Tree, Hedge & Woodland Strategy For East Devon 2024 - 2034







Acknowledgements

Project Team

- Kenton Rogers Ben Coles Charlie Plowden Alistair Jeans Will Dommett Chris Hariades James Chubb
- Director & Project Lead
- Senior Urban Forest Consultant
- Assistant Director Countryside & Leisure
- Arboricultural Team Manager
- District Ecologist
- Landscape Architect
- Countryside Manager

This Tree, Hedge & Woodland Strategy was prepared by Treeconomics in collaboration with the project team.

Authors

Ben Coles

Catherine Vaughan-Johncey



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1. Introduction and Background

1.1 Background

The development of a comprehensive Tree, Hedge, and Woodland Strategy (THAWS) reflects the commitment of East Devon District Council (EDDC) to protect and enhance the district's cherished trees, woodland and hedges. In doing so it will enhance landscape character and biodiversity, improve the overall quality of life for its residents and sustain the natural beauty for which the area is known. Based on the principle of establishing the right trees in the right places for the right reasons, the THAWS outlines how EDDC will provide essential care and maintenance of its own stock, encourage community engagement and private landowner cooperation, and monitor outcomes. The data gathered through this process will not only help measure success but also guide ongoing improvements. The strategy will serve as a roadmap over the next decade, focusing on key priorities and actions in the first three years to ensure tangible results.

East Devon's landscape is distinctly rural, with 90% of the district comprising a mosaic of farmland, woodlands, coastline, lowland heaths, estuaries and river systems, while its urban areas make up the remaining 10%. This distinction between rural and urban areas requires different approaches for managing trees, hedges, and woodlands. Notably, East Devon is home to two National Landscapes which includes a section of the Jurassic Coast World Heritage Site, and the Blackdown Hills. Together these cover some two-thirds of the district. The primary purpose of the National Landscape designation is to conserve and enhance natural beauty.

A total of XXha of land (XX%) within East Devon is woodland. This comprises a mix of natural, semi-natural and plantation woodland and includes ancient woodlands like Holyford Woods and Knapp Copse, which are managed by EDDC. East Devon possesses a varied range of woodland types, from wet woodlands, coastal woody habitats and commercial forestry to orchards and pasture woodlands. Dominant species tend to be oak or ash in lower lying areas, with beech on inland plateaus and birch and pine on heathland areas. East Devon's distinctive hedges - some of the densest in the UK - play a vital role in maintaining ecological connectivity and supporting wildlife, particularly in agricultural settings. Additionally East Devon boasts beautiful parkland, with notable estates such as Killerton (the National Trust's largest country estate), Bicton, and Poltimore. The diversity and quality of trees, woodland and hedges is a major contributor to the varied landscape character and natural beauty of the district.

Furthermore, the district is home to innovative conservation projects, such as Seaton Wetlands, the Lower Otter Restoration Scheme and the recent introduction of beavers along the River Otter, which are helping to enhance biodiversity and restore vital habitats.

This THAWS recognises the importance of local community involvement, education, and collaboration with key stakeholders, including landowners, conservation groups, and businesses. Exemplars of best practice, such as the Sidmouth Arboretum, Yonder Wood in Exmouth, and the work of Clinton Devon Estates, serve as models for future initiatives that aim to balance conservation with economic needs.

Through this THAWS, EDDC aims to not only conserve the existing natural heritage but also actively enhance and improve the resilience of East Devon's green infrastructure. By integrating this strategy with existing policies and focusing on the district's unique environmental features and outstanding landscapes, the THAWS will ensure that East Devon remains a leader in environmental stewardship and sustainable land management.

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There are many more benefits to trees than many of us appreciate. In keeping with benefits of other natural systems, they are also known as ecosystem services. This approach was standardised by the World Commission on Ecosystem Service Management of the International Union for Conservation of Nature. Work continues to quantify and value each of them.

Those that are quantifiable with valuations adopted by national or local government have been included within this report. They include carbon storage and sequestration, pollution mitigation, avoided stormwater runoff, all determined using i-Tree.

Many UK local authorities have also adopted CAVAT (Capital Asset Valuation of Amenity Trees) to place a valuation upon the amenity of public trees.

There are a large number of other benefits where research continues to help assign meaningful financial valuations.

Increased property or rental value:

A series of international third-party studies have shown that trees increase property prices by between 5% to 18%.

Increased consumer spending:

Consumers are willing to spend more in shopping areas with large, well cared for trees. This has been measured as an increase of 9% to 12%.

Climate Adaptation - Temperature Regulation:

Trees, woodlands and hedgerows can reduce peak summer temperatures by up to 7°C. This particular adaptation has long been adopted by municipalities in warmer locations and forms a key tenet of green infrastructure thinking. Current research extends into examining the cooling effectiveness of individual species.

Reduced Stress and improved mental health: Forest Research recently valued this particular benefit of forests and woodlands nationally at £185m. More trees immediately around the home (less than 100 meters) are associated with a reduced risk of being prescribed antidepressant medication. This association is especially strong for deprived groups.

Improved concentration and academic achievement: Greener schools have higher test scores, even after taking income into account. Middle school students get a boost from school greening. Planting trees within 250m of schools has the greatest effect.

Improved recovery times from illness:

Patients placed in rooms with views of nature experienced shorter stays in the hospital than patients in rooms that faced other buildings.

The image on the following page serves as a good illustration of the many benefits of trees

Sources and References:

Mental health benefits of visiting UK woodlands estimated at £185 million (2021). Forest Research (online). Kuo, M., Klein, S.E., Browning, M.H. and Zaplatosch, J., 2021. Greening for academic achievement: Prioritizing what to plant and where. Landscape and Urban planning, 206, p.103962.

The Benefits of Trees





East Devon's trees, woodlands and hedges are a vital resource for the district, with a growing role within the public policy of EDDC.

The contrast between urban forests and rural treescapes poses a level of complexity for East Devon, in terms of detailed understanding of each system and how they interact in peri-urban areas, management approaches, and tree planting strategies. Large amounts of East Devon are also protected by other designations, such as the East Devon National Landscape, Blacktown Hills National Landscape, the Jurassic Coast World Heritage site, nature reserves, and other conservation areas.

A canopy cover study was carried out using Google Environmental Explorer which found East Devon currently has just shy of 17,700 ha of tree canopy cover, covering 21.7% of the district. This covers 12.6% of the urban areas, and 22.7% of the rural areas. There is a large variation across Devon, withe the lowest canopy cover found in Exmouth Town ward, and the highest canopy cover in Exmouth Brixington ward.

Whilst 20% canopy cover has previously been suggested as a minimum for urban areas, the 3-30-300 rule (recommended by the IUCN), proposes 30% canopy cover in all neighbourhoods to help achieve green equity. In rural areas there is less definitive guidance, as landscapes can vary significantly, however aiming to improve tree cover and hedge extent, particularly in agricultural areas which may be lacking is crucial to improving connectivity for nature and climate resilience.

The existing tree population in East Devon consists of over 130 species, the most common being English Oak (Quercus robur) accounting for 15% of the population, Ash (Fraxinus excelsior) with 12%, and Sycamore (Acer pseudoplatanus) with 7%.

Currently, the biggest threat facing the tree population is Ash dieback, a deadly fungal disease which already exists across East Devon. Given the size of mature ash trees, and the amount of native biodiversity which rely on these species, both tree canopy cover and native ecosystems are at serious risk of widespread devastation over the next 10-20 years. This could kill up to 12% of the trees in East Devon.

Climate change is another major threat to trees, woodlands and hedges. Ensuring that both the urban and rural tree populations are resilient to changing temperatures, changing weather patterns, and new pest and disease threats will be crucial to ensuring the future of East Devon's landscapes. Improving resilience means improving biodiversity, protecting soils, diversifying urban forests and woodland types, and using trees and hedges to connect isolated green pockets to help pollinators and wildlife to diversify and thrive.

Sources and References:

Konijnendijk, C. (2021) The 3-30-300 Rule for Urban Forestry and Greener Cities

Browning, M.H.E.M., Locke, D.H., Konijnendijk, C., Labib, S.M., Rigolon, A., Yeager, R., Bardhan, M., Berland, A., Dadvand, P., Helbich, M. and Li, F., 2023. Measuring the 3-30-300 rule to help cities meet nature access thresholds. Science of The Total Environment, p.167739.



What is covered by 'Trees, Woodlands and Hedges'

We have taken a broad definition, to include all trees and hedges, which can be found anywhere from deliberately planted roadside trees to self-seeded scrubland. They provide benefits to those who live nearby and within them. These benefits include, air pollution removal, carbon sequestration and storage and reducing flood risk. Other social benefits such as an increase in house value, amenity value of trees and health benefits for residents are also increased in a diverse, healthy natural landscape.



Please note. Whilst in theory, 'Optimal' is the desirable state for each target, the goal for each has been determined, taking into account the limitations presented by time and resources. One consequence of this is the prioritisation of some activities over others, which manifests itself as a lower target for lower priority areas.

2. Vision

East Devon: where trees, hedges and woodlands are cherished and enhanced, enriching our landscape, economy and the wellbeing of all who live and visit. The vision recognises the vital importance of fostering a deep connection with the trees, hedges, and woodlands that enrich our landscape. It ensures a responsiveness to the concerns and wishes of those who live in the District, enabling these natural assets to be cherished and enhanced for the benefit of the landscape, economy, and the wellbeing of all who live in and visit East Devon."

The Strategy outlines key topics, priorities, and actions under three central themes:

- 1) Trees and Forest Structure
- 2) Community Framework
- 3) Sustainable Resource Management Approach

The Strategy is structured around a comprehensive set of key performance indicators, informed by the current state of evidence and best practice. For each of these performance indicators, an assessment of the current situation is made, ambitions are laid out, and priorities are identified.

Moreover, specific actions and roles and responsibilities are defined. This ambitious Tree, Hedge and Woodland Strategy is an important step forward. Its implementation, in collaboration with both Devon County Council and all 21 local parishes will create a greener, healthier, and more resilient place to live and work.

East Devon: where trees, hedges and woodlands are cherished and enhanced, enriching our landscape, economy and the wellbeing of all who live and visit.



EAST DEVON LOCAL PLAN

CLIMATE CHANGE PLAN

NATURE RECOVERY PLAN

NATIONAL LANDSCAPE MANAGEMENT PLAN

THAW STRATEGY

OPEN SPACES STRATEGY

LEISURE STRATEGY

HERITAGE STRATEGY

NEIGHBOURHOOD/ VILLAGE PLANS

3.1 East Devon's Trees, Hedges and Woodlands Targets, Priorities and Actions

This section considers the physical structure of the trees hedges and woodland from various perspectives. It does not cover the management of those trees which is covered in a later section.

T1 Relative Tree Canopy Cover

Tree Canopy Cover (TCC), which is often also referred to as tree cover, can be defined as the area of leaves, branches and stems of trees covering the ground, across a given area, when viewed from above. Canopy cover is a two dimensional metric, indicating the spread of canopy cover across an area. Assessing canopy cover is popular because it is relatively simple to determine from a variety of means and it can be calculated at relatively little expense. Canopy cover is useful to determine nature connectivity and a good indicator of the scale of ecosystem services provided by trees as the majority of benefits are directly related leaf area.

There are many methods of assessing canopy cover at this scale, including i-Tree Canopy, i-Tree Eco, Sentinel satellite data and Bluesky National Tree Map. These methods are not directly comparable with each other as they use different metrics and definitions of what constitutes canopy cover.

EDDC have conducted a TCC assessment using Google Environmental Insights Explorer (EIE). The example in Figure 1 of urban and rural analysis allows a more nuanced examination of canopy cover at greater detail than District wide. This data has been overlayed with National Forest Inventory (NFI) data to assess the contribution to TCC provided by woodlands (broad-leaved, coniferous & riparian), orchards and hedges, whilst separating urban TCC from rural TCC.

An impact of widespread agriculture for a long period of time, is that some areas of East Devon have low canopy cover. However, these areas still compare favourably in a national context. Comparatively low canopy cover in these areas is not a reason to avoid or delay appropriate management for the trees, hedges and woodlands that remain.

Geography	Total Tree Cover	Urban Tree Cover	Rural Tree Cover	Source	
East Devon	21.7%	12.6%	22.7%	Google Environmental Insights Explorer (2024)	

Google Environmental Insights Explorer (2024) Contains public sector information licensed under the Open Govern

Figure xx. Map of canopy cover across the urban areas of EDDC.

Link to relevant corporate policies	Actions	Responsibility	Review
Devon Tree and Woodland Strategy EDDC Nature Recovery Plan National Landscape Management Plan	 Carry out a detailed canopy cover assessment to establish accurate potential canopy cover Assess potential canopy cover for Cranbrook (based on current planting levels/existing trees) Review every 5 years by carrying out a canopy cover assessment 		

Priority	Key Performance Indicators showing current position						
	Low	Moderate	Good	Optimal			
	The existing canopy cover equals 0–25% of the potential.	The existing canopy cover equals 25–50% of the potential.	The existing canopy cover equals 50–75% of the potential.	The existing canopy cover equals 75–100% of the potential.			

Table 2: Urban Tree Cover Estimates

nment Licence v3.0	Canopy Cover % 0 - 16.2 16.2 - 21.4 21.4 - 26.7 26.7 - 30.6 30.6 - 45.2	

T2 Size (Age) Diversity

A healthy treescape relies on its age diversity to maintain its ability to provide constant benefits to the people who live in East Devon over time. Size can be used as a broad proxy for age when dealing with vast numbers of trees. Maturing trees must be protected and managed to ensure they thrive and survive to become veteran trees (senescent), and juvenile trees must be planted constantly to replace old trees, dying trees and trees removed for safety reasons. Larger, older trees typically provide more benefits than smaller, younger trees, particularly as habitats for insects and birds. However, younger trees are vital to maintaining a healthy and sustainable forest by providing lower canopy and maintaining the health and longevity of the population.

Generally, the most accurate way to gauge age diversity is to compare current tree size in each species (in terms of diameter at breast height, or DBH) to the maximum diameter for that species. The goal would then be to maintain a tree population that is unevenly distributed among different age classes, making sure that there are enough juvenile trees for the future.

This method of extrapolating age from DBH is not particularly useful or accurate when considering hedges, however, height, width, density, and health will be more useful to consider. <u>Devon Hedge</u> <u>Group</u> provides more detail on hedges across East Devon and their makeup.

It is of course also important to strive for an understanding of age diversity across the entire tree population – including public trees managed "extensively" (as a group) in parks and natural areas, as well as trees on private property, both district-wide and at neighbourhood level.

Sources and references:

Richards, N.A., (1982/1983). Diversity and stability in a street tree population. Urban Ecology 7, 159–171 – as cited in McPherson, Urban Forestry & Urban Greening 12 (2013) 134–143.

	Juvenile	(<15cm)	Se	mi-mature	(16 to 3
070	'Ideal'	EDDC		'Ideal'	EDDC
0%					
10%					
20%					
30%					
40%					
100/					
50%					

Figure 4: Richards "Ideal" Distribution of Tree Age Across the Urban Forest Showing Typical Stem Diameter for Each Age Class, and the Size Class Distribution of East Devon's Council Owned Tree Population (the EDDC data id not representative of the district as a whole as it only shows inventoried trees)

Link to relevant corporate policies	Actions
Local Nature Recovery Strategy	 Explore methodologies for assessing rural tree stocks more accurately (check NFI 1st). Incorporate DCC tree inventory & Sidmouth i-Tree data into this KPI.

Priority	Key Performance Indicators showing current position				
· · · · · · · · · · · · · · · · · · ·	Low	Moderate	Good		
	Even age distribution or highly skewed toward a single age class.	Some uneven distribution, but most of the tree population falls into a single age class.	Total tree population across district approach an 'ideal' age distribution of 40% juvenile, 30 semi-mature, 20% mature, and 10% senesce		







Species Diversity T3

Diversity is an important aspect of trees and woodland to monitor. It underpins the wider concept of biodiversity within our trees and woodlands, and provides a natural protection against large scale tree loss. Trees are split into families, genera, species and varieties and a mix of these is what we understand by a diverse treescape. Sufficient tree diversity can increase overall resilience in the face of biotic and environmental stresses and threats. Many threats target individual species, so in aggregate, a more diverse tree-scape is better able to deal with possible changes in climate or pest and disease impacts.

Understanding the species diversity of EDDC's existing trees and woodland is a vital first step. From there, tree planting and management plans can enhance the diversity in line with T10, T11, and R9 of the action plan. Diversity should be monitored across the whole tree population, both public and private, both rural and urban, to provide the best information. This will help push species selection towards better diversity, and reduce dominance on single species across landscape types.

Santamour's 10-20-30 rule for species, genus and family, and Barker's benchmark of 5% per species are useful tools in assessing and providing targets for species diversity; however these rules were developed to guide urban tree populations and may not be suitable for rural or woodland populations. For landscape scale approaches Hubbell's dominance diversity curves are a more useful aid to visualise and plan for species diversity. Generally speaking (see fig 5) the longer and shallower the curve, the greater the diversity.

The Woodland Trust's 'Tree Species Handbook' which accompanies the 'Woodland Creation Guide' identifies 10-30 dominant tree species across various types of woodland. This is suitable for woodland creation, however further diversity would be expected to establish in the understory over time and with appropriate woodland management. Hedges may have lower diversity of tree species than woodlands or urban populations, however their dense foliage provides disproportionately high support to wildlife for the number of individual trees.



Sources and references:

Santamour, F.S. (1990) Trees for urban planting: Diversity, uniformity and common sense, in: Proceedings of the Conference Metropolitan Tree Improvement Alliance (METRIA). pp. 57-65.

Barker, P.A. (1975) Ordinance Control of Street Trees. Journal of Arboriculture. 1. pp. 121-215.

Beeauchamp, K. 2016 Measuring Forest Tree Species Diversity, Forest Research

Hubbell, S.P., 1979. Tree Dispersion, Abundance, and Diversity in a Tropical Dry Forest: That tropical trees are clumped, not spaced, alters conceptions of the organization and dynamics. Science, 203(4387), pp.1299-1309.

Link to relevant corporate policies	Actions

The East Devon Local Plan Devon Biodiversity Action Plan (BAP) **EDDC Nature Recovery Plan** National Landscape Management Plan

- 1. Assess East Devon's tree diversity across the entire treescape using Hubbell's dominance diversity curve method.
- 2. Carry out a diversity study of East Devon's urban tree stock
- 3. Review every 10 years.

Priority	Key Performance Indicators showing current position						
	Low	Moderate	Good	Optimal			
	Five or fewer species dominate the entire tree population across district.	No single species represents more than 10% of total tree population; no genus more than 20%; and no family more than 30%.	No single species represents more than 5% of total tree population; no genus more than 10%; and no family more than 15%.	At least as diverse as "Good" rating (5/10/15) district-wide – and at least as diverse as "Moderate" (10/20/30) at the neighbourhood level.			

Figure 5. Hubbell's (1979) Dominance Diversity Curve showing example forest types and selected UK cities & towns.



Species Suitability T4

Selecting a broad array of species which are well suited to their context, whether that is urban or rural is fundamental to the concept of species suitability. Trees have unique needs; all tree species have different genetic characteristics and growth strategies which have been developed to maximise survival and growth in their natural habitats. Climate, soil, and other environmental aspects can affect their ability to survive and thrive.

Urban contexts create greater external stresses than trees experience in their natural habitat. This can limit their lifespan and increase vulnerability to pests and diseases. Securing species suitability means, trees are less likely to be placed under those stresses and more likely to reach maturity.

That context is also going to change under the impact of climate change. Predictions from the UK Meteorological Office forecast warmer wetter winters and hotter, dryer summers. Even that simplistic high level summary is enough to indicate that some species will struggle in the future. Such factors need to be taken into account today when making tree species selection decisions. Many of our native species will be closer to the edge of their suitability range under even the best case scenarios now being envisaged.

Table 1 shows the expected suitability of the most common tree species in East Devon's Council owned tree inventory. Under the current climate, most species displayed are comfortably within their survival range, but in the worst case scenario by 2090 most species are expected to struggle, and sycamore (Acer pseudoplatanus) is not currently known to survive in those conditions.

Sources and references:

Climate Change Alliance of Botanic Gardens, 2024, Climate Assessment Tool v1, Botanic Gardens Conservation International, Richmond, U.K. Available at https://cat.bgci.org. Accessed on 12/08/2024.

Species	Current suitability	2050 Emissions Limited	2090 Business as Usual
Quercus robur	9	9	6
Fraxinus excelsior	9	9	6
Acer pseudoplatanus	9	9	2
Betula pendula	9	9	6
Quercus ilex	9	11	11
Prunus spp.	9	9	6
Tilia spp.	11	9	6
Acer campestre	9	9	6
Acer platanoides	9	9	6
Fagus sylvatica	9	9	6

Table 1. Species suitability under 3 climate scenarios for the most common species in East Devon's tree inventory.

2050 Emissions Limited uses the SSP2 or RCP4.5 emission scenario as laid out by the IPCC. 2090 Business as Usual uses the SSP3 or RCP7.0 emission scenario as laid out by the IPCC.

Link to relevant corporate policies	Actions	Responsibility	Review
Street Tree Establishment Guide Devon Hedges Management Advice	 Assess species suitability across East Devon for a changing climate (incorporating BS5837 & DCC tree data) Establish Native - Non Native Guidelines for urban and rural areas Create a Tree Planting Strategy 		

Priority	Priority Key Performance Indicators showing current position							
Low		Moderate	Good	Optimal				
Fe	ewer than 50% of all trees are from species considered suitable for the area and for projected climate.	>50%-75% of trees are from species suitable for the area and for projected climate.	More than 75% of trees are suitable for the area and for projected climate.	Virtually all trees are suitable for the area and for projected climate.				

Current is based on the climate of 2020.

11 - Middle of natural range

9 - Middle of Botanic Garden range

6 - Shoulder of Botanic Garden range

2 - Not known but possible to survive

Publicly Owned Trees T5

Trees managed individually, such as street trees and some park trees, are considered to be "managed intensively," according to arboricultural techniques. These trees are often pruned, surveyed, and otherwise monitored for the safety of the public and the wellbeing of the individual tree.

Understanding how many trees are managed in this way and what this type of management entails will help provide a baseline for improving future 'intensive' practices. A tree inventory (such as East Devon's Council-owned tree inventory) documenting these trees, their location, species, health, etc is invaluable for tree maintenance and risk management.

It can also form the basis of a detailed community engagement tool, enabling people to learn and understand more about the individual trees that they pass in the streets where they live and work. Such information has proved instrumental in improving care of trees by residents.

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Link to relevant corporate policies

Devon Biodiversity Action Plan (BAP) Street Tree Establishment Guide Exeter and East Devon Green Infrastructure Strategy

Actions

1. Carry out a complete inventory of EDDC trees

Priority	Key Performance Indicators showing current position						
	Low	Moderate	Good	Optimal			
	Condition of treescape is unknown.	Sample-based tree inventory indicating tree condition and risk level.	Complete tree inventory that includes detailed tree condition ratings.	Complete tree inventory that is GIS-based and includes detailed tree condition as well as risk ratings.			

Responsibility	Review

3.1 Targets, Priorities and Actions

Publicly Owned Woodlands and Natural Areas T6

Trees in woodlands or other natural areas are typically "managed extensively," as a group whereas trees managed individually, such as street trees, are considered to be "managed intensively," according to arboricultural techniques (See T5). Park trees can fall into either category, depending on how they are managed.

Understanding how many trees are managed in this way and what this type of management entails will help provide information for improving future 'extensive' practices.

Natural area surveys that incorporate patterns and structures of ecological functions would be useful. Woodland fragmentation, recreational overuse, disturbance and invasive species such as Rhododendron have all been highlighted as issues of serious concern, which are as yet unquantified.

Developing individual management plans and a web map for these areas can be a useful tool for both management, community engagement and connectivity. Current 'extensive' management methods should be reviewed and updated if necessary to reflect best practice and the unique situation of each woodland area, whether ancient woodland, productive plantation, young and pioneering, or newly created.

Woodlands should be connected through green corridors such as hedgerows and linear tree features, and rivers and waterways, to promote the movement of wildlife and broaden the genetic pool for plants and animals alike, thereby boosting biodiversity and resilience. Keeping publicly owned and managed woodlands healthy and connected will likely involve private landholders including farmers and transport and highways management departments within the council.



Figure xx. Map of public green space designations across East Devon.

NB. Some areas fall under multiple landscape characteristics.

Link to relevant corporate policies	Actions	Responsibility	Review
Devon Biodiversity Action Plan (BAP) Devon Tree and Woodland Strategy EDDC Nature Recovery Plan National Landscape Management Plan	 Develop Targets, Priorities, Actions and KPI's for these areas for inclusion in individual management plans and other connected strategy documents. Look into woodland connectivity through hedgerows and roadside planting, linking habitats whilst connecting people to woodlands, and improving green transport links. Migrate woodland and other natural environment data to a web-map. 		

Priority	Key Performance Indicators showing current position						
,	Low	Moderate	Good	Optimal			
	No information about publicly owned natural areas.	Publicly owned natural areas identified in a "natural areas survey" or similar document or on webmap.	Survey document also tracks level and type of public use in publicly owned natural areas.	In addition, usage patterns, ecological structure and function of all publicly owned natural areas are also assessed and documented.			

T7 Trees on Private Property

Trees on private property are more difficult to survey and manage than those on public land due to the extent and inaccessibility of these trees. It relies on landowners taking an active role in tree management. Developing the tools to influence other land owners with trees on their property can become a significant factor within management of the totality of the trees, woodlands and hedges across the District. This can simply mean understanding the extent of the tree estate that is outside public ownership. This is generally a mix of the gardens of private householders together with larger private estates owned.

A full inventory of trees on private properties is difficult, however many will fall into conservation areas, and many more will be on record with a tree preservation order (TPO). Fully collating the data already held on these trees may be useful in combination with an ecosystem services survey. A sample based survey across the whole of East Devon, such as an i-Tree Eco Survey can help to capture information on both public and private tree populations, giving a rounded understanding of the trees and shrubs.

Some private landholders may be interested in collaboration, particularly educational bodies such as universities, colleges and schools. Engaging with these stakeholders is a good way to understand their trees as part of the wider East Devon population whilst also promoting other research projects, and community engagement.

For homeowners and small land holders, signposting clear, accessible guidance on tree planting, establishment, species choice, and management of trees and hedges (eg. <u>The Devon Hedge Group</u>) is a good way to improve the health and diversity of trees and hedges, particularly in urban spaces.



Devon Green Infrastructure Strategy1. Collate BS5837 data to better understand THaW structureExeter and East Devon Green Infrastructure2. Review and update existing TPOs	ty Review	ew
3. Create interactive maps detailing TPOs and Conservation areas		

Priority	Key Performance Indicators showing current position						
	Low	Moderate	Good	Optimal			
	No information about privately owned trees.	Aerial, point-based assessment of trees on private property, capturing overall extent and location.	Bottom-up, sample-based assessment of trees on private property, as well as basic aerial view (as described in "Moderate" rating).	Bottom-up, sample-based assessment on private property, as well as a detailed Tree Canopy Cover (TCC) analysis of entire treescape, integrated into district-wide GIS system.			

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T8 Natural Regeneration & Habitat Restoration

National Landscape Management Plan

Natural regeneration and habitat restoration is already a large part of policy and strategy across East Devon. It promotes natural processes on a natural timeline, allowing all parts of the ecosystems involved to work together. These processes can be supported through active management, protecting areas from overgrazing, and in some cases, limiting public access. Identifying the location and extent of degraded habitats in natural areas is the first step towards restoration and regeneration. These areas may be smaller than they should be, be of poor quality, or struggle with pollution or overexploitation from recreation. Understanding the needs of each habitat type is critical to ensuring that the right management approaches are employed, and that each habitat can recover quickly.

Individual Landscape Character Assessments for important areas are a vital tool for establishing a baseline for each habitat and landscape type, and EDDC's Nature Recovery Plan gives direction by promoting sustainable land management practices such as agri-environment schemes and habitat creation initiatives. It encourages collaboration between stakeholders, including local communities and landowners, to support wildlife corridors and improve ecological resilience. Hedge recovery should be prioritised as part of the push for connectivity and to boost insect numbers.

Natural regeneration offers significant benefits for natural flood management, as rewilded areas and woodlands increase soil infiltration and reduce surface runoff, slowing the flow of water during heavy rainfall. Additionally, regenerating habitats can contribute to nutrient neutrality, by improving the natural filtration of pollutants and excess nutrients, preventing them from entering watercourses. This is especially important for riparian woodlands, which play a crucial role in protecting waterways from agricultural runoff and maintaining healthy aquatic ecosystems. Beavers, now reintroduced along the River Otter, further enhance these benefits by creating natural dams, ponds, and wetlands that slow water movement, boost biodiversity, and improve water quality. it's important to recognise that habitat restoration sometimes involves the loss of trees. In circumstances such as heathland restoration, where tree cover may have encroached on historically open habitats, selective tree removal may be necessary to restore the ecological balance and protect species dependent on heath environments.

Link to relevant corporate policies	Actions	
Devon Biodiversity Action Plan (BAP)		
Natural Flood Management Guidance	1. Link to LNRS	
EDDC Nature Recovery Plan	2. Work with NGOs & developers to create habitat banks for BNG	

Priority	Key Performance Indicators showing current position						
,	Low	Moderate	Good	Optimal			
	Minimal efforts with no formal tracking of land area designated for natural regeneration and habitat restoration	Initial baseline survey and identification of designated areas for NR+HR with basic monitoring of plant and animal species	Established biodiversity index, expanding of NR+HR areas, regular surveys; detailed tracking of species' health and growth	Comprehensive GIS-based mapping of NR+HR areas, detailed biodiversity index, high survival rates of NR species, and extensive monitoring and reporting			

PLACEHOLDER

Work with NGOs & developers to create habitat banks for BNG

Responsibility	Review

3.1 Targets, Priorities and Actions

T9 Other Elements of the Treescape

Other elements of the treescape include shrubs, green walls and roofs, other plants, wildlife, and bodies of water. These elements, along with trees and hedges, provide a wide range of benefits, including ecosystem services and amenity value.

The unique aspects of East Devon's ecosystems must be protected and enhanced in both urban and rural areas. The protected species, such as beavers, bats, newts, dormice and others, which live in East Devon rely on these other elements of the treescape for shelter, food and more. Waterways and wetlands are of particular importance to many protected species, and trees, hedges and woodlands must enhance existing landscapes, rather than replace them. It is important that different landscape types are managed harmoniously with one another, maintaining and improving the diverse mosaic which makes up East Devons natural areas, and protecting the amenity which is so valued by residents and visitors. Connectivity plays into this concept by allowing the migration of species across habitat types through waterways, hedgerows, and linear tree features (such as those along roads.

These other elements of green and blue landscapes can be difficult to value and quantify. In urban landscapes, features such as green walls and roofs can be analysed using the Urban Greening Factor (UGF), which can provide a guideline and targets for urban greening. Waterways, wetlands, grasslands and moorlands are more challenging, however specific landscape character assessments, the National Landscape management plans, and the South-East Devon European Site Mitigation Strategy, can provide insight into these features and guide management practices to best enhance landscapes for the flora and fauna.

Protecting these landscape and treescape features from damage and degradation by human and natural causes will be the first step, and the second will be to regenerate, enhance and expand these elements to create a balanced, healthy environment which benefits both nature and the human experience in East Devon.



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The East Devon Local Plan Devon Tree and Woodland Strategy Exeter & East Devon GI Strategy Devon Hedges Management Advice

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1. Assess potential impacts and implications of a growing beaver population

Priority	Key Performance Indicators showing current position				
	Low	Moderate	Good		
	No information about other elements of the treescape.	An assessment of existing elements of the treescape has been carried out and a green infrastructure baseline has been established.	Establish relevant local targets. Identify opportunities for new greening in developme		

	Responsibility	Review
	Optimal	
ent.	A relevant local policy has bee implemented. Monitoring	en developed and is ongoing.
		18

Tree Benefits T10

Trees, woodlands and hedges bring with them both benefits and costs. Whilst many of the costs are well known, the benefits can be difficult to quantify or justify. Nevertheless, a considerable and expanding body of research exists on the benefits that trees, woodlands and hedges provide to those who live and work nearby to green infrastructure and to the wider ecosystem, yet, trees are often overlooked and undervalued. EDDC declared a climate emergency in 2021, recognising the threat to people, animals and habitats worldwide. Within East Devon, those threats are likely to arrive in the form of hotter drier summers and warmer wetter winters - more periods of drought, more heat and a greater risk of surface flooding.

Trees have a significant role to play in creating resilient places to live for both humans and wildlife. Their largest contribution is the through the active cooling created by evapotranspiration as the trees draw water up from the ground when actively photosynthesising. Combined with physical shade, this can lower temperatures to a point where it can still remain guite pleasant to be outdoors even in the heat of the day. Trees also, by virtue of their expansive canopies, capture water before it gets to the ground, reducing surface water run off and thereby reducing surface-flood and flash-flood risk. In using water as part of their natural growing processes, they also create space in the soil for new water ingress to take place at the next rainfall.

Trees are one of the most important tools in the climate resilience toolbox. It is important that they are deployed on as wide a basis as possible, which will require identifying and then addressing areas with lower tree cover. This target links to Tree Equity (R4) and the appreciation of trees as a community resource (C2). Tools such as i-Tree Eco can be used to quantify tree benefits or Ecosystem Services (ES) whilst also giving an overview of the structure of the trees, woodlands and hedges.

Trees also provide amenity benefits to their immediate surroundings by improving aesthetics and providing a sense of place. Tools like Capital Asset Value for Amenity Trees (CAVAT) aim to put a value on the amenity of trees, and can be useful in a cost-benefit analysis of trees, helping to unlock funding and influence policy.

About i-Tree:

i-Tree is a free to use, open-access suite of tools developed to assess the value of the urban forest and the ecosystem services provided which: Quantifies the benefits and values of trees around the world. Aids in tree and forest management and advocacy.

- Shows potential risks to tree and forest health.
- Is based on peer-reviewed international research.



About CAVAT:

Capital Asset Value for Amenity Trees (CAVAT) is regarded as one of the principal methods of tree valuation in the UK. It provides a method for managing trees as public assets rather than liabilities. It is designed not only to be a strategic tool and aid to decision-making in relation to the tree stock as a whole, but also to be applicable to individual cases, where the value of a single tree needs to be expressed in monetary terms.

Link to relevant corporate policies	Actions
The East Devon Local Plan EDDC Climate Change Strategy & Action Plan Natural Flood Management Guidance Open Spaces Strategy	 Work with Tree Wardens to highlight the benefits of trees at local level. Explore tree benefits for Council-owned trees using i-Tree Eco Inventory CAVAT valuation of EDDC trees

Priority	Key Performance Indicators showing current position				
· · · · · · · · · · · · · · · · · · ·	Low	Moderate	Good		
	No comprehensive information available about tree benefits in the district.	Some information available on key tree benefits.	Sound information available on a key set of tro benefits, such as biodiversity, recreation, environmental services (see below).		







T11 Wider Environmental Considerations

East Devon's trees, woodlands and hedges have a vital part to play in the fight against climate change and can be part of both adaptation and mitigation strategies. Urban trees, woodlands and hedges are particularly important as a way of reducing the urban heat island effect, and in removing air pollution from built up areas and highways. Trees also cool the air within our built up areas and shade buildings in the heat of summer.

Biodiversity is a vital underpinning of a healthy environment. The myriad intricate connections between species all play a role in the creation of rich ecosystems where individual members, such as trees, can thrive. Initiatives like the Seaton Wetlands Link and Lower Otter Restoration Projects exemplify the benefits of integrated landscape recovery efforts. By restoring natural habitats and promoting biodiversity, these projects enhance the ecological resilience of the area, providing vital ecosystem services such as flood mitigation, improved water quality, and increased carbon sequestration. Such restoration efforts also create wildlife corridors that allow species to adapt to changing conditions, further supporting biodiversity.

With the UK target of carbon net neutrality by 2050, the East Devon target aims to achieve this by 2040. To achieve these aims, protecting and enhancing the trees, hedges & woodlands, along with other elements of green infrastructure are key. Climate change poses a direct risk to the residents in East Devon; a warming climate increases risk of heatstroke, while increased rainfall will cause more frequent and more severe flooding. Biodiversity is also at risk, as species will struggle to adapt to warming climates, earlier springs and mild winters.

These considerations should be taken into account when managing trees, woodlands and hedges to ensure that the correct management practices are being enforced, tree and shrub species are as suitable to the future environment as possible, and that biodiversity is protected and enhanced, with biodiversity net gain as a key driver.



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Figure xx. East Devon Flood Management Catchment, showing main rivers and urban areas.

Source: Environment Agency. East Devon Catchment Flood Management Plan (2012).

Link to relevant corporate policies	Actions
The East Devon Local Plan EDDC Climate Change Strategy & Action Plan Natural Flood Management Guidance Open Spaces Strategy	1. Utilisation of local timber production to reduce transportation carbon

Priority	Key Performance Indicators showing current position					
	Low	Moderate	Good	Optimal		
	No consideration/information that relates treescape to climate change, air quality, water.	Some consideration of environmental aspects in relation to treescape, e.g. looking at climate change.	Consideration of at least major environmental aspects in relation to trees	Full consideration of environmental aspects in relation to trees, based on comprehensive, state-of-the-art information.		



3.1 Summary - Trees and Urban Forest Structure

Kov Porformanco Indicator	Current Performance Level				
Rey Performance indicator	Low	Moderate	Good	Optimal	Phoney
T1 - Relative tree canopy cover			Good		
T2 - Size (Age) diversity	Low				
T3 - Species diversity	Low				
T4 - Species suitability					
T5 – Publicly owned trees	Low				
T6 – Publicly owned woodlands and natural areas				Optimal	
T7 – Trees on private land		Moderate			
T8 — Natural regeneration & habitat restoration					
T9 – Other elements of the treescape		Moderate			
T10 – Tree benefits	Low				
T11 — Wider environmental considerations		Moderate			

3.2 Community Framework Targets, Priorities and Actions

This section considers the various communities that are required for a successful, long term approach to management of trees, hedges and woodlands. This covers not only the local residents, but local government in all its forms, NGOs and commercial entities.



Targets, Priorities and Actions 3.2

Governance and Inter-departmental Co-operation C1

This target aims to establish a path of leadership and cooperation for the successful delivery of the targets, priorities and actions within and relating to this Strategy, and to encourage all departments within EDDC to consult and collaborate with the tree and woodland managers on issues. Leaders must delegate responsibilities and ensure on time, on budget delivery of goals by partners and associates.

Regular communication across departments and agencies will be key to ensuring that trees, woodlands and hedges are considered to the fullest extent throughout the council. Key stakeholders to incorporate into this network are planning and development. Other key departments include housing, environmental health and parks & gardens, also parish councils, which although external to the council, still need to be involved in the process. Opening communication channels and interdepartmental teams can help to coordinate tree and woodland management by providing knowledge and guidance to all council departments when required in order to ensure that trees, woodland and green infrastructure are considered in full at all stages of decision making.

Assigning clear roles and responsibilities to District and Parish Council Members will help to maintain momentum for the strategy, and organising regular checkins and updates will help to cement two-way relationships. It also encourages the sharing of ideas and resources, which will make delivery of actions and targets easier at a lower level.

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Link to relevant corporate policies

The UK Climate Change Act National Planning Policy Framework

- 1. Set up dedicated interdepartmental/interagency working teams to facilitate the work packages arising from this strategy
- 2. Engage in other department strategy consultations to promote the importance of trees, hedgerows and woodlands, and encourage them to consider how they can contribute to targets and actions of this Strategy.

Actions

Priority	Key Performance Indicators showing current position					
	Low	Moderate	Good	Optimal		
	Agencies take actions impacting treescape with no cross-departmental coordination, consultation or consideration of the treescape resource. Leadership for trees, woodlands & hedge management is fragmented.	Departments/agencies recognise potential conflicts and reach out to tree & woodland managers on an ad hoc basis – and vice versa.	Informal teams among departments and agencies communicate regularly and collaborate on a project-specific basis.	Tree & woodland policy implemented by formal interdepartmental/interagency working teams on all projects.		
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	Responsibility	Review
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3.2 Targets, Priorities and Actions

C2 Community Involvement, Neighbourhood Action & General Appreciation of Trees, Hedgerows and Woodlands

In order for the strategy to be considered a true success, the most powerful legacy is that the residents love, respect, appreciate, and care for its trees. Public consultation has already demonstrated the deep connection people feel towards the landscape, with 94% of respondents stating that trees, hedges, and woodlands are very important to East Devon's character, with 74% feeling there are too few trees in the district. Community initiatives could provide an invaluable opportunity to promote the progress made by the district in terms of urban greening and green infrastructure, while fostering this strong sense of local pride.

Existing schemes, such as public involvement in nature reserves, have demonstrated the value of community engagement. Activities like invasive species removal and habitat restoration show how residents can contribute to environmental care while building stronger community ties.

Community and resident groups will be encouraged to participate and collaborate with EDDC, alongside partnerships with Governmental and Non-Governmental Organisations (NGOs), in tree, hedge, and woodland management activities. By collaborating with smaller community groups such as volunteers, schools, and charity organisations, EDDC can further deepen community involvement in projects that will benefit both small neighbourhoods and the wider district. Encouraging such involvement helps to strengthen the connection residents feel towards their natural environment and reduces the likelihood of conflict or opposition to tree planting efforts.

Widely publicising events year-round – making good use of digital communications and social media – such as National Tree Week (usually in late November to early December), Arbor Day, planting days (in winter), and outdoor events, will bring attention to East Devon's trees, woodlands, and hedges, encouraging participation from those who live and work locally.







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- Link to relevant corporate policies
- The East Devon Local Plan Open Spaces Strategy
- EDDC Leisure Strategy
- Exeter and East Devon GI Strategy

- 1. Aim to have at least one Tree Warden in each ward of the district
- 2. Work with local arts sector to promote the benefits of trees
- 3. Creation of community orchards
- 4. Facilitate neighbourhood tree nurseries
- 5. Establish working groups across East Devon to dissimilate best practice

Priority	Key Performance Indicators showing current position				
,	Low	Moderate	Good		
	Little or no citizen involvement or neighbourhood action.	At the neighbourhood level, citizens participate and groups collaborate with EDDC and/or its partnering NGOs in tree & woodland management activities to advance district-wide plans.	Some neighbourhood groups engaged in advancing tree & woodland goals, but with lif or no overall coordination with or direction to EDDC or its partnering NGOs.		



Blackdown Hills National Landscape



East Devon National Landscape













C3 Utilities Co-operation

This target aims to ensure that all utilities – above and below ground – employ best management practices and cooperate with the EDDC to advance goals and objectives related to urban forest issues and opportunities. This includes electric, gas, water, cable, telephone, fibre-optics, etc.

Utilities are required to follow certain standards for managing vegetation – including pruning branches, protecting roots, and performing overall management of trees and other vegetation that could impact their services. Local or national policies may also regulate certain utility management practices, such as overhead line clearance. Introducing and enforcing best practice standards which protect trees and other elements of the urban forest will be key, and collaboration with utilities could help advance the goals and objectives of the THAWS.

Some utilities extend beyond the local area, such as river catchments. These areas are not constrained by political boundaries, and this should be taken into account when assessing how the urban forest and utilities interact. Water companies should be encouraged to develop systems in which trees provide a vital role in water management.

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Link to relevant corporate policies

Devon Carbon Plan & Carbon Reduction Plan EDDC Climate Change Strategy & Climate Change Action Plan Natural Flood Management Guidance

Actions

- 1. Compile list of relevant utility providers and contacts
- 2. Set up initial engagement workshops with utility providers on trees in the built environme
- Coordinate collaborative arrangements to meet the objectives of the plan (e.g. a tree cha that utilities can sign up to when they want to work on EDDC land and training courses trees for relevant employees in these utilities)

Priority	Key Performance Indicators showing current position					
	Low	Moderate	Good	Optimal		
	Utilities take actions impacting treescape with no council coordination or consideration of the treescape resource.	Utilities employ best management practices, recognise potential municipal conflicts, and reach out to tree & woodland managers on an ad hoc basis – and vice versa.	Utilities are included in informal council teams that communicate regularly and collaborate on a project-specific basis.	Utilities help advance tree & woodland goals and objectives by participating in formal interdepartmental/interagency working teams on all municipal projects.		

	Responsibility	Review
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Targets, Priorities and Actions 3.2

Green Industry Co-operation C4

The "green industry" encompasses all professions and businesses that support or engage in tree and vegetation management activities, including landscapers, nurseries, garden centres, contractors, maintenance professionals, tree care companies, landscape architects, foresters, planners, and developers.

EDDC will collaborate with existing green industry partners to advance the District's tree, woodland, and hedge objectives while adhering to high professional standards. This work will be done, where appropriate, in conjunction with Devon County Council and local parish councils. In addition, EDDC will work closely with Bicton College, Exeter University, and local training providers to establish networks and pathways for job creation within the green sector, including apprenticeships. These partnerships will help to build skills, foster new careers, and create local employment opportunities within the sector.

There will also be a focus on engaging Habitat Bank providers and exploring Green Finance initiatives to support sustainable growth and restoration efforts. Collaborating with these emerging sectors will further enhance the District's environmental strategies and provide financial mechanisms for long-term management.

Close co-operation with the green industry offers an excellent opportunity to influence the management of forest resources on private property. Given the landholdings within East Devon, the key sectors for focus include: Farming, Forestry, Tree Surgeons and Renewable Energy (Wind & Solar).

This target links with T7, T10, C7 and C8.



Link to relevant corporate policies

Devon Carbon Plan & Carbon Reduction Plan EDDC Climate Change Strategy & Climate Change Action Plan

1. L	ist representatives and	contact details f	for each relevant	t business or	organisation	(link to
	ocal AA approved com	panies on EDDC	website)		0	

Actions

- 2. Coordinate collaborative arrangements to meet the objectives of the plan (e.g. a tree cha
- Explore opportunities for skills building in the sector and potential courses and apprentic schemes

Priority	Key Performance Indicators showing current position					
	Low	Moderate	Good	Optimal		
	Little or no cooperation among segments of green industry or awareness of district-wide treescape goals and objectives.	Some cooperation among green industry as well as general awareness and acceptance of district-wide goals and objectives.	Specific collaborative arrangements across segments of green industry in support of district-wide goals and objectives.	Shared vision and goals and extensive committed partnerships in place. Solid adherence to high professional standards.		

Forestry

Waste Management

	Responsibility	Review
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Targets, Priorities and Actions 3.2

Involvement of Large Private and Institutional Landholders C5

As a large proportion of land within the district is owned by private individuals, organisations, and institutions, enlisting their help in enhancing and protecting trees and woodland is paramount. Outreach programmes, management plans, and funding strategies will help engage these landholders. Communicating the benefits of trees will inspire them to invest time and resources into natural assets.

Examples from local estates like Clinton Devon Estates, which balances commercial forestry with conservation, and Combe Estate, which prioritises heathland restoration and hedge management, highlight how landholders can integrate conservation with economic activities. Similarly, the National Trust (NT) preserves historical woodlands and parklands while promoting public access and biodiversity, and the RSPB focuses on wildlife conservation at sites like Aylesbeare Common. These estates demonstrate how private landholders can support biodiversity, manage natural resources sustainably, and engage with the public.

The goal is to help large private landholders embrace and advance district-wide tree, woodland, and hedge objectives by implementing specific resource management plans, ensuring trees on their property are managed in the most beneficial way.

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Link to relevant corporate policies

Clean Growth Strategy National Planning Policy Framework Environmental Land Management Scheme

Actions

Priority	Key Performance Indicators showing current position					
	Low	Moderate	Good	Optimal		
	Large private landholders are generally uninformed about tree & woodland issues and opportunities.	EDDC conducts outreach directly to landholders with educational materials and technical assistance, providing clear goals and incentives for managing their tree resource.	Landholders develop comprehensive tree management plans (including funding strategies) that advance district-wide tree & woodland goals.	As described in "Good" rating, plus active community engagement and access to the property's forest resource.		

Responsibility	Review

C6 Trees & Agriculture

Agroforestry involves the planting of trees on agricultural land with assumed benefits for existing agricultural processes. It includes typical farming such as cropland and pastures, but also orchards and wood pastures. Hedgerows have always been a crucial part of this practice for farmers across Britain, reducing soil erosion and encouraging pollinators. In the face of climate change, tree cover is increasingly important for temperature regulation, stormwater management, and soil regeneration across farmlands.

"Agroforestry (including silvoarable and silvopastoral systems) is the integration of trees into productive areas of a farm, while maintaining the farm's main agricultural output." ... "Through agroforestry, the full gamut of benefits trees provide can support a farm's productive areas, such as improving soil health, providing shade and shelter for livestock, and creating new habitats for birds and insects." DEFRA, 2023.

Agricultural land can have huge potential for tree and woodland planting, and for encouraging full sized trees within hedges and along verges. Working with farmers and land holders in agricultural areas is crucial, namely for tree planting initiatives, and with funding initiatives for both tree planting and long term management of new and existing woodlands and hedges. Farmers and rural land holders must be involved to make this target successful. The East Devon Farmer's Group was first set up through the Countryside Stewardship facilitation fund, but is now fully supported by the National Landscape Partnership. It brings together farmers, foresters, and other land managers to improve the local natural environment at a landscape scale.

In East Devon, around 90% of land is considered rural, and it currently has tree canopy cover of 22.7%. This target can also feed into the targets of T11 and C6.

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Sources and references:

DEFRA, 2023. Environmental Land Management (ELM) update: how government will pay for land-based environment and climate goods and services. Woodland, Trees and Agroforestry. Available at https://www.gov.uk. Accessed on 14/08/2024.

Link to relevant corporate policies	Actions	Responsibility	Review
Devon Biodiversity Action Plan (BAP) EDDC Nature Recovery Plan	1. Hedges, orchards & wood pasture to be included in KPIs & targets		

Priority	Key Performance Indicators showing current position						
· · · · · · · · · · · · · · · · · · ·	Low	Moderate	Good	Optimal			
	No integration of agroforestry practices; soil health and agricultural yields are not monitored	up to 10% of farms practicing agroforestry with initial soil health and yield assessments	10-25% of farms adopting agroforestry, regular soil health tests, and noticeable improvements in soil health and yields	Over 25% of farms adopting agroforestry, comprehensive soil health metrics, significant yield improvements, and integrated GIS-based tracking and analysis			

Targets, Priorities and Actions 3.2

Regional Collaboration C7

Regional collaboration means engagement with both Devon County Council and the other Districts that it comprises. It also manifests itself within the District at the level of the Parish Council

Individual woodlands, National Landscapes, SSSIs, and river catchments can cross District boundaries; the species that depend upon them certainly do. Coordination on the management and public engagement regarding these vital green assets should provide better outcomes at lower costs.

EDDC's trees, woodlands and hedges have an important role to play in the development of the network creating corridors and joining up habitat for wildlife.

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Link to relevant corporate policies	Actions
Devon Tree and Woodland Strategy National Landscape Management Plan Exeter and East Devon GI Strategy	 Consult core team on current practices Saving Devon Treescapes, Devon Hedge Group & Devon Tree Strategy

Priority	Key Performance Indicators showing current position					
	Low	Moderate	Good	Optimal		
	Const. and Wards have no interaction with each other or the broader region. No regional planning or coordination on trees & woodlands.	Some neighbouring authorities and regional agencies share similar policies and plans related to trees & woodlands.	Some tree & woodland planning and cooperation across authorities and regional agencies.	Widespread regional cooperation resulting in development and implementation of regional tree & woodland strategy.		

Responsibility	Review

3.2 Summary - Community Framework

Key Performance Indicator	Current Performance Level & Future Goal				Priority	
	Low	Moderate	Good	Optimal	, nong	
C1 — Governance and Inter-departmental Co-operation		Moderate				
C2 – Community Involvement, Neighbourhood Action & General Appreciation of Trees, Hedgerows and Woodlands		Moderate				
C3 – Utilities co-operation	Low					
C4 – Green industry co-operation			Good			
C5 – Involvement of large private and institutional landholders		Moderate				
C6 – Trees & agriculture						
C7 – Regional collaboration			Good			

3.3 Sustainable Resource Management Approach Targets, Priorities and Actions

This section deals with the practical management of the trees and woodland resource. For much of the trees, woodlands & hedges of East Devon, this can mean seeking to engage and influence other land owners.

3.3 Targets, Priorities and Actions

R1 Tree and Woodlands Inventory

A tree and woodland inventory is an exercise to take stock of the assets within the district as a whole. An understanding such as this is an essential starting point for establishing the structure of the trees, woodlands and hedges, including the number of trees, diversity of species, age distribution

Inventory methodology needs to get the nature of the tree assets. For individual trees, often under a risk management protocol, or within a Tree Protection Order database, can be dealt with in detail in turn. Woodland trees and other large groups are more cost-effectively measured on a sample basis.

Sampling is also a very cost effective mechanism for establishing an understanding across all ownerships, where limited access to property is required, with remote sensing often allowing part of the task to be carried out with a site visit.

Analysing the inventory allows the setting of a baseline for many tree attributes, including species present, pests and diseases present, ownership, condition, tree size/ age, and more, These baselines allow for evidence based management approaches, and a starting point from which to monitor future progress and to further manage the tree stock over time.

A web-map is an interactive tool for displaying information to the public about trees, woodlands and hedges, and data can be broken down by parish and ward. They can display a range of things including tree benefits such as canopy cover, annual ecosystem benefits (avoided runoff, carbon sequestration, air pollution removal), and tree condition, to name a few. They are an excellent way to engage with the public and communicate benefits of trees. In creating a public web-map, tree data could be easily communicated and compared. Ideally the tool will be accessible, easy to use and comprehensive for all the trees, woodlands and hedges of EDDC. The data should be kept up to date with the most recent reviews of the treescape.

Figure xx. Demonstration of the Treekeeper tree inventory management system developed by Davey Trees.

Link to relevant corporate policies	Actions
Devon Biodiversity Action Plan (BAP)	 Create open-data web map for displaying tree benefits from inventory data Supplement with Ancient Tree Registry & Habitat mapping Include hedges in inventory Separate urban and rural areas

Priority	Key Performance Indicators showing current position		
· · · · · · · · · · · · · · · · · · ·	Low	Moderate	Good
	No inventory .	Complete or sample-based inventory of publicly owned trees. No open source mapping.	Complete inventory of publicly owned trees a sample-based privately owned trees that is guiding management decisions. Some data mapped and openly accessible.

3.3 Targets, Priorities and Actions

R2 Tree Valuation and Asset Management Approach

Tree valuation is an important part of managing and promoting trees, woodlands and hedges. With the trees valued, local people can understand the value of trees beyond the material worth. With these figures to hand, advocating for trees becomes easier.

Capital Asset Valuation of Amenity Trees (CAVAT) was developed by the London Tree Officers Association (LTOA) and others in 2008. It is one of the principal methods of tree valuation in the UK, and aims to provide a method for managing trees as assets rather than liabilities. It can be used for individual trees or for the tree stock as a whole. Documents related to CAVAT including a user guide and the spreadsheet calculator can be viewed online at: https://ltoa.org.uk/ documents-1/capital-asset-value-for-amenity-trees-cavat.

The CAVAT system is only really appropriate when applied to individual trees that are visible to the public. Furthermore, EDDC's individual woodlands are currently not subject to an asset valuation. These knowledge gaps will be addressed in the future.

The various valuation systems all use tree measurements as their starting point, larger trees generally being worth more. This infers that any valuation of trees can only be done following the creation of a tree inventory. See R1.

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Link to relevant corporate policies

Devon Biodiversity Action Plan (BAP)

Actions

- 1. Conduct CAVAT assessment of EDDC trees and include valuations in EDDC tree inventory data
- 2. Include Hedges

Priority	Key Performance Indicators showing current position			
	Low	Moderate	Good	Optimal
	Tree valuation nor assessment management are in place.	Some form of tree valuation is used, at least for key projects involving public trees.	Tree valuation and asset management are implemented across the district, for most public trees.	Tree valuation and asset management are implemented for all public trees - and in some cases also private trees.

Responsibility Review

Targets, Priorities and Actions 3.3

Canopy Cover Assessment and Goals R3

Assessing canopy cover is vital, as this metric is used frequently as a figure which is clear and easy to compare with other areas. Whilst canopy cover is not a thorough study of the health and diversity and therefore overall benefit of trees, woodlands and hedges, it is an important aspect which should not be overlooked for its simplicity.

This target involves assessing the existing canopy cover - the area of leaves, branches and stems of trees covering the ground, across a given area, when viewed from above - in detail, and setting goals based on reasonable potential canopy cover - the percentage of land area that could theoretically be covered by tree canopies if all suitable available space (e.g. open areas, or spaces where trees could be planted) were utilised for tree planting - and achievable steps to maximising cover. This leads into T1-'Relative Tree Canopy Cover'and would provide the necessary baseline for achieving that target. It is important that any tree canopy target is achievable within a reasonable time frame, and considered within the wider context of the strategy.

It should also be noted that tree planting does not necessarily provide an instant increase to canopy cover; in an urban setting trees are constantly being felled for any number of reasons, so insufficient planting can contribute to making up the deficit without actually increasing canopy cover.

Town/City	London	Bristol	Plymouth	Cambridge	Torbay	Sidmouth
Existing Canopy Cover	21% (2015)	18% (2018)	18.5% (2017)	17% (2008)	12% (2011)	
2050 Target	30%	30%	20%	19%	20%	

Table 3: Other Canopy Cover Estimates and Goals

Link to relevant corporate policies	Actions
The 25 Year Environmental Plan	 Include 3-30-300 rule as a target for new developments Include 3-30-300 as a guiding principle in the development of the new town & include in Target of 30% TCC across district

Priority		Key Performance Indicator	rs showing current position
	Low	Moderate	Good
	No assessment or goals.	Low-resolution and/or point-based sampling of canopy cover using aerial photographs or satellite imagery – and limited or no goal- setting.	Complete, detailed, and spatially explicit, hig resolution Tree Canopy Cover (TCC) assessment based on enhanced data (such a LiDAR, Satellite or NTM) – accompanied by comprehensive set of goals by land use and other parameters.

Figure xx. Map of EDDC wards with existing canopy cover ranked against target canopy.

Targets, Priorities and Actions 3.3

Tree Equity (links to C6) **R4**

The urban forest should reflect the diversity of people and cultures at a neighbourhood level, and planting and management should respect the views and values of the many different communities it serves. EDDC aims to progress equality in all spheres of social and economic life and empower and engage neighbourhoods.

Urban forests are connected to a range of socio-economic factors, with studies linking canopy cover to health, wealth, education, and crime. Typically, lower-income areas have fewer trees, and this inequality should be addressed across East Devon. Lack of tree canopy cover can also be linked to the level of urban intensification and the lack of physical space to plant trees (e.g., low-cost housing with small gardens is not always suitable for trees). Therefore, utilizing other aspects of the urban forest, such as green walls and roofs, may be part of the solution. The benefits of trees and green space should be made available to all people in all areas of the district. EDDC recognises that trees and green space should be a right for all, and environmental exclusion must be avoided.

It is important to note that the tree equity map currently only covers Honiton, Exmouth and Sidmouth. Canopy cover should be assessed alongside other data sets, such as air quality and indices of multiple deprivation, to ensure that areas not covered by the map are not overlooked. This target aims to ensure that the planting and management of the urban forest focus on areas where it will most benefit local people, particularly in regions with the lowest canopy cover. Tree management plans in these low-canopy areas should include community engagement and neighbourhood outreach to maximise the benefits of trees in the area. The multi-faceted meanings of trees to different people should be recognised.

Link to relevant corporate policies

Devon Green Infrastructure Strategy Natural Flood Management Guidance Open Spaces Strategy

1. Use EDDC tree canopy cover study coupled with Woodland Trust Tree Equity Map to focus efforts around tree planting and community engagement in the areas that most need it

Priority	Key Performance Indicators showing current position			
	Low	Moderate	Good	Optimal
	Tree planting and outreach is not determined equitably by canopy cover or need for benefits.	Planting and outreach includes attention to low canopy neighborhoods or areas.	Planting and outreach targets neighbourhoods with low canopy and a high need for tree benefits.	Equitable planting and outreach at the neighbourhood level is guided by strong citizen engagement in those low-canopy/high-need areas.

Actions

- 2. Identify opportunities for the greening of social housing estates

Figure xx. Tree Equity Score UK interactive map of East Devon and the surrounding area.

Trees & Development R5

Incorporating trees into planning policy is a critical pathway to achieving high levels of canopy cover in development and re-development. Biodiversity Net Gain (BNG) is now a compulsory part of new developments, however ensuring that the maximum possible gains are made on site or in the local area may still be challenging.

Integrating trees early in the design and planning stages will help to ensure the successful establishment of trees, by making sure they are given enough space to properly develop their crown and root structures, to accommodate underground and overhead services, and to minimise the costs whilst maximising the benefits that trees can provide.

To achieve the KPI's for this target it will be crucial to incorporate explicit guidance into development policy, and to work with housing development companies across East Devon. Enforcing this type of development policy consistently may initially be challenging, however site managers must be made aware of the importance of tree planning, planting and post-planting care, particularly during the development period, and also beyond.

Given East Devon's rural landscape and growing towns, much of the development is currently in peri-urban and rural areas surrounding the towns and villages. Therefore, this target will likely be centred around housing development. However, moving forward, the development of new business parks, industrial centres and the redevelopment of brownfield sites and other aspects of town planning, may become increasingly important. This target should aim to encompass all development, regardless of land use. Recent figures from EDDC, which show a 50% failure rate of newly planted trees in Cranbrook, highlight the critical need for rigorous oversight of tree planting schemes and subsequent monitoring to ensure the success and longevity of these green assets. Proper planning, species selection, and aftercare are essential to prevent such high rates of failure and to maximise the environmental benefits of tree planting.

Figure xx. Components used to assess Biodiversity Units

Source: McVittie, A., Cole, L., McCarthy, J., Fisher, H., and Rudman, H. (2023) Research into Approaches to Measuring Biodiversity in Scotland, Final Report to Scottish Government.

Link to relevant corporate policies	Actions
The East Devon Local Plan NPPF BS5837	 Assess potential plantable space and model canopy growth and planting scenarios to determine suitable timeframe for 30% tree cover in new developments Engage with the Devon Tree Strategy group to strengthen policy around tree retention 8 establishment in developments *Development of SPD

Priority		Key Performance Indicator	rs showing current position	
	Low	Moderate	Good	Optimal
	Tree planting in new developments will achieve less than 10% potential tree canopy cover.30% success of new tree establishment after 5 years.	Tree planting in new developments will achieve less than 20% potential canopy cover. 50% success of new tree establishment after 5 years.	Tree planting in new developments will achieve potential 25% canopy cover. 70% success of new tree establishment after 5 years.	Extensive tree planting and maintenance in new developments. New developments achieve the 3-30-300 rule. 90% success of new tree establishment after 5 years.

Habitat size What is the area of the habitat

Habitat

- distinctiveness
- How rare/ ecologically
- important is the
- habitat

Habitat condition

- How well is the
- habitat functioning in
- comparison to optimal
- functioning

Strategic significance

 Local priority or located in a priority area for creation

R6 Tree and Hedge Protection Policy Development and Enforcement

Urban trees are sometimes viewed as irritating and costly, dropping leaves on lawns, blocking drains, and damaging foundations and pipes with their roots. They may also be considered hazardous, especially if they are not properly managed. For these reasons, individuals may wish to remove trees from public land or private properties.

However, healthy trees—and hedges—can and should be protected, primarily due to the many benefits they provide to society. EDDC seeks to protect trees where appropriate. Conservation areas (CAs) and Tree Preservation Orders (TPOs) are just two examples of the council's duty to safeguard trees and hedges. Additionally, trees and hedges may be protected as part of planning conditions associated with planning approvals. Any unauthorised works to trees or hedges protected by a TPO, CA, or planning condition are addressed by planning enforcement officers when deemed necessary. Planning enforcement officers should also collaborate with tree officers, who can offer detailed guidance and support on tree and hedge protection in development.

To carry out works on a tree or hedge protected by a TPO, consent from the council is required through the submission of a tree works application. For trees in a conservation area, a six-week notice of intention must be submitted to the council, which may either accept the notice or impose a TPO.

Step one is ensuring that local people are informed about and have access to information regarding TPOs, conservation areas, and hedge protections. Step two involves consistently enforcing these policies to ensure they are respected and followed by local tree and hedge owners.

All TPOs are outlined and available to view online by visiting the EDDC website available online here: https://eastdevon.gov.uk/trees/

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Link to relevant corporate policies	Actions
National Landscape Management Plan Local Plan BS5837	 Work to ensure enforcement is pursued in the event of contraventions Protect where appropriate on existing trees & consented landscape schemes TPOs to increase tree retention

Priority	Key Performance Indicators showing current position			
	Low	Moderate	Good	Optimal
	No tree protection policy.	Policies in place to protect public trees and employ industry best management practices, but inconsistently enforced.	Policies and practices in place to protect public and private trees, generally enforced.	Integrated district-wide policies and practices to protect public and private trees, consistently enforced and supported by significant deterrents.

Responsibility	Review

3.3 Targets, Priorities and Actions

R7 Tree, Hedge & Woodland Funding

Securing sufficient funding on an annual basis is vital to not only secure and grow local government funding, but also to expand and diversify finances for tree and woodland funding.

There are several government schemes for funding tree planting of different types, from woodland establishment to urban forestry.

Whilst funding for tree planting is readily available, funding for management and monitoring of trees and woodland needs further investigation.

Private-sector funding as well as funding from one-off projects offer additional opportunities. Moreover, as a large share of East Devon's trees, woodlands and hedges are owned by private residents and organisations their involvement and support is also essential.

Three broad routes exist:

- 1. External funds from central government directed at different parties e.g.
 - 1. Urban Tree Challenge Fund (UTCF) for street trees
 - 2. Local Authority Treescapes Fund (LATF) for other trees and replacement street trees
 - 3. ELMS
- 2. External funds from major NGOs such as the Woodland Trust's Emergency Tree Fund and More Woods scheme, and the Forestry Commission England Woodland Creation Offer
- 3. Levies and agreements within the planning system. Best practice directs funds within developments to make good / surpass any tree loss on a fully funded basis using a more appropriate metric than tree numbers which do not reflect the impact of ecosystem services of the loss of large trees.

Link to relevant corporate policies	Actions
The 25 Year Environmental Plan	 Scope and implement Community Infrastructure Levy (CIL) and Section 106 funding Carry out Tree Planting Opportunity Mapping to assist in funding bids Create a dedicated officer role for bid/funding applications

Priority	Key Performance Indicators showing current position			
	Low	Moderate	Good	
	Little or no dedicated funding.	Funding only for emergency, reactive management.	Funding sufficient for some proactive management based on tree & woodland management plan.	

PLACEHOLDER

Re	esponsibility	Review
	EDDC	

Optimal

Sustained funding from public and private sources to fully implement the strategy .

Capacity and Staffing R8

Adequate staffing means there are enough staff with the correct training and experience to carry out all necessary tasks relating to the implementation and day-to-day running of the tree and woodland programme. This may mean hiring new staff, arranging further training for current staff or bringing in extra capacity from partners to help deliver. For example Devon Forest Partnership has been set up specifically to help deliver Districts' tree strategies.

This includes anyone involved in the delivery of tree management and implementation, e.g., Tree Wardens and other volunteers, Tree Officers, Parks countryside staff, etc. One of the key limiters of this target is money, therefore fully costing the Tree, Hedge and Woodland Strategy and establishing a dedicated and coordinated budget is the first step.

A fully costed budget to deliver this plan can be used to help obtain the necessary funding to deliver the plan. This funding would then allow for the important longer term work.

It would also help for EDDC to encourage DCC to promote future employment training for school leavers across the county. Bicton College should be a feeder school to EDDC's THAWS implementation and management teams. If and when there is capacity within the team, it would be valuable to have a work experience programme to encourage the next generation from the local area to be highly skilled in land based industries (Grow your own).

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Link to relevant corporate policies

The 25 Year Environmental Plan Clean Air Strategy

Actions

- 1. Secure funding for roles necessary to take target to good
- 2. Work with organisations such as WT, FC, NE & other partners to provide advice and assistance

Priority	Key Performance Indicators showing current position			
	Low	Moderate	Good	Optimal
	Team severely limited by lack of personnel and/ or access to adequate equipment. Unable to perform adequate maintenance, let alone implement new goals.	Team limited by lack of trained staff and/or access to adequate equipment.	Team able to implement many of the goals and objectives of the THAWS management plan.	Team able to implement all of the goals and objectives of the THAWS management plan.

Responsibility	Review

Targets, Priorities and Actions 3.3

Tree Establishment - Site Suitability, Planning, Implementation R9

To ensure trees survive, thrive, and reach their full potential, natural regeneration should be prioritised ahead of tree planting wherever possible, as it allows ecosystems to restore themselves more naturally. Where planting is necessary, the right tree species must be selected and placed in suitable locations, planted for the right reasons, and maintained properly to ensure long-term success. This approach gives trees the best chance to establish and reduces the likelihood of removal later.

- Right reason Tree planting should focus not just on quantity, but also quality. trees can benefit future generations by mitigating climate change, improving biodiversity, and enhancing health and well-being.

- Right place Location is key when planting, particularly where conditions can be less than ideal. Trees require space to grow, both above ground and below, of a scale appropriate to its size when fully grown. Potential conflicts should be understood early before deciding to plant.

- Right tree The benefits and drawbacks of different species must be considered, including site suitability, climate tolerance, size, rooting characteristics, aesthetics (canopy, leaves, flowers, etc.), ecosystem service provision, biodiversity, and more.

- Right way How the tree should be planted may vary depending on where the tree is, but all trees need the same essentials; good soil volume for root establishment; water, particularly for young trees and trees in urban areas which may struggle; air and support to keep it upright whilst its roots establish; protection from damage, and maintenance. In urban areas, hard paved impermeable surfaces present challenges which trees are not adapted to deal with, such as soil compaction, nutrient recycling and reduced water infiltration. These issues should be considered to help establish a healthy, long-lasting urban forest.

Any planning relating to trees should adhere to BS 8545 (Trees: from nursery to independence in the landscape) and BS 5837 (Trees in relation to design, demolition and construction). In particular, trees must be a priority in planning and development rather than an afterthought to ensure they are given enough space to mature. This should be extended for both public and private development and consistently enforced. This links to 'Tree Protection Policy Development and Enforcement'.

Sources and references:

Trees and Design Action Group. (2018). Tree Species Selection For Green infrastructure : A Guide for Specifiers: https:// www.tdag.org.uk/tree-species-selection-for-green-infrastructure.html

Link to relevant corporate policies	Actions
Street Tree Establishment Guide Devon GI Strategy Exeter and East Devon GI Strategy Devon Right Tree Right Place Guidance	 Complete a comprehensive prioritised plan and opportunity map for tree planting, hedge planting and natural regeneration, identifying opportunities for active travel and wildlife corridors Draft up SMART targets for the planting plan including 3rd party planting initiatives

Priority	Key Performance Indicators showing current position			
	Low	Moderate	Good	
	Little or no tree planting; tree establishment is ad hoc. Trees are selected and planted without consideration of site conditions.	Some tree planting and establishment occurs, but with limited overall district-wide planning and post-planting care. Appropriate tree species are considered in site selection.	Tree planting plan is guided by district-wide goals, with some post-planting establishment care. Guidelines in place for the improvement of planting site conditions and selection of suitable species.	

Figure 7: Trees and Design Action Group species selection criteria guide.

Maintenance of Publicly Owned Trees **R10**

Intensively managed trees typically include street trees and solitary park trees, which require more care and attention due to the additional stresses and challenges of life in proximity to humans, particularly in hard landscapes, along transport routes, and in areas of high foot traffic resulting in soil compaction. In order to ensure the safety of public trees, routine maintenance must be carried out. This includes planned cyclical inspections and appropriate maintenance.

East Devon does currently hold an inventory of the majority of its publicly owned trees, however ensuring that it is fully comprehensive is the first step in ensuring that all trees are maintained. This will help when recording maintenance schedules and works carried out.

The land use and target value are key drivers for inspection frequency, therefore an understanding of public land use may be a useful tool in further developing the inspection rota, which could in turn help prioritise monitoring and management.

Monitoring trees could help prevent the spread of diseases, the likelihood of falling limbs, and resolve issues such as roots heaving pavements, or tree guards and stakes being left too long and causing extensive damage.

Regular maintenance also helps avoid residents taking tree works into their own hands in the event that a public tree grows to overhang private property. Ensuring that there is a suitable, useable, accessible system for residents to report risks and ask for tree works is important, and reports and requests must be dealt with in a timely manner.

Link to relevant corporate policies	Actions	Responsibility	Review
National Planning Policy Framework	 Ensure EDDC tree stock is proactively managed and recommended works are undertaken as necessary via Ezytreev Consider the use of TPOs where EDDC may be under threat from inappropriate management 		

Priority	Key Performance Indicators showing current position			
	Low	Moderate	Good	
	No maintenance of publicly owned trees, or on a reactive basis only.	Publicly owned trees receive only periodic inspection and maintenance.	Publicly owned trees are inspected and proactively maintained on a cyclical basis.	

Optimal

All publicly owned, intensively managed trees are routinely and thoroughly maintained on ongoing basis according to a comprehensive management plan.

Targets, Priorities and Actions 3.3

Management of Publicly Owned Natural Areas **R11**

Extensively managed trees are trees in parks, woodlands and other natural areas which are often allowed to grow more naturally and freely than intensively managed trees. These areas still require management to provide a healthy and diverse green space.

As shown by figure xx, some areas fall into multiple landscape character designations. Some of these have competing management strategies and recommendations which must be juggled too ensure that the landscape is managed to the highest standard, not the minimum standard. Appropriate management for theses designations falls to the Local Authorities, in this case East Devon and Devon County Council are jointly responsible for designations which cross the LA boundaries.

They are often used by the public and therefore risk management is a key consideration. The frequency of land use and target value are key drivers for inspection frequency, and any inspection rota should accommodate this to prioritise monitoring and management.

A substantial and highly-valued part of East Devon's trees, woodlands and hedges are found in these areas, and efforts must be made to develop and implement good practices, and work in close partnership with land owners, charities, and volunteers.

Figure xx. Map of public green space designations across East Devon.

NB. Some areas fall under multiple landscape characteristics.

Link to relevant corporate policies	Actions
National Planning Policy Framework Local Plan LNRS	

Priority	Key Performance Indicators showing current position			
	Low	Moderate	Good	
	No natural areas management plans or implementation in effect.	Only reactive management efforts to facilitate public use (e.g., hazard abatement, trail maintenance).	Management plan in place for each publicly owned natural area to facilitate appropriate public use.	

Optimal

Management plan for each publicly owned natural area focused on sustaining and, where possible, improving overall ecological integrity (i.e., structure and function) - while facilitating appropriate public use.

3.3 Targets, Priorities and Actions

R12 Tree Risk Management

Existing tree management policy covering EDDC owned trees is covered in Appendix xx of theTree, Hedge and Woodland Strategy. However, its principle components of:

- tree/woodland maintenance
- tree protection policy
- risk management, are reflected here to ensure that and higher level issues are captured

Existing practice for risk management and associated tree maintenance is considered to serve East Devon well and is in keeping with its scale in terms of both numbers of residents and budgets.

Tree preservation orders (TPO), Section 197 of the Town and Country Planning Act 1990, places a duty on local planning authorities to ensure, whenever it is appropriate, adequate provision is made for the preservation of trees, irrespective of ownership.

Where individual trees, groups of trees, woodlands and hedges are considered significant/important, the Council will protect them by the designation of TPOs and the consistent use of the enforcement powers to ensure protection, retention and replacement of trees in the district.

Sources and references: National Tree Safety Group. (2011). Common sense risk management of trees. Forestry Commission

Link to relevant corporate policies	Actions
FAO Guidelines on Urban and Peri-urban Forestry	

Priority	Key Performance Indicators showing current position				
	Low	Moderate	Good	Optimal	
	No tree risk assessment or risk management program. Response is on a reactive basis only.	Level I (limited visual assessment) inspection and follow-up conducted periodically.	Level II (basic assessment) conducted periodically, resulting in scheduled follow-ups.	Level II (basic assessment) conducted routinely, according to defined cycle and intensive follow- up (i.e., priorities and timelines for mitigation established based on the characterisation of risk).	

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Responsibility	Review

Targets, Priorities and Actions 3.3

Reviewing and Improving the Strategy R13

EDDC is taking a strategic approach to its trees, woodlands and hedges. It follows an action based model more widely used in countries like the US and Canada. The Plan will help EDDC set and work towards a vision for its trees that is sustainable well into the future.

The Tree, Hedge and Woodland Strategy outlines a vision for the development of the urban and rural tree resource. It provides a long-term framework in which strategic plans can be developed. Tree-planting programmes are just one element of tree and woodland management, and long-term management plans are just as important. With a tree and woodland management plan in place, tree planting programmes can be focused and strategised, as well as better guiding the achievement of a long-term vision.

With agreement on an ambitious vision, the Tree, Hedge and Woodland Strategy can be divided into management periods, with goals and targets clearly outlined. A series of performance indicators are then be put into place to monitor performance and help progress towards the achievement of goals and the wider vision. It is important that progress is monitored and reviewed on a regular basis, and actions modified as necessary. This way, EDDC can focus on the most relevant and urgent areas going forward.

The Tree, Hedge and Woodland Strategy is an ongoing piece of work and this document represents the first step and will be subject to ongoing improvement and updating. For each and every target within the plan further detail will be added, projects will be planned and actioned to take EDDC towards its vision.

Link to relevant corp	orate policies	Actions			Review
The 25 Year Environmental Plan					
Priority		Key Performance Inc	dicators showing current position		
	Low	Moderate	Good	Optimal	
			Recent comprehensive plan developed and implemented	Strategic, multi-tiered plan with	h built-in adaptive

Priority	Key Performance Indicators showing current position			
	Low	Moderate	Good	
	No plan.	Existing plan limited in scope and implementation.	Recent comprehensive plan developed and implemented for publicly owned forest resources, including trees managed intensively (or individually) and those managed extensively, as a population (e.g., trees in natural areas).	

management mechanisms developed and implemented for public and private forest resources.

Summary - Sustainable Resource Management Approach 4.3

Kay Darfarmanaa Indiaatar	Current Performance Level & Future Goal				Duiouitu
Key Performance Indicator	Low	Moderate	Good	Optimal	Priority
R1 – Tree and Woodlands Inventory		Moderate			
R2 – Tree valuation and asset management approach		Moderate			
R3 – Canopy cover assessment and goals		Moderate			
R4 – Tree Equity (links to C6)		Moderate			
R5 — Trees & Development					
R6 – Tree protection policy development and enforcement		Moderate			
R7 – Tree & Woodland Funding	Low				
R8 – Programme capacity and staffing	Low				
R9 – Tree establishment planning and implementation	Low				
R10 – Maintenance of publicly owned trees		Moderate			
R11 – Management of publicly owned natural areas				Optimal	
R12 – Tree risk management			Good		
R13 – Reviewing and improving the Tree, Hedge and Woodland Strategy			Good		

This section presents the outcomes of the public consultation regarding the creation of this document and the key themes, targets and actions.

Introduction

As an integral part of this strategy, public consultation was sought, in order to gather opinions from a wide section of the community on how trees in EDDC are perceived and managed. The process was undertaken via an online public survey to gather opinions before any of the strategy was written, helping to inform its scope and direction.

The public opinion survey, consisted of around 20 questions with quick, selectable answers and additional space for free text on each. Feedback was overwhelming, which saw one of the greatest responses East Devon had seen in recent times, with almost 500 respondents taking part.

A key result of the feedback highlighted the main themes that members of the public want the Council to focus on. These are:

- ٠ Wildlife, biodiversity and concerns for native species,
- ٠ Safeguarding EDDC's Tree's, woodlands, and hedges for future generations,
- Managing trees to deliver ecosystem services such as stormwater attenuation and ٠ improving air quality,
- Protecting, enhancing, and regenerating the natural green spaces across East Devon for the ٠ amenity, health and natural beauty of the local area.

Further to the public consultation, a number of workshops were held for internal and external stakeholders throughout the process. The outcomes from these workshops helped to deliver the vision, actions, and priorities for this plan.

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Responder profiles

Almost 500 individuals interacted with this consultation. Some, however, did not complete all questions; most questions had 400-450 responses.

The vast majority of responders were members of the public. It is positive to see environmental professionals and local community group members interacting with this consultation.

13 of East Devon's 30 wards were represented by the consultees, however the larger towns account for a higher proportion of responders than the less densely populated wards. This may impact the results of the later questions in this survey, as the more urbanised areas of East Devon have a very different tree, woodland and hedgerow makeup than the rural areas.

Q1. How would you rate the importance of having trees, woodlands, and hedges in East Devon's landscape?

Q2. Do you feel that there are the right amount of trees across East Devon?

When asked about the importance of trees across the region the overwhelming response is that trees woodlands and hedgerows are "very important" to the people of EDDC.

When asked specifically about the number of trees in East Devon, the majority of respondents believe East Devon needs more trees, although almost a quarter believe that there are the right amount of trees .

76%

The current tree canopy cover across EDDC is 21.7%, and this strategy includes a target of increasing canopy cover to 30%.

Almost all survey respondents state that they can indeed see trees from their property.

It is interesting to note that regardless of the fact that almost all respondents being able to see at least one tree from their home, that according to Q2, 23% of people believe that more trees are needed across East Devon.

areas.

Q3. Can you see any trees from your property?

The 3-30-300 rule may be a helpful guide to improve the public view on trees, particularly in urban and residential

Q4. What type of tree(s) can you see from your home?

55%

2%

13%

Up to the height of a bungalow

home?

Unknown

Interestingly, exactly half of the trees seen from respondents' homes are privately owned trees, either in their own gardens or that of neighbours. The next highest proportion of trees belong to woodlands and hedgerows, highlighting the importance of these features in East Devon's landscape.

Question 5 reveals that only 2% of trees seen from homes are newly planted. This is likely simply that small trees are difficult to see and more are likely to be obscured by other infrastructure, but could also be a potential indication that new planting has been limited in residential and urban spaces. Further investigation into recent planting practices and priorities would clarify this. The majority of trees seen are large, mature trees. Again, this may be simply that they can be seen from further away and are not obscured by buildings thereby appearing to be more common than smaller trees, however given the response the Q4, it is reasonable to believe that more of the trees within view of homes are simply mature woodland trees.

The responses to question 6, regarding the feelings towards the trees that consultees can see from their properties are exceptionally positive. The few which are negative are understandable and the comments of the respondents reflect the main themes of a lack of light, excess leaf litter and lack of maintenance and potential risk of property damage.

directly aware of the specifics.

Q6. How do you feel about the tree you can see from your

The positive feedback reflects consultees intrinsic understanding of the value of trees, even if they are not Q7. Should EDDC actively encourage new tree planting across both private and public locations?

Q8. How do you feel about the care of street and park trees in East Devon?

The vast majority of respondents believe that EDDC should promote and action more tree planting, and most others did not feel strongly either way.

This is interesting considering 23% of respondents answered Q2 by stating that they believe East Devon has the right number of trees. This may be indicative of the belief that more is better when it comes to trees, and that people recognise the benefits to continuing to plant trees, both in terms of ecosystem service provision and to replace dead and dying trees each year, regardless of the number of existing trees.

Question 8 adresses public perception ot tree management. Whilst a considerable proportion of consultees did not feel strongly either way, 58% of respondents did have an opinion on street and park tree management. This opinion was split almost in half by those who felt positively and those who felt negatively, with about 5% more respondents feeling positively than negatively. However, 7% of people feel "very dissatisfied' compared with only 2% who feel 'very satisfied'.

Q9. Which benefits that trees, hedges, and woodlands in East Devon provide are most important to you?

The highest priority for the consultees is to ensure that the trees, woodlands and hedgerows of East Devon provide a habitat for wildlife. Other ecosystem services were also considered important, particularly regarding air quality and flooding. Amenity benefits were also important, with natural beauty, mental and physical benefits, and recreational space accumulating 27% of votes.

Create shade to help keep my house cool

Improve air quality (reduce air pollution)

Appendices

4.1 Best Practice Guidance

Biosecurity

Tree Planting

Tree Establishment

Green Infrastructure in Planning

British Standards

Hedgerow Management and Maintenance

Woodland Management and Maintenance

Watercourse & Wetland Management and Maintenance

4.1 Best Practice Guidance

Biosecurity

Tree Planting

Tree Establishment

Green Infrastructure in Planning

British Standards

Hedgerow Management and Maintenance

Woodland Management and Maintenance

Watercourse & Wetland Management and Maintenance

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Glossary

Abbreviations

BNG - Biodiversity Net Gain **BSI** - British Standards Institution **CAVAT** - Capital Asset Valuation for Amenity Trees DCC - Devon County Council **EDDC** - East Devon District Council **ISA** - International Society of Arboriculture LPA - Local Planning Authority **NFI** - National Forest Inventory NGO - Non-Governmental Organisation NTSG - National Tree Safety Group **NTM** - National Tree Map **RTC** - Relative Tree Canopy **SSSI** - Site of Special Scientific Interest **TPO** - Tree Preservation Order **TDAG** - Trees and Design Action Group **USDA** - United States Department of Agriculture

Glossary of terms

Arboriculture- The selection, production, planting, maintenance, and removal of all woody plants for amenity purposes.

Biodiversity- A measure of biological variation, whether represented by gene, species, habitats or ecosystems.

Biosecurity- A set of precautions to reduce the risk of accidentally introducing or spreading alien invasive species, including potential pests and pathogens.

Canopy Cover- A 2-dimensional metric quantifying the area of ground covered by tree canopy when viewed from above, where tree canopy is the collective branches and foliage of the tree.

Carbon sequestration- Processes that remove carbon from the atmosphere.

Carbon storage - The amount of carbon bound up in the above-ground and below- ground parts of woody vegetation.

Community forestry- Addresses the social benefits of the urban forest: community pride, community planting and care projects, reduction of violent crimes and a sense of safety.

Conservation- Use, management and protection of natural resources that insures use and enjoyment for future generations

Ecosystem Services- The ways in which humanity relies on ecosystems for the continued provision of clean air, drinking water, an equitable climate, the productivity of agriculture, forestry and oceans, control of flooding, soil erosion, coastal erosion, carbon sequestration etc.

Ecosystem- A unit of ecology consisting of a more or less discrete community of species, interacting with each other and their physical environment.

Environment- The prevailing conditions which reflect the combined influence of climate, soil, topography and biology (other plants and animals) present in an area.

GIS (Geographic information system)- A collection of computer hardware, software, and geographic data for capturing, storing, updating, manipulating, analysing and displaying all forms of geographically referenced information.

Green infrastructure (GI)- An interconnected network of waterways, wetlands, woodlands, greenways, parks, forests, and other open spaces that support native species, maintain natural ecological processes, sustain air and water resources and contribute to health and guality of life. Includes parks, parkways, riparian buffers, residential landscaping, street trees, rain gardens, green roofs, and window boxes.

Green space- Any vegetated land or water within an urban area that serves as recreation or open space. This includes neighbourhood and regional parks, gardens, cemeteries, playing fields, bike and walking paths, and urban landscaping.

Greenway/green corridor- Corridor composed of natural vegetation. Greenways can be used to create connected networks of open space that include traditional parks and natural areas.

or animal life.

Impervious surface- A hard surface (such as a car park or rooftop) that prevents infiltration of water into the ground, causing water to run off the surface.

Infiltration- The downward movement of water from the land surface into the soil.

Inventory, Tree- Gathering of accurate information on the health and diversity of the community forest which can include: listing and description of trees and planting sites.

factors.

Native Species- Species present in a defined region for a certain amount of time without having been brought by humans (cf. exotic), for instance in Britain since the English Channel was flooded around 6,000 years ago.

Non-native species- A species that due to direct or indirect human activity occurs in locations beyond its known historical or potential natural range. Refers to species from another continent, region, ecosystem, or habitat.

Pollution- Substances introduced into the environment by human actions that contaminate the environment.

Stormwater runoff- Precipitation that falls on impervious surfaces (such as roofs and roads). Because it is not absorbed by soil and vegetation, it flows into storm drains.

Habitat- Food, water, shelter and space that supports plant

Microclimate- The climate of a site as modified by local site

Subsidence- In relation to soil or structures resting in or on soil, a sinking due to shrinkage when certain clay soils dry out, sometimes due to the extraction of moisture by tree roots.

Tree Protection Order (TPO)- A legally enforceable document made by the local planning authority to protect trees and woodland in the interests of public amenity. While trees in conservation areas are automatically protected, individual trees outside these areas may be protected with a Tree Preservation Order.

Urban Forest- Trees, woody shrubs, hedges, herbaceous plants, waterways, wildlife, grasses, and other green infrastructure (including green roofs, green walls etc.) within the built environment, considered collectively over an extensive area.

Urban heat island effect- A phenomenon where air temperatures in urban areas are 2-10°F hotter than surrounding rural areas due to the high concentrations of buildings and pavement in urban areas.

Stem Diamete (DBH)r- The diameter of a tree at around 1.5 metres above ground level.

