East Lothian Council

DRAFT

Tree and Woodland Strategy For East Lothian

Tree and Woodland Strategy for East Lothian

Helping Address the Climate and Nature Crises

This strategy is the Forestry and Woodland Strategy required by the Planning (Scotland) Act 2019 and replaces the 2011 Edinburgh and Lothians Forestry and Woodland Strategy in East Lothian. It helps fulfil the Council's duty to promote sustainable forest management as required by the Forestry and Land Management (Scotland) Act 2018. The Strategy has no end date. However, its focus is on the next 10 years in line with delivery of the East Lothian Climate Forest.

The focus of our Strategy is as much on the urban as the rural area. To recognise the importance of trees and tree groups as well as woodlands within our rural and urban areas we have chosen to title our document a Tree and Woodland Strategy rather than a forestry strategy.

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1	Draft	7 July 2022
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Authors

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UK Forestry Standard Definition of Forest and Forestry

The term 'forest' is used to describe land predominately covered in trees (defined as land under stands of trees with a canopy cover of at least 20%), whether in large tracts (generally called forests) or smaller areas known by a variety of terms (including woods, copses, spinneys or shelterbelts). For the purposes of the UK Forestry Standard the alternative term woodland is synonymous with forest.

Forestry is the science and art of planting, managing and caring for forests.

ELFWS – Edinburgh and Lothian Forestry and Woodland Strategy

ELLDP – East Lothian Local Development Plan 2018

TWSEL – Tree and Woodland Strategy for East Lothian (this Strategy)

SEPA – Scottish Environmental Protection Agency

SFS – Scotland's Forestry Strategy

SSSI – Site of Special Scientific Interest

Woodland – area of land larger than 0.25 ha, where trees are growing

UKFS – United Kingdom Forestry Standard

1 Introduction

1.1 Welcome to the East Lothian Tree and Woodland Strategy. This Strategy:

- Sets out our long term vision and our policies and proposals for trees and woodland
- Identifies woodlands of high nature conservation value.
- Shows how we will protect and enhance our trees and woodlands.
- Provides guidance to landowners and others seeking to manage woodland and plant trees and hedgerows.
- Provides guidance to developers for trees in and around their sites
- Provides advice for our people and communities who want to get involved with protecting trees or creating woodland

1.2 The strategy will enable trees to play a key role in addressing the climate and biodiversity crises and guide delivery of the East Lothian Climate Forest. We might tell you a bit about trees along the way. Because we like them.

Some policies, strategies and projects that inform this one

Scotland's Forestry Strategy

1.3 Scotland's Forestry Strategy 2019-2029 (Scottish Government, 2019) presents Scottish Ministers' 50 year Vision for forestry, and a 10 year framework for action.

Scotland's Forestry Strategy Vision

In 2070, Scotland will have more forests and woodlands, sustainably managed and better integrated with other land uses. These will provide a more resilient, adaptable resource, with greater natural capital value, that supports a strong economy, a thriving environment, and healthy and flourishing communities.

Scottish Climate Change Plan update

1.4 The Update sets out how Scotland will meets its climate change targets, including:

18,000 ha of woodland creation annually

21% of Scotland forested by 2032

Scottish Biodiversity Strategy

1.5 The new draft strategy aims to deliver the transformational changes needed to protect and restore terrestrial, freshwater and marine biodiversity in Scotland.

Scottish Government's Control of Woodland Removal Policy

1.6 This policy contains a presumption in favour of the retention of woodland, especially woodland of high nature conservation value. Woodland can only to be removed where there are public benefits, and normally compensatory planting is required.

Central Scotland Green Network (CSGN)

1.7 This project aims to transform places for people and nature across central Scotland. It is one of the largest and most ambitions green infrastructure projects in Europe. Its focus is to address climate change, biodiversity loss and environmental inequality by connecting people to greenspace where it is needed most. The CSGN is identified as a National Development in NPF4.

National Planning Framework 4 (NPF4)

1.8 National Planning Framework 4 promises a step change in how the planning systems approaches issues of climate change and biodiversity loss. Its sets out requirements for development proposals regarding forestry, woodland and trees.

NPF4 Policy 6 Forestry, woodland and trees

Policy Principles

Policy Intent:

- To protect and expand forests, woodland and trees

Policy Outcomes:

- Existing woodlands and trees are protected, and cover is expanded.
- Woodland and trees on development sites are sustainably managed.

Local Policy Context

1.9 The Council declared a Climate Emergency in 2019. Our Climate Change Strategy 2020-2025 with its annual update followed this, and included the proposal to create an East Lothian Climate Forest, which will bring around 2000 hectares of new woodland creation and tree planting.

EAST LOTHIAN CLIMATE FOREST

An ambitious proposal to help the Council reach its target of a net carbon neutral East Lothian, whilst also delivering a range of biodiversity, landscape, health and wellbeing, and green network benefits .

Working in partnership with communities, landowners and producers this will:

- Plant 2 million trees between 2021 and 2031
- Increase the urban tree canopy
- Expand the network of hedgerows

Green Network Strategy

1.10 The Green Network Strategy sets out some of the ways the Council intends to integrate new development and new people into our beautiful area. This includes an expansion of native woodland and tree planting.

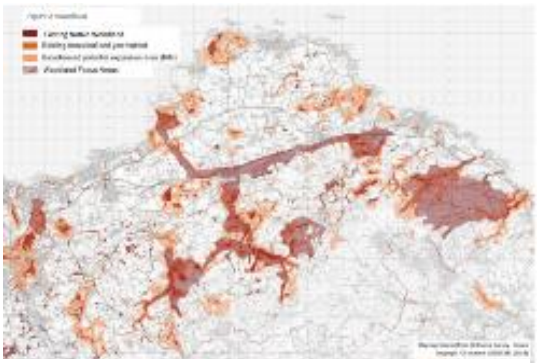


Figure 1 Extract from Green Network Strategy (Fig 8: Woodland)

Trees - Who Does What

Scottish Government

Sets the legislative framework for forestry and woodland and decides on overall levels of grant funding

Scottish Forestry

Scottish Government agency responsible for forestry policy, support and regulation. This agency determines grant applications at the project level.

Forestry and Land Scotland

Scottish Government agency responsible for managing Scotland's national forests and land. There is no national forest land in East Lothian.

NatureScot

Designates Sites of Special Scientific Interest, and regulate the operations that can take place there.

Provide advice to the planning authority on proposals that might affect internationally and nationally designated sites.

Scottish Environment Protection Agency (SEPA)

Responsible for maintaining water body quality and flood risk planning. Trees and woodland can help improve water quality.

Scottish Water

Responsible for providing safe drinking water and managing waste water. Trees can reduce surface water run-off reducing pressures on water assets.

Charitable Bodies

The Woodland Trust is the UK's largest woodland conservation charity, with a vision for a UK rich in woods and trees. The Trust aims to plant more trees, protect trees and woodland, restore woods and inspire people (Woodland Trust, 2021). The Woodland Trust owns Seton Dean, Butterdean Wood and Pressmennan Wood in East Lothian. The Scottish Wildlife Trust champions the cause of wildlife through policy and campaigning work, but also owns land, including Brock Wood and Woodhall Dean, by Dunbar. Smaller trusts and community groups also own and/or manage woodland in East Lothian, such as the Dunbar Community Woodland Group.

East Lothian Council

Responsible for producing the Forestry and Woodland Strategy for the area (this Strategy). We manage thousands of trees and woodland on land we own, including in parks, school grounds, open spaces and woodland across East Lothian. We also manage trees and woodland under Management Agreements which includes John Muir Country Park and much of the coast. The Council also has a duty as Roads Authority in ensuring safety on the public highway, which can be affected by nearby trees.

The Council also has a regulatory role. We make Tree Preservation Orders for the protection of specific trees and areas of woodland in the public interest. We produce the Local Development Plan for our area which contains policy on how trees are treated in development proposals. We determine planning applications, considering the removal and replacement of trees on development sites and imposing conditions on consent requiring replacement tree planting or landscaping schemes where necessary. The Council also arbitrates on disputes over high hedges.

Landowners and Managers

Most of East Lothian's woodland and trees are privately owned, from large commercial woodlands to trees in gardens. Landowners are responsible for avoiding damage to third party property from their trees and for the safety of the public on their land. The Scottish Outdoor Access Code asks land managers to assess the level and nature of public use of their woodlands. On busy sites, a plan should be developed to manage this. Where possible, paths and other facilities should be provided.

Homeowners and Tenants

Plant and look after trees in their gardens, with responsibility for any planted or self-seeded trees there.

Public

Have a right of responsible access to woodlands.

Where We Are

1.11 East Lothian's tree and woodland cover is lower than the Scottish average. And the trend from 2011-2019 was downwards, with woodland cover decreasing by 103 ha, mainly due to felling for recent windfarm and golf course development. The Strategy aims to help reverse this trend.

1.12 Within the lowlands and Lammermuir fringe, woodland is concentrated in the river valleys and policy woodlands. The agricultural plain is generally open, though broken by shelterbelts and hedges. There are also trees associated with our towns and village here, some of which are well treed. The Lammermuir Cleughs contain areas of native woodland, and there is considerable potential to increase this. The exposed Lammermuir plateau is generally grouse moorland, although there are coniferous plantations at either end.

1.13 We have different types of woodland from native and ancient woodlands to woodlands for a purpose. More information on these can be found in the Biodiversity Section.

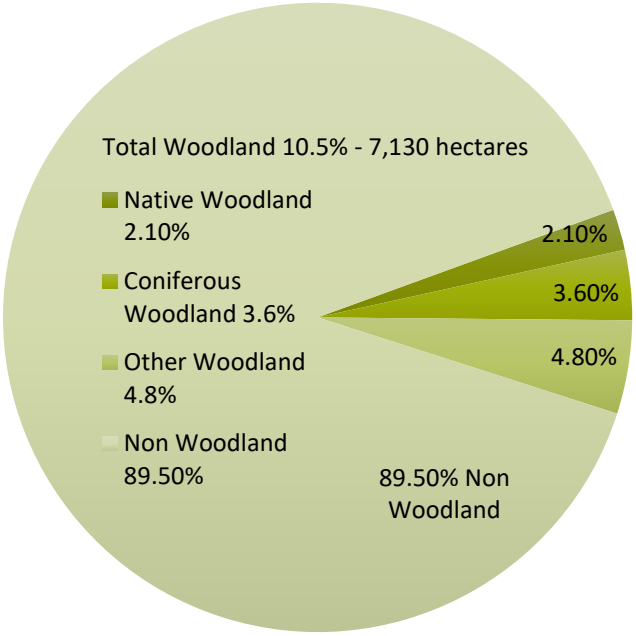


Figure 2 Percentage of landcover by type in East Lothian

1.14 The low level of woodland within East Lothian is partly due to a number of competing landuse and constraints to woodland expansion as shown in figure 4.

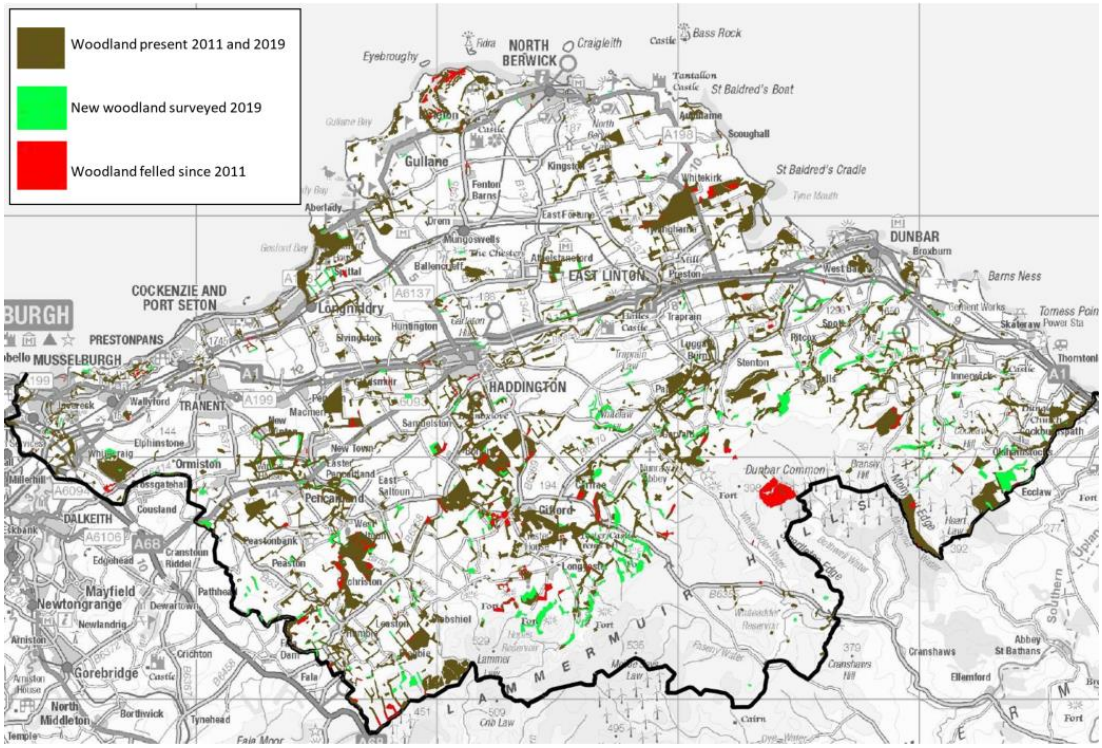


Figure 3 Change in woodland cover of East Lothian

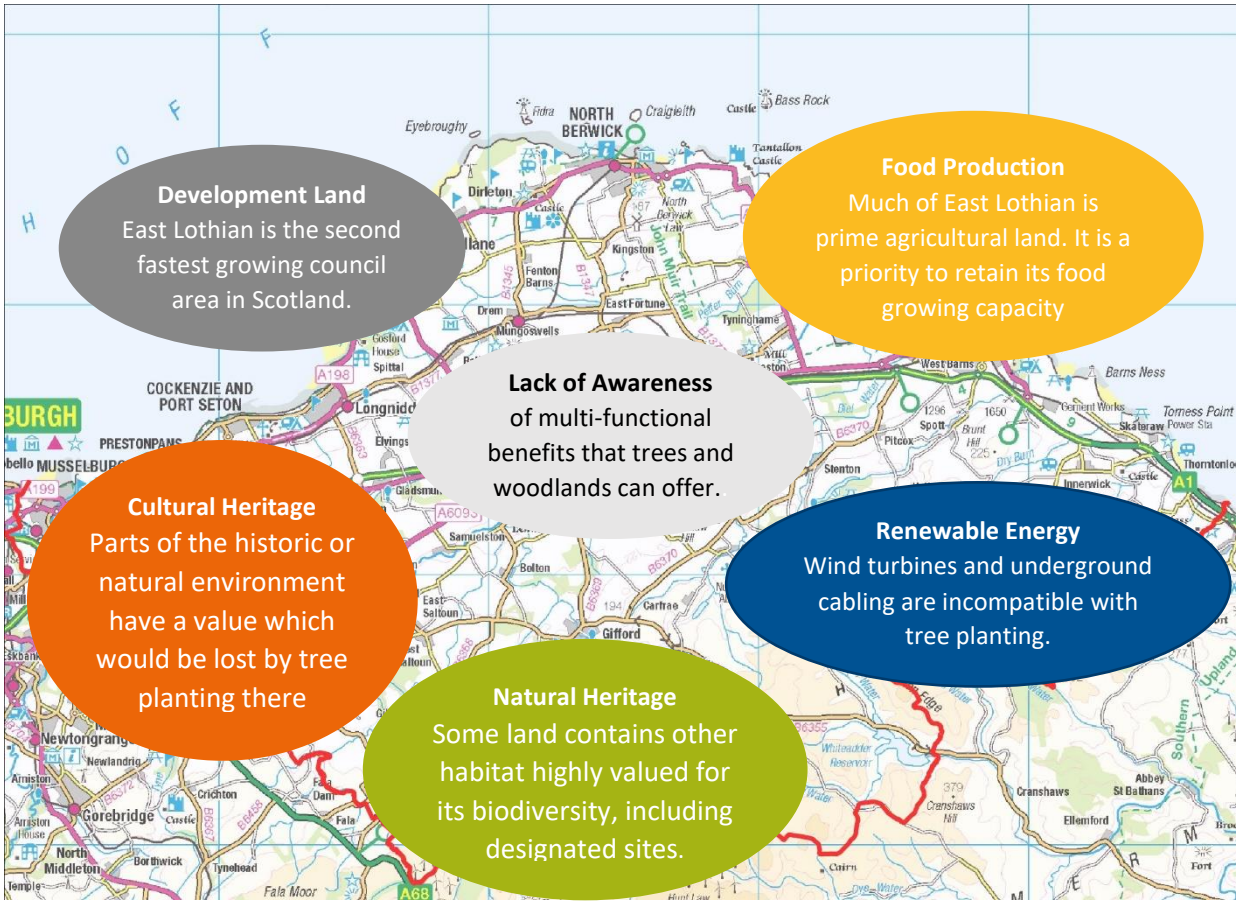


Figure 4 Constraints to woodland expansion

What We Have Been Up To

1.14 An impressive amount of tree planting is already underway – we are on track to meet the Climate Forest target so far, which is fantastic. Community groups have enthusiastically taken up the challenge, while private landowners and developers have also increased the wooded area. Charities such as the Woodland Trust have been providing trees to community groups while others including The Conservation Volunteers are bringing people together to plant them. The Council itself has an ongoing tree planting programme across our communities, including 15,000 recently planted at Levenhall Links.

1.15 A challenge is to make sure that these new trees and woodlands are managed so they can play their role in addressing climate change, improving biodiversity and providing attractive places to live.

Figure 5 The Provost helps plant the first tree for the Queen's Green Canopy in East Lothian

1.16 The Queen's Green Canopy was a significant project in celebration of the Queen's Platinum Jubilee. It encouraged people across the UK to "Plant a Tree for the Jubilee". Trees in schools and elsewhere were one legacy of this project; another is East Lothian Tree Time where donations to the Climate Forest can be made.

2 The Vision

Expanded and sustainably managed networks of woodland and trees across East Lothian contribute to addressing climate change, and provide healthy and resilient environment, nature recovery, a strong sustainable economy and enhanced quality of life for local communities

Total Woodland

Currently		10 Years' Time
10.5%	increase by	max 13.45%
7130 ha	1 to 3%	max 9130 ha

Native Woodland

Currently		10 Years' Time
2.1%	increase	4.2%
1426 ha	by 2.1%	2852 ha

If this Strategy achieves its aims, the woodland in East Lothian will look something like this:

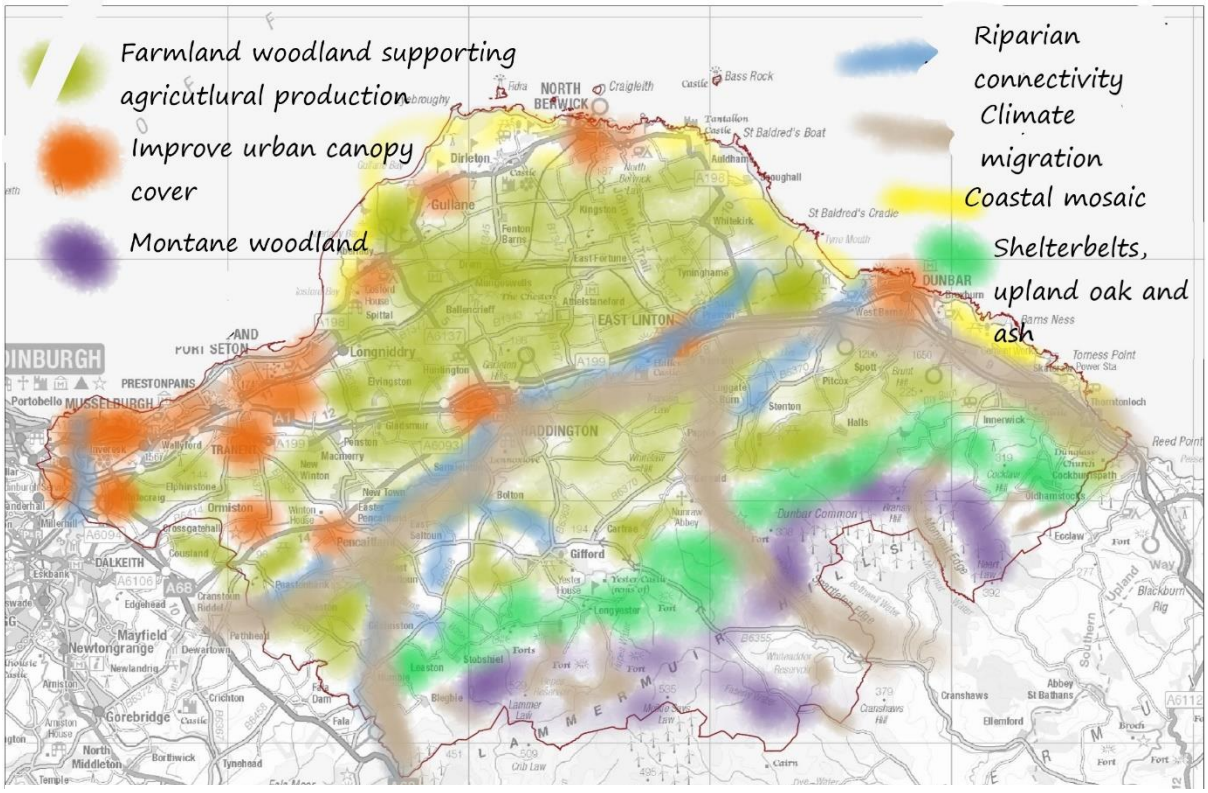


Figure 6 Vision diagram

3 Achieving the Vision

3.1 The Strategy Vision is all about what we can do for trees and what trees and woodlands can do for us. To help think about this we have split the Strategy into 7 Themes each covering a separate part of the Vision. Each Theme has an Aim and Targets as shown below. These are supported by Actions throughout the document showing what we intend to do to achieve the targets and ultimately, the Vision.

Target 3B: Habitat connectivity is both a Scottish and UK biodiversity indicator, and work is ongoing into creating a method to measure functional connectivity

Target 4A: Targets may be set by communities for their area through Local Place Plans or other inclusive means however until this is done the working target is 30% in line with the 3-30-300 rule (IUCN Urban Alliance, 2021)

3.2 Achieving the Vision requires us both to retain and create woodland. Retaining existing established mature trees, hedges and woodlands has multiple benefits across all themes. Replacement planting takes many years to perform the same function as established woodland. Retention of trees and woodland is therefore as important as creation of new woodland. This is our policy towards retention:

POLICY 1 Retention of woodland, trees and hedges
(also refer to Policy 7)Existing woodland, trees and hedges/hedgerows should be retained where possible.

Woodland retention and compensatory woodland creation is required in line with the Scottish Government Control of Woodland Removal Policy.

Where consent is given for removal of trees and / or hedges compensatory planting with native species will normally be required.

Consideration should be given to replacing the function of the woodland being removed such as recreation, canopy, biodiversity connectivity, and flood prevention.

Normally replacement planting should be sought on the site. Where it can be shown that this is not possible sites should be sought in the following order of preference: (1) East Lothian, (2) sites with active travel, biodiversity and / or visual links to East Lothian, (3) Scotland.

Where the carbon sequestration value of new woodland, tree or hedgerow planting does not completely equal that lost the loss of carbon storage should be compensated in other ways.

In addition, where trees are felled the timber shall be retained as a carbon store, where possible, such as by use in wood products.

3.3 The Scottish Government's Control of Woodland Removal Policy will be applied by both Scottish Forestry through felling permissions and East Lothian Council through the planning system. The planning system will also seek retention and replacement of individual trees and hedgerows. This will help retain existing woodland, trees and hedgerows, and secure replacement planting where this is lost. Replacement planting should ensure the functional benefits offered by the original woodland.

3.4 The mapping in Section 11 shows existing woodlands and where new trees and woodlands will create most benefit.

4 Climate Change Mitigation

AIM – Increase the contribution that East Lothian's existing and future woodlands make to achieving net zero carbon in line with East Lothian Council and Scottish Government targets

4.1 Trees and woodland can help address climate change by absorbing carbon. Increasing woodland cover is a Scottish Government priority. Our Green Network Strategy aims to maintain tree and woodland cover, and supports maximising the carbon stored in vegetation and soils through planting and landuse. Retaining and managing existing woodland and expanding woodland coverage, as well as supporting the use of wood products are therefore priorities for this Strategy.

4.2 The Strategy is not promoting the use or growth of wood as fuel. Burning wood releases carbon and often adds to air pollution, and experience over the last few years indicates that this is not viable currently.

Retain and sustainably manage trees and woodland

Retain existing hedgerows, trees and woodlands

4.3 Existing trees and woodland, particularly mature established woodlands, trees and hedgerows store far more carbon than areas of new tree planting. The Strategy therefore supports retention of existing trees and woodlands as shown in Policy 1, and replacement of those that cannot be retained.

4.4 Where tree or woodland removal is mitigated by an equivalent area of new planting there can still be net loss of carbon due to the initial smaller size of the new trees. The Strategy supports offsetting this additional loss of stored carbon through other means.

ACTION 1

The Council will investigate opportunities for offsetting its own unavoidable carbon emission through creation of new multifunctional woodland locally

4.5 There is evidence to suggest that hedgerows sequester carbon at twice the rate of the equivalent area of woodland (Game and Wildlife Conservation Trust 2021) making them important for climate mitigation. There is no national protection for hedges or hedgerows in Scotland. This Strategy therefore includes local policy (see Policy 1) to help retain hedges.

4.6 Trees within garden ground are exempt from Scottish Forestry management requirements. Experience has shown that trees taken into garden ground can be very vulnerable to loss. Given the importance of retaining woodland, the Council does therefore not generally support change of use of woodland to garden ground.

POLICY 2 Change of Use of woodland to garden ground

Change of use of woodland to garden ground will not normally be supported. Where permission for change of use to garden ground is granted for land that contains tree(s) the Council will seek to protect these by a planning condition or Tree Preservation Order.

Sustainable woodland management

European Definition of Sustainable Forest Management

The stewardship and use of forest lands that maintains biodiversity, productivity, regeneration capacity, vitality and potential to fulfil now and in the future relevant ecological, economic and social functions at local, national and global levels and that does not cause damage to other ecosystems

4.7 Support for sustainable woodland management is at the heart of this Strategy and woodland owners are encouraged to manage their woodlands in this way. Maintaining healthy woodlands through good management increases carbon sequestration. Sustainable woodland management is also important for adaptation to climate change (see Policy 7 on woodland management below).

4.8 The UK Forestry Standard, (Forestry Commission, 2017) is informed by European definition of Sustainable Forest Management and shows how to design and manage woodland sustainably. Scottish Forestry funding is conditional on meeting this standard.

4.9 Woodland management plans are a key tool to help manage woodland well. Plans should include mixed species planting including both those for short term harvesting and those for long term growth.

4.10 The UK Woodland Assurance Standard (UKWAS, 2021) is a voluntary scheme that certifies sustainable woodland management. The UKWAS combines the UK Forestry Standard requirements with those of the internationally recognised certification of the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC). We encourage sustainable management of woodlands and signing up to these schemes.

Woodland creation and tree planting

4.11 The Council is passionate about woodland creation. East Lothian's Green Network Strategy aims to increase tree and woodland cover for multiple benefits. The Council has since committed to planting 2 million trees over 10 years through the East Lothian Climate Forest. This equates to between 80 to 200 hectares a year. For comparison, Haddington's Neilson Park is around 5 hectares, Yellowcraig Plantation is around 12 hectares, and Butterdean Wood is around 65 hectares.

ACTION 2
Deliver the East Lothian Climate Forest

TARGET 1: Creation of the East Lothian Climate Forest of at least 80-200 ha of new woodland annually across East Lothian to provide 2 million trees in 10 years

4.12 Carbon sequestration is an important function of woodland, however our Strategy identifies that woodland in East Lothian must be multi-functional and in the right places. Coniferous plantations offer the fastest benefits for carbon sequestration, however broadleaves offer longer term and wider benefits and are generally preferred. Other habitats including peatland, saltmarsh and some grasslands also provide essential carbon sequestration value. Tree planting on such areas is unlikely to be the best use of the land. The value of existing and adjacent habitat for carbon sequestration should be considered at project level (see 'Peatland' in Section 7 Biodiversity).

POLICY 3 Woodland creation Tree planting and woodland creation should comply with the Spatial Guidance in Section 12 of this Strategy and the UK Forestry Standard.

Land managers creating new woodland should seek to reduce carbon impacts associated with its creation by using methods of tree planting to reduce soil disturbance or by allowing natural regeneration

Woodland should be designed to achieve multi-functional benefits and broadleaved trees are generally preferred.

4.13 A tool (the CARBINE accounting model[2]) is available to help land managers with existing woodland, or who are planning woodland, to estimate carbon stocks. This can help manage the woodland to increase its carbon potential. Land managers are encouraged to use the tool.

4.14 The Woodland Carbon Code (Woodland Carbon Code, 2021) is the internationally recognised standard for projects creating woodland as carbon offset in the UK. The Woodland Carbon Code issues carbon units which represent the amount of CO_2 removed from the atmosphere by the woodland created. East Lothian's Green Network Strategy has as an aim for the identification of sites for woodland and tree planting to enable the benefits of off-setting to be kept within East Lothian. As part of the East Lothian Climate Forest implementation, the Council will seek to match landowners with space for trees with businesses – or individuals - who wish to support tree planting here, including for offsetting of unavoidable emissions.

4.15 Funding may be available for land managers for woodland creation, and tree and hedgerow planting from Scottish Forestry and through the Scottish Rural Development Programme, charities such as the Woodland Trust, and schemes supporting companies or individuals seeking to offset their carbon emissions. Proposals for woodland creation of over 2 ha or in a sensitive site[3], felling permission or woodland operations submitted to Scottish Forestry for approval and/or funding will be required to comply with the UK Forestry Standard (Forestry Commission, 2017).

[2] More information on the CARBINE Accounting model for the measurement of carbon levels in forestry stock, soil and harvested products at Carbon accounting - Forest Research

[3] Sensitive sites are those set out in The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017 and in East Lothian currently are SSSIs, European Sites, Scheduled Monuments, and land covered by a Nature Conservation Order

Wee Forests

"Help mitigate the effects of the climate crisis, one Tiny Forest at a time" Earthwatch

'Wee Forests' are areas of dense tree planting in urban areas specifically designed for climate mitigation, a method development by Dr Akira Miyawaki. A Wee Forest is a tennis court-sized area of dense fast growing native woodland planting to mitigate climate change. About 600 young trees of a mix of 15 to 30 native species suited to the local area are planted closely together. This avoids the need for maintenance and develops the structure of a mature woodland in about 20 years.

Wee Forests help address climate change but also provide space for nature in the heart of our settlements. Their small scale may offer opportunities for tree planting for climate mitigation in many of our urban areas.

The Queen Elizabeth II Jubilee Wood wee forest in the Longniddry planted by the Glassel Park Association with help from the local Scout Group. The mix of native trees were donated by the Woodland Trust. They intend to extend this in future planting seasons.

Reduce climate forcing emissions from the forestry industry

4.16 Organic woodland soils also hold significant quantities of carbon. Reducing soil disturbance of management operations helps to retain this carbon. Soil disturbance, drainage and transport of stock for woodland creation all lead to carbon emissions. Natural regeneration avoids emitting carbon from these sources. It also allows for natural selection of the best species for the site to establish, which should absorb more carbon more quickly (Fletcher, T.I. *et al*, 2021). Natural regeneration therefore may be preferable to planting in many situations for climate sequestration and also ecologically and financially. Where planting is used, notch planting of whips can lessen soil disturbance and thereby reduce release of carbon.

4.17 Single use, plastic tree tubes are widely used to protect new planting from herbivores. However these are not biodegradable, can be expensive and time consuming to collect, and difficult to recycle. Often their removal is not included in woodland management, or is forgotten about. This can lead to damage to the trees as they grow and littering and pollution as the tubes break and blow around or enter the water system. Tubing individual trees also does not encourage natural regeneration in the wider woodland environment. The use of biodegradable trees tubes or alternatives to tree tubes, such as fencing, are supported by this Strategy.

POLICY 4 Reducing climate forcing emissions from tree planting and forestry operations

Forestry operations should aim to reduce climate forcing emissions including from fossil fuel use and soil disturbance.

Use of materials in tree and forestry operations and treatment of waste arisings should follow the waste hierarchy (Scottish Government, 2010) of prevent, reuse, recycle, recover, dispose.

The use of single use plastics should be avoided.

4.18 Some of the operations undertaken for both forestry and the supporting businesses lead to climate forcing emissions through transport, energy use or disposal of waste. This should be reduced to maximise the carbon benefits of woodland. Advice on reducing emissions for businesses is available from bodies such as the Energy Saving Trust.

Promote the sustainable use and reuse of wood and wood products

4.19 Use of wood products helps support a low-carbon economy. Wood products store carbon as well as replacing more carbon intensive materials. The manufacture of timber products requires less fossil fuel than non-wood alternatives such as concrete, metals and plastics. In fact wood from sustainable sources has the lowest energy consumption and CO^2 emissions of any building material (Forestry Commission Scotland, 2010). Using local product reduces transport emissions. However wood products transported from other places can still be a more sustainable solution than a non-wood alternative.

4.20 Scotland's Forestry Strategy (2019) has a target for increasing the use of Scottish wood products in construction. The Council will support this by encouraging the use of timber and wood products in preference to less sustainable materials where possible. In line with our Sustainable Procurement Policy and Sustainable Procurement Charter (East Lothian Council, 2020) we will also increase specification of wood and wood products, particularly locally sourced timber, where possible.

ACTION 3
The Council will explore ways of increasing use of wood and wood products, particularly locally sourced timber

4.21 The Forest Stewardship Council (FSC) is an international body promoting responsible management of forests. It certifies wood, paper and other forest products that come from responsibly managed forests. The Programme for the Endorsement of Forest Certification (PEFC) also promotes sustainable forest management through certification. Obtaining PEFC and FSC certification or use of certified products, will help suppliers show the product is sustainable.

POLICY 5 Wood Products
The Council supports:

- The use and retention of timber and wood products in preference to less sustainable materials where possible
- The use of Scottish wood and wood products
- The use of wood products that are from recycled material and/or that can be re-used or recycled after use

4.22 The circular economy, explained as 'make, use, remake' as opposed to 'make, use, dispose', is part of the solution to our global climate emergency (Zero Waste Scotland, undated). The more wood products are recycled and reused the fewer trees need to be felled. See Policies 4 and 5.

4.23 The Council will continue to recycle wood products and use recycled wood products where possible. The Council's Climate Change Strategy has further actions on the circular economy.

Recycling Wood Products

The Council supports the circular economy in regard to forestry, wood and wood products by:

- Collecting paper and cardboard waste from businesses and households, allowing their recycling into further product and reducing the number of trees that need to be harvested to make new products. This means more land is available for permanent woodland.
- Purchasing recycled paper, helping create demand for recycled produce.
- Chipping brash waste from our own timber operations on site and collecting garden waste to send to a local company (Forth Resource Management) where it is composted. This is then sold as fertiliser and mulch for use in planting schemes, including by the Council. This helps avoid use of peat compost products, supporting the maintenance of peatlands as carbon sinks.
- Selling good quality timber from tree and woodland management to a local timber merchant thereby retaining its carbon content. Poorer quality timber is sold for biomass to create energy.

Reduce emissions associated with woodland recreation

4.24 Recreational use of woodlands can lead to emissions, sometimes from activities undertaken within woodland, but mainly through the journey there. Implementation of the Core Path Plan and Active Travel Improvement Plan will help improve the active travel offer across East Lothian. This Strategy aims to improve access to woodland locally, to reduce the need to travel (see Section 8 Community).

5 Resilience and Climate Adaptation

AIM - Increase resilience of East Lothian's environment and its woodlands, including using trees and woodland to adapt to Climate Change

5.1 Resilience means ensuring East Lothian's environment and woodlands are sustainable and can adapt and meet current challenges as well as future challenges brought by climate change. Woodlands and trees can help address issues such as flooding and water management and soil loss as part of nature based solutions. Tree planting can also be used to help make more resilient, adaptive places for people, including by creating shade, urban cooling, and provision of trees as windbreaks.

Use trees to contribute to reducing flood risk

5.2 Climate change projections for East Lothian include milder wetter winters with more rainfall and risk of flooding (Met Office). Trees and woodland can help reduce flooding and form an integral part of natural flood management.

5.3 There are three different types of woodland for natural flood management:

- Floodplain woodlands - SEPA suggest that conifer or mixed species woodlands or short rotation coppicing / woodland may be most suitable for this. Floodplain woodlands may have the greatest potential for downstream flood mitigation.
- Riparian woodlands - up to 30m wide to both sides of a watercourse provide a buffer between the watercourse and adjacent land. Broadleaved species are likely to be more suitable for these to improve both river and woodland biodiversity. These areas are shown on the Opportunities for Native Woodland map in Section 11.
- Catchment woodlands - planted within the wider catchment in areas of waterlogged soils or rapid water run-off improve infiltration and soil stability can significantly alleviate flooding downstream

Pickering, North Yorkshire: Slowing the Flow project

Planting of 40,000 trees, installing woody dams and moorland drain blocking helped reduce peak river flow by 15-20% at a time when 50mm of rain fell on sodden ground in 36 hours. The project cost £500,000, much less than a proposed flood wall (Forest Research, 2015)

5.4 Surface water and river flooding primarily occur during or shortly after times of heavy rainfall. The speed at which the water that falls as rain infiltrates the ground, or joins a water course, can affect how severe any resultant flooding is. Trees and woodlands intercept rain reducing the rate of flow across the ground, decreasing peak flows. One study found that soil infiltration was 60% greater under young native cross slope woodlands compared to adjacent grazed pasture (SEPA, 2015).

5.5 SEPA (undated) have identified areas with medium and high potential for water runoff reduction (figure 7). These areas are generally where there are steeper slopes. Tree planting in the opportunity areas shown in figure 7 could help reduce the speed with which water would run off the land, potentially helping reduce flood risk. It may also help with slope stability. Planting in these areas should be considered alongside the opportunity mapping in Section 11.

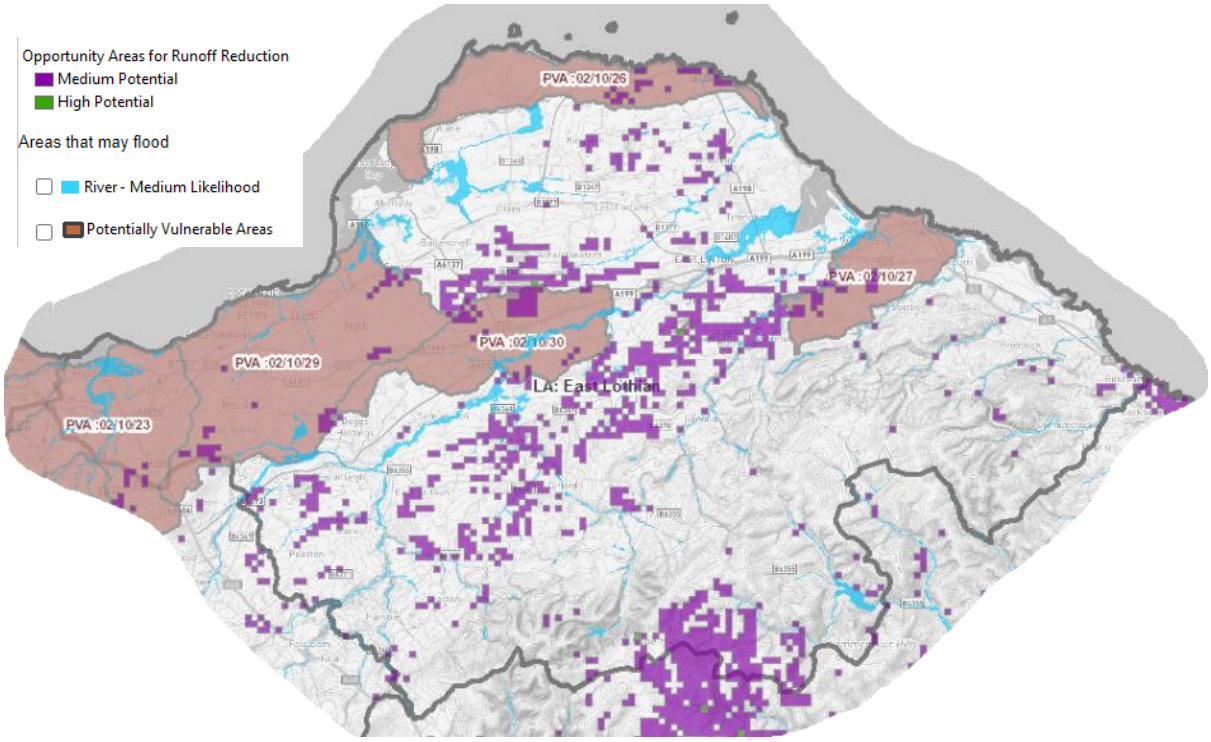


Figure 7 SEPA Opportunities for Runoff Reduction https://map.sepa.org.uk/floodmap/map.htm

5.6 Tree planting in urban areas, including street trees, can also be used to manage surface water, reducing pressure on the drainage systems. Opportunities for urban tree planting are discussed further in Section 8 Community.

5.7 Surface water run-off from agricultural land can also create localised flooding issues on our roads. Appropriately located woodland, shelterbelt and hedge planting could help address these issues. However, tree root ingress may have a detrimental impact on existing field drainage systems, worsening the situation. This should be considered at project level.

ACTION 4
Work with farmers and landowners to encourage hedgerow and tree planting and woodland creation where appropriate, to help reduce water run-off onto our roads

5.8 Well sited and well managed woodlands can work together with other flood risk management solutions to help address flood risk and surface water runoff. The planting of any new woodland, however, should also consider the potential for an increased risk of flooding. Trees should not be

planted beside flood embankments if there is a risk of windblow. Further advice can be found in SEPA's Natural Flood Management Handbook (SEPA, 2015).

5.9 The Council will work with SEPA, neighbouring authorities and stakeholders to identify how and where woodland retention, creation and management supports reduction in flood risk including areas such as floodplain, riparian and catchment woodlands. Funding is available for woodland creation and management to reduce flooding.

ACTION 5

Work with SEPA, neighbouring authorities and stakeholders to identify where woodland retention, creation and management could most improve water quality, support reduction in flood risk and help increase slope stability

POLICY 6 Water Management and Slope Stability

Use of woodland and trees to improve water quality, reduce flood risk and improve slope stability is encouraged. Planting of new trees and woodland must avoid increasing flood risk.

Use trees to improve the water environment

5.10 Trees and woodland can help to improve water quality. Increased rainfall is already resulting in increased surface water runoff, carrying sediment and pollutants into rivers. Well-sited and well-managed riparian woodland can help to address this diffuse pollution by intercepting runoff. Trees can also stabilise banks, help prevent excessive deposition of sediment instream and provide important wildlife habitat.

The community group Friends of the River Tyne have recently planted 499 trees along the banks of the Tyne. 200 trees for the Queen's Green Canopy and others donated by local businesses and the Woodland Trust. These trees will have multiple benefits for the river from bank stabilisation, flood mitigation and providing shade.

5.11 Increasing river temperature due to climate change is a threat to many of Scotland's freshwater species which have adapted to live in cool places (Marine Scotland, no date). This includes fish with high economic, recreational and conservation value, such as salmon and brown trout. Management of riparian woodland is proven to protect cold water habitats and water quality. They create shelter for water-based flora and fauna and provide nutrients for them through leaves and insects dropping onto the water below. (SEPA, 2015). The canopy also creates shade helping to regulate water temperature, prevent algal blooms and keep the aquatic ecosystem in balance. Shading will become more important with climate change. Riparian woodland should provide an open canopy with dappled shade with, ideally, around half of the watercourse open to sunlight. Priority areas for woodland creation for river temperature control have been identified by Marine Scotland (figure 8). This should be used together with the mapping in Section 12 when considering where to create riparian woodlands. Currently just over 42% of the riparian zone along rivers within East Lothian is wooded[4]. The Strategy seeks to increase riparian planting by 18% in line with Target 2B in places where benefits for river water quality can be achieved.

TARGET 2: Improve resilience of East Lothian's environment including by:
(B) Increasing native riparian woodland by 18%; from 42% of the riparian zone to 60%

[4] This figure is based on a 30m wide zone to the sides of the rivers using the National Forest Inventory 2019.

5.12 The Council will work with SEPA, neighbouring authorities and stakeholders to identify how and where woodland can most improve water quality. Funding is available for woodland creation and management to reduce diffuse pollution.

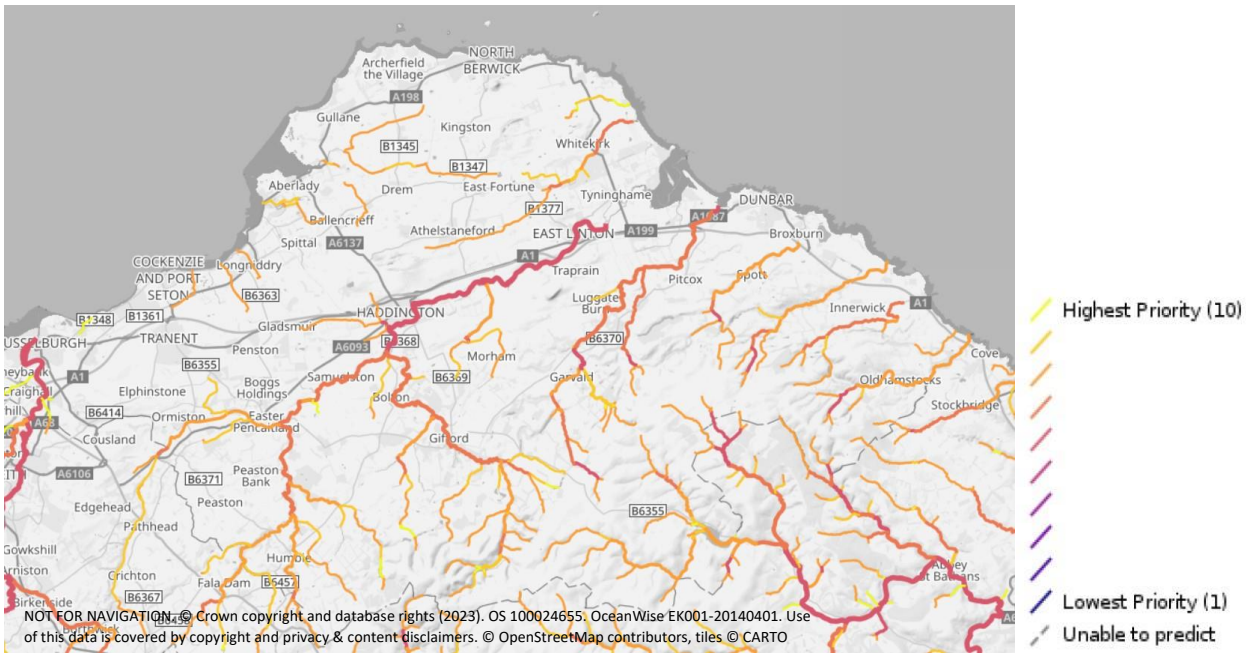


Figure 8 Prioritisation for shading rivers, Marine Scotland

Use trees to protect and enhance the soil resource

5.13 Woodlands can improve soil structure by increasing its organic matter, reducing erosion, increasing humidity. Surface water run-off can lead to soil erosion (discussed in Water Environment). Wind erosion can lead to, not just a loss of topsoil, but also seeds, fertiliser and agrochemicals which can pollute watercourses. In arable areas in East Lothian, particularly in lowland parts of East Lothian where there are lighter, sandy loams, wind and water erosion of the soil resource is a significant issue that is set to worsen as a result of climate change due to increased periods of drought.

5.14 Changes in arable farming over the last 50 years have seen the loss of hedgerows and increased field sizes to accommodate larger, heavier machinery. Larger fields can lead to increased soil erosion

by wind. However research has shown that shelterbelts planted in the right locations can reduce wind erosion and wind damage to crops as well as improve microclimate. This leads to reduced wind erosion of ploughed fields and can increase crop yields by up to 26% (SAC Consulting, 2010). Hedgerows offer similar benefits.

5.15 Farm woodlands and shelterbelts can also help reduce the intensity of rainfall, reducing run-off and improving soil stability. Trees reduce yields close to shelterbelts but increase productivity of both crops and pastureland overall due to an increase in humidity and daytime temperature and decrease in wind speed (SAC Consulting, 2010; Woodland Trust, 2012).

5.16 As part of the East Lothian Climate Forest the Council will encourage the expansion of farm hedgerows, woodlands and shelter belt planting as a means of sustainable soil management (see Section 9 Economy – Rural Diversification and Section 7 Biodiversity – Hedgerows and Hedgerow Trees).

Use trees to regulate the urban climate

5.17 Trees can help regulate temperature in urban areas by providing shelter from cold winds and shade from the sun. This can reduce the need for heating and cooling systems within buildings. Providing shade in urban areas can also help reduce the incidence of UV-related health problems.

5.18 In urban areas, heat can build up as hard surfaces such as concrete absorb heat in the day to release it at night, extending exposure time, known as the heat island effect. Heat stress can cause illness and fatalities with high temperatures make the symptoms of respiratory illnesses worse. Those with chronic illness, or who are very old or poor, are more susceptible to the effects of heat. Heat

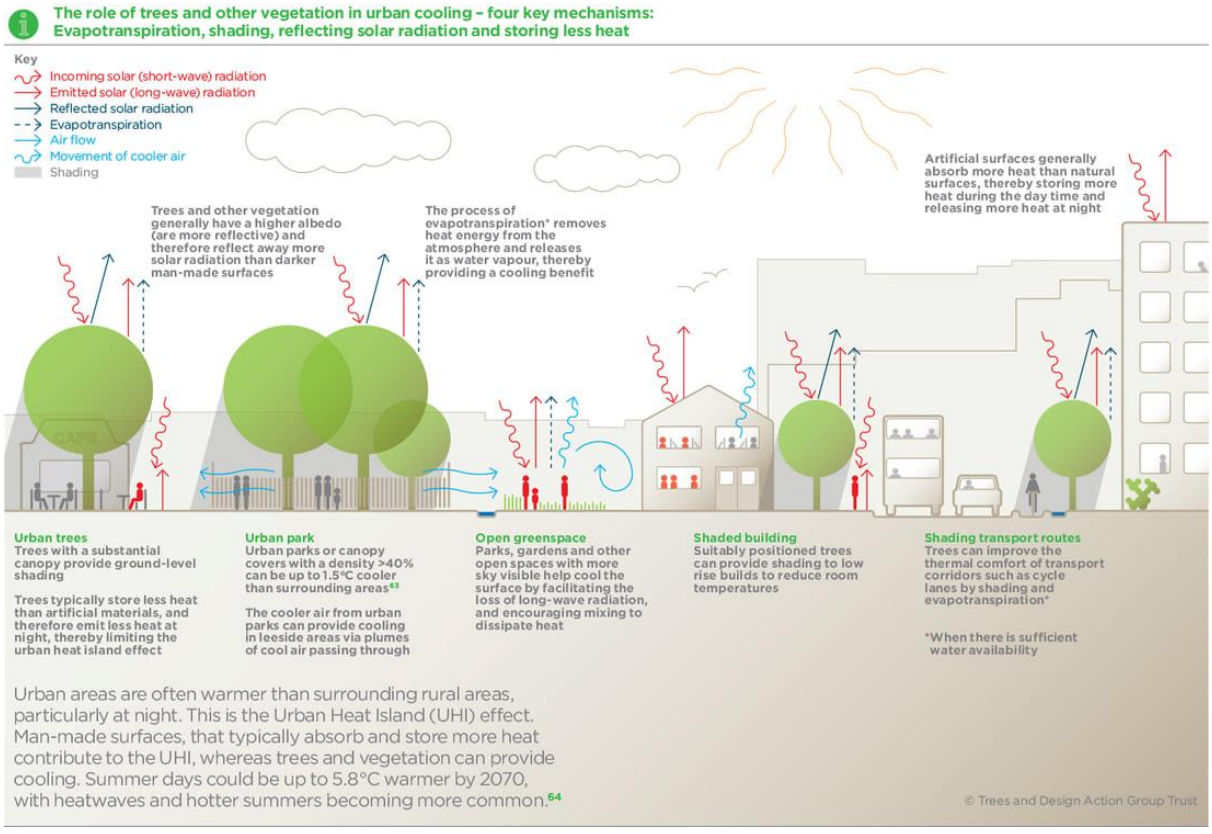


Figure 9 The role of trees in urban cooling, Trees and Design Action Group Trust

waves are likely to become more common with climate change. Climate change may exacerbate the urban heat island effect, so increasing the need for shady outdoor spaces in urban areas.

5.19 Trees reduce urban heat in summer through preventing the sun heating surfaces of roads and buildings and cooling the air. Trees also release water into the air through transpiration helping to cool the air. See figure 9 for more detail.

5.20 Canopy cover must exceed 40 % to get the maximum benefit from this cooling effect. This tree planting must also be located within the areas where people live, not just in parks, to benefit all people at all times (Science Daily, 2019). Larger trees with dense crowns are most effective at local cooling. However broadleaf trees would be most appropriate to allow sunlight through during the winter. Locating trees where people can sit under them as well as offering shade to buildings brings multiple benefits. Target 4A aims to increase canopy coverage to a minimum of 30%. See also 'Urban Tree Canopy' in Section 8 Community.

Increase tree and woodland resilience

5.21 Challenges for trees and woodland include changes in weather patterns and temperatures due to climate change, attacks from pests and diseases, and for woodland, increased recreational use. There are uncertainties around the nature of changes so choosing a single approach may not be effective; flexibility is important. Measures likely to support resilience are considered below.

Tree Diseases and Species Diversity

5.22 Until recently tree diseases that wipe out entire species have been limited within the UK, Dutch elm disease being the main contender. However, within the last decade tree diseases have begun to spread rapidly across the UK's woodlands and more are regularly being reported. Factors driving this include global travel and imported stock plants and timber, as well as climate change. Once here, disease can be spread in mud or plant material stuck to footwear and car or bicycle tyres, or even through the use of wood based packaging of goods.

5.23 Currently two main diseases are having an impact on Scottish woodlands potentially similar in scale to that of Dutch elm disease. These are Ash Dieback which, as the name suggests, is affecting ash trees, and *Phytophthora ramorum* mainly affecting larch trees but also rhododendron. No cases of *Phytophthora ramorum* have been identified in East Lothian to date. Scottish Forestry has a national Action plan to try and control its spread. Other diseases present in East Lothian include Dutch elm disease and bleeding canker of horse chestnut. Many other diseases could spread to East Lothian.

5.24 The Scottish Plant Health Strategy sets out measures that are in place to prevent and react to plant disease. Any trees identified with disease can be reported at Tree Alert. A citizen science project, Observatree, provides training in recognising tree disease. The Council will update its tree web pages with information on how to identify and report tree diseases.

5.25 The impact of tree disease can be reduced by

- increasing the resilience of trees and woodlands to disease
- reducing the chances of introducing new diseases
- managing trees and woodlands once a disease has arrived.

5.26 The resilience of the treescape and woodland to future diseases can be increased through use of a diverse mix of tree species across the landscape as not all species will be lost to one disease. Woodlands with a range of species will increase the chances that some trees will be able to cope with future pests and climatic conditions. Achieving species diversity in forests is a requirement of the UK Forestry Standard. This states that a single species can be a maximum of 75%. The UK Forestry Standard states that when selecting trees and shrubs for new woodlands and restocking, the risks and opportunities of climate change and vulnerability to pests and diseases should be considered to decide if alternative species or increased species diversity are merited.

5.27 The urban tree canopy should also contain a diversity of species to improve its resilience. Guidelines for tree diversity within a street tree population (Santamour, 1999) recommend that there should be no more than 10% of a single species, 20% of a single genus and 30% from a single botanical family in an urban tree population. A wider mix of species suitable to differing climatic conditions, which may not be appropriate within our native woodlands, can be planted in our urban areas.

5.28 Disease spread is likely to be slowed by spacing trees of the same species further apart. This is something the Council will consider in planning tree planting on our own land within settlements once a tree audit has been carried out.

5.29 Creating woodlands using natural regeneration and planting of only trees grown in the UK, ideally locally grown and grown from seed sourced from southeast Scotland, reduces the risks of introducing new tree diseases. Use of locally grown trees also supports the East Lothian economy (see Section 9). It is not always possible to avoid the arrival of new diseases, for example the fungus causing ash dieback can travel in the wind, though it was brought in initially on imported saplings.

5.30 Biosecurity measures including cleaning equipment and tyres before and after going to a woodland are encouraged. This is good practice even where diseases are not yet apparent. The Council will promote biosecurity measures within its own woodland through the Ranger Service as necessary.

5.31 The loss of individual tree species leads to changes in the woodland mix and diversity. The UK Forestry Standard suggests that woodlands with the affected species could be managed by replacement with a range of other species that are characteristic of the woodland habitat type. Planting those species which are most ecologically similar to the infected trees will help to mitigate for changes to the ecology of the woodland.

An ash tree in stage 2 of ash dieback disease

Ash Dieback (Hymenoscyphus fraxineus or Chalara ash dieback)

Ash Dieback is a fungal disease causing leaf loss and canopy decline. Unfortunately the majority of infected ash trees will die. Some ash trees, however, are likely to be resistant. The Tree Council highlights the message "Don't panic: focus on finding the truly hazardous trees" and that trees showing only slight or moderate symptoms should be considered as potential survivors for many years to come and their condition monitored accordingly.

East Lothian has large numbers of ash trees including some native ashwoods. The loss of ash will significantly affect East Lothian's landscape character and woodland habitats. Due to the scale of loss, replacement planting with alternative species is strongly encouraged where ash trees are removed.

No single tree species can entirely substitute for ash. However a number of tree species have similar properties and if used together can provide similar ecological conditions and greater diversity. The Devon ash dieback resilience forum (2019) has produced advice on suitable species. There are three considerations:

- Nectar and Pollen production – Elm is the closest match to ash in terms of tree height, flowering time and fruit type. Birch and rowan are also similar.
- Food source – for specialist insects, mosses and lichens elm is again the closest match, followed by sycamore, aspen, oak and hazel. More general animal species that feed on ash can be found on oak and beech as well as sycamore, birch and hazel.
- Soil quality – ash tree leaves important to soil quality as they are nutrient and base rich and decompose rapidly. Tree species with the leaves of the most similar qualities include alder and lime and less so sycamore, field maple and aspen.

The Council has over 22,000 ash trees, many of which are at an advanced stage of the disease. We are in process of surveying all the ash trees under ELC ownership for the presence of Ash Dieback disease. We are also developing an Ash Dieback Action Plan which will identify, communicate and address the risks from the disease to landscape and biodiversity, public safety, and to roads and overhead cables in East Lothian. We have advice for the public and landowners about the issue on our website.

The Council intends to develop an Ash Dieback Recovery plan for the landscape scale replacement of ash trees lost to Ash dieback disease, identified as Action 7 and Target 7B (see Section 10 Landscape Character).

ACTION 6

Adopt the draft Ash Dieback Action Plan and manage ash trees in accordance with this.

ACTION 7

The Council will develop a plan for the landscape scale replacement of ash trees lost to Ash dieback disease

Improving genetic diversity of woodland

5.32 Genetic diversity within species is important as it provides the adaptive potential for tree species or populations to resist pests and pathogens and cope with climatic changes so reducing the chances of wholescale losses.

5.33 Trees that spread clonally are genetically identical, and can therefore be particularly vulnerable to loss. This can be seen in alder along rivers. NatureScot are looking at ways of increasing genetic diversity in a number of tree species, including introducing diversity into clonal species, to help address this concern.

Phytophthora disease of alder (Phytophthora alni)

Incidence of *Phytophthora alni,* which can infect and kill all species of alder has significant presence in East Lothian, mainly along river systems.

The loss of Alder would have a significant impact on East Lothian's riparian and wet woodland. Alder grow naturally in waterlogged conditions and their roots can stabilise river banks, so preventing erosion and helping mitigate flood risk. They are also useful for natural fertilising of poor quality soil through nitrogen fixing nodules on their roots. Alder offer valuable habitat for many plant and animal species with otters known to use their roots as nesting sites.

5.34 Linking woodlands supports diversity by allowing genes to spread more widely. Diversity can also be improved by allowing natural regeneration and sourcing stock locally from trees at similar elevations. This Strategy supports inter-species diversity through promoting connected woodland (See Section 7 Biodiversity – Addressing Fragmentation) and support for natural regeneration over planting.

Improving age diversity of woodland and urban trees

5.35 Climate change projections for East Lothian include a greater risk of severe weather events. The impact on woodlands of single age and stand structure by extreme weather events can be seen by the felling of 90% of the pine stand at Hedderwick Hill plantation at John Muir Country Park in the recent 1 in 50 year event of Storm Arwen.

5.36 Diversity in age of the urban tree canopy will also improve resilience. Good age distribution for population stability is suggested by N A Richards as quoted in the Cambridge Tree Strategy (2016) to be about 40% trees under 20cm diameter, 30% 20 to 40cm trees in the early functional stage, 20% 40 to 60cm functionally mature trees, and 10% older trees with most of their functional life behind them.

Specifying trees for a changing climate

5.37 Extended periods of drought can lead to new trees failing to establish. Existing trees may also struggle. Predicted climatic changes would make drought more likely. Planting schemes usually include for a year's maintenance, however this may not be enough to allow large specimen trees to establish sufficient root systems to survive droughts in following years.

5.38 Increasingly warmer wetter winters could also impact some species of tree in both growth and seed germination.

5.39 Consideration should be given to specifying species suitable for these predicted changes in climate, although care needs to be taken to ensure the species are also suitable in others ways. Specifying smaller stock for planting schemes also has the potential to establish more quickly making it more resilient. Watering schemes may need to be extended in the first few years following planting to ensure successful establishment.

5.40 Urban tree planting schemes in particular should give due cognisance to the area provided for tree root growth. This is discussed further in Section 8 Community 'Urban Tree Canopy'.

5.41 Species and species mixes should be selected for their resilience to climate change. Sourcing a proportion of native species from areas with conditions that match predicted future climate at the planting site could be considered (The UK Forestry Standard).

5.42 Wildfires are a risk from poorly managed or designed woodland, and may become more likely with changing climate. As well as being dangerous, fires result in the loss of stored carbon. Good planning and management of woodland can help reduce this risk (Forestry Commission, 2015). The Council will continue to manage its own woodland to reduce risk of wildfire.

Devastation of Storm Arwen at Hedderwick Hill plantation November 2021

Climate migration

5.43 Climate change may change the tree species that can grow here and could alter the distribution of species, introducing new species to East Lothian but also potentially bringing local extinctions both directly and indirectly. In Scotland, one in ten species face extinction. Species potentially at risk in East Lothian include Tree Creeper and migrant birds such as Wood Warbler and Spotted Flycatcher. Many species may need to adapt by moving to cooler areas, generally northwards and uphill. If we do not plan now for the connections that allow this movement, we risk losing species as the climate becomes too warm for them where they are. The Native Woodland map in Section 11 shows suggested strategic connections to improve connectivity and help support movement of tree and woodland species within and beyond East Lothian.

The brimstone butterfly is a newcomer to East Lothian, one of several species spreading northwards in response to climate change. Our Countryside Ranger Service is promoting planting of alder buckthorn in private gardens, as it is an important larval food plant for this butterfly.

TARGET 2A: Improve resilience of East Lothian's environment including by securing functional native woodland connections through East Lothian to support migration of species under climate change

5.44 Some mobile insect or animal species migrating to East Lothian may arrive to find there is no or little suitable habitat here. Planting of specific tree species can be carried out in support of particular species or habitat that is migrating. The European Forestry Genetic Resources Programme, EURFORGEN, (which includes the UK) promotes the conservation and sustainable use of forest genetic resources in Europe, and is a platform for pan-European cooperation. EUFORGEN recognises that climate change will affect species distribution and range, and that the areas which need most focus are those at the edges of a species range. Assisted migration – deliberately selecting planting material and moving it to areas being newly colonised – is under consideration at a European level.

Management of woodland for good condition

5.45 A diverse woodland of a variety of ages, species and stand structure, including open space, will be more resilient. To address the challenges identified above and increase woodland resilience, woodland should also be managed to good condition. This should be done through a range of silvicultural methods to increase resilience to risks such as windthrow and loss to disease, as well as improve biodiversity. The Council will continue to actively manage its own woodlands and trees to improve their resilience, and encourage others to do likewise.

POLICY 7 Sustainable Woodland Management

Woodlands should be designed and managed so that they are diverse, resilient and sustainable in line with the UK Forestry Standard.

Continuous cover management is encouraged.

Woodland creation and management proposals must consider any increase, and the potential to decrease, risk of wildfire and spread of pests and disease.

6 Biodiversity

AIM – Work towards a more natural tree and woodland cover with thriving native flora and fauna, protecting, maintaining and connecting our distinctive native woodland types, and enhancing and connecting nature in our urban areas

6.1 Biodiversity loss is as much of a danger as climate change. The world is losing biodiversity at an alarming rate. The situation in Scotland is no different with both the abundance and distribution of species declining (NatureScot, 2019 (B)). Woodland habitat is an important part of our biodiversity but is threatened by direct habitat loss and fragmentation, disease, climate change, invasive species, overgrazing, and pressures from increased recreation (IPBES, 2019). To improve the biodiversity of our woodlands, and therefore biodiversity overall, we need to address these threats.

6.2 The UN Global Biodiversity Framework adopted in November 2022 (UN, 2022) aims to address biodiversity loss, restore ecosystems and protect indigenous rights to halt and reverse nature loss. It is a core aim of the UK and Scottish biodiversity action planning processes (Scottish Government, 2009 & 2013 and draft Scotland's Biodiversity Strategy 2022-2045) to significantly increase the area of all native woodland types. The land and trees of East Lothian now have many functions and returning to its original tree cover extent is not a feasible aim.

6.3 This Strategy supports the delivery of the Global Biodiversity Framework by:

- Restoring and connecting woodland whilst not harming other habitats
- Considering genetic diversity including its adaptive potential
- Using and managing our woodlands sustainably
- Reducing pollution risk
- Minimising the impact of climate change
- Increasing connection to nature particularly in urban areas

NPF4 Policy 3 Biodiversity
Policy Principles
Policy Intent:
To protect biodiversity, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks

Policy Outcomes:
Biodiversity is enhanced and better connected including through strengthened nature networks and naturebased solutions

6.4 The Strategy also supports the delivery of the UK and Scottish Biodiversity Actions Plans by:

- Retention and protection of the distinct native woodland types
- Management and increase in native woodland and trees
- Addressing fragmentation of woodland

Protection and Enhancement of Woodland

6.5 Woodland and trees are protected against loss and fragmentation through various regulatory regimes. The Wildlife Information Centre check all planning application against their records of notable species and habitats so their interest can be taken into account in planning decisions. The

Local Development Plan contains policy protecting the biodiversity interest of a site proportionate to its value. Mitigation is required where damage is accepted.

Woodland of high nature conservation value

POLICY 8 Protecting the Biodiversity Value of East Lothian's Woodland

Activities that lead to the removal of ancient woodland or damage ancient woodland sites are not supported.

It will not be appropriate to remove woodland of high nature conservation value to replace it with a timber crop.

Appropriate management of native woodland including ancient woodland, orchards, wood pasture and parkland, including habitat enhancement for key native species is encouraged.

6.6 This Strategy is required to identify woodlands of high nature conservation value and set out policies and proposals to protect and enhance them. Woodlands of high nature conservation value are generally given more weight in the decision making process across regulatory systems. The Council will continue to protect woodland of high nature conservation value and this is strengthened through the introduction of Policy 8. Woodlands of High Nature Conservation Value are identified as follows, mapped as existing native and broadleaved woodland and PAWS in Figure 25 Native woodland Expansion Opportunities map, and described in further detail in the following section. The Strategy has identified opportunities for expanding native woodland as shown on Figure 25.

Woodlands of High Nature Conservation Value

- Ancient and Semi-Natural Woodland (including those now planted with plantation (PAWS))
- Sites of Special Scientific Interest (SSSI) with woodland as a qualifying feature
- Local Biodiversity Sites (Woodland Network)
- East Lothian Priority Woodland Habitats
- Broadleaf and Yew habitat identified by mapping carried out for the Central Scotland Green Network (CSGN)
- Areas on the Native Woodland Survey of Scotland
- Woodlands supporting UKBAP priority species

Ancient Semi-Natural Woodland

893 ha

12.5% of all woodland is recorded on the Ancient Woodland Inventory as ancient semi-natural woodland and has been woodland since at least 1860

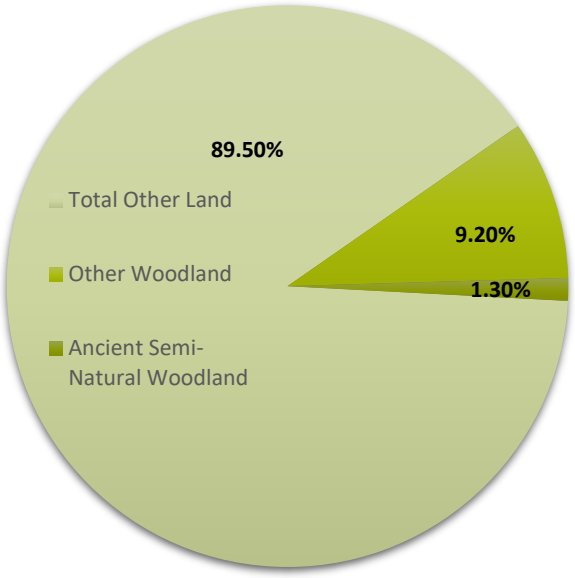


Figure 10 Semi-Natural Ancient woodland as a percentage of total land cover

6.7 Ancient Woodland in Scotland is defined as land that is currently wooded and has been continually wooded since 1750/1850. Some is native woodland of semi-natural origin and some is woodland of long established plantation origin. Ancient woodland is valued for its rich biodiversity. In 2011, East Lothian had only 893 hectares of ancient woodland (for comparison, John Muir Country Park is 713 ha). Only a third of this was native (Forestry Commission, 2013).

6.8 Ancient woodland is a rare resource in East Lothian and Scotland as a whole. It is irreplaceable and it is important that it is protected and well managed. The structure, wildlife and soils of ancient woodland has had the longest time to establish, leading to richer biodiversity that other woodlands making them of high value for nature conservation.

6.9 Target 3D of this Strategy seeks to retain ancient woodland. Scotland's Policy on Control of Woodland Removal contains a strong presumption against removing semi-natural ancient woodland. The quality of this woodland should also be retained, or where degraded, improved. As a sensitive habitat, ancient woodland is particularly adversely affected by the factors noted in paragraph 6.1. Even seemingly small changes (trampling, disturbance, emissions of pollutants) can lead to biodiversity loss. This should be carefully considered when planning activities or development that could affect this habitat (see Policies 1 and 8). Herbivore management and invasive species control is particularly important here.

TARGET 3D Improve biodiversity value of East Lothian's woodland habitats in line with the Green Network Strategy SPG (Nature Network Green Network Task 1 Woodland) by retention of ancient woodland

6.10 Ancient woodland over 1ha is identified on the Ancient Woodland Inventory (NatureScot, 2020). This includes semi-natural woodlands and those of long established plantation origin. The Ancient Woodland Inventory does not identify all such sites. As a result these undesignated areas can be at risk of loss due to lack of appreciation of their value. The Council is in the process of identifying areas

of ancient woodland not included in the original survey, including those less than 1ha, using the same methodology.

ACTION 8

Complete the Ancient Woodland Survey for East Lothian including the mapping of wood pasture, parkland and orchards

Plantation on Ancient Woodland Sites (PAWS)

358 ha

5% of all woodland is Plantation on Ancient Woodland Sites (PAWS). Where trees have been planted on semi-natural ancient woodland sites.

6.11 These plantation on semi-natural ancient woodland sites appear to have originated through natural regeneration sometime before the mid-19th century, but have later been converted to planted woods. In East Lothian these are concentrated in designed landscapes and river corridors.

6.12 Around a fifth of PAWS still comprise native woodlands. Scots pine, sycamore and Sitka spruce are the main components of the non-native PAWS woods. (Scottish Forestry, 2013).

7.1 Although the composition and character of many of these woods has changed, the soil structure and seedbank are often still present. This may also be the case for ancient woodland sites which currently do not have trees. These sites are therefore worthy of protection (see Policies 1 and 8) and restoration.

Sites of Special Scientific Interest (SSSI) with woodland features

120 ha

1.7% of all woodland are designated as Sites of Special Scientific Interest

6.13 SSSIs are designated by NatureScot as those areas which best represent our natural heritage. SSSIs are protected by statute – it is an offence for anyone to intentionally or recklessly damage the protected natural features of a SSSI. NatureScot regulates operations in SSSIs. For those sites with woodland interest, this generally precludes the introduction of a plant or seed, and includes aspects of woodland management.

6.14 Most of East Lothian's woodland SSSI features are in unfavourable condition, though some are recovering. The main pressures are invasive species, and over or under-grazing. Lack of, or poor, management also affects some sites. More detail on the condition and location of these can be seen in Appendix B. The Council supports and encourages management so that the woodland interest of SSSIs is improved to a favourable condition.

6.15 NatureScot draws up management statements for each SSSI and aims to work with owners and managers to ensure appropriate management of the site's natural features. Funding for management may be available from the Scottish Rural Development Programme.

6.16 Appropriate expansion of woodland habitat in connection with SSSI woodland features could help support genetic diversity and connectivity of these sites. We have not mapped any proposed expansion areas for these as they will require site specific survey to consider other sensitive habitats both within and adjacent to the SSSIs as well as geodiversity sites.

Woodland Local Biodiversity Sites

6.17 The Council designated Local Biodiversity Sites in East Lothian in 2018. These sites include most of the large areas of priority woodland habitat (see below). They are of high value for nature conservation through their importance for both habitat and connectivity. Part of the aim of designation is to support and protect woodland as a network including supporting the woodland interest of SSSIs.

6.18 The Council will continue to protect these sites from habitat loss and fragmentation through the planning system where possible, and seek to strengthen their protection in line with any revised national policy.

East Lothian Priority Woodland Habitats

6.19 The East Lothian Local Biodiversity Action Plan identified habitats and species of most importance to nature in an East Lothian context. This includes all the national Native Woodland types as well as wood pasture and parkland, orchards, hedgerows, urban woodland and dead and veteran trees.

East Lothian Priority Woodland Habitats:

- Lowland mixed deciduous wood*
- Wet woodland*
- Upland mixed ashwoods*
- Upland birchwoods*
- Upland oakwood*
- Scrub

** = also on the Scottish Biodiversity List*

Native Woodland Priority Habitat

6.20 A native woodland survey was carried out in 2013. This identified the distribution of native and nearly native woodland types across East Lothian. This includes lowland mixed deciduous wood, wet woodland, upland mixed ash wood, upland birch woods, upland oak and scrub.

6.21 Native woods are those where over half the canopy cover consists of native species. Only around a fifth of our woodland is native, so just 2% of our total land area. This is about half the Scottish average (Forestry Commission, 2013). However, many of these are highly semi-natural in their structure and composition (Forestry Commission 2011).

6.22 The most common native species in the upper canopy are ash and pedunculate oak (Forestry Commission, 2013); this shows what a potentially devastating effect ash dieback disease could have.

6.23 Nearly native woodlands have canopy coverage of 40-50% native species. These

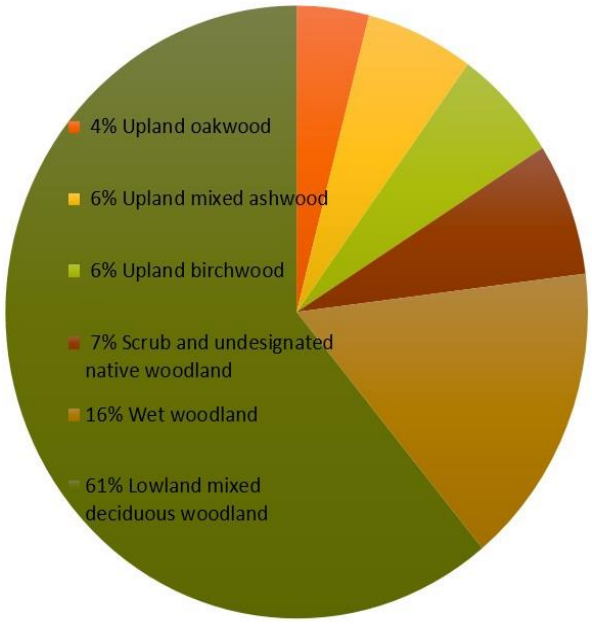


Figure 11 Native Woodland Mix in East Lothian

woodlands have the most potential to restructure into native woodlands and should be prioritised. They are identified on the native woodland opportunities map in section 11.

Lowland mixed deciduous woodland

6.24 The most common native woodland in East Lothian, this type occupies a wide range of fertile, moist soils in the East Lothian lowlands and supports a rich flora. Common oak, ash and sycamore are the most common species of the upper canopy, followed by sessile oak, downy and silver birch. There is a range of other species both native and non-native.

Wet woodland

6.25 Alder, willows and ash are the dominant trees in East Lothian's wet woodland. These species along with downy birch are happy to colonise marshy areas. Found mainly along the edge of the River Tyne and its tributaries with some occasional small areas in less free draining areas of woodlands and other low lying areas.

6.26 These are extremely valuable habitats for wildlife because they support species that would be found in both woodland and wetlands.

Upland mixed ashwood at Woodhall Dean

Upland mixed ash woodland

6.27 Diverse species rich woods with ash, alder, hazel, downy birch and oak. Found generally within the lower valley slopes within the Humbie river valley and upland fringes. Often in mosaics with upland birchwoods or upland oakwoods and merging into lowland mixed deciduous woodland at the lowland margins.

Upland birchwoods

6.28 Birch-dominated woods found in East Lothian on poorer quality soils of the mid-Tyne plain and cleughs of the higher land of the fringe and uplands with rowan, hazel, oak, alder, bird cherry, aspen and juniper amongst the associated species. In East Lothian silver birch is more common than downy birch, which is generally only found on wetter and more exposed sites.

Upland Birchwood at Sheeppath Glen

Upland oakwoods

6.29 A scarce habitat contained in small areas within the eastern cleughs of the upland fringes. It has the lowest proportion of non-native species of East Lothian's native woodlands and also the highest proportion of deadwood. It is dominated by sessile oak with a few scattered ash and birch trees.

Scrub

6.30 This is an important variable woodland habitat. Scrub with clearings are often rich in wildflowers and provide cover and food for a variety of birds, mammals and invertebrates.

6.31 Montane scrub is a transitional habitat naturally found between the unwooded hill tops and the wooded lower land, in limited areas in the Lammermuirs. It is identified as 'Peatland with Scattered Trees' by NatureScot in the Native Woodland Model. It comprises ancient juniper and stunted and low growing trees.

6.32 Coastal scrub in East Lothian generally comprises sea buckthorn with young trees.

6.33 Areas of scrub in between the hills and coast can comprise low growing tree species of hazel, hawthorn and blackthorn growing more as shrubs than single stem trees. In urban areas naturally regenerating scrub can add some biodiversity value to vacant and derelict land.

Other Woodland and Woody Priority Habitats

6.34 The remaining ELBAP priority woodland or tree habitats are not mapped on the Native Woodland map in Section 12 but are still worthy of protection.

Wood pasture and parkland

6.35 Wood pasture and parkland is a distinctive woodland type characterised by open grown and usually old trees in a habitat kept open by grazing. It is classed as woodland if the canopy cover is over 20%. Individual trees, some of which may be of great size and age, are key elements of the habitat and many sites are also important historic landscapes most usually associated with designed landscapes.

Other Woodland and Woody Priority Habitats:

- Wood pasture and parkland*
- Traditional Orchards*
- Urban woodland
- Hedgerows*
- Veteran trees
- Dead wood

** = also on the Scottish Biodiversity List*

6.36 Wood pasture and parkland is important for biodiversity as its open woodland cover allows varied amounts of light through. Specialised and varied habitats within wood pasture and parkland provide a home for a wide range of species, many of which occur only in these habitats, particularly insects, lichens and fungi which depend on dead and decaying wood (JNCC, 2011). Due to changing agricultural and estate management this habitat has been declining across Europe. Damage from livestock has also led to loss of trees within this habitat in places.

6.37 The Strategy supports restoration and maintenance of wood pasture and parkland. At the moment we have no accurate record of the current amount and condition of wood pasture and

Wood Pasture at Lennoxlove Estate

parkland. To give a baseline we will identify the remaining wood pasture and parkland as part of the East Lothian Ancient Woodland Survey.

Orchards

6.38 East Lothian has a long tradition of orchards and fruit growing. Traditional orchards are plantations of mature, open-grown fruit-producing trees – mainly apple – managed in a low intensity way. Ground vegetation is generally neutral grassland but can include other grassland and bramble. Scrub, wetland vegetation, ponds and streams can also occur (NatureScot, undated).

6.39 Orchards are a UK Biodiversity Action Plan priority habitat. Over recent decades, the number of orchards has declined in East Lothian, as in Scotland in general. Some old orchard fruit trees remain in modern housing developments and links to this heritage can be seen in many street names. There has been recent renewed interest in community fruit growing which may bring some old orchards back into use or develop new ones.

An Old Castle Orchard, Longniddry by Robert Noble

6.40 NatureScot carried out a desk based survey of possible orchards in 2013/14 (NatureScot, 2014). This survey found East Lothian had around 80 possible orchard sites covering around 25 hectares, although these have not been mapped. As a first step towards protection, the Council will also seek the mapping of orchards as part of the East Lothian Ancient Woodland Survey.

Urban woodland

6.41 There are many trees and woodlands in our urban areas. Some settlements have larger areas of woodland such as Lochend Woods in Dunbar and the trees along the Tyne and Esk in Haddington and Musselburgh. Although some areas have a significant lack of trees. Trees range from formal planting defining the urban structure to less formal planting of trees and woodlands in our parks and open spaces, to small areas of unmanaged regenerating woodland on vacant and derelict sites.

6.42 Species tend to be of a wider range of species than surrounding rural areas due to garden and parkland planting. Fruit trees are common within gardens together with exotic species.

6.43 Trees and hedges in urban areas can be important for biodiversity and can offer greater biodiversity than surrounding arable areas in parts of East Lothian. Lines of trees and hedges can create links between habitats, allowing species to move into and though urban areas with woodlands providing pockets of habitat.

6.44 Urban woodlands, trees and hedges

provide opportunities for people to be closer to nature. They help people in urban areas connect with nature, such as watching the trees change through the seasons. They also attract other species giving opportunities such as seeing butterflies and hearing bird song. This can inspire people who then act to protect biodiversity.

6.45 This Strategy supports the retention and management of existing hedgerows and trees within urban areas. It also supports increasing urban tree and hedge planting as part of the Green Network to improve biodiversity. More on trees and hedges in urban areas can be found in the Urban Tree Canopy in Section 7.

Hedgerows

6.46 A hedgerow is defined as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less that 20m wide (CPRE, 2021). Hedges and hedgerow trees are an integral part of the character of lowland East Lothian, particularly the agricultural plain. There are some distinct hedges such as the rolling beech hedges lining the roads around Humbie. Hedgerows are much more important than just field or garden dividers. Hedgerows are important both as habitat and for connectivity. Healthy hedgerows are teeming with life and vital for nature with the hedgerow network creating our largest nature reserve (CPRE, 2021).

6.47 Hedgerows in Scotland are predominantly hawthorn, with smaller amounts of blackthorn, gorse, elder, Wych elm and common oak, with native woody climbers including bramble and dog rose. Typical species of hedgerow trees include common oak, ash, Wych elm, holly and wild cherry.

6.48 Hedgerow trees are more likely to develop into ancient trees as there is less competition for light compared to in a woodland (Woodland Trust, 2014). There is no overall information available on hedgerow trees, however through casual observation their numbers appear to be reducing. Many of those that remain are old and /or ash. These trees may be removed for road safety reasons, or through collapse and death due to age or ash dieback.

6.49 Field expansion of arable land has led to the loss of many traditional hedgerows. The East Lothian Landscape Character Review (East Lothian, 2018) found the condition of those remaining to be variable from intact and well managed, to defunct and gappy, to completely derelict or replaced with post and wire fences or sometimes no upstanding boundary.

6.50 To be able to protect hedgerows as provided by Policy 1 we need to know where they are and what condition they are in. There is however an overall lack of information on East Lothian's hedgerows, with no comprehensive data set being available. As a first step the Council intends to map all hedgerow and hedgerow tree locations, species and condition. Our intention is to also develop a Hedgerow and Hedgerow Tree Plan discussed further in 'Addressing Fragmentation' below. The Strategy also aims to protect hedgerows by working with farmers and landowners.

ACTION 9
Map locations, species and condition of all hedgerows and hedgerow trees in East Lothian

Veteran Trees and Deadwood

6.51 Veteran trees and deadwood are important habitats themselves. Some individual trees in East Lothian are over 300 years old: some as old as 500 years[5]. These veteran trees can be seen in estate

[5] Information from the East Lothian Biodiversity Action Plan

grounds and along field edges. Veterans are more than just trees. They are the habitat of a great diversity of plants, mosses, lichens, fungi, birds, mammals and invertebrates. Veteran trees tend to have a deeply fissured bark, dead wood, water-filled hollows and a wide girth. All this provides habitat for a great variety of wildlife and a great number of invertebrates. Veteran trees are scarce, and each individual is extremely valuable. They can be damaged by pruning, local disturbance, local planting or nearby tree felling. Mature trees are the veteran trees of tomorrow and need to be looked after. The Strategy supports the mapping of Veteran Trees through the Woodland Trust's Citizen Science Ancient Tree Inventory project. There is further information on this in Section 10 Cultural Heritage. The Council will consider protection of these such as through Tree Preservation Orders or conditions of planning consent where relevant.

Veteran sweet chestnut at Hedderwick Hill

CSGN Woodland Network

6.52 The CSGN identifies a broadleaf and yew woodland habitat network as well as grassland, wetland and bog heath habitats. Protecting these networks is important to support biodiversity connectivity across the CSGN area.

6.53 In East Lothian all of this Broadleaf and Yew habitat is considered important forest habitat network as identified in the Control of Woodland Removal Policy (Scottish Government, 2009) even where not currently a continuous woodland, as removal of any part leads to further fragmentation. There is therefore a strong presumption against the removal of this woodland habitat.

Woodland on the Native Woodland for Scotland Survey

6.54 Scottish Forestry published a survey (Forestry Commission, 2013) to map the extent, type and condition of native woodland in Scotland. This identified areas of native and nearly-native woodland and plantation on ancient woodland sites. These will continue to be protected from habitat loss and fragmentation through the planning system, applying the Control of Woodland Removal Policy and Local Development Plan policy.

Improve woodland biodiversity

6.55 There are no truly wildwoods in the UK anymore. Human interaction has had a long term and important influence on how the biodiversity of our woodlands has developed. This started at local scale, with coppicing, allowing light into the woodlands and development of diverse ground flora. However more recent forestry planting initially to provide for boat building and to fuel the industrial revolution has been less sensitive to native woodlands and their biodiversity.

6.56 In recent years interest has grown in 'rewilding'. The idea is that nature is given more space, in a connected network of habitats, allowing lost wildlife to return and bringing greater diversity. In Scotland rewilding is generally seen as involving an expanded wild forest network connected by wildlife corridors.

6.57 Returning woodland to its original form would require more than just stopping human intervention in the landscape, with which it has coevolved over millennia. Historical management has led to a change in the seedbank and there is overgrazing by herbivores. This means that the land would not revert naturally to its original form. However the aim of the Strategy is to encourage development of more natural woodland within East Lothian which could include "rewilding" in some places.

Managing Woodland for Biodiversity

6.58 Many of East Lothian's woodlands have lacked management or have been managed in a way unsympathetic to wider biodiversity aims. Woodland biodiversity can be improved by active management.

6.59 The Strategy supports management measures that improve woodland biodiversity including:

- Coppicing, which can increase the range of fungi, plants and animals
- Creation of canopy gaps
- Mixed aged stands to increase structural diversity
- Over mature trees, and standing and fallen deadwood
- Space for regeneration
- Woodland edge management

6.60 There is funding available for management of woodland for biodiversity. This currently includes the Sustainable Management of Forests (SMF) Native Woodlands grant and the Habitats and Species Woodland Improvement Grant (WIG) to help encourage natural regeneration which will benefit priority habitats.

6.61 Sustainable forest management is designed to retain woodland structure and biodiversity. However, poorly executed works, particularly during tree felling and ground cultivation works can also impact negatively on woodland biodiversity. Good forest practice must be followed to prevent this.

Restructuring Plantation on Ancient Woodland Sites

6.62 Many ancient woodland sites (both semi-natural and of long established plantation origin) have since been planted with coniferous crops. The process of restructuring these woodlands following harvesting provides an important opportunity to re-establish a functioning native woodland ecosystem on ancient woodland sites where key woodland species or fragments of the ancient woodland survive.

6.63 Removal of the plantation species and/or removal of grazing or cultivation will enable the dormant ground flora to regrow from the original ancient woodland seedbank, restoring the original character and species composition of the woodland through careful management and stewardship.

ACTION 1
Promote the restoration to native woodland of Plantation on Ancient Woodland Sites (PAWS)

6.64 We have identified 1172 hectares of coniferous plantation on ancient woodland sites, of both semi-natural and plantation origin, as ELC PAWS on the Native Woodland Expansion Opportunities mapping (see figure 25). Where conifers are planted on ancient woodland sites this Strategy supports reversion to native woodland. There is grant funding available to help facilitate this as indicated at 6.60.

TARGET 3E Improve biodiversity value of East Lothian's woodland habitats in line with the Green Network Strategy SPG (Nature Network Green Network Task 1 Woodland) by restoring 30% of coniferous plantation on ancient woodland sites (PAWS) to native woodland

Natural Regeneration and Seed Sourcing

6.65 East Lothian's Green Network Strategy supports the use of native and locally sourced species in planting schemes, using local seed or stock. Natural regeneration is the ideal, as this allows the local seed to grow to suit local conditions, helping maintain the resilience of local woodland and distinctiveness of the different woodland types present in East Lothian. Where this is possible this is the preferred option supported by this Strategy. However, allowing natural regeneration in areas which have been used for plantation can allow trees not native to East Lothian to re-establish. Removal of these non-native species will be an ongoing process as these seeds will still be present in the soil. Even naturally regenerating woodlands therefore need to be managed to ensure diverse species development.

POLICY 9 Seed and Tree Stock Sourcing
When planning new or managing existing woodland, source material should be obtained in the following ways, in order of preference:

i. Natural regeneration from seed stock within the soil

ii. Trees grown in the UK from:
- Seeds or cuttings sourced from nearby woodland
- Seeds or cuttings from trees in Zones 203 – 204

iii. Trees grown in the UK from seeds or cuttings from elsewhere

6.66 Natural regeneration is not an option for areas of new woodland or

restructuring of coniferous woods unless on ancient woodland sites. In these situations, trees planted should ideally be grown from seed sourced from local native woods. The Strategy supports the development of a local seed bank to provide seed for this. Where local seed is not available then stock should be locally grown from seed sourced from southeast Scotland native seed zones 203 or 204 in line with Scottish Forestry's Scottish native seed sources guidance (Forestry Commission, 2006). This enables retention of local genetic diversity.

Addressing fragmentation

6.67 "Connectivity is a measure of the relative ease with which typical species can move through the landscape between patches of habitat" (JNCC, 2019). Historical scrub and woodland removal as a consequence of development and agricultural intensification has resulted in significant fragmentation and loss of lowland native woodland, leading to a lack of connectivity. The same is true for hedges and hedgerow trees. The largest areas of native woodland remaining in East Lothian are within the riparian zones and cleughs.

6.68 Improving connectivity of woodland increases resilience of woodland through greater genetic diversity of trees and generally supports more robust populations of woodland species, also allowing them to respond to climate change by migration.

6.69 In general connectivity is positive, though there are some situations where it is not, including where it would allow invasive non-native species to spread.

TARGET 3A Improve biodiversity value of East Lothian's woodland habitats in line with the Green Network Strategy SPG (Nature Network Green Network Task 1 Woodland) including by doubling the area of native woodland (1426 ha new native woodland)

6.70 Reducing fragmentation will require an increase in native woodland, which currently extends to 1426 hectares. Target 3A aims to double the area of native woodland within East Lothian. To achieve this, three quarters of the East Lothian Climate Forest would require to be native woodland. Ideally, this new woodland should be sited where it will have most benefit for connectivity as shown on the Native Woodland Expansion Opportunities Map (figure 28). The woodland (and other habitat) networks need to be considered beyond the boundaries of East Lothian, and the Council will work with others to form a wider connected woodland network across property and administrative boundaries to create woodland in the most useful places. This is a long term vision, and making of such connections may well not be achieved for decades.

ACTION 11
Create and expand native woodlands where there are suitable opportunities, in particular where this will have most benefit for connectivity

ACTION 12
The Council will work with others including neighbouring authorities to identify the best areas for connectivity of woodland habitat networks.

TARGET 3B Improve biodiversity value of East Lothian's woodland habitats in line with the Green Network Strategy SPG (Nature Network Green Network Task 1 Woodland) including by improving connectivity of the CSGN broadleaf and yew habitat network by woodland creation as opportunities arise focussing on the primary and secondary CSGN opportunity areas

Riparian areas

6.71 Riparian corridors offer significant opportunities for native woodland habitat expansion. Expansion of riparian woodland along the Tyne in particular would help connect east to west from Belhaven to Midlothian. Other rivers offer potential for strengthening connections both north/south and east/west. Projects must consider the value of other habitat, and where relevant should take into account the recreational value of the riparian zone. The Scottish Wildlife Trust's Riverwoods project encourages and supports expansion of riparian woodlands and may provide funding for this.

Cleughs

6.72 Some of our most natural woodland is found within the Lammermuir cleughs. However, not all are wooded. There is potential for expansion of native woodland, particularly upland oak, within the cleughs. Upland oak is suitable at lower levels, transitioning to montane scrub higher up towards the tree line at about 460-500m. This could help restore a natural treeline in places, and potentially connect across to Scottish Borders Council area. NatureScot have carried out modelling on the potential for native woodland in upland areas (SNH, 2004). This shows that there is potential in the Lammermuirs for upland oak and birch, lowland mixed broadleaf as well as mosaic habitat. Suitable areas for this are shown on the Native Woodland Expansion Opportunities Map in section 12 (see figure 28).

An unwooded cleugh with potential for native woodland creation

Coastal mosaic

6.73 Improving woodland connectivity at the coast is proposed by this Strategy. This is likely to take the form of mosaic or transitional habitat rather than solid woodland. This needs to take account of other important coastal habitats and prime agricultural land.

Hedgerows and Hedgerow Trees

6.74 Hedgerows including hedgerow trees are the main form of field enclosure within the lowlands of East Lothian. They can provide habitat connectivity in areas unsuitable for woodland and therefore have the potential to create landscape scale connectivity.

> "Just as our capillaries branch and penetrate the body to supply all cells with food and oxygen, the UK's hedgerow network must remain healthy in order to branch and spread deep across our countryside and supply every village, town, city and rural area with the ecosystem services they need" CPRE, 2021

Introducing hedgerow trees further increases the biodiversity of the hedge. Many UK priority species are associated with hedgerows including the hedgehog, whose decline has been linked with hedgerow loss (CPRE, 2021). Increasing the hedgerow network will help in the recovery of these species. The East Lothian Biodiversity Action Plan therefore seeks improved habitat connectivity through hedgerows within farmland.

TARGET 3C Improve biodiversity value of East Lothian's woodland habitats in line with the Green Network Strategy SPG (Nature Network Green Network Task 1 Woodland) including by mapping East Lothian's hedgerows and increase the total length by 10%

6.75 This Strategy supports the retention and management of existing hedgerows, reinstatement of moribund or missing hedging and hedgerow trees, and the creation of new hedgerows with hedgerow trees. New hedgerows and hedgerow trees, however, must consider any road safety implications. We aim to develop a Hedgerow Plan for retention, replacement, increase and management of hedgerows and hedgerow trees including in urban areas for climate mitigation, biodiversity, landscape, and air quality.

ACTION 2
Develop a Hedgerow Plan for retention, replacement, increase and management of hedgerows and hedgerow trees

6.76 The Woodland Trust offers funding for new hedges with hedgerow trees to create habitat links. The Scottish Government offers funding through the Scottish Rural Development Fund for creating, restoring and managing hedgerows.

6.77 Hedgerows need management and this should be planned for from the start when new hedgerows are created. The potential impact on agricultural productivity of both hedges and the mature size of hedgerow trees should also be considered at the planning stage.

6.78 Hedges should only be trimmed every 2 to three years, and this must not be carried out in the bird nesting season as destroying a nest in use is an offence. Hedges on a farm should not all be cut the same year to allow for refuge for birds and mammals. Ideally a margin around the hedge – conservation headlands, beetle banks or grass margins – should be managed alongside the hedgerow. The use of traditional techniques of hedge laying and coppicing and ongoing management are encouraged.

POLICY 10 Addressing fragmentation

Woodland and hedgerow creation that improves native woodland connectivity is encouraged, in particular where it supports the CSGN woodland habitat network; is within the riparian area or connects river catchments; creates coastal mosaic or supports species migration for climate change as shown on the Native Woodland Expansion Opportunities Map.

Where woodland removal severs existing woodland connections, mitigation should include replacement of any functional connectivity that it provided. Mitigation could include a woodland or hedgerow connecting across or around the site to the remaining woodland.

Land managers and developers are encouraged to work together to form woodland connections.

Avoidance of the potential for introduction or spread of disease or Invasive Non-Native Species (INNS) should be considered at project level.

Invasive species management

6.79 Not all non-native species cause difficulties, and some have naturalised and now form an important part of our landscape and ecosystems. This includes commonly seen tree species such as sycamore. However, some non-native species can outcompete native species or cause other problems[6]. Others are native but are out of balance and require to be managed for the good functioning of woodland ecosystems. Scotland's Biodiversity Strategy requires restoration of riparian and woodland flora where invasive species such as rhododendron or Japanese knotweed are becoming dominant. The East Lothian Biodiversity Action Plan requires invasive species to be managed, such as rhododendron in plantation woodlands and sea buckthorn on the coast, as well as along riparian zones.

POLICY 11 Invasive Species

Management of Invasive Species in line with National Policies is supported.

6.80 Woodland expansion aims to increase connectivity of woodlands through the landscape. This will lead to easier and greater dispersal of species. Although generally a good thing for biodiversity, care is needed to minimise the risk of spread of invasive, non-native species including rhododendron, Himalayan balsam, Japanese knotweed and Giant Hogweed. Removal of non-native invasive species is the responsibility of the landowner. However it is advantageous to work together to manage these. The Council will seek opportunities to work with others to help removal of these. Funding may also be available from SEPA and NatureScot to assist with this.

6.81 It is an offence under the Wildlife and Natural Environment (Scotland) Act 2011 to plant or release non-native trees and plants into the 'wild' outside their native range. There are exemptions for many common forestry species, including some species that are naturalised or only native to parts of Scotland. These species are exempt as they are economically important and their invasive potential is sufficiently known to allow the risk of spread to be managed. However the forest must still be managed in accordance with the UK Forestry Standard. Advice on woodland creation to manage invasive species is available from Scottish Forestry (Forestry Commission, 2015).

6.82 Incentives (grants) for forestry is conditional on meeting UK Forestry Standard requirements, and forest management plans are recommended to make clear how invasive species will be managed. The two woodland species with the highest invasive potential are rhododendron and grey squirrels. There are national strategies for both to reduce their spread.

Advice on treatment and disposal of invasive species is available from the Non-Native Species code of Practice (Scottish Government, 2012).

[6] Such as Japanese Knotweed, which can cause structural issues for buildings

6.83 In planning for woodland management it must be recognised that climate is changing, and species are likely to naturally move north, and higher up slopes, to adapt. Not all species that arrive here should be considered as automatically unwelcome.

Deer

6.84 Deer cause problems for establishment of new woodland through browsing on new growth, affecting both planted trees and natural regeneration. They also eat some woodland ground flora and coppice regrowth. Availability of woodland cover for deer can also increase problems of human/deer interaction such as road accidents, Lyme disease and other tick borne illness, crop and garden damage.

Roe Deer (c) Duncan Priddle, East Lothian Ranger Service

6.85 All wild deer species risk becoming overabundant as their natural predators such as wolves, bears and lynx have been eliminated. As roe deer are native to East Lothian eradication is not a suitable aim. However the population should ideally be kept at a suitable level to protect trees from browsing and support sustainable forest management.

6.86 It has been long-standing Scottish Government policy to avoid the expansion of the existing ranges of non-native deer species, and also to avoid muntjac deer establishing in Scotland. Fallow and sika are not native to East Lothian but have established here. Other non-native deer species – muntjac and Chinese water deer - may arrive. There are no wild red deer in East Lothian.

6.87 Deer management is complex, and is overseen by NatureScot. At the time of writing, deer impacts in East Lothian were not considered to be sufficient to warrant action.

POLICY 12 Deer and deer fencing

Land managers are encouraged to work together and with NatureScot to maintain deer numbers at a level that allows for native woodland and shrub regeneration.

Where deer fencing is used it should:

- minimise landscape and biodiversity impact
- be removed once trees are sufficiently well established

6.88 Deer can only legally be controlled by shooting them. This can be controversial as well as dangerous in areas such as East Lothian which are well populated and also popular for walking. Deer can be kept of out specific areas by fencing, however this can impact landscape and biodiversity. In particular fences can be dangerous to low flying birds, such as Black Grouse. The Green Network Strategy supports re-establishment of Black Grouse in areas of the Lammermuirs. Guidance on avoiding bird strike should be followed if using fencing.

Grey Squirrels

6.89 Grey squirrels are not native, and are extremely destructive in woodlands, due to their bark stripping tendencies which can harm timber production. In habitat other than coniferous forest, they will outcompete the smaller native red squirrels, partly by infecting them with squirrel pox. In 1998 East Lothian had both red and grey squirrels – the last recorded sighting of a red squirrel in East Lothian was in 2021.

6.90 The Scottish Strategy for Red Squirrel Conservation, 2015 (Scottish Squirrel Group) supported by NatureScot has as an aim for Central and Southern Scotland "to defend priority red squirrel populations from the threats of replacement by grey squirrels and disease".

Rhododendron

6.91 Rhododendron is a threat to trees, woodland, and the countryside generally, with potential for biodiversity loss and economic damage. This is partly due to the plant out competing native understorey, but it also spreads pathogens, in particular a major threat to larch, Phytophthera. Rhododendron is a major cause of native woodland in SSSIs being in unfavourable condition, and was the main problem invasive plant found in the Native Woodland for Scotland Survey, East Lothian as shown in figure 12.

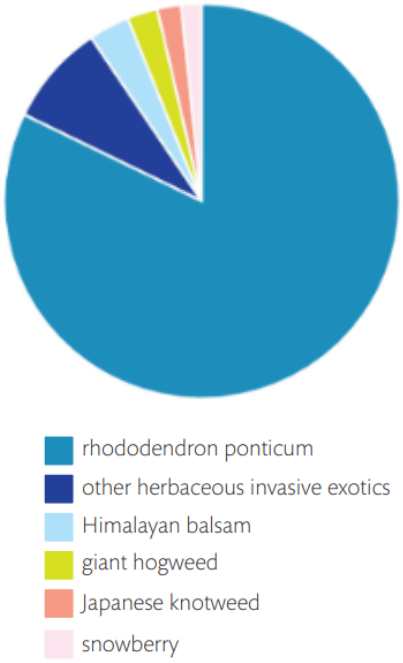


Figure 12 Proportion of recorded invasive non-native shrub and field layer species in native woods (Forestry Commission 2013)

6.92 Effective removal of rhododendron is difficult and requires coordination and long term effort and monitoring (Forestry Commission Scotland 2017). At a national level, Scottish Forestry and NatureScot are working together to identify priority areas for removal, currently in the west of Scotland where the problems are more acute. This strategy supports rhododendron removal as part of a coordinated approach.

Sea Buckthorn

6.93 Sea buckthorn is a native woody scrub species that was planted at the coast, in particular at Gullane, to stabilise the dunes. It spreads quickly, and although it can look dramatic in autumn with its bright orange berries, once established it can adversely affect grassland and dune habitats. The Council is working to restore natural dune grassland habitat by removal of sea buckthorn, with small areas of retention at Gullane and Aberlady for birdlife. Although removal of sea buckthorn and related successional tree growth can appear to go against our aim of increasing woodland cover, this is needed in places to conserve coastal habitats. The Council will therefore continue to manage this plant to conserve coastal habitat in accordance with SSSI site management statements and landowner management agreements.

Rangers managing invasive sea buckthorn at Yellowcraig, near Dirleton

Protection of non-woodland habitat and species

6.94 An expansion of woodland should not come at the expense of protected or valued non-woodland habitat or species.

European Protected sites

6.95 There are two European sites in East Lothian, the Firth of Forth Special Protection Area and Forth Islands Special Protection Area. There are other European Sites nearby which have ecological linkages with East Lothian. Protecting the interest of these sites is not only important for biodiversity internationally, it is also a legislative requirement (see Policy 13). Woodland proposals will not come forward in the Firth of Forth SPA itself as it is the intertidal area, and are unlikely on the Forth Islands, however the birds from these sites (and others) also use inland areas for foraging and roosting. Woodland creation in some areas could affect the birds from the SPAs, either from direct habitat loss, or loss of openness so they are nervous they may not see predators. Both could affect their use of the site. This is most likely to be an issue for woodland creation proposals on open farmland sites near the coast and within a wedge roughly between Aberlady, Drem and North Berwick. Advice can be sought from East Lothian Council's Sport Countryside and Leisure Service or NatureScot.

POLICY 13 Protection of European Sites

Proposals that are likely to have a significant effect on a European Site must undergo assessment under The Conservation (Natural Habitats, &c.) Regulations 1994 ('Habitats Regulations'). Sufficient information must be provided to allow the relevant authority to carry out this assessment, or failing which, provide sufficient funding to enable the authority to obtain this information. Where an adverse impact on the integrity of such a site is found, the proposal can only go ahead where:

a) there are imperative reasons of over-riding public interest and there are no alternative solutions; and

b) compensatory measures are provided to ensure that the overall coherence of the European Site network is protected.

Protection of designated sites, protected species and CSGN habitat networks

6.96 The interests of designated sites, protected species and priority habitats should be taken into account in any woodland planting proposals to ensure their interest is protected. This includes impacts from proposals outwith the designated sites or priority habitat themselves.

POLICY 14 Protection of the natural environment

Woodland management, expansion, creation, removal or restructuring should:

- enhance and not harm the interest of designated sites including Sites of Special Scientific Interests, Geological Conservation Review sites, Local Biodiversity or Geodiversity Sites, Local Nature Reserves
- avoid harm to protected species including through location of proposals and timing of works
- respect the CSGN wetland, grassland and heathland habitat networks and East Lothian priority habitats.

SSSI

6.97 Many of the SSSIs in East Lothian have been designated for habitat other than woodland, or for their geological interest. Each SSSI has a list of 'Operations Requiring Consent' for which approval must be obtained from NatureScot. In some of East Lothian's SSSIs, woodland management requires consent, such as at Bangley Quarry and Danskine Loch. Other SSSIs, such as the Firth of Forth SSSI, include prohibiting the introduction of a plant or seed.

Geological Conservation Review Sites

6.98 Geological Conservation Review sites are of national and international scientific importance to show all the key scientific elements of the Earth heritage of Britain with the intention of designating them as SSSIs. Information on the importance of each can be found on the Joint Nature Conservation Committee website. East Lothian Council recognises these sites through Local Development Plan policy and supports their protection. Guidance by NatureScot (2022) on forestry and woodland planning in relation to Geological Conservation Review sites, also relevant for Local Geodiversity Sites, should be followed.

Local Nature Conservation Sites

6.99 Local Nature Conservation Sites, consisting of Local Biodiversity Sites and Local Geodiversity Sites were designated in the Local Development Plan. Further information on these can be found in the Council's Green Network Strategy Supplementary Planning Guidance. Our Local Biodiversity Sites were identified as a network with the aim of protecting locally and regionally important biodiversity, and supporting the biodiversity value of SSSIs. Our Local Geodiversity Sites were identified with support from the British Geological Survey.

Local Nature Reserves / Country Parks

6.100 Both Local Nature Reserves and Country Parks have a biodiversity as well as a recreational interest. East Lothian has one Local Nature Reserve, at Aberlady, and one Country Park, John Muir Country Park, by Dunbar.

East Lothian Priority Habitat

6.101 East Lothian Priority Habitat was identified through the East Lothian Local Biodiversity Action Plan process. These areas are important for conserving biodiversity across different habitat types. Tree planting could adversely affect some of these habitats.

Central Scotland Green Network (CSGN) Habitat Networks

6.102 The mapping in figure 13 shows woodland, wetland, grassland and bog heath habitat as mapped by the CSGN. There is potential to expand and connect these habitats. Primary and secondary opportunities for expansion have been identified using disperal zones and mapped by NatureScot for the CSGN. The impact on the other habitats and potential connections as a

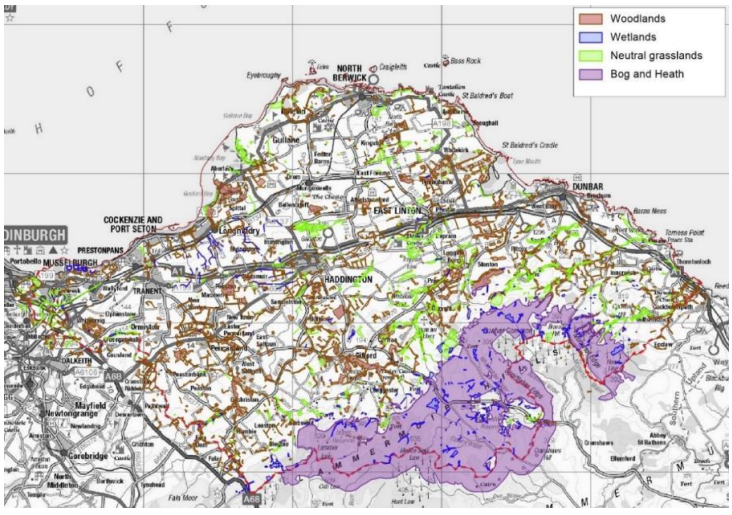


Figure 13 CSGN Habitats

network should be considered when looking at sites for woodland.

Coastal Mosaic

6.103 East Lothian's coasts support a wide range of habitat including saltmarsh, dunes, cliffs, and coastal grasslands as well as woodland. This is an important area for biodiversity and also for recreation and landscape. Sufficient open grassland habitat must be maintained here to support the birds of the SPA. Woodland creation here should therefore strengthen the existing mosaic of coastal habitats by integrating with non-woodland habitats as well as considering the needs of the birds of the SPA and other coastal species.

6.104 Woodland types appropriate in this area include scrub to the coastal edges. Along the deans extending to the coastal margins lowland mixed deciduous woodland, wet woodland or upland oak may be appropriate depending on the local ground conditions and surrounding woodland types.

ACTION 14
Create and retain a balanced coastal mosaic habitat including reverting plantation woodland to more natural coastal habitat should the opportunity arise, subject to public engagement

Peatland

6.105 Peatland is a priority habitat and also has significant potential for carbon sequestration. Scotland's third Land Use Strategy (Scottish Government, 2021) notes that as Scotland moves towards being a net zero economy there will need to be significant land use change from current uses to both forestry and peatland restoration. The UK Forestry Standard contains a presumption against woodland creation on peatland. It also requires avoidance of woodland creation on sites that would compromise the hydrology of adjacent bog or wetland habitats. The Scottish Government's Climate Change Action Plan's targets for the restoration of peatland are currently not being met[7]. NPF4 seeks to "protect carbon rich soils, restore peatlands and minimise disturbance to soils from development".

6.106 Where there is peatland or areas that could be restored to peatland this Strategy therefore generally supports peatland retention, creation and restoration over woodland creation. There may however be some small areas where creation of juniper scrub or scattered birch would be acceptable where this can be integrated with retention or restoration of peatland.

POLICY 15 PeatlandIn areas of existing peat or land suitable for peatland creation or restoration, this is supported over woodland creation.

[7] See Climate Change Committee's 2022 Report to Parliament "Progress in Reducing Emissions in Scotland" https://www.theccc.org.uk/wp-content/uploads/2022/12/Progress-in-reducing-emissions-in-Scotland-2022-Report-to-Parliament.pdf

7 Community

AIM: maximise the benefits for all people of trees and woodlands for recreation, health, wellbeing and community including through placemaking

7.1 Trees can have a positive impact on health, wellbeing and overall quality of life. This can come from visiting a woodland or even just seeing a tree through a window.

7.2 Woodlands provide opportunities for access to nature, play and physical activity. They can absorb large numbers of visitors without feeling overcrowded. The Land Reform (Scotland) Act 2003 gives a right of non-motorised access to most of the countryside in Scotland, as well as giving communities the option to buy land. This gives greater opportunity both for visiting woodland and involvement in managing woodland through ownership.

NPF4 Policy 20 Blue and Green Infrastructure
Policy Principles
Policy Intent:
To protect and enhance blue and green infrastructure and their networks.

Policy Outcomes:
- Blue and green infrastructure are an integral part of early design and development processes; are designed to deliver multiple functions including climate mitigation, nature restoration, biodiversity enhancement, flood prevention and water management.
- Communities benefit from accessible, high quality blue, green and civic spaces.

"Everybody needs beauty as well as bread, places to play in… where nature may heal and give strength to body and soul alike" John Muir

7.3 Trees within urban areas, particularly those close to residential areas, can provide benefits for everyone, and provide particular health benefits for the elderly, children, people with mental health issues, and for people living in deprived communities (O'Brien et al, 2010). 'Walkability' of urban woodland is especially important for the elderly. The diagram in figure 14 shows the benefits to health of trees in urban areas.

7.4 There are potentially some adverse health effects that could result from increased numbers of trees particularly in urban areas. This includes increased pollen levels (affecting those with hay fever)

and risk of spread of animal and insect borne illness (mainly from ticks). There is information on the NHS Inform website on how to prevent tick bites and what to do if you get bitten.

Figure 14 Benefits of trees for health in urban areas, Trees and Design Action Group

Improving accessibility of woodland

7.5 Woodland is the second most popular destination for visitors to the outdoors nationally, after local parks and open space (NatureScot, 2019 (A)), making up just over a fifth of all outdoor visits in Scotland. Research (NatureScot, 2014) found that almost two thirds of adults had visited a forest or woodland in the previous 12 months. Two of the reasons for not visiting were lack of interest or that woodlands were too far from where they lived.

7.6 The Woodland Trust (2017) also found that the closer woodlands are to where people live the more likely they are to use them. People from lower socio-economic groups tend to visit woodlands less, which may be due to access issues, including lack of access to a car. An increase in locally accessible woodland will help people benefit from woodland while reducing the need to travel. Target 4B of the Strategy aims to improve accessible woodland close to communities.

Target 4B Increase access to trees and woodland for all by improving and increasing access to woodlands to meet the Woodland Trust's Accessible Woodland Standard so that 98% of properties meet at least one of the Standard's (currently 90%) and increase the number of properties with access to a 2ha wood within 500m from 42% to 55%.

Woodland Trust Access Standard

7.7 The Woodland Trust have produced a standard for access to woodland (see box). This standard is a good starting point for examining access to woodland. As part of this Strategy we have mapped woodlands that meet this standard and their proximity to people's homes. For simplicity we have described these as recreational woodlands. More information on how we defined 'recreational' woodland and people's homes can be found in Appendix D.

Woodland Trust's Woodland Access Standard

- No person should live more than 500m from at least one area of accessible* woodland of no less than 2ha in size; and
- There should also be at least one area of accessible* woodland of no less than 20ha within 4km (8km round trip) of people's homes.

* in Scotland, where access rights apply to all woodlands, accessible woodlands are defined as those where access is actively

7.8 The map in Figure 15 shows the woodlands over 2 ha and over 20 ha we consider recreational. The map in figure 17 shows the distribution of properties within 500 m and 4 km of recreational woodlands of 2 ha and 20 ha respectively, as well as those where the standards are not met.

7.9 The graph in figure 16 shows that overall only 42% of addressable properties are currently within 500m of a woodland of over 2ha. However, 88% of properties overall did meet the standard for access to larger woodland, which is encouraging. It is likely that there are smaller woodlands that are already used recreationally but which have not been picked up in the desktop mapping.

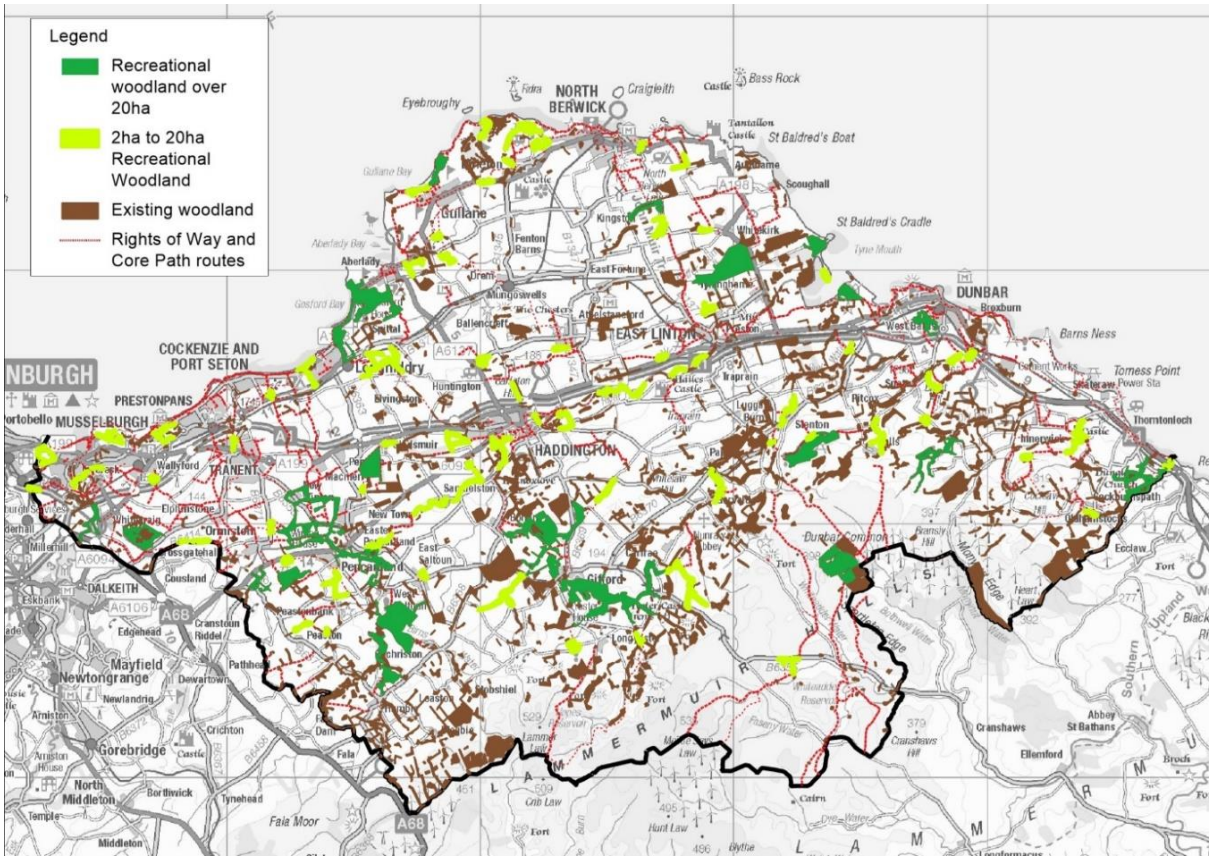


Figure 15 Recreational Woodland Map

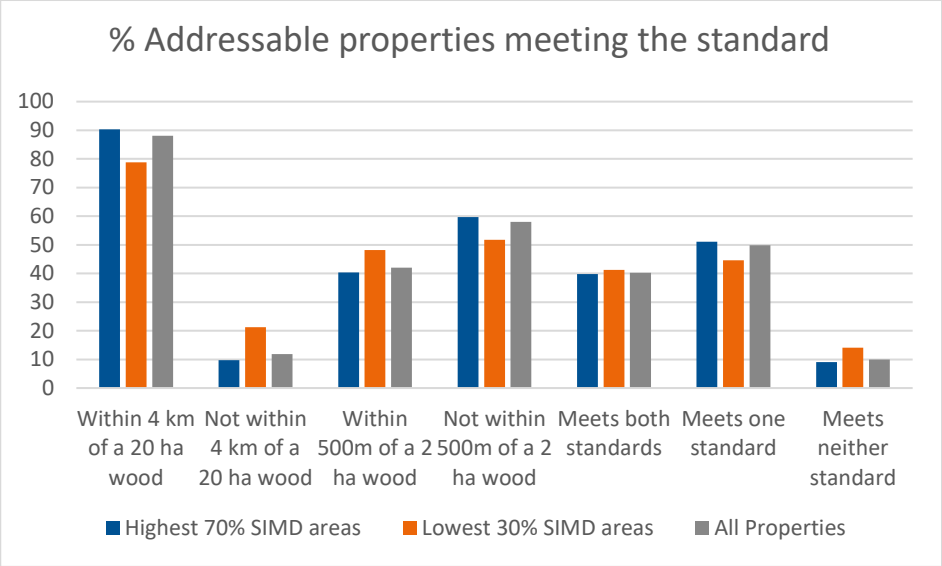


Figure 17 Percentage of addressable properties that currently meet the Woodland Trust's Woodland Access Standard

7.10 The mapping does however also show that a tenth of all properties, and more within lower SIMD areas, do not meet *either* part of the standard. There are some parts of East Lothian where there is no nearby woodland that people are likely to feel comfortable visiting, either because there simply is no nearby woodland or because public access is not encouraged.

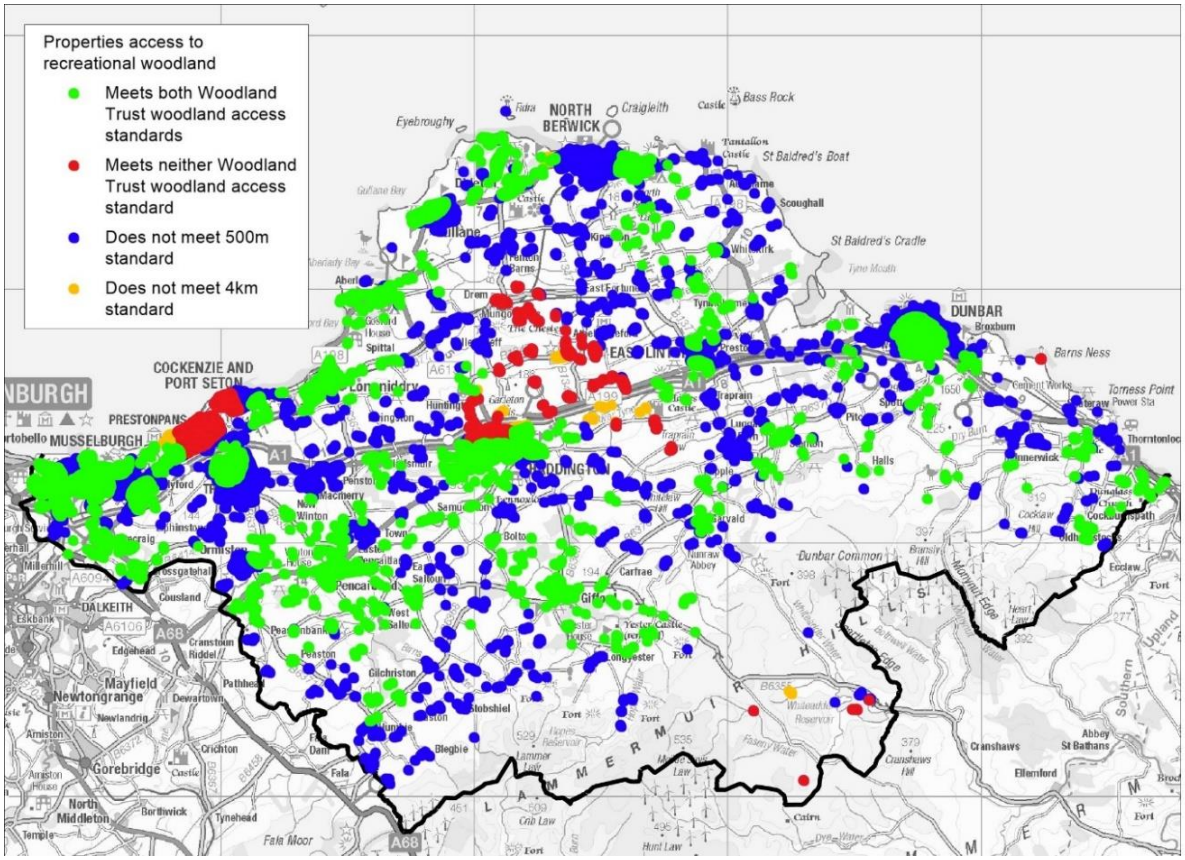


Figure 16 Map showing properties current access to 2ha and 20ha woodlands in line with the Woodland Trust's Woodland Access Standard

7.11 Prestonpans/Cockenzie is one of the main areas where neither part of the standard is met for a large number of properties. Parts of Prestonpans are also within a lower SIMD area, and in addition the town as whole has low tree canopy cover, so this is particularly concerning.

7.12 The second main area with properties where the standard is not met is part of the north of Haddington, along with a triangle to its north through to Drem then south east through Athelstaneford via Monksmuir to the area between Traprain and Stevenson Mains.

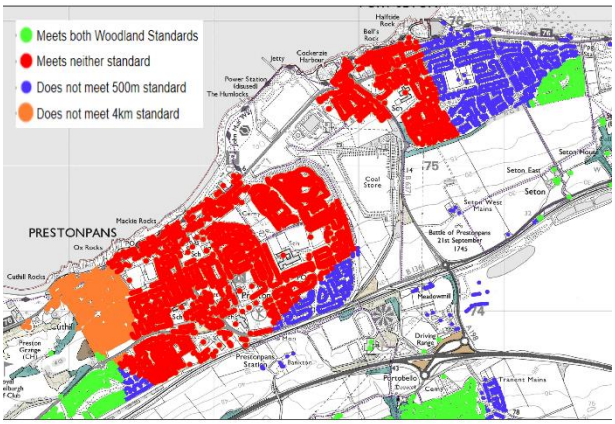


Figure 18 Properties in Prestonpans and Cockenzie Port Seton where the Woodland Trust's Woodland Access Standard is met and not met

7.13 There are challenges for increasing woodland in both of these areas. In Prestonpans/Cockenzie the area has a dense urban form and is bounded to the north by the sea. In Haddington and the rural triangle, prime agricultural land and key foraging areas for the pink footed goose, a qualifying interest of the Firth of Forth and other Special Protection Areas may limit opportunities for new woodland.

7.14 There are many properties at which the standard of being within 500m of a woodland of over 2 ha is not met across East Lothian. Significant urban areas are include Fisherrow and the Pinkie Braes areas of Musselburgh; the south and east of Tranent; the Barbachlaw area of Wallyford and Elphinstone, Macmerry and the west of Ormiston. Most of these areas also have generally lower percentages of canopy coverage (excepting Ormiston), and some are more deprived areas in the SIMD. Improved access to a 2 ha woodland within 500m would therefore be especially beneficial here.

7.15 There are parts of North Berwick and Dunbar that are also shown as not meeting the 2ha woodland within 500m standard. However both these towns have access to beaches. Although this is clearly not woodland it does also offer a natural outdoor experience.

7.16 In more rural parts, there are properties across much of the agricultural plain shown as not meeting the 2 ha standard. Although much of this is prime arable land there may be small scale opportunities for increasing either woodland or access to existing woodland.

7.17 There are three ways to increase recreational woodland to meet the Woodland Trust's Woodland Access Standard.

- Improving access to woodlands where public access is not currently encouraged.
- Management of neglected woodlands.
- Creating new woodland or increasing the size of small areas of woodland so they qualify.

ACTION 15
Investigate opportunities for increasing recreational woodland where required to meet the Woodland Trust's Accessible Woodland Standard

7.18 More information on potential opportunities for the creation of new recreational woodlands in and around our settlements can be found in Appendix A.

Improving woodland access by welcoming visitors to more woodlands

7.19 Although access rights apply to almost all woodland in East Lothian, not all woodland owners encourage recreational users. The Strategy seeks to increase the number of woodlands where

responsible access is encouraged, particularly close to settlements and where woodland can be reached by sustainable transport modes. We therefore encourage woodland owners to consider increasing the accessibility of their woodland, where the woodland is ecologically robust and otherwise suitable for increased access. We respect however that not all owners will wish to do this. Where owners do wish to encourage access, various sources of funding for access related projects are available. Advice can be obtained from our Access Officer.

Improving woodland access by improving management of woodland

7.20 The Scottish Forestry 'Woods In and Around Towns' (WIAT) programme provides funding to bring neglected woodlands in and close to urban areas into positive management, improving local environments, contributing to sustainable development and supporting people in using and enjoying their woods. Scottish Forestry offer Woodland Improvement Grants for Woodlands In and Around Towns (WIG WIAT). These woods must have free and unhindered public access. These grants can provide funding for operations that will contribute to the sustainable management of urban woodlands as well as provide a range of public benefits. This can improve accessibility by providing paths and way finding.

7.21 Woodlands within the WIAT programme are defined as those within one kilometre of settlements with a population of over 2000 people. To qualify for funding, at least half of the woodland must be within the Woods In and Around Towns area and be a minimum of 0.5 ha in size. The areas where WIG WIAT funding could apply can be found of Scottish Forestry's website and are included on the urban opportunities mapping in section 11 and Appendix A.

7.22 Figure 29 Urban tree and woodland opportunities map in Section 11 (and detailed maps in Appendix A) shows properties that do not meet the Woodland Trust's Woodland Access Standard overlaid with the eligibility areas for WIG WIAT funding. This shows that funding is available for large areas where new woodland or improved public access to woodland would most help meet the Woodland Trust's Woodland Access Standard.

Improving woodland access by creating new woodlands

7.23 Funding is available from Scottish Forestry through the Forestry Grant Scheme, and potentially other rural payments, for woodland creation. This can be used to create new woodlands or increase the size of woodlands to address the Woodland Trust's Woodland Access Standard.

7.24 On prime agricultural land the Strategy supports improving access to existing woodlands by welcoming visitors and bringing neglected woodland into good condition before creation of new woodland.

Sustainable transport

7.25 Nationally almost all visits to less local countryside sites including woodlands are made by car (NatureScot, 2018). Although the Strategy supports increased access to woodland, increased car travel is not a desired outcome. There are many core paths within East Lothian and a number of these already pass through woodlands. These are shown on the Recreational Woodland map in figure 15 and are available online. Accessibility of woodland by active and sustainable travel options should be maximised, such as access via a core path, or by considering bus routes. Where there is potential for an active travel route between destinations to be formed *through* a woodland, this should also be considered when designing the woodland.

7.26 Opportunities for tree planting and enhancing green networks alongside paths and active travel routes are being explored by the CSGN. Creating attractive, wooded routes may encourage users to consider the route as part of the experience, as well as offering shade and access to nature.

Inclusive access

7.27 It should be possible for people with all levels of mobility to access and enjoy woodlands. Where public access is encouraged, woodland managers and those locating and designing new woodland should consider the needs of people of all levels of ability including differing levels of mobility and sensory perception, as well as the needs of people with different characteristics. Aspects to consider include provision of disabled car parking and wheelchair accessible paths, and the actual and perceived safety of routes. Although it may not be possible to provide level or wheelchair friendly access through a whole wood, paths offering access for those of lesser mobility should be provided to some parts of these accessible woodlands where possible.

ACTION 16

Map existing woodland provision for people with reduced mobility and work with disability groups to identify where this could be increased.

POLICY 16 Design for all

Managers and designers of new and existing woodland intended to encourage public access should:

- maximise provision for access by active and sustainable transport modes to and through woodland
- include provision for all levels of ability through location, access points and design

Recreation in woodland

7.28 The strategy aims for recreational users to have safe and enjoyable experiences in East Lothian's woodlands and wooded open space and encourages responsible access. What 'responsible access' means is set out in the Scottish Outdoor Access Code. The main points are that users should avoid or minimise damage; horse riders and cyclists should keep to suitable paths and tracks, dogs should be under close control, and trampling on seedlings and young trees should be avoided. Deer control (by the landowner or their agents) can take place in forests all year round, often at dawn or dusk. Warning signs should be adhered to.

7.29 Those managing recreational woodlands need to consider the available facilities provided to ensure that everyone feels equally welcome and catered for. Some groups are underrepresented as visitors to woodlands. Older people, people with learning, sensory or mobility disability and people with some protected characteristics may have particular barriers to visiting woodland. Some people may come from cultures which do not have traditions of woodland access. Work to increase the appreciation and use of woodlands by people from a wide range of abilities, and socio-economic and ethnic backgrounds is encouraged.

ACTION 17

The Council will promote access to and enjoyment of woodland for all, particularly with respect to underrepresented groups, where this can be done in a manner that does not harm the woodland.

7.30 There is a need to manage visitor pressure arising from recreational use of woodlands. There can be conflict between recreational use of a woodland and its biodiversity value as well as between

different types of recreational user. Steering recreation to robust woodlands that can absorb increased visitor pressures helps to protect sensitive woodlands such as ancient woodlands.

7.31 The Council's Countryside Service produces management plans and management statements for a number of woodland sites it owns to help manage pressures. The Council will continue to manage the woods it owns or looks after under management agreement.

7.32 Play is hugely important in the lives of children and young people, and woodlands and trees can provide an excellent setting (see e.g. Jarvis et al, 2022). Scotland's Forestry Strategy supports the provision of more opportunities for children to play and learn in woodlands, particularly in urban areas. Our Strategy encourages woodland creation in and around towns which will provide additional opportunities for play within woodlands.

Hutting and low-impact holiday accommodation in woodland

7.33 There has been a recent upsurge in enthusiasm for huts and low-impact holiday accommodation such as glamping and pods. Woodland can be an attractive location for hutters and glampers, offering good opportunity to recreate and experience nature. However, it is important that this accommodation does not erode the overall character or biodiversity of woodlands. It must operate alongside enjoyment of the woodland by others under statutory countryside access rights. Planning permission will be required.

What is a hut?

"a simple building used intermittently as recreational accommodation (i.e. not a principal residence) having an internal floor area of no more than 30m^2, constructed from low impact materials, generally not connected to mains water, electricity or sewerage and built in such a way that it is removable with little or no trace at the end of its life"

7.34 NPF4 supports hutting proposals where the nature and scale of the development is compatible with the surrounding area and the proposal complies with relevant good practice guidance. This refers to Reforesting Scotland's 2014 guidance New Hutting Developments, which stresses its low impact ethos. Proposals for huts within woodland should follow this guidance.

7.35 In ecologically sensitive areas the impact of hutting or glamping development must be considered carefully. The location and design of the building must avoid harming woodland biodiversity. Woodland can be adversely affected by trampling and disturbance from people, dogs and light; even seemingly small changes can lead to biodiversity loss. These developments are unlikely to be compatible with woodland within SSSIs and Ancient Woodlands of semi-natural origin due to the likely detrimental impact on their biodiversity interest. Proposals for hutting within woodland should include a woodland management plan for the area of woodland associated with the hut.

7.36 Car access routes and parking can be both visually intrusive and damaging to woodland biodiversity, and are unlikely to be acceptable within woodland. Where parking is required as part of planning permission this should be formed at the public road entrances to the woodland and limited to one space per accommodation. This is particularly important where woodland has been subdivided and there is potential for more than one building in a larger woodland and therefore requirement for multiple parking spaces. Multiple parking provision should be grouped together.

POLICY 17 Hutting

Proposals for huts within woodland should:

- follow Reforesting Scotland guidance "New Hutting developments"
- provide a management plan for the woodland
- provide vehicular access and parking by a public road and not within the woodland
- consider using local businesses for materials and skills

Hutting proposals within SSSIs, Ancient Woodlands of semi-natural origin are not supported.

Urban Tree Canopy

7.37 Trees play and important role in making our urban areas attractive, healthy and functional. Increasing tree coverage in our communities and urban areas is a key aim of the East Lothian Climate Forest. This is encouraged by Scotland's Forestry Strategy and the CSGN.

7.38 All the trees in urban areas, in gardens and other private land, on institutional land, parks and open spaces and alongside streets form the urban tree canopy. Good canopy coverage can:

- Improve amenity and climate change resilience by providing shade and shelter
- Reduce urban heat in summer through preventing the sun heating surfaces of roads and buildings and cooling the air: for maximum benefit canopy cover should exceed 40% and include trees within residential areas (Science Daily, 2019)
- Improve energy efficiency of buildings by reducing wind chill
- Support health and wellbeing by giving views of trees; even a view of a tree through a window can help
- Slow water run-off from hard surfaced areas into nearby watercourses, and improve water quality by filtering pollutants from roads
- Improve air quality and reduce impacts of air pollutants
- Contribute to the distinctive character, amenity value and place-making of settlements
- Enhance biodiversity and green networks
- Reduce the amount of water entering the combined sewerage system

7.39 Despite these benefits, poorly chosen or sited urban trees can create issues such as creation of dark or apparently dangerous places, increase in allergens or damage to structures. This should be considered at the project stage and avoided through good design.

7.40 The Strategy supports and encourages an urban forest approach (Davies et al, 2017) within urban areas. This approach views urban trees, shrubs, plants and soil as a single entity regardless of ownership. It includes trees on streets and paths, in civic squares, urban woodlands, parks and open spaces as well as gardens. The wider issues of climate change and biodiversity connectivity are best understood by looking at the urban forest holistically. The Urban Forest approach encourages collaboration with communities, owners, occupiers and visitors to get the best result for their area. This approach is very different from the current management approach for urban trees in East Lothian. This would require more resources and collaborative working as well as collection of data. This approach could be taken forward by local communities through production of Area Partnership Plans and Local Place Plans.

ACTION 18
Encourage those preparing Area Partnership Plans and Local Place Plans to include appropriate proposals for trees and woodlands in their area

POLICY 18 Community collaboration
Proposals for tree planting in and around urban areas should be taken forward in a collaborative approach and seek consensus from all sectors of the community. Equality impact assessment is recommended to identify issues.

Canopy coverage and targets

7.41 The 3-30-300 rule as suggested by Professor Cecil Konijnendijk van den Bosch and adopted by the IUCN Urban Alliance defines targets for tree cover and open space within urban areas (IUCN Urban Alliance, 2021). It recommends a 30% tree canopy within every neighbourhood. The Strategy will work towards a 30% target as defined in Target 4A. However we recognise that settlements each have a different character and different roles. We therefore support a collaborative approach seeking consensus from all sectors of the community in setting targets for canopy cover through Area Partnerships Plans or Local Place Plans. These plans may also be a good vehicle for communities to work out how trees best fit into their area and propose areas for new planting. All sectors of the community should be involved to make sure increasing canopy coverage does not lead to issues for any particular groups. The 3-30-300 Rule will also be taken forward in the Council's Open Space Strategy.

Target 4A: Increase access to trees and woodland for all by retaining or increasing tree canopy coverage to a working target of 30% in settlements of over 500 homes and the areas in the most deprived 30% of SIMD areas.

7.42 We have calculated the canopy coverage for our main settlements and largest villages. These are shown in figure 19 and discussed further in Appendix A. We have also calculated canopy coverage for the urban parts of the lowest 30% SIMD areas of East Lothian and these are shown in figure 20. Some settlements have more canopy coverage than others, and there are also differences between areas within a settlement. New housing areas in particular have low canopy coverage as new trees planted there have yet to reach maturity. Social housing areas in general tend to have lower canopy coverage. Such areas often overlap with areas of higher multiple deprivation. Only Longniddry and Pencaitland currently have canopy coverage greater than 30% reach this level.

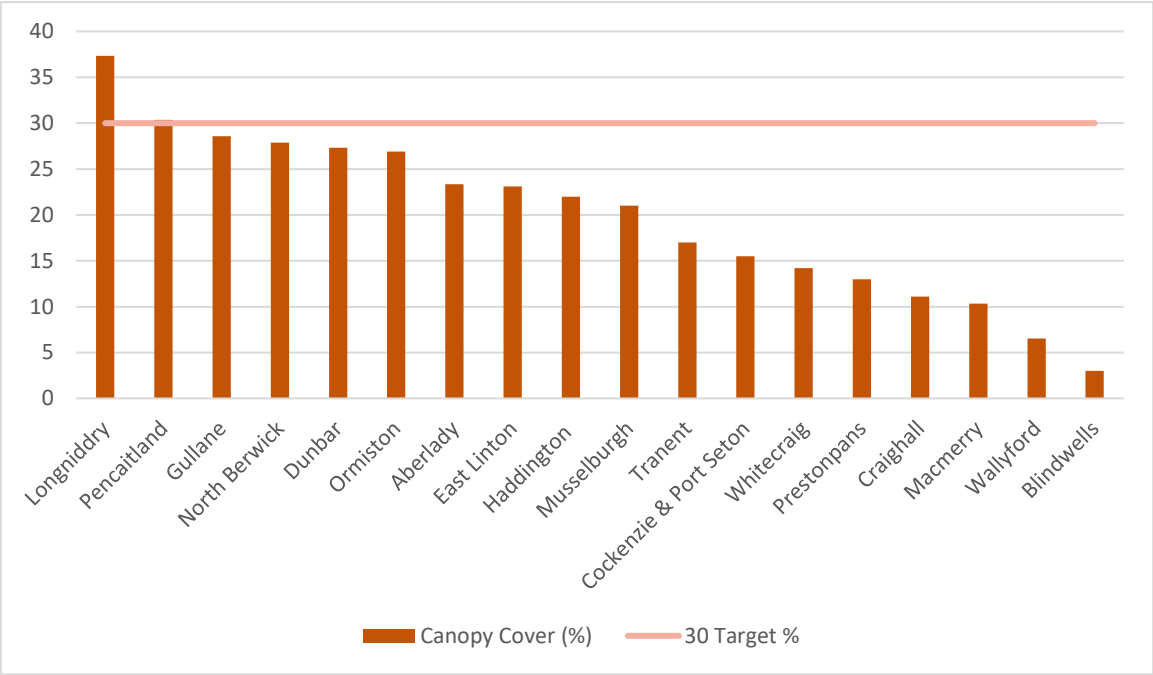
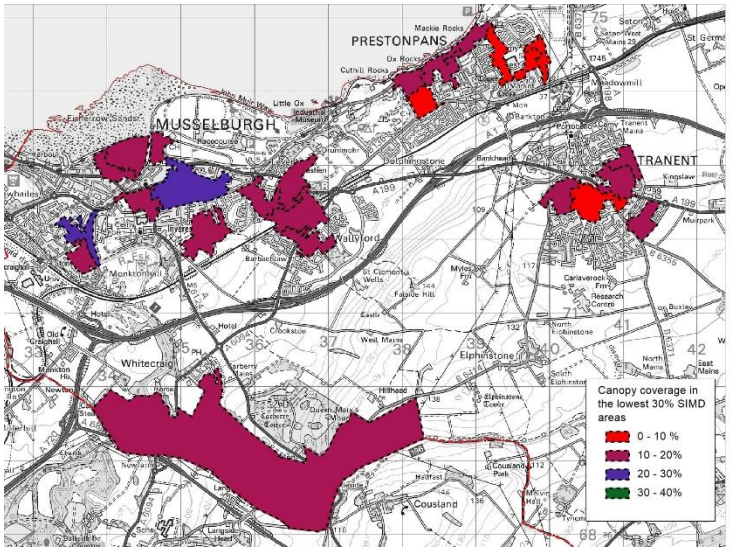


Figure 20 Graph of settlement canopy coverage



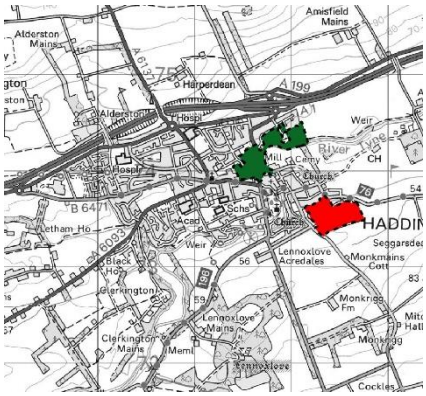


Figure 19 Map of canopy coverage in lowest 30% SIMD areas to west of East Lothian, with Haddington inset

7.43 The Council is already working to increase canopy coverage in social housing areas, in consultation with communities, as it usually owns the areas of open space and landscaping there. Considerable tree planting has also recently been undertaken in our communities through the Queen's Green Canopy scheme and ongoing Council tree planting programme all helping increase canopy coverage. It is likely that there is potential for additional small scale planting in many of our urban areas. The Council is updating its Open Space Strategy. This will identify areas of amenity woodland within towns, and help identify additional areas of open space suitable for tree planting or woodland creation.

7.44 To retain and where desirable increase urban canopy coverage, the Council intends to:

- raise awareness of the importance of the urban tree canopy, including trees in private ownership as part of the wider urban canopy
- sustainably manage our own trees and those we look after under agreements

- secure the canopy into the future by increasing age and structural diversity of our own trees
- work in partnership with communities and private owners through the East Lothian Climate Forest project
- use our regulatory powers to protect the urban canopy, and
- encourage retention and good management of trees in private ownership.

7.45 More information on potential opportunities for new woodlands in and around our settlements in both Council owned and other space can be found in Appendix A. See also 'Character and Setting of Towns and Villages' in Section 10.

Design, and siting of trees in urban areas

7.46 Although trees are beneficial, badly sited trees or poor species choice can cause issues. It is important that any new planting proposals consider the right tree in the right place. Guidance on this has been produced by the Trees Design and Action Group (TDAG).

7.47 The diagram in figure 21 from TDAG gives examples of where and where not to plant for successful urban trees. Consideration must be given to the final size of the trees canopy when positioning trees to avoid damage or nuisance to built structures. Tree planting proposals adjacent to roads and railways should be designed to avoid adverse impacts on these assets. Trees and hedges should not be planted in the road verge for road safety reasons.

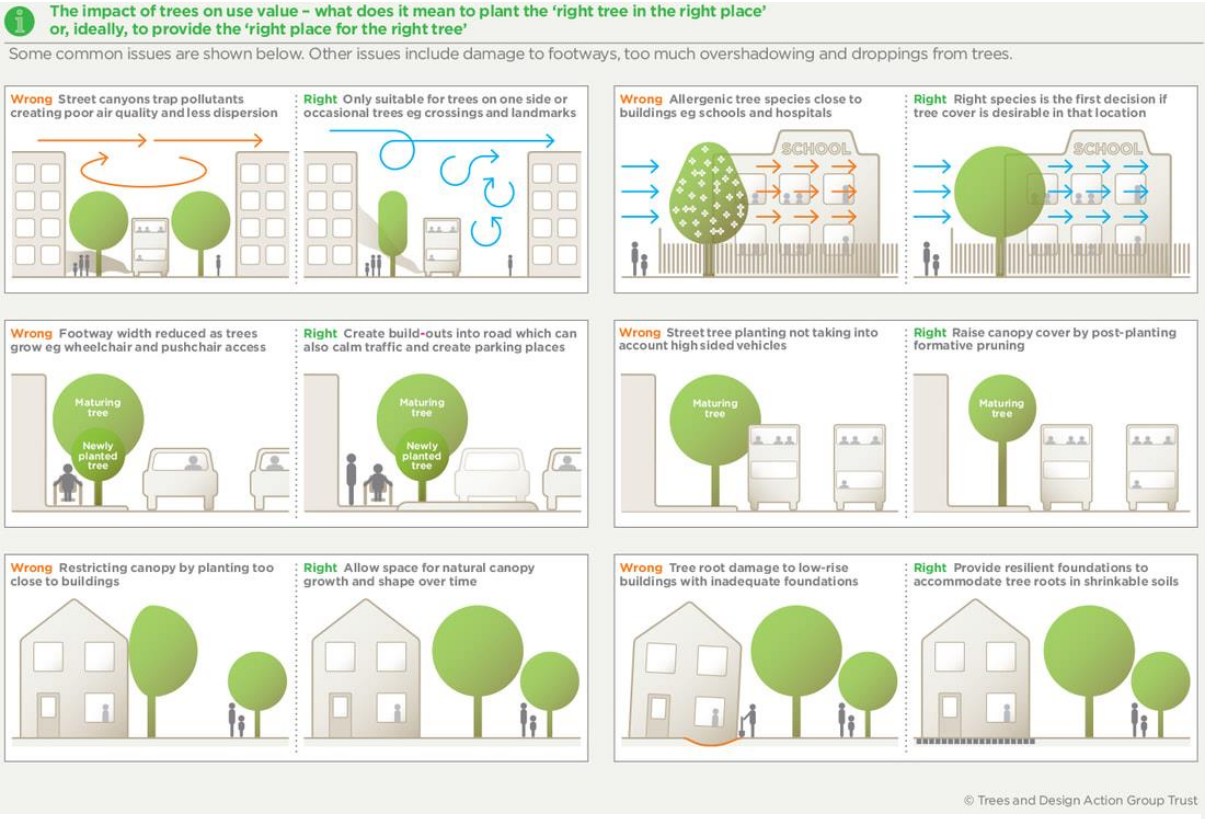


Figure 21 Urban tree placement guidance, Trees and Design Action Group

7.48 Roots must also be considered with appropriate space for root growth and protection for underground structures as required. Without sufficient space for tree root growth any trees planted will be unlikely to reach their full potential. A tree planted in a cubic metre of soil within a hard surfaced area has little opportunity to find water in times of drought. There are planting systems

available to increase the area for root growth beneath hard surfaced areas. Developers should consider these in new developments as it is difficult to retrofit these elements. Root barriers should also be used to enable trees to be planted next to underground services to avoid damage to these by tree roots. The use of underground cell systems to provide space for root growth below hard surfaces areas is supported by this Strategy. This ensures the roots have sufficient space to develop below the ground and avoids issues of roots lifting and damaging pavements and road surfaces.

An example of the use of underground cell systems in Musselburgh, without which the trees would not grow in this location

7.49 Pollen from wind pollinating trees, in particular silver birch pollen, can cause allergies including hay fever and food allergies. This Strategy recommends not planting these allergenic tree species closer than 100m to schools, hospitals or care homes to reduce impacts from pollen.

7.50 Policy and guidance on trees within new development can be found in the Council's LDP and Design Standards for New Housing SPG.

Securing the urban canopy into the future

7.51 Trees planted when the parks and streets were laid out in the Victorian era have considerable value to the urban forest for canopy coverage, carbon storage and amenity value. The majority of these are now mature or over mature. Ageing trees cost more to manage, and their environmental value gets less while hazard increases. As trees reach over maturity or die they may will require to be removed for safety reasons.

7.52 The Strategy supports succession planting of trees to retain canopy coverage. Urban tree renewal, however, is not simply a question of replacing trees like-for-like, but as previously discussed, is also about identifying the most resilient and appropriate replacement species. Engaging in a meaningful dialogue with a broad range of stakeholders and community members also ensures support for proposals.

7.53 Inadequate replacement of the large tree species is a threat to future stability of the urban canopy. Succession planting should include for replacement of large species trees with associated ground works to enable space for root growth.

7.54 Uniform, symmetrical avenues and rows of, mainly lime, trees create wonderful vistas in our parks and main streets. When considering succession planting of these it may be seen to be desirable to plant identically aged trees that will maintain visual consistency. However, this would lead to wholescale loss of a feature with related carbon sequestration and townscape effects. Instead we support a managed replacement of individual trees within an avenue as required to ensure continuity of the avenue feature regardless of size comparity.

Council owned urban trees

7.55 The Council owns and proactively manages a substantial tree resource throughout our urban areas. This includes many wooded parks, street trees and areas of woodland. Together these form a major part of the urban forest. More information can be found on the Council's website.

Management of Council Trees

7.56 The Council intend to produce a Tree Management Strategy for trees on our own land. This will set out an integrated approach to tree management including risk management, the need for selective felling, new planting and replanting where required, and species choice to create a resilient tree resource.

ACTION 19
Produce a Tree Management Strategy for trees on our own land

7.57 To start this process a full survey of all council owned and managed trees and woodlands needs to be undertaken to identify and record every tree location, species, age and size, and condition. The survey will be used to inform development of the urban tree canopy in Council owned areas in accordance with the Urban Forest principles.

ACTION 20
Identify funding to carry out an audit/survey of our current tree estate including tree condition etc; management requirements for these trees, including for selective felling where needed

Works to Council Trees

7.58 The Council has a duty of care with regard to the safety of our trees. Sometimes a tree must be removed, in particular when public safety is at risk. The decision to fell a tree is not taken lightly. Where possible we will notify local residents and discuss the issues with them. The Council will not normally fell a healthy tree. Reasons we may remove a tree include:

- To allow certain works to be carried out, such as roadway improvement works or development projects. Often there is consultation on development projects through the planning process or other Council procedures, so people can make representations about projects before a decision is made
- Where an approved planning application or essential development works requires tree removal
- To follow tree management practice and support tree health. Trees that are suppressing or excessively shading other trees may need to be removed to let others grow
- To protect or enhance biodiversity such as alternative habitats as carried out with Sea Buckthorn management along the coast
- Where the inconvenience and detrimental impacts of the tree outweigh its benefits.

7.59 As a major landowner, the Council receives many requests and complaints regarding trees and it is important that they are dealt with consistently and proportionately. Policy 19 identifies works that will not be undertaken by the Council. Where Council owned trees overhang someone else's property, provided the tree is not in a Conservation Area or protected by a Tree Preservation Order or Planning Condition, property owners may cut back branches above their land to their boundary. The work should be carried out to British Standard BS3998:2010 'Tree Work – Recommendations'. For other

POLICY 19 Management of Council Trees

Unless there are exceptional overriding reasons such as safety, trees owned or managed by the Council will not be cut back or felled, at the expense of the Council, as a result of the following:-

· Being perceived as too large or overgrown
· Shade (unless oppressive)
· Loss of a view
· Dropping aphid honeydew/sap
· Dropping leaves or other seasonal debris
· Interfering with TV reception
· Affecting the efficient working of solar panels
· Touching overhead telecommunication wires
· Overhanging branches

enquiries please email the Council at trees@eastlothian.gov.uk.

Privately owned urban trees

7.60 Trees within garden ground, factored private housing areas, businesses and institutions form a significant part of the urban canopy. Without these trees our towns and villages would be much less attractive. However, care must be taken when choosing trees - and hedging - to ensure the right sized species for the location. Issues can arise where trees become too large for the garden, and shade or cause nuisance. Trees planted in the wrong location may also risk nuisance or damage to neighbouring property or services. Hedges when not well maintained can have similar issues. Consideration should be given to appropriate locations for trees to avoid future damage to public infrastructure such as roots disrupting pavements. The council does not support tree planting within road verges. The Strategy encourages appropriate tree planting and care of trees in urban areas.

7.61 The RHS website has information on tree species and sizes as well as information on planting and caring for your trees. Where you can, use trees that are native to your local area so they can provide food and habitats for insects and animals living nearby. Requirements for ongoing maintenance should also be considered.

7.62 Trees require care and maintenance to avoid problems developing. Regular inspection can help identify issues before they become a problem. Some trees are protected and require notification or permission from East Lothian Council before carrying out work to them. Larger trees may require professional attention. Advice on tree protection and tree work including questions to ask your tree surgeon can be found on East Lothian Council's website. The Council maintains a list of insured tree surgeons that can be provided on request. All tree work should be carried out to BS3998:2010 'Tree Work – Recommendations'.

7.63 High hedges can sometimes be a source of dispute between neighbours. There is High Hedge legislation providing a framework to help resolve disputes which the Council applies. However use of the statutory procedures is a last resort and parties concerned are required to try and solve the issue amicably through discussion first. Advice on this can be found on East Lothian Council's website.

Use tree planting to enhance air quality

7.64 Although air quality in East Lothian is generally good, there are some pollutants, including particulates, which are thought to have no safe level. Any reduction of exposure is therefore beneficial. Trees and woodlands can absorb pollutants from the air, gathering them on their leaves and reducing the movement of pollutants through the air. Hedgerows have been shown to significantly reduce air particles on the opposite side from the road when placed alongside residential roads (Kumar et al, 2021). When planted along the road and transport corridors and around industrial developments trees and hedgerows act as a natural barrier to pollutants.

7.65 Tree planting is used extensively along the A1 transport corridor through East Lothian and is particularly effective at mitigating air quality impacts where close to communities. Tree planting of

appropriate species around sensitive sites such as schools, care homes, hospitals, and play areas and sports fields could be particularly beneficial for vulnerable groups.

7.66 East Lothian has one Air Quality Management Area, which brings particular focus to improving air quality. The area incorporates High Street, Musselburgh (A199) from its junction with Newbigging and extending westwards to the junction with Bridge Street and Mall Avenue. Tranent High Street is not an Air Quality Management area but air pollution levels are a concern there so monitoring takes place there. Planned actions for both these areas are being implemented and should improve air quality there.

ACTION 21

Where appropriate, plant street trees and hedges in urban areas, including in Air Quality Management Areas and around sensitive sites including hospitals, schools, care homes and play areas and sports fields; woodland expansion along strategic road corridors and adjacent to industrial sites; and hedges along roadside edges

7.67 We support tree and hedgerow planting where the most benefits for air quality can be achieved. Tree planting should avoid trapping pollutants in places used by people (see Figure 21). Species choice should consider potential for ozone precursor (Fitzky, 2019).

Formal beech hedging and regular hedgerow trees at Markle Mains

Vacant and Derelict Land

7.68 East Lothian's legacy of past industrial development is small. There are, however, a number of vacant and derelict sites here, and where they occur, they can affect nearby communities due to poor visual amenity among other issues. There are a larger than average proportion of properties within the lowest 30% SIMD areas that are within 500m of this land.

7.69 Trees can help provide temporary greening on vacant and derelict sites, and often regenerate naturally in such areas. This often improves amenity value of the area as well as offering climate and biodiversity benefits. Tree planting can also address ground contamination issues, remediating sites.

7.70 The sites on East Lothian's Vacant and Derelict land audits are shown on the Urban maps in Section 10 and in Appendix A. Some of these may have potential for temporary greening or even more long term tree growth. Target 7A to improve landscapes through structural planting in the Cockenzie / Blindwells areas will help to remediate this area of derelict land.

TARGET 7A Improve landscapes through woodland creation by structural planting in the Cockenzie/Blindwells area

Community involvement in woodland and orchards

7.71 Community ownership of woodland can support community cohesion, helping galvanise and empower communities, and giving people a sense of belonging and control. Community involvement with woodlands of any sort can help residents appreciate the benefits and need for woodlands. The more people know and understand about trees the more likely they are to welcome them in their surroundings.

7.72 Woods under community ownership in East Lothian include Lochend Woods in Dunbar, and Gifford Community Woodland. Other communities have similar opportunities. Garvald have a Garden and Woodland Project and Spott Community Association have registered an interest in land at the Village Hall which they propose would include some tree planting.

7.73 There are a number of other groups involved in working within some of the Council's woodlands. All lead by Rangers with input when required from the Council's Tree Officer. These include North Berwick Country Park, Gilsland Woodland and Glen Woodland in North Berwick, Yellowcraig in Dirleton, John Muir in Dunbar, Levenhall in Musselburgh, Woodhall in Ormiston and Butterdean at Gladsmuir.

7.74 A range of fruit trees can be successfully harvested in East Lothian; apples, pears, plums and cherries all do well provided the right variety is chosen. Other fruit and nut trees may produce successful crops here with future changing climate. The Council is intending to produce a Local Food Growing Strategy which will encourage the growing of fruit and nuts.

7.75 Growing of tree fruit in gardens for home consumption eliminates food miles, and is cheap and healthy. Community orchards also have these benefits, and also bring people together. A new community orchard has recently been created in Musselburgh's Lewisvale Park by Sustaining Musselburgh, a sub group of the Musselburgh Area Partnership. There is a heritage orchard at Preston Road, East Linton managed by the East Linton Horticultural Society. A local producer, Thistly Cross Cider, crowd sources its apples as well as sourcing from larger local growers, making a desirable product from fruit which might otherwise have gone to waste. There may be further such opportunities.

ACTION 22
Maintain and where appropriate publicise a list of community orchards

7.76 The Council's Climate Change Strategy encourages local food growing, including orchards. This includes the action to plant and manage community orchards / community fruit growing in partnership with communities and the planting of apple trees alongside core paths – 'Apple Core Paths' – for community benefit. The Council's Local Biodiversity Action Plan encourages the planting of apple trees in business sites.

ACTION 23
Encourage local fruit and nut growing

8 Economy

AIM: Trees and woodland contribute towards a Sustainable and Inclusive Economy

8.1 Productive forestry, sustainable use of woodland and manufacture of wood products support the circular economy and green economy. Direct employment opportunities include planting and management of woodland, and production and processing of timber, while indirect opportunities include creation of products from wood products and businesses which use woodland as a base such as pony trekking and other leisure based business. Trees and woodlands are also important in maintaining an attractive environment which encourages investment and tourists to the area. Increasing the amount of trees and woodlands is expected to increase employment opportunities both directly and indirectly.

Productive forestry

Wood Fibre Production

8.2 Scotland's Forestry Strategy aims to improve the efficiency and productivity of the forestry sector (Priority 6). This will be achieved by ensuring wood fibre availability from Scotland's forests and woodlands is predictable and increases over time. The forestry industry predicts growth in the sector overall in Scotland. Their strategy "Roots for Further Growth" (Scottish Forest and Timber Technologies, 2018) has a vision of doubling Scottish forest and timber technologies sector's present contributions to the sustainable low carbon growth of the Scottish economy.

8.3 East Lothian's productive softwood sector is small. Purely coniferous commercial woodland within East Lothian accounts for 35% (Forest Research, 2019) of its overall woodlands, down from 41% in 2011. East Lothian has limited large scale softwood forests. There are some larger plantations within the Lammermuirs particularly to the west of Lammer Law and to the east end of the Lammermuirs, west of Oldhamstocks, with many smaller scale coniferous plantations found along the edges of the Lammermuirs.

8.4 There are significant constraints to woodland expansion in East Lothian overall, and commercial softwood in particular. This is due to the suitability of the land for other uses including agriculture, urban development, windfarm, peatland restoration and grouse moor, or valued historic and natural heritage. Where woodland can be accommodated, native trees (including montane scrub) are preferred due to the multifunctional benefits they provide. Therefore this Strategy does not support a significant increase in softwood timber woodlands. Where conifers for timber production are already planted on ancient woodland sites (PAWS) the Strategy supports reversion to native woodland (see Section 7). On former peatland, restoration of peatland is preferred to woodland, due to habitat and carbon sequestration benefits. An increase in hardwood production is supported.

8.5 Where land has been historically planted for softwood production but left unmanaged, proper management is encouraged, including thinning to improve timber quality. This also brings a range of biodiversity and landscape benefits. Including native hardwood species in softwood forests for sustainable timber and specialist forestry products is encouraged. Where non-native species are used for timber production reasons, preference should be given to European species as they support a wider range of native biodiversity.

POLICY 20 Productive woodland

Continued production of wood and wood fibre from existing productive woodlands is generally supported, as is expansion of productive hardwood. However:

- Plantation on ancient semi-natural woodland sites (PAWS) should be restored to native woodland
- New productive woodland should not be solely softwood
- Restructuring of softwood woodland to improve landscape and biodiversity value is encouraged
- Improving the recreational value of commercial woodland is encouraged

Ancillary Forestry Businesses

8.6 East Lothian has two major sawmills as well as other local sawmills and maintaining local supply would support their continuation. Local processing supports local jobs as well as having the potential to reduce emissions by reducing the transportation distance of both harvested logs and finished timber, which can then be used locally.

8.7 An increase in trees and woodlands and woodland management will lead to more opportunities in woodland management and tree surgery. There is a UK wide shortage of people with forestry skills. Training and education to ensure safety of workers will also be required.

8.8 This Strategy seeks locally sourced and grown seeds and trees to meet biodiversity and climate aims. This requires a supplier; trees take time, space and labour to grow even to the plug stage. East Lothian has the UK's largest container-grown forest nursery supplying commercial markets. A number

of small scale plant nurseries sell to the domestic market. As part of the East Lothian Climate Forest project we will encourage local nursery, wood and tree businesses to provide sufficient locally sourced stock.

8.9 Ancillary businesses related to woods includes furniture making and smaller crafters. These are encouraged in appropriate locations.

8.10 An increase in management and timber works leads to an increase in waste. Green waste can be harvested by local companies such as Forth Resource Management and turned into mulch and fertiliser. This supports the circular economy as well as zero waste targets.

8.11 This Strategy encourages the development of links between local plant suppliers, timber growers and processors / users to enhance local supply chains and encourage the circular economy. We intend to explore this further through the East Lothian Climate Forest.

ACTION 24
Encourage and enable smaller producers to work together in joint marketing, promotion and equipment sourcing through a local timber forum

Contribute to sustainable agriculture, rural development and diversification

Sustainable agriculture

8.12 East Lothian has extensive areas of land which are suitable for arable or mixed agriculture. The value of keeping land that is capable of food production available for this use is obvious and this land is protected in National Planning Framework 4. Tree planting in areas which are capable of growing crops, in particular prime agricultural land Classes 1 – 3.1, should be carefully integrated with the use of farmland for agricultural production. This is also relevant for land suitable for mixed agriculture (Classes 3.2 – 4.2). This land is unlikely to be suitable for large woodlands. Assessment of suitability for woodland should consider the impact on the agricultural unit and surrounding facilities, for example if the loss of the agricultural land would result in closure of a related food processing plant.

8.13 Climate change is expected to make more land become available for a wider range of crop growing, so land that is not prime now may become so in the future. Changes in climate may also mean a wider range of fruit can be grown, offering opportunities for farm diversification. Proposals on land suitable for mixed agriculture should therefore consider both current and possible future agricultural potential where the potential of this land in particular may improve with climate change.

8.14 East Lothian's woodlands can play an important role in rural development. The Scottish Land Use Strategy notes that more of our land will be forested and this will become increasingly integrated with

agriculture. Woodland can increase the productivity of agricultural land. Although shelterbelts take up space, research shows they can increase arable crop yields by up to a quarter and improve livestock productivity (SAC consulting, 2010). The most effective shelterbelts to increase yield are those with 40-60 porosity which will protect an area up to 30 times the height of the shelterbelt (Woodland Trust, 2012). Providing shelter for crops and livestock may become increasingly important if, as projected, climate change brings drier summers, wetter winters and increased storm events.

8.15 Hedgerows can also provide shelter for crops and stock, as well as reduce erosion. They can be important for agriculture by enabling insects which predate pests to survive the winter, and helping pollinating insects by connecting habitats. However, they do also need management which can be more expensive and labour intensive than other field boundary treatments.

8.16 Support is currently available for creation or management of woodlands through the Forestry Grant Scheme, and potentially other rural payments. Following Brexit, rural support in general is being reviewed but is likely to continue in some form. Private sources of income from forestry can include carbon credits. This can help make woodland part of a viable rural business.

8.17 The East Lothian Climate Forest project will aim to continue the work of the Queen's Green Canopy through engaging with the agricultural community, landowners and managers.

TARGET 5: Farmland Woodland - Create 300 hectares of new small farm woodlands and shelterbelts which align with and support agricultural production

POLICY 21 Woodland creation within farmland

Woodland creation in farmland should aim to complement and improve agricultural production. Loss of agricultural production capacity may be acceptable where woodland creation is shown to improve water quality through reducing diffuse pollution and / or reduce flooding including surface water runoff to roads and rivers.

Rural Diversification

8.18 Small farm woodlands and shelterbelts offer opportunities both to improve agricultural production and may offer opportunities for appropriate diversification, providing additional income streams for farmers and landowners. Gamebird breeding and habitat is a traditional and widespread use of farm woodlands and shelterbelts. Where this takes place we encourage suitable choice of woodlands and management of the woodlands to support biodiversity. Advice can be obtained from our Biodiversity Officer and/or the Game and Wildlife Conservation Trust

8.19 Other use of woodlands includes growth of trees for fuel logs or Christmas trees and green woodworking – small scale management of woodlands including through coppicing to provide products at a small scale for local businesses. More recently commercial dog exercise areas have become a popular use. Increased woodland may offer further opportunities for diversification achieving greater integration between forestry and other land-based businesses in line with the aims of Scotland's Forestry Strategy.

8.20 Some of these activities will require planning permission. Where it is not required, we encourage consideration to be given to the type of woodlands used for these activities to protect biodiversity. Mixed species woodlands may be more suitable over native or ancient woodlands.

Support sustainable tourism

8.21 Tourism is an important sector in the East Lothian economy, and while many tourists and day visitors come for the golf courses, beaches or heritage assets, maintaining an overall attractive landscape is undoubtedly part of the overall tourist offer. Trees and woodlands make a significant contribution to the appeal of East Lothian as a visitor destination. Trees form an important component of many of our Conservation Areas, parks and cultural attractions. They also provide settings for historic towns and villages as well as individual buildings. Trees are often an integral component of designed landscapes, some of which are open to visitors, such as Newhailes House in Musselburgh. Trees can also be the attraction to the area through their historic links, such as the Great Yew at Ormiston.

8.22 As well as being attractive, woodland can also be an integral part of the recreational offer. This includes high ropes zip wires at Foxlake (although recently damaged by Storm Arwen in November 2021) and woodland walks and trails such as the sculpture trail in Pressmennan Wood and Archerfield Walled Garden woods. There is also visitor accommodation in tree houses at Lochhouses and woodland camping at Blinkbonny Wood. The Life Sciences Trust offer opportunities for people to deepen their relationship with nature at Pishwanton Wood.

8.23 East Lothian woodland based tourism is less developed than in other areas of Scotland. The main challenge in East Lothian is diversifying the existing tourist market into new areas and extending the season. There is opportunity to further develop the contribution that woodlands make to tourism. New small scale low impact tourism enterprises[8] in appropriate robust woodlands could offer woodland owners and managers and local businesses additional income streams and support local economies.

ACTION 25
Promote woodland based tourism and recreation, where appropriate, including joint marketing campaigns with other visitor attractions, tourism operators and accommodation providers.

ACTION 26
Encourage the development of small scale low impact tourism enterprises (excluding accommodation) linked to appropriate woodlands

[8] Excluding accommodation

9 Cultural Heritage

AIM: Celebrate the role of trees and woodland as part of our cultural heritage and protect cultural heritage assets from harm from trees

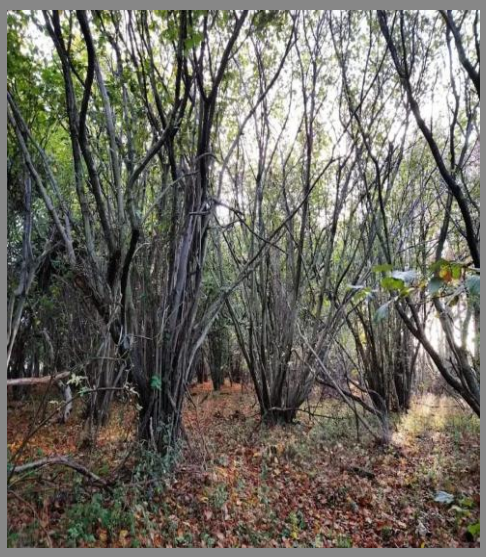
9.1 The planting and arrangement of trees by our ancestors, whether in parks, streets, or on farms and estates across the landscape is part of our heritage. In Scotland the Natural and Historic environment are symbiotic and trees are integral to this as they are a long lasting element of how we view our surroundings in the round. For the majority of people trees and buildings/ monuments are essentially permanent throughout their whole lives and are the framework by which they see their landscape. Some trees have been here longer than most of the buildings as well as the people now living in East Lothian, and some specimens even played a role in historic events.

9.2 There is also considerable intangible heritage tied up in woodlands. This includes traditional skills and lore. Names of woods can reveal former land cover, or remember local people or events. The Strategy supports the passing on of traditional skills and knowledge.

9.3 Some traditionally managed trees and woodlands now suffer from the loss of this type of management, though the evidence of it is still there if you know what to look for. There is no current protection for historic woodland features such as banks and coppice trees. We would support management of woodland to retain these features including by the use of traditional skills.

9.4 Trees can enhance views to cultural heritage assets and can be integral to them. Trees, however, also have the potential to damage cultural heritage assets, either physically with roots or branches or by blocking important views. Sensitive management of trees with regard to cultural heritage is therefore required.

Some woods within East Lothian are being brought back into traditional management techniques including coppicing restoration. One acre of hazel stools has recently been brought back into rotation coppicing at Tyninghame.



Traditional Skills and Knowledge

9.5 Many woodlands have had an economic role which has been superseded or mechanised, such as use for charcoal, the oak bark used in tanning or for coppicing for firewood and / or willow for wicker work and other green woodworking. With this change in economic use of woodlands, skills passed through generations are being lost – hedge laying, charcoal burning, coppicing.

9.6 With fewer people living in or near woods, local knowledge of the properties of trees and woodland plants for food, healing or traditional beliefs are also at risk. As fewer people's lives and livelihoods depend on woodland, there is a risk that they will lose their cultural

value. The Strategy supports the retention and passing on of traditional skills and woodland management.

9.7 The Strategy supports retention of traditional names of woodlands. These often provide links to past uses, characteristics or ownership of the woodlands. When naming new woodlands consideration could be given to the use of names of local places and people and the use of Gaelic and Scots language.

Notable Trees

9.8 This Strategy seeks to protect notable trees and secure succession planting where relevant. These include trees protected by tree preservation orders as well as historic trees, and ancient, veteran and champion trees, and trees with spiritual or cultural value. The Council will consider additional Tree Preservation Orders or imposing conditions on planning consent where relevant to protect these trees.

POLICY 22 Notable trees

The Strategy supports the retention of notable trees.

ACTION 27

To celebrate East Lothian's tree heritage develop a series of tree trails for our town and villages.

Tree Preservation Orders

9.9 Tree Preservation Orders are promoted to protect those trees of highest amenity value or those identified as having important historical cultural value. East Lothian has over 135 Tree Preservation orders from large orders covering all the trees in a village to ones covering single trees of merit, dating from the late 1950's to current time. The Council will continue to prioritise trees for protection by Tree Preservation Orders and implement these as funding allows.

9.10 East Lothian Council has information on its web pages on protected trees. Permission must be obtained from East Lothian Council before undertaking any works on a tree protected by a Tree Preservation Order.

Historic Trees

9.11 Well known East Lothian trees valued for their association with historic events include the Great Yew at Ormiston. This ancient yew tree was reputedly a venue for early Protestant preaching, while that at Whittingehame was thought to be the site of the hatching of the plot to murder Lord Darnley, husband of Mary Queen of Scots. A hawthorn to the east of Prestonpans is remembered in sculpture as Colonel Gardiner may have crouched under it after the 1745 Battle of Prestonpans. Celebrating this heritage must be done carefully as some such trees are on private land, and it is also important to avoid damage from visitor pressure.

Ormiston Yew, where reputedly George Wishart and John Knox preached

9.12 Individual trees have also been planted to commemorate events. The beech trees on North Berwick Law, visible for miles around, were planted to mark the union of the Scottish and English Parliaments. A horse chestnut commemorating the coronation of Queen Victoria in 1838 was planted at the West Haugh and an oak tree to remember John Knox in the Giffordgate in Haddington. There are numerous others.

9.13 Some of these trees are covered by Tree Protection Orders. However, this only gives protection against felling or poor tree work, it does not secure positive care for these important trees.

TARGET 6A Improve recognition and protection of trees with cultural heritage value including by encouraging identification of Champion, Veteran and Ancient Trees through Citizen Science

Ancient, Veteran and Champion Trees

9.14 There are other individual notable trees that have just been there a very long time. Ancient trees are those that are in the final stage of life – how old this is depends on the species. Some species can live over 1000 years including oaks and yews. Veteran trees are old trees that are in the second stage of life. They have many features of ancient trees although they are not as old. Trees may also be valued as the oldest or tallest of their species in the UK. These are known as Champion trees, and there are a number of these within East Lothian. Citizen Science projects are underway to map these.

9.15 Ancient and Veteran trees are recorded on the Ancient Tree Inventory. There is information on what constitutes and ancient tree and how to record one at Quick recording guide - Ancient Tree Inventory (woodlandtrust.org.uk). Some ancient trees are also included within the council's Historic Environment Record (HER). Champion trees are recorded on the Champion Trees website.

ACTION 28
Encourage identification and recording of important individual historic, ancient veteran and champion trees and where appropriate begin succession planting.

An example of a notable tree in Haddington, recently felled due to significant decay. There are a number of plaques celebrating the tree at the site. A replacement Scots pine planted a couple of years ago is growing well

Spiritual Value

9.16 Individual trees can also have symbolic, cultural or religious value. For example, yews are often found in churchyards, usually heavily trimmed to retain a formal shape, to remind the faithful of eternal life. Some of these trees may pre-date Christian worship at these site. Such trees should be retained in re-development proposals for such sites. Churches often contain a 'Green Man' – a head with leaves – another tree-related link to an older religion. More recent traditions include tying ribbons onto particular trees, such as the Wishing Tree in Haddington.

Haddington's Wishing Tree

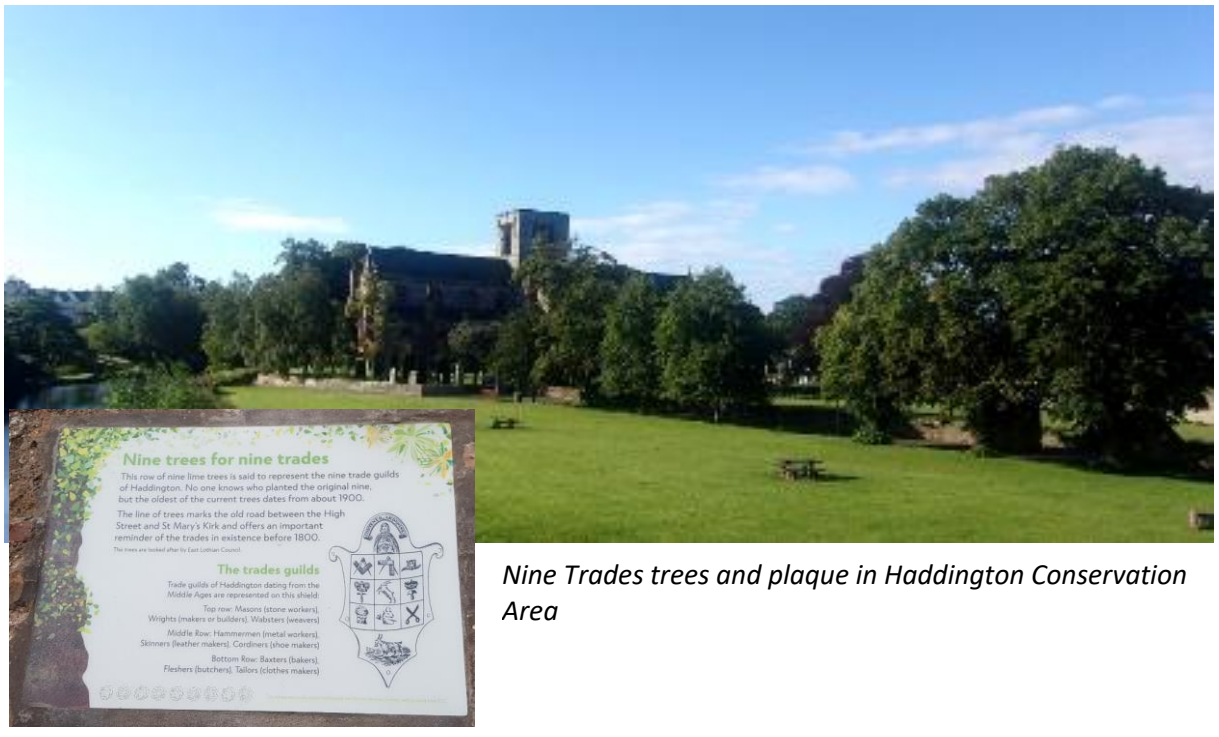
Planting memorial trees

9.17 East Lothian Council will consider requests for planting memorial trees on council owned land on a case by case basis. Requests can be made to trees@eastlothian.gov.uk.

9.18 Trees planted as memorials often include plaques. This can be appropriate in urban or formal settings, however plaques within more natural areas can affect the naturalness of the appearance of the area and affect others' enjoyment of it. Plaques can also encourage the leaving of floral tributes, which can seed into the surrounding area. The Council's experience is that plaques can draw attention to the tree sometimes unfortunately leading to vandalism.

POLICY 23 Plaques and Memorial Trees

Plaques in association with memorial trees are not supported in the countryside nor natural areas within towns.



Nine Trades trees and plaque in Haddington Conservation Area

Conservation Areas

9.19 Conservation Areas are designated to preserve areas with particular historic or architectural character, to which trees can make a substantial contribution. Notable trees in Conservation Areas include Haddington's nine trades trees at the Haugh by the Tyne, Gifford's lime Avenue approaching Yester House, or the sizable sycamores in Tranent's Parish Churchyard. But there are many, many more. Anyone planning work to or removal of trees within Conservation Areas must give six weeks prior notification to the Council (see website). This allows for protection of trees that contribute to their character.

9.20 There are few controls however over the *planting* of individual trees or hedges – generally people can plant what they wish on their own land. Those looking to plant trees within a Conservation Area are encouraged to consider its character. In addition to the considerations shown for urban trees in Figure 21, factors for choice of tree and location include:

- Will the chosen species accord with the historic character of the area?
- Will the tree at its mature size obscure views of important elements of the built heritage, including Listed Buildings?
- Could tree (including roots) affect historic surfaces such as cobbles?
- Would the character be harmed by introducing the tree e.g. where character derives from openness or hard landscaping, as for example North Berwick links or Haddington's High Street.

CASE STUDY: Haddington Town Centre

Haddington's High Street is lined with buildings dating from the 18th century, where the street was open for movement and trade. Trees were never part of this layout, yet the wider streetscape at Court Street to its west developed during the 19th century is defined by its avenue of lime trees, typical species of the Victorian era. This avenue has been reinforced with new succession planting.

9.21 Some trees that are inappropriate in one place may suit another. Within gardens and parks some ornamental species may be suitable even if they are new, or not native, as they continue the idea of these areas being maintained for interest or beauty. Hedging should also be carefully considered.

Leyland cypress is a relatively new hybrid, forming a dense hedge of continuous colour. This homogenous appearance is not traditional and can look out of place.

9.22 The Council has produced Supplementary Planning Guidance on Cultural Heritage and the Built Environment which contains short Conservation Area Character Statements for each of East Lothian's 30 Conservation Areas. This includes information on trees in the area as well as the built environment. Some of these areas have more detailed Character Appraisals. The Council is working towards producing Conservation Area Character Appraisals for all such areas, which will include detailed information and guidance on trees there. This will be referred to in decisions on tree work within Conservation Areas and in planning decisions.

Historic lime avenue in Gifford leading to the gates of the Yester Estate

Gardens and Designed Landscapes

9.23 East Lothian is rich in historic gardens and designed landscapes, of both national and local importance. Nationally important gardens and designed landscapes are described on an Inventory held by Historic Environment Scotland, which sets out the main features of the site. Statements of Significance for the Local Designed Landscapes are currently being prepared as part of the Glorious Gardens of East Lothian Project. Once adopted these will be used to inform planning decisions. This will help protect their important elements from development, and also raise awareness of them.

9.24 Policy woodlands, orchards, avenues, parkland and feature trees are often significant elements of the design of these landscapes. However in places a lack of management and future planning has led to the loss or degradation of these features.

ACTION 29
Promote positive management of gardens and designed landscapes and heritage trees to maintain their historic and cultural significance

9.25 There may be pressure for tree planting within designed landscapes due to the availability of funding. This Strategy encourages the creation of a Conservation Management Plan to guide planting within designed landscapes to maintain the interest of the site.

TARGET 6B Improve recognition and protection of trees with cultural heritage value including by completing mapping of ancient woodland under 0.5 ha, orchards, parkland and wood pasture

9.26 Guidance on "managing change in the historic environment: gardens and designed landscapes" is available from Historic Environment Scotland. Guidance is also available from Scottish Forestry (Forestry Commission, 2011) on "conserving and managing trees and woodlands in Scotland's designed landscapes". These should be referred to when considering tree planting within designed landscapes.

Battlefields

9.27 Historic Environment Scotland maintains an inventory of historic battlefields which contain a description of the battle sites. Retaining elements of the landscape is important to understanding the battle as well containing artefacts. Battlefields cover large areas and any tree planting needs to take account of their special characteristics. This should be considered at project level in consultation with Historic Environment Scotland and the Council's Archaeology Service.

9.28 Guidance on "Managing Change in the Historic Environment: Battlefields" is available from Historic Environment Scotland and should be referred to.

Scheduled Monuments and archaeological sites

9.29 Historic Environment Scotland maintains an inventory of scheduled monuments of national importance. Any damage to a Scheduled Monument is a criminal offence. Planting or felling trees within a Scheduled Monument will require consent from Historic Environment Scotland. Further information can be found on their website: Scheduled Monument Consent | Historic Environment Scotland | HES.

POLICY 24 Scheduled Monuments and Archaeological sites

Where planting, felling or restructuring might affect any Scheduled Monument or archaeological site (of known or suspected archaeological interest), a professional archaeological assessment and, if necessary, a field evaluation should be undertaken.

The Council will not normally support proposals that would harm a Scheduled Monument, site of regional or local archaeological interest, or its setting. In exceptional circumstances, the Council may accept archaeological advice that the significance of the remains is not sufficient to justify physical preservation in situ when weighed against the benefits of the proposal. In such cases, the Council will seek mitigation measures such as:

- excavation, recording and analysis of the archaeological remains in advance of the commencement of the project
- reporting of results along with any subsequent post-excavation work undertaken, and if warranted, publication

9.30 The UK Forestry Standard recommends tree planting be set back 20m from archaeological sites whether scheduled or not. However Historic Environment Scotland and the Council's Archaeology Service may recommend different distance which suits depending on the nature of the site and remains. Any proposals should be discussed with them at project level. There may be potential for woodland creation, management or restructuring to improve the setting of some historic sites. The Strategy encourages this where appropriate.

Protection of the Historic Environment

9.31 Trees have considerable potential to enhance the cultural heritage. However, they may also harm historic environment assets either directly, such as where their roots or branches damage structures, or indirectly, such as when they alter a historic landscape making its understanding difficult. Planting and management of trees and creation of woodland should aim to avoid such harm. Attention should also be paid to the setting of historic assets such as scheduled monuments and listed buildings in forming tree planting proposals. Guidance on "Managing Change in the Historic Environment: Setting" is available from Historic Environment Scotland and should be referred to. Information on historic environment assets can be found on the council's Historic Environment Record (HER).

POLICY 25 Protection of the historic environment

Woodland creation, management, expansion or tree planting, removal or restructuring should aim to enhance and not harm the historic environment including Scheduled Monuments, Battlefields, Gardens and Designed Landscapes (either Inventory or Local), Listed Buildings or Conservation Areas, and where relevant their settings.

10 Landscape Character

AIM - Use trees to help retain and enhance the distinctiveness of landscape and settlement character within East Lothian

10.1 East Lothian sits on the east coast in central Scotland, with the south of its area in the Southern Uplands. These landscapes have a distinct character within Scotland. The eastern central lowlands are characterised by rolling arable fields, with shelter belts and policy woodlands. Small areas of more natural woodland remain, often on steep or rocky ground. At the coast, wide estuaries, dunes and coastal grasslands are characteristic, with some policy woodland as well as wooded deans. The Southern Uplands are a rolling plateau, much of it managed as grouse moor but with both productive coniferous plantation woodland and some native woodland within cleughs.

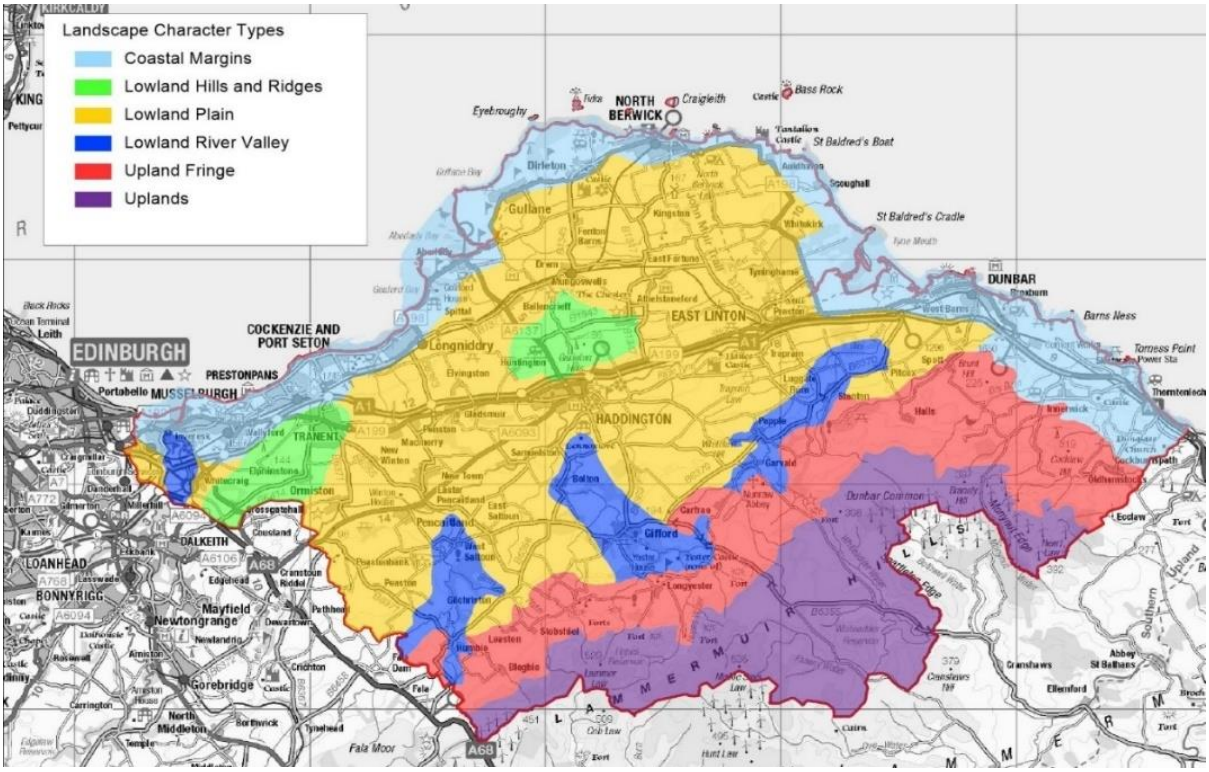


Figure 22 Landscape Character Tpes of East Lothian

10.2 Our landscapes are also different from each other at a more local scale, with six main landscape character types, shown in Figure 22. Each landscape type has a general landscape character and also a different pattern of woodland cover. These are detailed within the East Lothian Landscape Review section of the Special Landscape Area SPG (East Lothian Council, 2018). The Council takes an 'all landscapes' approach. All landscapes are valued as everyone has a right to live in and enjoy vibrant surroundings. Landscape is dynamic, and change, even when significant, is not necessarily bad. The ambition to plant 2 million trees in East Lothian's Climate Forest will bring landscape change. New woodland creation and restructuring proposals have considerable potential to enhance landscapes. However, the 'all landscapes' approach means that landscape change anywhere should be carefully considered.

Note: tree planting in some areas may be likely to have a significant negative effect on the qualifying bird interest of a European site. Habitat Regulation Appraisal will then be required at project level and may limit what is possible. Support for woodland creation noted below is subject to satisfactory completion of this process.

10.3 Some landscapes have special qualities that are recognised through designation. East Lothian has no National Scenic Areas, however areas with a particular landscape character are recognised through a variety of local designations, the main one being Special Landscape Area. The special qualities and features of these areas are set out in the East Lothian Special Landscape Area SPG. The Green Belt has a landscape role in protecting the setting of Edinburgh and other towns, as do some of the Countryside Around Town areas. The coastal area is also has a varied and valued character, recognised in Council policy. Information on these areas can be found in our 'Countryside and Coast SPG'.

10.4 Woodland expansion proposals should be a key mechanism of enhancing landscape character. Proposals should aim to reinforce the distinctiveness of landscape character types both regionally and locally through appropriately designed and located woodland creation schemes. Structural tree planting should be used to work with and add interest to development; it should not be a substitute for good quality design of the built element. However, where a development is unavoidably unsightly due to its nature, screening can be the best solution.

10.5 The most relevant elements for woodland and tree planting for each landscape character type are summarised in Appendix H together with opportunities and proposals for woodland creation and tree planting within each area.

10.6 There are three particular areas where landscape change could be mitigated for by woodland creation and is identified in Target 7. This would be best addressed by detailed planning for these areas.

POLICY 26 Protection and Enhancement of Landscape

Woodland expansion or tree planting, management, removal or restructuring should enhance and not harm landscapes and landscape character. The landscape interest of Special Landscape Areas, the coastal area, Green Belt and Countryside Around Town areas should be taken into account in woodland creation proposals. For forestry proposals that require Environmental Impact Assessment, applicants are encouraged to provide a Design Statement explaining the landscape change.

Spotlight Landscape Structure 1

10.7 Within the Innerwick Coastal Margin there is already considerable landscape effect arising from quarrying, waste disposal, industrial and transport infrastructure, as well as electricity generation at Torness Power Station. Considerable change is anticipated here, with further large scale electricity infrastructure to support offshore windfarms and grid strengthening expected, the closure of Torness Power Station, and the eventual end to quarrying. Cumulatively, these developments will impact the rural character of this area. In some cases they limit the potential for woodland creation, for example the area above high voltage electricity cables must be kept clear, as must the area around Torness.

10.8 The area is also important for woodland. Parts are identified in this strategy as part of the Strategic Migration corridor (see Section 7 Connection for Climate Migration), and parts are within and connected to the Woodland Focus area in East Lothian's Green Network Strategy.

TARGET 7A Improve landscapes through woodland creation by structural planting in the Innerwick coast

ACTION 30
Develop and implement a landscape masterplan for the Innerwick Coastal Margin and adjacent Upland Fringe area

10.9 The Strategy therefore encourages the development of a landscape masterplan for this area extending from the southern boundary of East Lothian to the River Tyne identifying constraints and opportunities, including investigation of the potential of strengthening woodland along the A1 / railway corridor. Major landowners and operators of infrastructure are encouraged to work together here to create an overall landscape structure which supports landscape improvement, biodiversity connections and public access. This could include giving consideration to offsite woodland and hedgerow creation to replace any losses.

Spotlight Landscape Structure 2

10.10 The draft Climate Evolution Vision suggests a high priority short term action to develop a climate resilient habitat creation policy. This would provide a landscape framework to create a multi-functional landscape integrating blue and green infrastructure, providing for biodiversity, managing water and improving active travel.

ACTION 31
Develop and implement a landscape framework and planting programme for the Cockenzie/Blindwells area.

10.11 A lack of woodland in this area means many properties here do not meet the Woodland Trust's Accessible Woodland Standard as shown in Figure 15. Implementation of a landscape framework including woodland creation here could therefore also help to improve the local communities' access to woodland.

10.12 We therefore support the development of a landscape framework for this area within which other projects including the active travel network and surface water management plans can be coordinated. The framework should comprise increased woodland and tree cover including tree and hedgerow planting to create multi-functional active travel corridors, additional woodland creation along the A1 corridor, and tree planting along re-naturalised watercourses.

Figure 23 Extract from Climate Evolution showing proposed new planting (Fig 19, Theme 4)

TARGET 7A Improve landscapes through woodland creation by structural planting in the Cockenzie/Blindwells area

Spotlight Landscape Structure 3

10.13 There is a significant amount of Ash in the Athelstaneford area, which is likely to be lost to ash dieback. Cooperation is encouraged between landowners to form a landscape structure for the village. This will be considered as part of the larger action to develop a plan for the landscape scale replacement of ash trees identified in Action 7 (in Section 5 Resilience and Climate Adaptation) and Target 7B.

TARGET 7B Improve landscapes through woodland creation by developing a plan for the landscape scale replacement of ash trees lost to Ash dieback disease

Character and setting of towns and villages

10.14 East Lothian has six – soon to be seven - main urban settlements together with a number of villages and smaller settlements. Development is more concentrated in the west of the area where there is a risk of settlement coalescence. Green Belt and Countryside Around Town areas have been designated around some of our towns and villages to protect their landscape setting, provide for recreation and prevent this coalescence. Trees can be particularly useful in preventing visual coalescence due to their height. They are also important for the setting and visual amenity of many of our settlements. There may be opportunities within some of the Green Belt and Countryside Around Town areas, especially around Blindwells, to use woodland to enhance setting.

10.15 Trees are often an important element of the character of our towns and villages. Larger trees can often be associated with settlement. Within the agricultural plain, such as at Drem or Whitekirk, large trees associated with the settlements help punctuate the openness of the farmland. Within the river valleys and upland fringe, large woodlands often surround and conceal villages. There are some woodlands and significant areas of trees within towns including Lochend Woods in Dunbar, the Lodge grounds in North Berwick, Neilson Park and the Tyne walkway in Haddington, the Heugh in Tranent, Lewisvale Park and the Esk area in Musselburgh. This varied interplay between trees and built environment is important in giving a distinctive sense of place to our towns and villages.

10.16 Trees enhance townscape through providing colour, movement, rhythm and variety. The type, layout and number of trees helps define the townscape character, not only of each settlement, but often different parts of each settlement. Large specimen tree planting is particularly useful in integrating new development into the wider landscape. However space must be allowed for such trees. Trees within urban areas can:

- Help to reinforce formal design or provide a contrast in form through formal tree planting, such as the evenly spaced street trees of planned agricultural villages and Victorian town extensions
- Offer oases of greenery as visual relief from the hard urban environment within parks and open spaces
- Offer a connection to nature and local distinctiveness, helping provide a sense of place.
- Play an important role in improving the visual amenity of residential areas, including trees in gardens
- Role in screening, for example of industrial estates, from adjacent housing

10.17 Hedges are also an important feature of landscape character in urban areas. Hedges are important to include as they create immediate impact whereas trees take time to mature. They can also:

- Provide containment
- Soften the urban form
- Form green linkages for areas where it is not possible to grow trees
- Create a sense of place by unity of species, such as beech hedging at Longniddry.

10.18 The more mature, larger trees generally found in gardens, open spaces and on streets within older residential areas usually form an important part of their character. Conversely in new development space for larger trees to grow to their full potential without creating issues of overshadowing or safety is often lacking. Some parts of settlements have a historic character that means tree planting would not be appropriate there. For example, many of our historic towns have a treeless older medieval core with attractive, tightly spaced buildings. More information on the character of each of our towns and main villages and their suitability for tree planting can be found in Appendix A.

10.19 A considerable amount of new development is taking place and planned in East Lothian. On development sites the Council will seek to protect existing woodland, trees and hedges, and identify opportunities for green network linkages including woodland creation and tree planting through design briefs and the planning process.

10.20 Guidance on use of trees within new housing areas can be found in the Council's Design Standards for New Housing SPG. This aims to secure space for street trees, open spaces suitable for trees, and hedges in new residential development and support and improve green networks. Housing developers are expected to apply the principles of the Design Standards for New Housing Areas SPG within the masterplanning, planning and design processes.

ACTION 32

Support managed programme of replacement of trees important to townscape character

10.21 Further information on our approach to the urban forest is shown in Section 7.

11 Spatial Guidance

11.1 The above sections identify the benefits of trees and woodlands and what the Strategy aims to achieve. The following maps indicate opportunities for tree planting in East Lothian. As digitisation of planning progresses we hope at some point to produce this information in an interactive and dynamic online form. This can be revised to capture any changes in the information on which these maps are based.

NPF4 Policy 6D

"Development proposals on sites which include an area of existing woodland or land identified in the Forestry and Woodland Strategy as being suitable for woodland creation will only be supported where the enhancement and improvement of woodlands and the planting of new trees on the site (in accordance with the Forestry and Woodland Strategy) are integrated into the design."

Areas we have identified as suitable for woodland creation that should be given consideration through NPF4 Policy 6D are:

- Preferred and potential locations on the Constraints for Woodland Expansion Map (figure 25),
- All woodland creation areas identified on the Native Woodland expansion opportunities map (figure 24)
- Inventory ancient woodland sites including those with no trees currently (see map in Appendix E).

Further detail on requirements for hedge, tree and woodland creation for development proposals can be found in Appendix E.

Potential for Native Woodlands

11.2 As set out above, we aim to retain, sustainably manage, expand, and connect our native woodlands this includes returning areas of ancient woodland planted with conifers to native woodland.

11.3 The mapping in Figure 25 shows where native woodland would be most beneficial to meet the aims of the strategy. We appreciate that not all of the areas mapped may be suitable for woodland expansion. The Constraints mapping in figure 27 should be referred to for areas where planting cannot be carried out or where there may be sensitivities to woodland creation and specific site assessment should also be undertaken.

Existing native woodland

11.4 Existing native woodland should be retained as per Policy 1. Much of East Lothian's remaining native woodlands can be found in riparian locations where they have been allowed to remain due to the land's reduced suitability for agriculture. In particular the larger river valleys of the Humbie, Gifford and Whittingehame Waters provide strong wooded corridors through the southern part of the agricultural plain. Many of the smaller steeper valleys of the cleughs and deans within the upland fringe are also well wooded, with ancient native sessile upland oak woodland a particular feature at Rammer, Deuchrie and Woodhall and ancient native upland birch woods at the East Lammermuir Deans, where the woodlands are well managed.

11.5 Native woodland identified in the Native Woodland Survey for Scotland by Scottish Forestry in 2013 is shown on the Map in figure 25. Landowners and managers should give consideration to the type of native woodland when planning woodland management. Appendix F provides species lists for the native woodland types.

Existing Nearly Native Woodland

11.6 Nearly-native woodland identified in the Native Woodland Survey for Scotland by Scottish Forestry in 2013 is shown on the Map in figure 25. These woodlands have a native component of between 40-50% and are likely to offer the easiest opportunity to restructure, through appropriate management, into native woodland.

Other Existing Woodland

11.7 There are large areas of broadleaved woodland across East Lothian mapped as the CSGN woodland habitat network. Scottish Forestry has also identified woodland through the National Forest Inventory 2020 including broadleaf and coniferous areas. These are all mapped to show the existing woodland coverage.

Native Woodland expansion

11.8 Scottish Forestry have identified areas where they will fund expansion of native woodland to offer the most benefit for habitat improvement as it naturally extends and connects to existing native woodland. In places this overlaps with existing non-native woodland that could be restructured. The expansion areas are shown in figure 25.

11.9 When considering woodland creation consideration should be given to the existing native woodland type proposed for expansion. Appendix F provides species lists for the native woodland types to guide planting mixes for new woodland creation.

11.10 The CSGN has mapped areas where grassland, wetlands and heathland habitats could be expanded in ecological terms. These other habitat networks are included on the Constraints mapping in figure 27 and should be used to identify where other habitats are the priority when considering native woodland expansion.

Native Woodland Model

11.11 The potential for native woodland in Scotland: the Native Woodland Model shows areas of the uplands where upland oak woodland and areas of mixed birch with moorland grass, and mixed pine, birch and scrub with peatland in higher areas would be capable of growing. The Strategy mapping in Figure 25 includes areas suitable for native woodland of Upland Oak and Upland Birch. Pine planting is not mapped as although the model notes that this area is physically suitable for pine growth, pine is not native to East Lothian. Use of pine as a component of native woodland is therefore not supported. The model excludes areas where soils have been modified by cultivation and are likely to support many woodland types. There is therefore likely to be potential for Upland Oakwood or Upland Birchwood on somewhat lower slopes than shown here. On the higher slopes of the Lammermuirs, juniper scrub is more characteristic.

11.12 Appendix F provides species lists for the native woodland types to guide planting mixes for new woodland creation.

Primary and Secondary CSGN connections

11.13 The CSGN has identified a limited number of primary and secondary opportunity areas which will most easily improve connectivity of the CSGN woodland habitat network. These areas are located within the dispersal zones[9] (500m) of existing woodland where excluding grazing and cultivation would allow expansion of existing woodland by natural seed dispersal. Some opportunity areas have been planted with conifers, and here restructuring of the woodland with native species is sought. The woodland created in these areas should be of the same native woodland type as the woodlands they are connecting. This Strategy strongly supports woodland creation in these locations where site survey identifies them as suitable.

Coniferous Plantation on Ancient Woodland Sites (ELC PAWS)

11.14 The ELC PAWS layer shows all ancient woodland sites currently recorded as being planted with conifers. This Strategy supports reversion to native woodland of these sites. This should be ideally be achieved through removal of re-growth of conifers once the mature trees are removed to allow the original native seedbank to regrow to woodland. However supplementary planting may sometimes be required

Riparian

11.15 Woodland in the riparian zone is particularly important for its multiple benefits including biodiversity and climate migration, flood management and water quality, as well as recreation.

11.16 Riparian woodland creation areas are shown as 30m either side of all watercourses. As watercourses generally start in the hills and run through the plain to the sea, over their length different woodland mixes will be appropriate. This ranges from scattered juniper scrub on the upland plateau through upland ash, oak and birch within the cleughs of the upland fringe merging into lowland deciduous woodland or wet woodland in the agricultural plain. As the river approaches the sea, coastal mosaic may be most suitable.

11.17 Woodland in the riparian zone should follow the advice in SEPAs Natural Flood Management Handbook (SEPA, 2015). Woodland creation should ideally be prioritised in the riparian zone for river temperature control as identified by Marine Scotland and shown in Figure 8. Riparian woodland should shade no more than half a watercourse and provide an open canopy with dappled shade. The need to maintain this canopy balance into the future must be considered when designing riparian woodland.

Strategic Connections

11.18 The mapping shows proposed areas of strategic connection. This is intended to provide a framework based on existing woodland, which will create connections across East Lothian from Scottish Borders area in the east to Midlothian in the west to enable species migration northwards. It also shows strategic connections between lowlands and uplands where a transition of woodland types from lowland deciduous to montane is expected, allowing species to migrate uphill. The intention is to allow for species movement in response to climatic changes.

[9] Dispersal zones are predicted based on the distance that a Generic Focal Species from that habitat can travel beyond a patch. Generic Focal Species are commonly used in habitat network modelling to take into account a range of species from each particular habitat.

11.19 The Lammermuir Hills to the south of East Lothian, create a barrier to woodland species migration due to altitude and landcover. The Innerwick coastal area (see Section 10 Spotlight Landscape Structure 1) is therefore of particular importance for native woodland expansion. This area is a Woodland Focus Area in the ELC Green Network Strategy.

11.20 The A1, and in parts the East Coast Rail Line, create significant barriers to woodland connectivity. These barriers must be considered when identifying woodland locations and connection opportunities to ensure continuity of the strategic connections.

11.21 The mapping of climate migration corridors is intended to be flexible; the areas shown are places where connections are thought to be most useful based on location and existing woodland cover including connecting woodland SSSIs. Connections could be achieved in several ways, possibly even taking routes outside the corridors. The aim is to achieve functional connectivity for various species, not to fill the areas shown with woodland.

Figure 24 Key to native woodland expansion opportunities map

Woodland Type	Description of information mapped
Existing native woodland	Native woodland identified in the Native Woodland Survey of Scotland
Nearly Native Woodland	Woodland of 40-50% native species identified in the Native Woodland Survey of Scotland
Existing other woodland	CSGN 2021 woodland, which is based on broadleaf and yew habitat (native and non-native species) National Forestry Inventory 2020 woodland areas excluding those identified as felled.
ELC PAWS	East Lothian Plantation on Ancient Woodland (PAWS). Areas of ancient woodland identified as planted with conifer or mainly conifer on NFI 2019
Riparian zone	30m buffer from OS watercourses.
Primary Native Woodland Expansion	Scottish Forestry's FGS native woodland eligibility areas – Primary Zone
Native Woodland Expansion Areas – Secondary Zone	Scottish Forestry's FGS native woodland eligibility areas
CSGN primary connection opportunities	Central Scotland Green Network Primary Opportunities
CSGN secondary connections opportunities	CSGN Secondary Opportunities
Strategic ELC connections	ELC Strategic aims
Native Woodland Model areas	

Woodland Type	Description of information mapped
Upland Oak	Areas where this will grow based on the Native Woodland Model. Expanding here will link to existing upland oak woodlands.
Peatland with scattered birch/pine/scrub trees	Areas where this will grow based on the Native Woodland Model. This type of expansion here would be compatible with peatland restoration.
Birch with moor grass and open land	Areas where this will grow based on the Native Woodland Model. Expanding here will link to existing native woodlands.

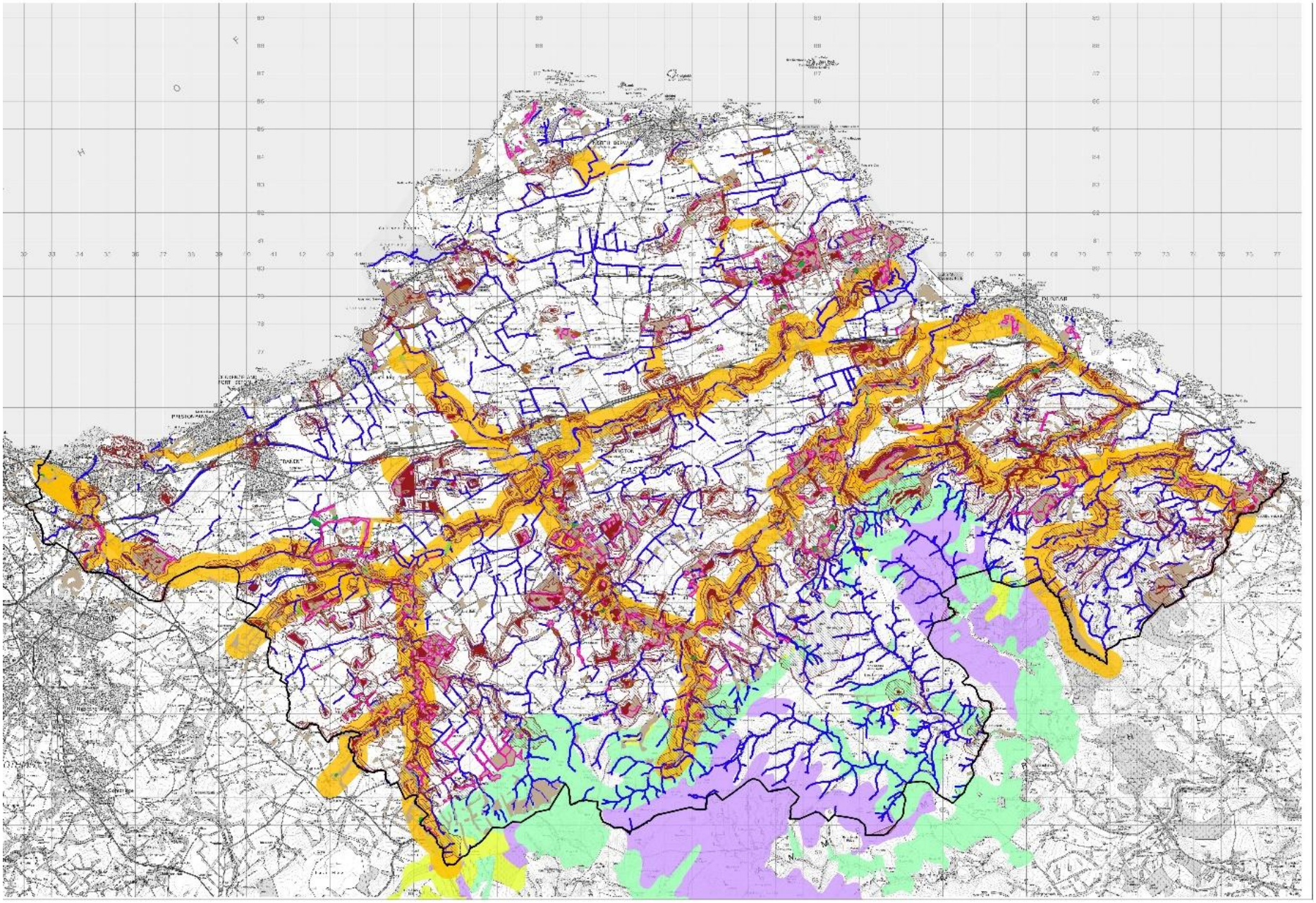


Figure 25 Native woodland expansion opportunities map

Constraints for woodland expansion map

11.22 Scottish Government Guidance "The Right Tree in the Right Place: Planning for Forestry and Woodlands" (Scottish Government, May 2010) recommends categorising land into areas with differing potential to support tree and woodland planting according to land sensitivities. This has been carried out according to the methodology set out in Appendix C. The result is shown in the 'Constraints for Woodland Expansion' map in Figure 27. The mapping relies on designations and land categorisation that may change over the life of the plan.

11.23 The guidance also indicates that authorities should identify how the categories apply to different woodland types. The Native Woodland Opportunity Map in Figure 25 show areas for different woodland types of native woodland and should be read together with the Constraints for Woodland Expansion Map. The landscape character areas define the type of woodland most suitable within each area. Further information on how we see woodland creation within the sensitive, potential and preferred areas shown in the constraints mapping is described below.

11.24 Our constraints mapping gives only a general idea of an area's potential or otherwise for woodland expansion. It is likely that there are small areas that fall into a different category from that shown. In addition, not all sensitivities have been taken into account in drawing up the mapping. Notable designations that haven't been included as sensitive are: Special Landscape Areas, Countryside Around Towns areas and Green Belt, and the Local Nature Reserve. The indirect physical impacts on and settings of the heritage assets have to be assessed at project level and hence are not discussed here. There are some infrastructure related issues which may cause practical constraints for tree planting and woodland creation, in particular wayleaves for electricity and telecom infrastructure (over and underground); windfarms; and private water supply catchments. These will require to be considered at project level.

11.25 The mapping should not be taken as recommending that any specific site should be wooded, or not wooded. The investigation of an area should be guided by this Strategy, but the final decision to create woodland, should be based on site specific assessment, supported by data and site survey. This should include an ecological survey, especially where there is the potential for protected species.

Sensitive

11.26 These are areas where there is limited scope to accommodate woodland expansion. Tree planting and woodland expansion is only likely to be possible in these areas where it does not have a negative impact on the feature, is of a scale and character with the feature, or where it positively enhances the feature. This should be considered at project level.

Non-woodland habitat

11.27 This includes SSSIs, the CSGN grassland, wetlands and heathland habitats as well as non-woodland priority habitats. Retention and protection of species and other habitats is detailed in the Biodiversity Section.

Local Geodiversity Sites

11.28 Tree planting on these sites could negatively impact the integrity of the identified geological features. Any proposals would require site specific assessment at project stage.

Scheduled Monuments

11.29 The site itself as well as the setting of the monument are protected and tree planting close to these will require discussion with Historic Environment Scotland. Further information is provided in Section 9.

Potential - Designations

11.30 These are areas which have a constraint which is likely to limit the type or extent of woodland expansion but where there may be scope for woodland expansion which supports the interest.

11.31 In line with the UK Forestry Standard Historic Environment section proposals for woodland planting and restructuring should take account of the historical character and cultural values of the landscape and policies associated with historic landscapes, battlefield sites, and gardens and designed landscapes.

Conserving and Enhancing Gardens and Designed Landscapes

11.32 Inventory and Local Gardens and Designed Landscapes fall within the Potential – Designations category. Policy woodlands, wood pasture and parkland, orchards, avenues, and feature trees are often significant elements of the design of these landscapes. This Strategy supports opportunities to manage these landscapes and reinstate lost trees and woodland elements in line with their Statements of Significance and guidance from Historic Environment Scotland and Scottish Forestry. More information on this can be found in Section 9.

Policy Woodlands

11.33 Policy woodland is associated with Gardens and Designed Landscapes offering large areas of woodland within the agricultural plain. Their habitat is mixed mainly broadleaved. Although some have been replaced with coniferous crops over the last century. The potential to restructure these as productive broadleaved and mixed woodlands or native woodlands should be considered. There may also potential for some policy woodlands to be expanded where this fits with the designed landscape plan. New policy woodland could include a variety of species, including those chosen for their decorative or productive value as well as native species. New woodland sections dominated by a single species are however discouraged.

Wood pasture and parkland

11.34 Succession planting for these elements of designed landscapes and protection from damage from grazing animals is encouraged.

Orchards in designed landscapes

11.35 Orchards are often an integral part of designed landscapes. Those that remain may contain heritage varieties. Restoration and maintenance of orchards as part of the wider restoration and management of gardens and designed landscapes is encouraged.

Battlefields

11.36 There are four battlefield sites within East Lothian. These cover large areas. Any tree planting needs to take account of their special characteristics. This should be considered at project level in consultation with Historic Environment Scotland and the Council's Archaeology Service. Guidance from Historic Environment Scotland should be referred to.

Conservation Areas

11.37 A number of Conservation Areas extend well beyond the settlements they relate to. This is for setting. These are identified on the mapping. Tree planting within these areas should accord with the character of the area and the individual Conservation Area Character Statement.

Golf Courses

11.38 Many golf courses in East Lothian are traditional links course - open coastal setting with few trees. However, even these can have areas of scrub or woodland. Others occupy a more parkland landscape, often associated with designed landscapes and policy woodlands, with woodland and mature trees. Golf courses often contain other priority habitat and have been shown as potential where there is no other constraint.

There may be scope for some additional planting in golf courses while retaining or even enhancing their playing appeal. The Local Biodiversity Action Plan notes that if new golf courses are proposed "extra care must be taken to ensure that good habitats are not adversely affected by construction. Sand dunes are particularly vulnerable to disruption and loss." There is a risk that areas of woodland would be lost through reshaping of the land and landscape. This should be avoided as far as possible, and replacement woodland cover provided in line with ELLDP policy.

11.39

Potential – Prime and Mixed Farmland

11.40 This is land which has potential to accommodate woodland expansion, respecting agricultural production and the qualifying interests of European sites. Within these areas appropriate woodland types would include small farm woodlands and shelterbelts, wood pasture, orchards, hedgerows and hedgerow trees. Structural woodlands may also be suitable is some areas.

Small Farm Woodlands and Shelterbelts

11.41 There is some potential for this type of woodland across much of the agricultural area. This type of woodland is likely to be one of the main contributors to meeting the Strategy targets. In addition to woodland creation, there may be opportunities to strengthen existing woods.

11.42 These woodlands should be designed to offer multiple benefits including providing shelter for crops and stock, flood and soil management, slope stabilisation and biodiversity connectivity as well as supporting agricultural productivity.

11.43 Ideally these would be at least 50% native species

Wood Pasture

11.44 Wood pasture may exist within agricultural land outwith Garden and Designed Landscapes. Mapping will be carried out to identify areas of ancient wood pasture and funding is available to retain and manage these.

Orchards in farmland

11.45 There may be opportunities within the agricultural land for productive orchards. Both commercial and community are encouraged. Areas close to or within settlements are most suitable for community growing.

Hedgerows and hedgerow trees

11.46 In agricultural land new hedgerows and hedgerow trees are expected to be a major contributor to achieving East Lothian's Climate Forest target of 2 million trees. There are potential opportunities for hedge planting together with hedgerow trees along many field boundaries, as well as restoration of defunct and gappy hedgerows. They will, in the right places, contribute to habitat connectivity whilst benefitting the agricultural land by providing shelter for crops and stock, and reducing erosion.

11.47 New hedgerow designs should consider the potential for biodiversity connectivity and landscape enhancement, as well as choosing the right species for the function of the hedge.

Structural Woodlands

11.48 Structural woodland is created in association with development. It therefore tends to be located at the edge of settlement – or the former edge of settlement – or around larger infrastructure. Generally structural woodlands will be planted rather than arise from natural regeneration. This is due to the desire to achieve visual goals quickly. Consideration should be given to natural regeneration where suitable however. Structural woodlands will be expected to be maintained as such as a condition of planning consent, with trees dying within a certain time requiring to be replaced and the woodlands managed.

11.49 Use of native species in these woodlands is encouraged, however conifers can also sometimes be usefully included as they are less visually permeable in the winter months. Decorative non-native species are also a possibility, though should be carefully chosen to avoid species that could become invasive in the surrounding area.

Preferred

11.50 The areas identified as 'Preferred' have no strategic constraints and are likely to offer the greatest flexibility for woodland expansion. Site specific issues are likely to be addressed with well-designed proposals.

11.51 The mapping shows that the majority of the preferred areas in East Lothian are within the upland fringe and along riparian corridors. The areas shown offer potential for connectivity with existing woodland and tie in well with the proposals on the native woodland opportunities mapping in Figure 25. This suggests that woodland creation for native woodland expansion and connectivity should be possible without significant constraint

Vacant and Derelict Land

11.52 Most Vacant and Derelict sites within East Lothian are within or close to settlement. However not all are, and areas of vacant and derelict land with no other constraint outwith urban areas have been included within preferred areas. These sites offer potential for temporary greening or more permanent tree planting and woodland creation as part of regeneration proposals. The potential for disturbance of ground contaminants should be considered at project level.

Figure 26 Key to constraints for woodland expansion

Land Category	Description of information mapped
Existing Woodland	Areas already wooded Mapped: CSGN Woodland Network 2021 (Habitat areas only); National Forest Inventory 20209 (not including areas identified as felled).
Unsuitable	Areas where the land is unlikely to be physically suitable for trees. Mapped: John Hutton Institute map "Land Suitability for Forestry" category "Land unsuitable for trees"
Water bodies	Based on OS mapping
Urban	Settlements with 50 or more addressable properties. The settlement boundaries include areas allocated for development in the East Lothian Local Development Plan 2018. (Note, the settlement boundaries are drawn solely for this Strategy, and have no other planning status).
Sensitive	Mapped: Special Protection Areas; Scheduled Monuments; SSSIs; Local Geodiversity Sites; CSGN Grassland, Bog Heath and Wetland Habitat; Non-woodland East Lothian Priority Habitat
Potential - designations	Mapped: Geological Conservation Review; Inventory and Local Gardens and Designed Landscapes; Inventory Battlefields; Local Biodiversity Sites; Conservation Areas, Golf Courses.
Potential – Prime Farmland	Mapped: from James Hutton Institute Land capability for agriculture: Class 1-3.1
Potential – Mixed Farmland	Mapped: from James Hutton Institute Land capability for agriculture: Class 3.2-4.2
Preferred	Land with no strategic constraints that offers the greatest flexibility for woodland expansion, and vacant and derelict land.

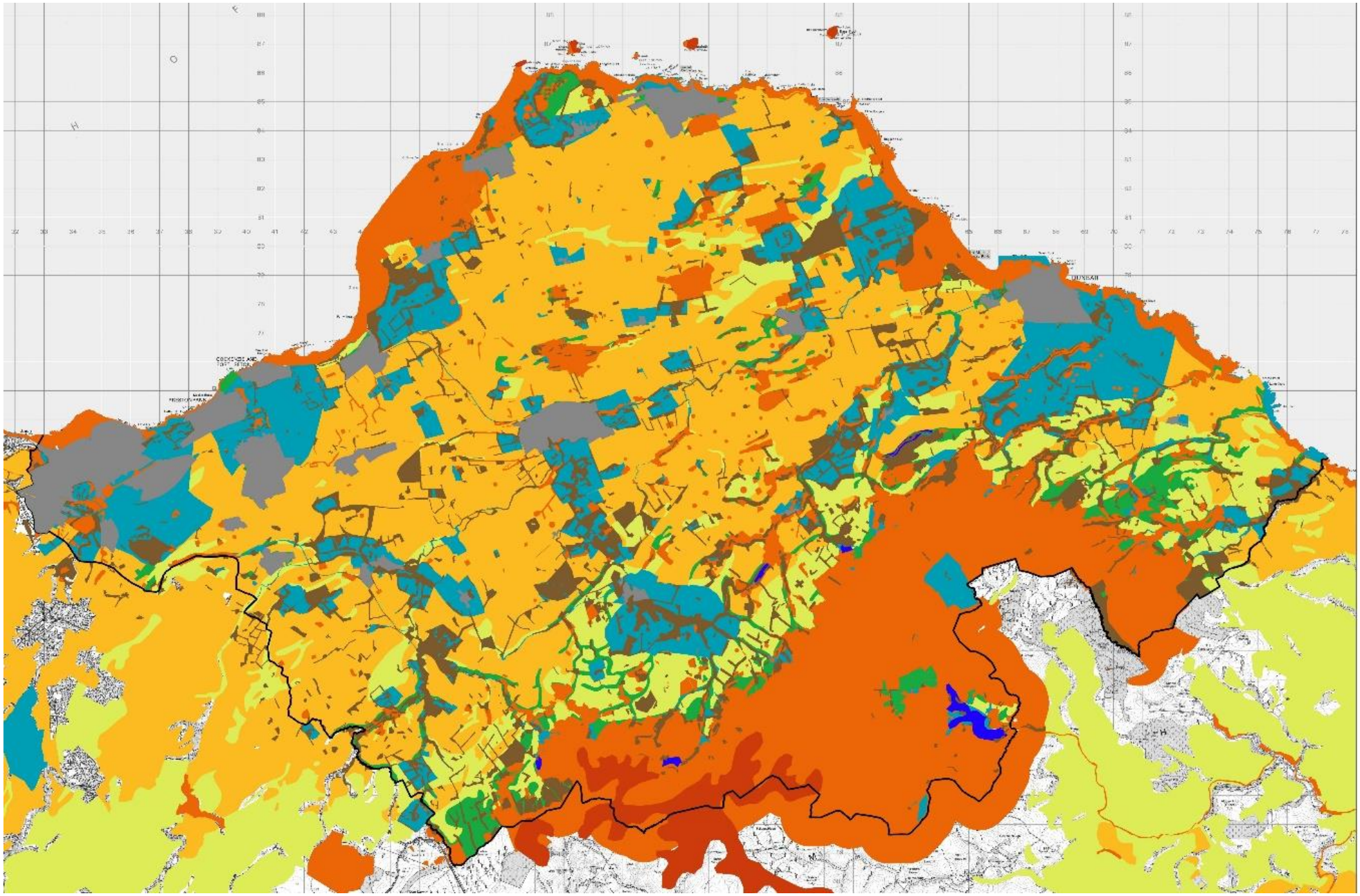


Figure 27 Constraints for woodland expansion map

Urban Tree and Woodland Planting

11.53 Trees, woodlands and hedges in urban areas are particularly important within this Strategy. They are multi-functional. They can improve resilience to climate change by creating shade as well as addressing flooding. They can improve health and wellbeing by improving amenity value of residential areas, offering access to nature and alternate forms of recreation as well as combatting poor air quality.

11.54 The Strategy supports the retention of existing urban trees, woodlands and hedges.

11.55 The map in Fgure 29 shows an overview of East Lothian with opportunities within and around urban areas as identified in the table in Figure 28. To provide further detail, a map has been provided for each settlement area in Appendix A with information on opportunities and constraints for each settlement.

Existing Woodlands and recreation

11.56 The mapping shows recreational woodlands as identified by the criteria described in Appendix D. Other existing woodlands have been shown. Areas of ancient woodland have been overlaid on these woods to identify areas that may be most sensitive to increases in recreation and should be considered when looking at the possibility of bringing woodland into recreational use.

11.57 The proximity of properties to recreational woodlands of over 2ha and over 20ha has also been mapped. This identifies those areas where access to recreational woodland is lacking and helps to focus any projects to improve access to woodland or create new recreational woodlands.

11.58 The areas where funding from Scottish Forestry for increasing woodland access and management can apply have also been shown. Used together with the information on lack of access to recreational woodlands this can help support woodland creation and management in the best areas for communities.

11.59 Woodland areas close to settlement identified as local biodiversity sites have been identified to help communities identify the areas which already provide access to nature.

Canopy Coverage

11.60 The mapping identifies the lowest 30% SIMD areas where Target 4B aims to retain or increase canopy coverage to at least 30% to help focus tree planting.

Vulnerable Sites

11.61 Some groups in society are more at risk from air pollutants, in particular the young, old and unwell. The Strategy supports appropriate planting to help create barriers to air pollutants. The mapping has identified sites where the most vulnerable groups would be most affected and where tree and hedgerow planting would be most beneficial within urban areas.

11.62 These sites should also have a 100m offset for the planting of allergenic tree species to help reduce the impacts from pollen.

Conservation Area and Town Centres

11.63 Conservation Areas and Town Centres have been identified on the mapping. Tree planting within these areas should accord with the character of the area and the individual Conservation Area Character Statement.

Vacant and Derelict Land

11.64 These sites offer potential for temporary greening or more permanent tree planting and woodland creation as part of regeneration proposals. In particular Target 7A aims to improve landscapes through woodland creation by structural planting in the Cockenzie/Blindwells area.

Figure 28 Key to urban tree and woodland opportunities

Woodland Type	Description
Existing woodland not identified as recreational	CSGN 2021 woodland, which is based on broadleaf and yew habitat National Forestry Inventory 2019 Broadleaf and Mixed Mainly Broadleaf, Shrub, Assumed Woodland, Conifer, Low Density, Mixed Mainly Conifer and Young Trees
Recreational Woodlands	Woodlands identified as recreational in Figure 15
Ancient Woodlands	Woodlands recorded on the ancient woodland inventory as well as on the East Lothian additional ancient woodland layer
Woodland expansion opportunities	Central Scotland Green Network 2021 500m habitat dispersal zone, Central Scotland Green Network Primary and Secondary Opportunities
Support access to nature locally for those living in urban areas	Existing woodland Local Biodiversity Sites designated for community interest and Community Woodlands
Improve amenity of deprived areas	Lowest 30% SIMD areas
Woodland Trust Access Standard Attainment	
Properties meeting neither standard	Properties further than 500m from a recreational woodland over 2ha and further than 4km from a recreational woodland over 20ha
Properties not meeting 4km standard	Properties further than 4km from a recreational woodland over 20ha
Properties not meeting 500mm standard	Properties further than 500m from a recreational woodland over 2ha
Opportunities for recreation in and around towns	Forestry Grant Scheme Woodland In and Around Towns Eligibility Areas (WIAT)
Opportunities for recreation in and around the lowest 15% SIMD areas	
Vulnerable Sites	Schools, Hospitals, Playing fields, Play areas, Care Homes

Woodland Type	Description
Contribute to the character of town centres and Conservation Areas	ELLDP town centres and Conservation areas
Contribute to temporarily or permanently greening vacant or derelict land within urban areas	Sites on the vacant and derelict land registers 2022

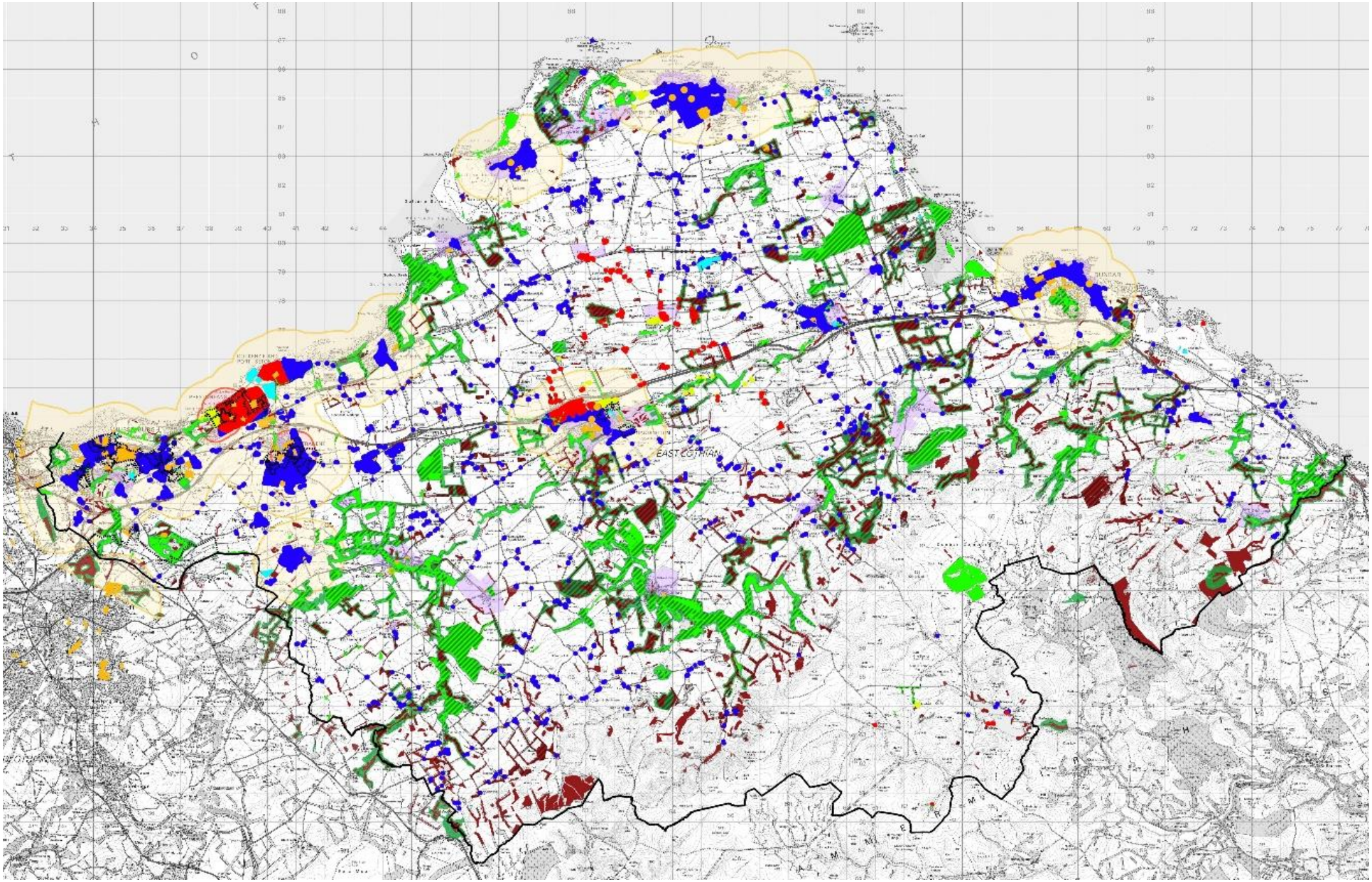


Figure 29 Urban tree and woodland opportunities mapping

12 Delivery and Monitoring

12.1 This Strategy aims to make the most of the strengths and opportunities identified in Figure 30. The green ovals in Figure 30 show how the Strategy will help combat the weaknesses and threats identified. Achieving the aims and targets of the Strategy will entail considerable work at project level, as well as securing funding. Delivery of the Strategy is not entirely within the Council's gift, not least as we do not own or control much of the land where the strategy seeks to conserve or create woodland. Cooperation between many different parties over the long term is therefore vital to achieve our aims.

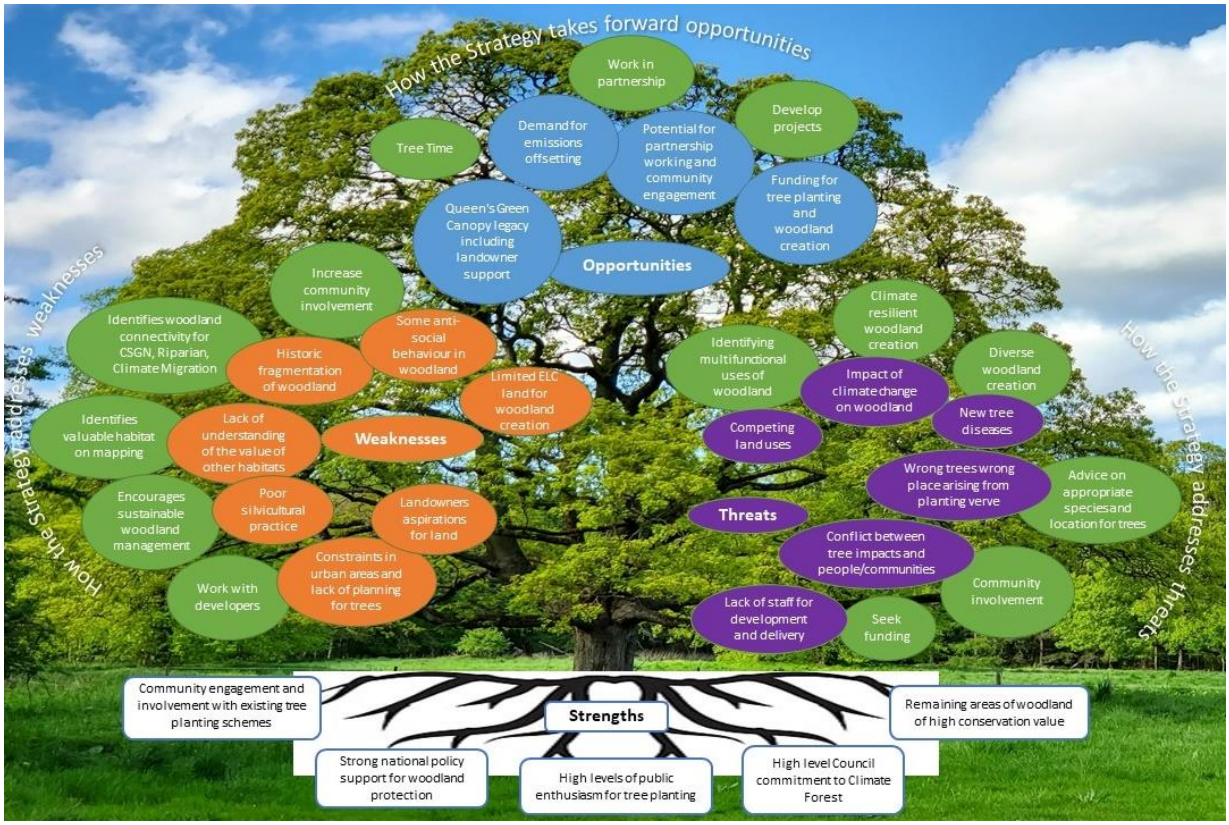


Figure 30 Representation of the strengths, weaknesses, opportunities and threats (SWOT) to trees and woodlands in East Lothian and how the Strategy addresses these

12.2 The Council will deliver the Strategy partly through our ongoing activities as regulator and as a land manager and these functions are detailed at the end of this section. The Strategy identifies Actions throughout the document, and these are included in an Action Plan below with details of possible delivery mechanisms

12.3 Other public bodies have important roles in delivery. Scottish Forestry will continue to provide grants for woodland creation, control of felling, and applying the UK Forestry Standard to proposals for creating or restructuring woodland. SEPA and Scottish Water have an interest in woodland retention and creation through their interest and responsibilities for water management and supply. NatureScot will continue to seek to improve the condition of SSSIs through management agreements with landowners and applying the Operations Requiring Consent Regime.

12.4 The community, volunteers, individuals and families are also very important in helping deliver our Strategy, whether planting trees in their own gardens or suitable public areas or joining with

others to look after and celebrate our woodland heritage. Or even just getting out there and enjoying what East Lothian's trees and woodlands have to offer!

Achieving the Targets

12.5 Seven targets to help deliver the Tree and Woodland Strategy Vision were identified, one for each theme covered by the Strategy.

TARGET 1: Creation of the East Lothian Climate Forest of at least 80-200 ha of new woodland annually across East Lothian to provide the 2 million trees in 10 years

12.6 All new tree planting and woodland creation will count towards the creation of the East Lothian Climate Forest. More detail on this can be found in the East Lothian Climate Forest section below.

12.7 The numbers of trees planted will be collated by the Council where we are aware of them. This will include information from our own planting, Scottish Forestry Woodland Creation Grants, the Woodland Trust, the Riverwoods Project, community planting schemes, implementation of planning approvals, Scottish Government Rural Payments scheme.

TARGET 2: Improve resilience of East Lothian's environment including by:

(A) Securing functional native woodland connections through East Lothian to support migration of species under climate change

- **A lowland corridor between the eastern boundary with Scottish Borders to the east and Midlothian to the west**
- **corridors between lowland woodland and montane scrub/heathland in the Lammermuirs**

(B) Increasing native riparian woodland by 18%; from 42% of the riparian zone to 60%

12.8 The Native Woodland Expansion Opportunities Map in Figure 25 in Section 12 has identified strategic areas within which these functional native woodland connections identified in Target 2A should be made. Action 11 "*the Council will work with others including neighbouring authorities to identify the best areas for connectivity of woodland habitat networks"* will take this work further to a detailed project level both within and beyond East Lothian. Action 30 "*Develop and implement a landscape masterplan for the Innerwick Coastal Margin and adjacent Upland Fringe area"* will also be integral to identifying these functional connections taking on board the significant development this area is currently undergoing.

12.9 Action 10 "*Create and expand native woodlands where there are suitable opportunities, in particular where this will have most benefit for connectivity"* together with Action 30 will help enable implementation of this woodland.

12.10 The Native Woodland Expansion Opportunities Map in Figure 25 in Section 12 has identified all rivers and has shown a 30m wide riparian zone to either side of these within which riparian woodland as identified in Target 2B could be made.

12.11 Action 4 "*Work with SEPA, neighbouring authorities and stakeholders to identify where woodland retention, creation and management could most improve water quality, support reduction in flood risk and help increase slope stability"* will in places identify areas for woodland creation within this riparian zone.

12.12 Action 10 "*Create and expand native woodlands where there are suitable opportunities, in particular where this will have most benefit for connectivity"* will enable implementation of woodland to meet Target 2B. In the riparian areas we anticipate that the Riverwoods Project in collaboration with SEPA will help deliver this woodland.

TARGET 3 Improve biodiversity value of East Lothian's woodland habitats in line with the Green Network Strategy SPG Nature Network Green Network Task 1 Woodland including by

(A) Doubling the area of native woodland (1426 ha new native woodland)

(B) Improving connectivity of the CSGN broadleaf and yew habitat network by woodland creation as opportunities arise focussing on the primary and secondary CSGN opportunity areas

(C) Mapping East Lothian's hedgerows and increase the total length by 10%

(D) Retention of ancient woodland

(E) Restoration of 30% (390 hectares) of coniferous plantation on ancient woodland sites (PAWS) to native woodland

12.13 The Native Woodland Expansion Opportunities Map in Figure 25 in Section 11 has identified expansion areas for existing native woodland types – broadleaf woodland, upland oak wood, peatland with scattered birch trees, and birch with open ground to meet Target 3A.

12.14 Target 3A can be achieved partly through the planning system. Policy 3 of NPF4 seeks enhancement of biodiversity through development, giving the opportunity to increase native woodland. The Control of Woodland Removal Policy limits woodland removal, thereby retaining the native woodland that we have. Policy 1 of this Strategy requires compensatory planting for felled woodland to be of native species. Therefore where non-native woodland is felled compensatory native woodland will be required. Woodland creation schemes also often support native woodland and are likely to be the main way to increase native woodland.

12.15 The Native Woodland Expansion Opportunities Map in Figure 25 in Section 12 shows the CSGN primary and secondary connection opportunities identified as offering the best opportunities for improving connectivity of the CSGN broadleaf and yew woodland network to help meet target 3B.

12.16 Woodland creation is encouraged within the CSGN expansion areas and schemes that include these connections are supported by Scottish Forestry. Additional funding is available for proposals within these areas. More information can be found the on Scottish Forestry website.

12.17 Action 12 "*Map locations, species and condition of all hedgerows and hedgerow trees in East Lothian"* will identify what the situation is in East Lothian at the moment to address the first part of Target 3C. This will inform Action 13 "*Develop a Hedgerow Plan for retention, replacement, increase and management of hedgerows and hedgerow trees".* Hedgerows have protection through Policy 6 of NPF4 which will help to reduce loss of existing hedgerows due to development.

12.18 Action 5 "*Work with farmers and landowners to encourage hedgerow and tree planting and woodland creation where appropriate, to help reduce water run-off onto our roads"* will help increase hedgerow planting to address the second part of Target 3C.

12.19 The mapping in Figure E1 in Appendix E shows areas of Ancient Woodland as identified by NatureScot over 40 years ago. Areas under 0.5 hectares were not included in this mapping. We are

the process of mapping additional ancient woodland for East Lothian as identified in Action 8. Some of the originally mapped ancient woodland areas may have since been affected by a change in land use. To identify the baseline of East Lothian's ancient woodland we will take the NatureScot ancient woodland, minus areas of development, as well as those areas mapped under Action 8. These combined areas will give us a baseline Figure for retention to meet Target 3D. These areas will be protected from development by Policy 6 part b of NPF4 and by our implementation of the Control of Woodland Removal policy and by Scottish Forestry in woodland management and felling permissions.

12.20 Ancient woodland sites that are shown as coniferous plantation on the National Forest Inventory 2019 have been shown as ELC PAWS sites on the Native Woodland Expansion Opportunities Map in Figure 25. Their total area is currently 117 hectares. These are the areas identified to be restored to native woodland in target 3E. Through Action 9 "*Promote the restoration to native woodland of Plantation on Ancient Woodland Sites (PAWS)"* we will restore native woodland on sites we own and work with Scottish Forestry and landowners to encourage restoration of ancient woodland on other sites.

Target 4: Increase access to trees and woodland for all by:

(A) Retaining or increasing tree canopy coverage to a working target of 30% in settlements of over 500 homes and the areas in the most deprived 30% of SIMD areas

(B) Improve and increase access to woodlands to meet the Woodland Trust's Accessible Woodland Standard so that 98% of properties meet at least one of the Standard's (currently 90%) and increase the number of properties with access to a 2ha wood within 500m from 42% to 55%.

12.21 We have identified the existing canopy coverage in all the settlements of over 500 properties and the lowest 30% SIMD areas. This gives us a baseline to work from and identifies those areas with low canopy coverage to address Target 4A.

12.22 The Council is carrying out tree planting in many of our housing areas. These often correlate to the lower SIMD areas. Action 17 *"Encourage those preparing Area Partnership Plans and Local Place Plans to include appropriate proposals for trees and woodlands in their area"* could help to identify opportunities and implement additional tree planting.

12.23 The map in Figure 17 identifies properties which currently lack access to a local woodland and identifies areas of priority for creation of new or larger woodlands and/or improving access to address Target 4B.

12.24 Action 14 "*Increase accessible woodland where required to meet the Woodland Trust's Accessible Woodland Standard"*. Woodland creation is encouraged within the Woodland In and Around Towns eligibility areas and schemes that improve woodland management and access are supported by Scottish Forestry. Additional funding is available for proposals within these areas. More information can be found the on Scottish Forestry website.

Target 5: Farmland Woodland - Create 300 hectares of new small farm woodlands and shelterbelts which align with and support agricultural production

12.25 The mapping in Figure 27 identifies agricultural land of prime quality and that of land class 3.2 to 4.2 as areas where there is potential for new small farm woodlands and shelterbelts to enhance agricultural productivity. Policy 21 encourages this.

12.26 Target 5 will be partly delivered through Action 2 and the work of the East Lothian Climate Forest. Grants are also available from Scottish Forestry and Rural Payments Schemes to support creation of small scale woodlands on agricultural pasture.

TARGET 6: Improve recognition and protection of trees with cultural heritage value including by:

(A) Encouraging identification of Champion, Veteran and Ancient Trees through Citizen Science
(B) Complete mapping of ancient woodland under 0.5 ha, orchards, parkland and wood pasture

12.27 Notable trees including champion, veteran and ancient trees are protected from development by Policy 6 of NPF4 as well as policy 23 of this Strategy.

12.28 Target 6A will be undertaken through Action 27 *Encourage identification and recording of important individual historic, ancient, veteran and champion trees and where appropriate begin succession planting*. The Woodland Trust have information on how to record ancient, veteran and notable trees and a site to record these on their website. There is also a website of Champion trees where Champion trees can be recorded.

12.29 Target 6B will be undertaken by the Council through Action 8 *Complete the Ancient Woodland Survey for East Lothian including the mapping of wood pasture, parkland and orchards*. Mapping of these may also help identify some of the trees in Target 6A.

12.30 Action 28 *Promote positive management of gardens and designed landscapes and heritage trees to maintain their historic and cultural significance* may also help to identify trees with cultural heritage value.

TARGET 7: Improve landscapes through woodland creation by

(A) Structural planting in the Cockenzie/Blindwells area and Innerwick Coast

(B) Developing a plan for the landscape scale replacement of ash trees lost to Ash dieback disease

12.31 Target 7A will be carried out through the implementation of Action 31 *Develop and implement a landscape framework and planting programme for the Cockenzie/Blindwells area* and through Action 30 *Develop and implement a landscape masterplan for the Innerwick Coastal Margin and adjacent Upland Fringe area*. The woodland creation can be undertaken through Action 2 *Deliver the East Lothian Climate Forest*, together with Action 10 *Create and expand native woodlands where there are suitable opportunities, in particular where this will have most benefit for connectivity*.

12.32 Target 7B will be carried out by the Council through Action 7 *Develop and implement a plan for the landscape scale replacement of ash trees lost to Ash dieback disease.*

ACTION PLAN

Action number	Action	Target	Explanation	Who	How delivered	Timescale
Theme 1 Climate Change Mitigation						
1	The Council will investigate opportunities for offsetting its own unavoidable carbon emission through creation of new multifunctional woodland locally			Climate Change Implementation Group	Through the climate change strategy and the climate forest	10 years
2	Deliver the East Lothian Climate Forest	1, 2A, 3A,3B, 3C, 4, 7A, 7C	See section below for details	ELC Climate forest steering group and partners	Climate Forest project River Woods project Woodland creation schemes	10 years
3	The Council will explore ways of increasing use of wood and wood products, particularly locally sourced timber			Procurement Architects Planning authority	Procurement policies Project specifications Planning policy and negotiation with developers	Ongoing
Theme 2 Resilience and Climate Adaptation						
5	Work with SEPA, neighbouring authorities and stakeholders to identify where woodland retention, creation and management could most improve water quality, support reduction in flood risk and help increase slope stability	2B, 3A, 3D, 7A, 7C		ELC SEPA Scottish Forestry	River Woods project Climate forest Woodland creation schemes	River basin management plan timescales
4	Work with farmers and landowners to encourage hedgerow and tree planting and woodland creation where appropriate, to help reduce water run-off onto our roads	1, 2A, 3C, 4		ELC roads authority Farmers/landowners	Climate forest Woodland creation schemes Woodland trust Landowners	Ongoing
6	Implement the Ash Dieback Action Plan and manage ash trees in accordance with this			ELC Amenity Services		2023 onwards

Action number	Action	Target	Explanation	Who	How delivered	Timescale
7	Develop and implement a plan for the landscape scale replacement of ash trees lost to Ash dieback disease	7B		Amenity Services Planning Service		2024 onwards
Theme 3 Biodiversity						
8	Complete the Ancient Woodland Survey for East Lothian including the mapping of wood pasture, parkland and orchards	3D, 6B		ELC planning service		2023
9	Map locations, species and condition of all hedgerows and hedgerow trees in East Lothian	3C		ELC		Ongoing
10	Promote the restoration to native woodland of Plantation on Ancient Woodland Sites (PAWS)	3A, 3D, 3E		Scottish Forestry NatureScot ELC	Felling permissions Advice from NatureScot Advice from ELC Biodiversity Officer Management of council owned woodland	
11	Create and expand native woodlands where there are suitable opportunities, in particular where this will have most benefit for connectivity	1, 2A, 3A, 3B, 3E, 7A, 7C		Climate Forest steering group and partners CSGN	climate forest project River Woods project Woodland creation schemes	
12	The Council will work with others including neighbouring authorities to identify and create cross boundary connectivity of woodland habitat networks	2A, 3B		ELC Neighbouring authorities CSGN	Advice from ELC Biodiversity Officer ELBAP CSGN projects CSGN habitat networks	

Action number	Action	Target	Explanation	Who	How delivered	Timescale
13	Develop a Hedgerow Plan for retention, replacement, increase and management of hedgerows and hedgerow trees	1, 2A, 2B, 3C				
14	Create and retain a balanced coastal mosaic habitat including reverting plantation woodland to more natural coastal habitat should the opportunity arise, subject to public engagement					
Theme 4 Community						
15	Investigate opportunities for increasing recreational woodland where required to meet the Woodland Trust's Accessible Woodland Standard	1, 5B, 7A, 7C		ELC Scottish Forestry Woodland Trust Land Owners Community Groups	Climate Forest WIAT funding	
16	Map existing woodland provision for people with reduced mobility and work with disability groups to identify where this could be increased			ELC		
17	The Council will promote access to and enjoyment of woodland for all, particularly with respect to underrepresented groups, where this can be done in a manner that does not harm the woodland			ELC		
18	Encourage those preparing Area Partnership Plans and Local Place Plans to include appropriate proposals for trees and woodlands in their area	1, 5A, 5B, 7A, 7B, 7C		ELC		
19	Produce a Tree Management Strategy for trees on our own land	3D, 3E, 5A, 5B, 6A, 7A, 7C		ELC		

Action number	Action	Target	Explanation	Who	How delivered	Timescale
20	Identify funding to carry out an audit/survey of our current tree estate including tree condition etc.; management requirements for these trees, including need for selective felling where needed			ELC		
21	Where appropriate, plant street trees and hedges in urban areas, including in Air Quality Management Areas and around sensitive sites including hospitals, schools, care homes and play areas and sports fields; woodland expansion along strategic road corridors and adjacent to industrial sites; and hedges along roadside edges	1, 2A, 5A, 7A, 7C				
22	Maintain and where appropriate publicise a list of community orchards		Within the food growing strategy	ELC		
23	Encourage local fruit and nut growing		Within the food growing strategy			
Theme 5 Economy						
24	Encourage and enable smaller producers to work together in joint marketing, promotion and equipment sourcing through a local timber forum			ELC		
25	Promote woodland based tourism and recreation, where appropriate including joint marketing campaigns with other visitor attractions, tourism operators and accommodation providers			ELC		
26	Encourage the development of small scale low impact tourism enterprises (excluding accommodation) linked to appropriate woodlands			ELC		

Action number	Action	Target	Explanation	Who	How delivered	Timescale
Theme 6 Cultural Heritage						
27	To celebrate East Lothian's tree heritage develop a series of tree trails for our town and villages.	6A				
28	Encourage identification and recording of important individual historic, ancient, veteran and champion trees and where appropriate begin succession planting.	6A		ELC		
29	Promote positive management of gardens and designed landscapes and heritage trees to maintain their historic and cultural significance	3D, 3E, 6A		ELC		
Theme 7 Landscape Character						
30	Develop and implement a landscape masterplan for the Innerwick Coastal Margin and adjacent Upland Fringe area	1, 2A, 3A, 3B, 3C, 3D, 3E, 4, 7A				
31	Develop and implement a landscape framework and planting programme for the Cockenzie/Blindwells area.					
32	Create a managed programme of replacement of street trees important to townscape character	5A, 6A, 7B, 7C				

EAST LOTHIAN CLIMATE FOREST

12.33 The East Lothian Climate Forest will be guided by this Strategy. The Climate Forest is also a way of helping deliver many of the Actions of this Strategy. Through this project we will:

Work with Others

- Work with SEPA, NatureScot, HES and other stakeholders to identify where woodland creation can best achieve their objectives
- Work with farmers and landowners to encourage the expansion of farm hedgerows, woodlands and shelter belt planting as a means of sustainable soil management and water management
- Work with rural forum economic group to encourage woodland and hedgerow expansion where this has benefits for farming production and/or rural diversification
- Work with communities to identify appropriate canopy cover targets for settlements and urban areas and identify suitable locations for planting so that targets can be achieved for settlements and urban areas and identify suitable locations for planting
- Support local nursery, wood and tree businesses to supply sufficient locally sourced stock
- Explore the development of links between local plant suppliers, timber growers and processors / users to enhance local supply chains and encourage the circular economy

Promote the importance of trees and woodland

- Encourage land managers to use the CARBINE Accounting Model (Forest Research, 2022) to estimate carbon stocks of stands and forests in living and dead biomass and soil and associated harvested wood products and help increase carbon potential of existing and new woodlands
- Promote Woodland Carbon Code accreditation
- Consult the public on woodland management plans

Carry out tree planting and woodland creation

- Identify suitable opportunities for movement of species northwards and uphill as part of improving biodiversity woodland connectivity and providing suitable habitat and tree species for migrating species
- Create and expand native woodlands where there are suitable opportunities as shown on the Native Woodland Map, in particular where this will have most benefit for connectivity
- Hedgerow Strategy - Map hedgerows and create a plan for their retention, replacement, increase and management
- Encourage local fruit and nut growing and consider a project to supply householders and businesses with a fruit tree
- Identify any areas of amenity open space suitable for tree and woodland planting
- Where appropriate, prioritise planting of street trees and hedgerows in urban areas, including in Air Quality Management Areas, and woodland expansion along strategic road corridors and adjacent to industrial sites and hedgerows along roadside edges
- Identify any vacant, derelict, stalled and safeguarded sites with potential for temporary or more long term greening.
- Seek suitable opportunities for tree planting in its school estate
- Encourage planting and woodland creation to enhance settlement and setting including the use of large specimen trees in appropriate areas
- Support the implementation of the Innerwick Coastal Margin Landscape Masterplan
- Support the implementation of a landscape framework and planting programme for the Cockenzie/Blindwells area.

Council Actions as Regulator

12.34 The Council will continue to carry out its functions to protect trees and woodland:

- As planning authority, the Council will continue to apply planning policy protecting trees and woodland, and securing new trees and landscaping in association with new development
- As planning authority, the Council will apply National Planning Framework 4 policy on use of materials with the lowest forms of embodied emissions, such as recycled and natural construction materials (such as timber)
- Subject to national policy support, the Council will seek to include policy on use and retention of timber (e.g. window frames) as a sustainable construction material in the review of the East Lothian Local Development Plan.
- Continue to support farm and forest diversification in appropriate locations through the planning system
- Respond to complaints on unauthorised tree work and arbitrate on High Hedge disputes.
- Publicise requirements for notification of tree work in Conservation Areas and permission for work to trees with Tree Protection Orders and planning conditions, and where appropriate report unauthorised tree work to protected trees to the Procurator Fiscal.
- Prioritise trees for protection by Tree Preservation Orders and implement these as funding allows.
- Include guidance on trees in Conservation Area Character Appraisals and refer to this in decisions on tree work in Conservation Areas and planning decisions.
- Adopt Statements of Significance currently being prepared for the local designed landscapes.
- Apply the Design Standards for New Housing Areas SPG to secure space for street trees, open spaces suitable for trees, and hedges in new residential development within the masterplanning, planning and design process as well as to provide for the management and expansion of woodland, linked to the development of green networks

Managing Council Woodland and Trees

12.35 The Council will continue to manage its own woodland and trees including by:

- Planting trees in suitable locations on Council owned/managed land
- Adhering to good woodland management practice in Council owned or managed woodland
- Identifying suitable opportunities for movement of species northwards and uphill by creating woodland connectivity and providing suitable habitat and tree species for migrating species in Council managed woodland
- Actively managing key tree species and woodlands to improve their resilience to climate change, pests and diseases and wild fires on Council owned woodland and trees
- Taking appropriate biosecurity actions in the Council's operations
- Working with others to achieve this Strategy including neighbouring authorities to ensure connectivity of woodland habitat networks.
- Carrying out rhododendron removal as part of a coordinated approach
- Consulting the public on Council woodland management plans
- Carrying out succession planting of important historic and townscape trees in appropriate cases

Role of the Countryside Ranger Service

12.36 The Countryside Rangers will continue to work to look after Council woodland and engage the public:

- Publicise woodland biosecurity measures to the public as necessary

- Continue to manage invasive scrub (such as sea buckthorn) on coastal habitat to protect grassland and dune habitat in line with management plans for the coast
- Continue to provide day to day presence and woodland activities through the Countryside Ranger Service
- Support community woodland groups particularly in areas with high levels of multiple deprivation
- Increase awareness of the role of woodlands as an outdoor learning resource and a resource for education, training and lifelong learning, including through play
- Work with schools to facilitate greater use of woodlands as a resource for learning
- Support community involvement in woodland projects, through the East Lothian Countryside Volunteers

Other Council activity

12.37 The Council will continue to:

- Recycle wood products, and use recycled wood products where possible
- Raise awareness of tree diseases and how to identify and report them on the council's web pages

What You Can Do

12.38 Everyone can play a part in delivering the TWSEL. Planting and looking after trees in your own garden – adding to its beauty, attracting wildlife or providing fruit – is the most obvious contribution. However, there are many other ways to get involved, even if you have no garden ground of your own.

Volunteering

12.39 Opportunities to support trees and woodland through volunteering include:

- Volunteering with the East Lothian Countryside Volunteers – supported by the Council Countryside Service, they offer a range of opportunities including species surveys or controlling invasive species, and have undertaken extensive tree planting particularly at Levenhall Links, Musselburgh;
- Volunteering with local groups: charities including the Woodland Trust and Scottish Wildlife Trust own land in East Lothian and sometimes have volunteering opportunities, as do Borders Forest Trust and Edinburgh and Lothians Greenspace Trust;
- Joining a community group involved with tree planting or woodland management;
- Taking part in Citizen Science projects related to trees such as Observatree. Information about projects can be found from the UK Tree Health Citizen Science Network or The Woodland Trust.

Influencing plans for trees

12.40 People with enthusiasm and local knowledge can help improve planning decisions, plans and policies. If a community is preparing a Local Place Plan, there is the opportunity to get involved and help the community plan for trees.

12.41 There are sometimes opportunities to influence woodland management when woodland owners and managers, including East Lothian Council or the Woodland Trust, consult on reviews of their management plans. Scottish Forestry also have public consultation on Forest Plans and Woodland Management Plans on their Public Registers.

12.42 Through Area Partnerships and Community Councils, community involvement has already contributed to tree planting for the Queen's Green Canopy, which contributes to the East Lothian

Climate Forest. Community involvement will be a key aspect of the further development of the East Lothian Climate Forest.

12.43 East Lothian Council often consults about new plans and policies. Some of these may affect trees or woodland in ways the Council has not considered. We are keen to hear everyone's views. Anyone interested can keep up to date at the East Lothian Consultation Hub, where they can view and comment on forthcoming plans and strategies. Planning applications can also sometimes affect trees. These are published at East Lothian Planning Online, where comments can be made. These will be taken into account in making a decision.

Reporting wildlife crime and tree issues

12.44 People can help protect trees by reporting wildlife crime, trees with disease, unauthorised tree work or felling.

12.45 Work to trees or hedges suspected breaching wildlife legislation, for example because it is harming breeding birds, should be reported to Police Scotland on 101 (999 if it is an emergency), or by email to Contactus@scotland.pnn.police.uk .

12.46 Felling permission is usually needed when felling of trees is being carried out. Exemptions include trees in garden ground, some small scale felling (less than 5 cubic metres), felling to implement a planning permission, or emergency work. Further information can be found on Scottish Forestry's website, including a link to a map viewer where felling licences can be checked. Planning permissions can be checked at www.eastlothian.gov.uk/planning . Reports of unauthorised felling should be made to Scottish Forestry using their online form, or to their South Scotland Conservancy at southscotland.cons@forestry.gov.scot. Felling in breach of planning consent can be reported to environment@eastlothian.gov.uk or by calling the Council on 01620 827827 and asking for Planning Enforcement

12.47 Potentially unauthorised work to trees in Conservation Areas or subject of a Tree Preservation Order or condition of planning consent should be reported to the Council at landscape@eastlothian.gov.uk. Information on protected trees can be found on the Council's website.

12.48 Tree diseases can be reported to Scottish Forestry via Tree Alert.

12.49 Trees which could be a danger to the public should be reported to the landowner. Where these are on council land this should be reported to trees@eastlothian.gov.uk. Trees that could cause an issue for road safety can be reported to roadservices@eastlothian.gov.uk. Where these trees are not the Council's responsibility contact will be made with the landowner.

Inspiring others

12.50 Inspiring friends and family about nature in general and trees in particular will help secure protection of trees into the future. If people care when trees are lost they are more likely to act to protect them. Many people have had an interest in trees sparked by activities they did as a child, such as leaf dipping or bark rubbing, or taking a walk in the woods.

Consumer power

12.51 As a consumer, buying recycled wood products (such as paper) or second hand helps reduce the rate at which trees are felled. Choosing wood over alternatives (such as wooden rather than uPVC windows) is sustainable and supports the wood economy. Consumers can look for Forest Stewardship

Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC) mark to make sure their goods come from sustainably managed forests.

Useful Contacts

East Lothian Council

General Enquiries and East Lothian Council switchboard: 01620 827827

Planning Service

- Prepares the Local Development Plan for the area, and supplementary planning guidance
- Determines planning applications
- Where appropriate, enforce breaches of planning control
- Provide pre-application planning advice
- Advises on whether trees are covered by planning condition

Website: https://www.eastlothian.gov.uk/info/210547/planning_and_building_standards

Write: Planning Service, Development, East Lothian Council, John Muir House, Haddington, EH41 3HA

Phone: 01620 827216

Enquiries about this Strategy: policyandprojects@eastlothian.gov.uk

Enquiries about trees and development Email: environment@eastlothian.gov.uk

Sustainability & Climate Change Officer

- Coordinates the Council's Climate Change Strategy

Email: climatechange@eastlothian.gov.uk

Landscape Team (part of the Planning Service)

- Provide advice to the Planning Service on trees on development sites
- Consider notifications for works to trees in Conservation Areas
- Prepare Tree Preservation Order Notices
- Arbitrate on High Hedge disputes that cannot be resolved by any other means
- Maintain a list of insured tree surgeons working in East Lothian

Website: https://www.eastlothian.gov.uk/info/210547/planning_and_building_standards/12249/trees_tpos_and_consent_for_tree_works

Enquiries about work to trees covered by Tree Preservation Orders, planning condition or in Conservation Areas: Email landscape@eastlothian.gov.uk

Sport, Countryside and Leisure

- Manage Council owned trees and woodland, parks, greenspaces and open spaces, as well as private land where there is a management agreement in place
- Provide biodiversity advice for the planning service
- Provides information to members of the public on local biodiversity matters
- Improve access in the countryside including promoting responsible access, upholding Rights of Way and preparing the Core Path Plan

Advice on Council owned trees: on the Council's website: https://www.eastlothian.gov.uk/info/210567/your_community/12208/trees_and_woodlands

Enquiries about work to Council owned trees: email trees@eastlothian.gov.uk

Outdoor Access Officer

Advice on access issues: email landscapeandcountryside@eastlothian.gov.uk

Biodiversity Officer

Advice on biodiversity issues: email landscapeandcountryside@eastlothian.gov.uk

Archaeological advice

- Provide advice on local heritage issues including potential for unknown archaeology

Email: heritage@eastlothian.gov.uk

Roads Services

- Responsibility as the Roads Authority for the safety of road users, including in relation to roadside trees. Roadside trees will be considered in accordance with our Policy for Road Inspections.

  Concern over the safety of roadside trees email: roadservices@eastlothian.gov.uk

Scottish Forestry

- Prepare national forestry policy including the Scottish Forestry Strategy
- Licence felling and woodland creation
- Provide grants and loans for some forestry/woodland activities

Felling Permission:

Website: https://forestry.gov.scot/

Felling Permissions: https://forestry.gov.scot/support-regulations/felling-permissions

Questions and applications should be submitted to the local office, the Central Scotland Conservancy:

Bothwell House
Hamilton Business Park, Caird Park
Hamilton
ML3 0QA

Email: centralscotland.cons@forestry.gov.scot

Phone: 0300 067 6006

NatureScot

- Provide advice on biodiversity and outdoor access
- Consider applications for Operations Requiring Consent in SSSIs
- Carry out species licencing
- Maintain the Ancient Woodland Inventory and Semi-Natural Woodland Inventory.

Website: https://www.nature.scot/professional-advice/protected-areas-and-species/licensing

Information on trees and planning and development: https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/habitats/planning-and-development-trees-and-woodland

Forth Area Office: Silvan House, 3rd Floor East, 231 Corstorphine Road, EDINBURGH EH12 7AT

Phone 0131 316 2600

Email: forth@nature.scot

Scottish Rural Development Programme

- Provides information on grant funding including for woodland creation and management and hedgerow management

More information can be found here Scottish Rural Development Programme - mygov.scot

The Woodland Trust

- Plant trees and manage woodlands
- Provide funding and trees for new woodlands and hedgerows.
- Provide advice on trees and woodlands

More information can be found at What We Do - Our Work - Woodland Trust

Historic Environment Scotland

- Contact for information about Scheduled Monument Consent

Website: Historic Environment Scotland | Àrainneachd Eachdraidheil Alba

Phone: 0131 668 8600

Address: Historic Environment Scotland
Longmore House, Salisbury Place, Edinburgh, EH9 1SH

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Legislation

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- www.eastlothian.gov.uk/ldp
- East Lothian Council Environment 01620 827216
- ldp@eastlothian.gov.uk
- Contact East Lothian Council Planning Service

  John Muir House
  Brewery Park
  HADDINGTON
  East Lothian
  EH41 3HA

- To make a comment, suggestion or complaint about a council service, download a feedback form online at www.eastlothian.gov.uk or pick one up at your local office

Versions of this leaflet can be supplied in Braille, large print, audiotape or in your own language. Please phone Customer Services if you require assistance on 01620 827199