## **Culture and Communities Committee**

### 10.00am, Tuesday, 28 January 2020

**Edinburgh: Million Tree City** 

**Executive/Routine** Executive

Wards All Council Commitments 43

#### 1. Recommendations

#### 1.1 Committee is asked to:

- 1.1.1 recognise the value that urban trees play in addressing the Climate Emergency contributing: to meeting the Council's ambitious target of being net carbon neutral by 2030; and ongoing global biodiversity losses;
- 1.1.2 note the Council's existing commitments to tree protection, planting and management and the increase in tree numbers attributable to the positive implementation of policy actions, development planning, and partnership working;
- 1.1.3 support the ambition for Edinburgh to be a "Million Tree City" by 2030, ensuring continuing investment in measures to protect, plant and actively manage the city's trees and woodlands, aligning with the timeline of Scotland's Forest Strategy;
- 1.1.4 support the establishment of an Edinburgh 'Million Tree Forum' to bring together principal stakeholders so that the city can set an updated vision for trees in the city, can better communicate its tree values, plant trees more quickly, and collectively help look after those already in its care; and
- 1.1.5 support further i-Tree Eco surveys of Edinburgh's tree canopy cover and the ecosystem service benefits that its urban forest generates, communicating tree number and tree location data on an ongoing basis.



- 1.1.6 give consideration to using the environmental policies within the City Plan to progress the million-tree aspiration; and
- 1.1.7 refer this report to Transport and Environment Committee.

#### **Paul Lawrence**

#### **Executive Director of Place**

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# Report

## **Edinburgh: Million Tree City**

### 2. Executive Summary

- 2.1 This report sets out the policy basis that directs the Council's tree protection, planting and care activities. It presents the latest data on Edinburgh's tree resource, their number and estimated social and environmental benefits, as well as mechanisms put in place to encourage public support for trees in the city.
- 2.2 Urban Edinburgh contains approximately 731,000 individual trees of varying age and species. To help address the Climate Emergency, contribute to the Council's 2030 net carbon neutral target it is recommended that this number be increased to one million by 2030, making Edinburgh a "Million Tree City". Given that most city trees are not managed by the Council it is further recommended that this ambition is achieved via the establishment of a "Million Tree Forum", which can pool expertise, enthusiasm and resources to drive attainment of this ambitious target.

### 3. Background

- 3.1 The Council actively conserves, manages and enhances the city's urban forest. The Parks, Greenspace and Cemeteries service manages woodlands, tree groups and individual trees across the Council's outdoor estate, plants additional trees where appropriate, and regularly inspects the condition of trees, removing those trees in such poor condition that they considered a significant risk to people or property.
- 3.2 The Planning service protects private trees of significance through the use of Tree Preservation Orders and tree work controls for trees within Conservation Areas. It also seeks to preserve existing trees and woodlands, and establish new ones, through the development management process, securing tree planting through planning permission and tree work approvals. The Planning service is looking at how the authority can devise tree canopy and/or green infrastructure cover targets and embed them in statutory development plans and guidance an issue that will be considered in the upcoming Local Development Plan 2 (LDP2) Main Issues Report ('Choices'). Such an approach could significantly increase the city's tree stock.

- 3.3 At its meeting of <u>4 October 2012</u> the Planning Committee approved the <u>Edinburgh</u> and <u>Lothians Forestry and Woodland Strategy</u>. This strategy provides strategic and delivery-focused advice to those seeking to manage and expand woodland in the region, and a policy and spatial framework to optimise the contribution of woodland to people, the economy and the environment. It aims to increase woodland cover across Edinburgh and the Lothians from 13% to between 17% and 19% of the total land area.
- 3.4 An <u>i-Tree Eco survey</u> was undertaken in summer 2013, and updated in 2016, to value ecosystem services provided by Edinburgh's urban trees. The key findings were:
  - 3.4.1 Edinburgh has over 712,000 trees within its urban core, resulting in an average urban tree density of 62 trees per hectare;
  - 3.4.2 Edinburgh has a 17% urban tree cover, equal to an area of 1,950 ha;
  - 3.4.3 the trees were primarily found in residential land, parks, and on institutional land. Of the trees recorded, 75% are privately managed;
  - 3.4.4 the urban forest includes 50 tree and shrub species. Sycamore, Holly and Silver birch are the most abundant tree species;
  - 3.4.5 the ecosystem services provided by Edinburgh's urban trees are estimated to have a value of £1.82m per year. The ecosystem services valued were:
    - 3.4.5.1 carbon capture;
    - 3.4.5.2 rainwater interception; and
    - 3.4.5.3 the removal of air pollution.
  - 3.4.6 Edinburgh's urban trees intercept 183 million litres of water every year, equivalent to an estimated £247,375 in sewerage charges avoided;
  - 3.4.7 Edinburgh's trees remove an estimated 195,000 tonnes of airborne pollutants each year, worth more than £575,313 in damage costs;
  - 3.4.8 Edinburgh's trees remove an estimated 4,885 tonnes of carbon from the atmosphere each year, this amount of carbon is estimated to be worth £1m;
  - 3.4.9 Edinburgh's trees store an estimated 179,237 tonnes of carbon, estimated to be worth £39.8m; and
  - 3.4.10 Edinburgh's trees have a public amenity asset value of £3,066m.
- 3.5 The report concluded that:
  - 3.5.1 Edinburgh's urban forest should be managed to increase the number and diversity of mature large stature trees, as these are currently poorly represented yet provide proportionally more ecosystem services than small stature trees:
  - 3.5.2 species mix in the urban forest should be diversified to build resilience to climate change, to the threats posed by emerging pests and diseases and to improve ecosystem service provision by Edinburgh's urban trees;

- 3.5.3 the identified benefits from the urban forest need to be aligned to land use management, development planning and the City's approach to health, wellbeing and environmental planning;
- 3.5.4 the proactive management of privately-owned trees should be encouraged;
- 3.5.5 a management strategy for Edinburgh's urban forest is required it should contain a minimum 20-year vision and be reviewed and updated every five years; and
- 3.5.6 assessment of the urban forest should be repeated in five years to assess change and monitor progress in line with any future urban forest management strategies.
- In response to these findings the Council produced a Trees and Woodlands Action Plan called <u>Trees in the City</u>, which was endorsed by the Transport and Environment Committee at its meeting of <u>14 January 2014</u>. This document addresses requirements identified in the Edinburgh and Lothians Forestry and Woodland Strategy 2012-17, clarifies how the Council manages trees and woodlands in its own ownership, provides guidance to inform the public on tree-related matters and on their tree rights and responsibilities, and lists a series of actions as part of a five-year action plan. A summary of progress in delivering these actions is given in Appendix 1.
- 3.7 A tree nursery was established at the Council's Inch Park plant nursery in 2016. This is now producing around 1,000 native and non-native trees per year for planting across the authority's public parks, gardens and other green spaces. There are also plans to sell some of these from the nursery shop to encourage people to plant young trees in their gardens or local community spaces.
- 3.8 Scotland's Forestry Strategy 2019-2029 aims to increase urban tree canopy to help address the fact that although tree cover in Scotland has increased from around 5% to 18.5% over the last century; this percentage is still well below the European Union average of 38%. It recognises that urban forestry represents an opportunity to benefit a significant proportion of the Scottish population, providing accessible spaces for active travel, exercise and other forms of recreation, promoting physical and mental health and well-being, improving social inclusion and helping to reduce health inequalities.
- 3.9 In May 2019 Councillors added their signatures to a Woodland Trust led UK-wide Charter for Trees, Woods and People, the first local authority in Scotland to do so. <a href="Tree Charter">The Tree Charter</a>, launched in 2017 on the 800<sup>th</sup> anniversary of the 1217 Charter of the Forest, sets out ten principles for a society in which trees and people can stand stronger together. These principles are now being embedded into the Council's tree and woodland practices:
  - 3.9.1 Sustain landscapes rich in wildlife;
  - 3.9.2 Plant for the future;
  - 3.9.3 Celebrate the power of trees to inspire;

- 3.9.4 Recover health, hope and wellbeing with the power of trees;
- 3.9.5 Protect irreplaceable trees and woods;
- 3.9.6 Grow forests of opportunity and innovation;
- 3.9.7 Plan greener local landscapes;
- 3.9.8 Strengthen our landscapes with trees;
- 3.9.9 Make trees accessible to all; and
- 3.9.10 Combat the threats to our habitats.
- 3.10 A pilot initiative called <u>Tree Time Edinburgh</u> has recently been set up in partnership with the Edinburgh and Lothian Greenspace Trust and the Woodland Trust. This aims to raise support as well as public and corporate donations to assist with the care and planting of trees along the city's streets and roadsides, recognising the relative expense of street tree planting and the fact that the city only has 8,550 prominent street trees, an estimated 22% decline since the 1990s. A range of packages are available for people to adopt an existing tree or plant a new tree. The pilot will be reviewed in Autumn 2020. If deemed successful, the Council will be encouraged to support its continuation alongside other partners.
- 3.11 Following its declaration of a "Climate Emergency", on 14 May 2019 the Council set an ambitious target for Edinburgh to become net carbon neutral by 2030. The Corporate Policy and Strategy Committee agreed a <u>Sustainability Approach</u> that endorses a three-phased delivery plan and draft sustainability programme. The programme includes measures to increase green infrastructure and nature-based solutions to protect and enhance biodiversity and combat the impacts of climate change. Trees help to improve the quality of our air, cool our city, reduce the risk of flooding and function as an excellent store of carbon, and it is expected that increasing their number and conserving their presence will significantly contribute to the Council's climate emergency objectives.
- 3.12 The continuing global loss of biodiversity from human activity is an equally significant threat to our way of life. The Nature Conservation (Scotland) Act 2004 confers a duty on the Council to further the conservation of biodiversity, which is addressed in the Edinburgh Biodiversity Action Plan. Trees in the city help address biodiversity losses, as they provide habitat, shelter and food source to more species than most other biological features. The value of individual trees for wildlife depends upon the type and age of the tree, different species being associated with an individual tree at different stages of its lifecycle. Older and native trees generally have a much greater variety of microhabitats available for colonisation than younger specimens.

#### 4. Main report

- 4.1 The i-Tree Eco surveys provide significant evidence for what is instinctively known, that trees make a vital contribution to quality of life in Edinburgh, both as street trees and as a component of parks, green spaces, gardens, and woodlands. They provide sensory stimulation, visual relief and aesthetic pleasure that changes with the seasons, help to provide the setting for buildings, screen unwanted views, and reduce the impact of noise. They act as reservoirs for biodiversity, and for many citizens are the most obvious and readily available form of contact with nature. Trees remove pollution from the atmosphere, alleviate localised flooding, provide shade in summer and shelter in winter. As trees grow they convert atmospheric CO2 into carbon-storing wood, lessening the impacts of climate change.
- 4.2 A number of global cities have committed to increasing their urban forest through the planting of one million trees, including Los Angeles, Denver, New York, Shanghai and London. A common motive shared between these cities is the reduction of carbon dioxide in the atmosphere to reduce the effects of climate change. It is recommended that Edinburgh join this growing global recognition of the value that trees play in the urban environment by becoming a Million Tree City.
- 4.3 Since the 2016 survey the Council and its partners Edinburgh and Lothian Greenspace Trust and the Woodland Trust have directly planted some 23,348 trees across the city and ensured the planting of many more as part of the Planning process (numbers as of November 2019). Over that time 4,534 trees have been removed by the Council, principally for health and safety reasons or due to Dutch elm disease, making a net gain of around 19,000 trees and an overall total of around 731,000 specimens. There are plans to plant between 500-1,000 trees during the current winter period.
- 4.4 Although these numbers provide evidence of the Council's positive approach to tree care, planting and management, if this rate and scale of increase continues it is anticipated that it will take around thirty more years for Edinburgh to attain million-tree status, an ambition that could be captured within the <a href="2050 Edinburgh City Vision">2050 Edinburgh City Vision</a>. However, given the decade-long timescale of Scotland's Forest Strategy and Edinburgh's ambition to become carbon neutral by 2030, a more appropriate target date would be 2030.
- 4.5 Attaining this target will require a concerted approach by the Council, its principal tree planting partners, and the residents of the city (given that <u>6.4 hectares</u> of Edinburgh's vegetation is lost each year through the paving over of, and building on, residential gardens). To this end, it is proposed that the Council lead the establishment of an Edinburgh 'Million Tree Forum' to bring together principal stakeholders so that the city can set an updated vision for trees in the city, can better communicate its tree values, plant trees more quickly, and collectively help look after those already in its care.

- 4.6 To monitor progress, it is recommended that the i-Tree Eco survey is repeated on a regular basis, and that annual tree planting targets are set, with actual tree numbers publicly reported on an on-going basis. The focus would be on areas of the city where trees will deliver the greatest social and environmental benefits (e.g. around schools, more deprived areas, and where canopy cover is currently low), ensuring recognition of quality, not simply tree number quantity.
- 4.7 Other important considerations include:
  - 4.7.1 biosecurity and procurement planting trees from reliable sources is paramount to prevent future issues with diseases and pests;
  - 4.7.2 appropriateness of tree planting location e.g. avoiding species-rich grassland, where there may be other habitats and species that are important and declining or vulnerable;
  - 4.7.3 tree choice recognising the need for future-proofing against climate change and disease resilience; and
  - 4.7.4 maintaining and creating green networks to link habitats and enhance ecological connectivity.

#### 5. Next Steps

- 5.1 Establish an Edinburgh Million Tree Forum, inviting representation from across relevant Council services, the Edinburgh and Lothian Greenspace Trust, the Woodland Trust, the Royal Botanic Garden Edinburgh, Trees of Edinburgh, the Scottish Wildlife Trust, the Trust for Conservation Volunteers, and the Edinburgh Living Landscape initiative.
- 5.2 Draft a costed Action Plan to achieve the target of one million trees across urban Edinburgh by 2030. This will include tree planting opportunities on both public and private land, residential gardens, via new development and through replacement of trees lost to age, disease and damage.

### 6. Financial impact

6.1 The cost of committing to becoming a Million Tree City has not yet been determined. An Action Plan will be developed to progress this which, as well as identifying the costs of this, will identify external grants and external support which may be available. The expectation, however, is that additional Council resources may be required to progress this.

### 7. Stakeholder/Community Impact

7.1 An inherent intention of Edinburgh: Million Tree City is to improve communication regarding trees, the values associated with trees, tree planting, and tree numbers across the city. Principal stakeholders will be involved in the Million Tree Forum and wider consultation exercises will be initiated as and when appropriate throughout its delivery programme.

### 8. Background reading/external references

- 8.1 <u>Valuing Edinburgh's Urban Trees</u>
- 8.2 Trees in the City Edinburgh Trees & Woodlands Action Plan
- 8.3 <u>Achieving Net Zero in the City of Edinburgh</u> and <u>Update on the Short Window</u> <u>Improvement Plan</u> – Policy and Sustainability Committee, 25 October 2019

### 9. Appendices

9.1 Appendix 1 – Trees in the City Actions

#### **Appendix 1: Trees in the City - Actions**

- Create a prioritised list of street tree locations and plant replacement trees.
- Identify streets where new street tree planting can be introduced and consult with others.
- Consult with others and create a policy to guide tree planting by the Council, with the aim of increasing resilience in the light of climate change and disease threats.
- Adopt a tree valuation model, to be applied as policy to aid decision-making around tree removals.
- Promote woodland management and creation as a key component of sustainable flood management initiatives.
- Identify locations where new planting or woodland management can help increase slope stability.
- Where appropriate, prioritise planting of street trees in urban AQMAs, and woodland expansion along strategic road corridors and adjacent to industrial estates.
- Promote the importance of managing and increasing trees and woodlands in urban areas to conserve and enhance townscape character
- Promote positive management of historic gardens and designed landscapes and heritage trees to maintain their historic and cultural significance and increase resilience to climate change.
- Encourage forest restructuring to improve the setting of historic sites and landscapes.
- Expand woodland cover within Edinburgh and the Lothians as a means of increasing carbon sequestration and reducing net carbon emissions.
- Promote positive and proactive management of key tree species and woodlands.
- Provide better information through the web on tree operations and policies that concern trees and woodlands.
- Reorganise and relaunch the voluntary Tree Warden scheme in partnership with Friends of Parks, amenity groups and others.
- Develop and publicise opportunities for active outdoor recreation in woodlands and forests, including mountain-biking, walking and activities such as orienteering.
- Ensure that existing and new forests and woodlands are managed to create new opportunities for active travel, including walking, cycling and horseriding connecting settlements and the countryside.
- Promote the role of woodlands in providing a resource for physical activity, accessible to all parts of society close to where people live and work.

- Support community involvement in woodland projects, especially through mentoring and co-ordinating delivery of activity on the ground. There should be a particular focus within WIAT
- 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.
- Promote the development of outdoor learning opportunities, including in woodlands and forests.
- Identify sites where trees could be planted to enhance the linkages between green spaces, and to assist in the delivery of the Edinburgh Living Landscapes project.
- Support delivery of new woodland areas in the CEC authority area.
- Create new woodland on the CEC estate.
- Promote the establishment of new native woodlands as part of integrated habitat networks.
- Where there are suitable opportunities, enhance ancient and semi-natural woodland.
- Increase the proportion of existing woodland brought into positive management.
- Publish tree management policies after consultation.
- Continue to extend the Ezytreev database to cover all trees in CEC ownership.
- Publish tree work schedules in advance.
- Continue to work in partnership with others, such as Edinburgh & Lothians
  Greenspace Trust to deliver woodland management work
- Work towards the elimination of any waste from tree operations and no woody waste to go to landfill.