Transport and Environment Committee

10.00am, Tuesday, 3 June 2014

The Edinburgh Living Landscape Programme

Item number 8.6

Report number

Executive/routine Executive

Wards All

Executive summary

This report fulfils this Committee's requirement to respond to Councillor Gardner's motion of 14 January 2014 "to call for a report by the Director of Services for Communities on progress made to date in delivering the Edinburgh Living Landscape Initiative".

The Edinburgh Living Landscape Programme advocates the development of an ecosystem approach to the management of the Council's open space estate in order to realise benefits to both biodiversity and public amenity. This follows extensive research on current land management practices, and successful trials of species-rich grasslands in partnership with Edinburgh University.

Links

Coalition pledges P33 P43 P48 P50

Council outcomes CO7 CO10 CO18 CO19 CO23 CO24 CO25 CO26

Single Outcome Agreement SO1 SO2 SO3 SO4

Report

The Edinburgh Living Landscape Programme

Recommendations

- 1.1 To note the progress made in realising an Edinburgh Living Landscape initiative.
- 1.2 To support the initiative as a means of developing an ecosystem approach to land management, including creating attractive and biodiverse landscapes across the Council's outdoor estate, thereby helping meet the Council's 'biodiversity duty'.

Background

- 2.1 In 2006 the Scottish Wildlife Trust (SWT) launched a long-term vision titled Natural Connections. Underpinned by the concept of the 'ecosystem approach' it sought to take nature conservation out of its silo and make it a much stronger element of sustainable development. The 'ecosystem approach' is then about making the links between a healthy environment, a healthy economy, people's well being and ultimately the prosperity of Scotland.
 - Keen to demonstrate how the concept might work on the ground, two pilot Living Landscape programmes were launched; one in Cumbernauld (where the Trust owns around a third of the greenspace in the town) and a second in Coigach-Assynt in north-west Scotland (where landowning partners are working together to restore natural habitats to create local employment and promote the area to tourists). In 2011, SWT and the City of Edinburgh Council discussed the idea of running a similar Living Landscapes programme in the capital and also develop the concept in an urban environment.
- 2.2 The programme involves initiating projects across the city, involving neighbourhoods and communities in local decision-making and taking action on the ground. Three fundamental ways of improving habitat quality apply:
 - Naturalness encourage species that support other native species (e.g. pollinators). This would principally relate to native species, but in urban environments will also constitute species that add visual or amenity value to the landscape.
 - 2. **Habitat complexity** encourage vertical and horizontal complexity of structure within habitat patches, whatever their size. This maximises the number of niches available for species.

- 3. **Connectivity** encourage physical and functional connections between habitat patches so the green infrastructure begins to coalesce into a more resilient system.
- 2.4 The more connected fragments of habitat are, the more resilient to change they become. Species can move more freely between patches and are less likely to die-out; thus habitat biodiversity can be maintained, even in the face of disturbance such as climate change. Moreover, improving the connectivity and quality of green networks will mean they increasingly deliver a range of 'ecosystem services' to city residents (e.g. clean water, flood mitigation, safe, low-pollution active travel networks and visually attractive green areas for play, recreation, exploration and education).
- 2.5 The Edinburgh Local Biodiversity Action Plan, for which the Council is the lead partner, is an established framework for local biodiversity conservation. Working with the Edinburgh Biodiversity Partnership, the Council identifies priorities for biodiversity conservation within the action plan. These priorities in turn help deliver improvements to green networks and underpin ecosystem services. The Edinburgh Living Landscape programme would build on recent habitat creation work on the Council estate and make a significant contribution to biodiversity gains across the city.
- 2.6 The Council has already done a lot to naturalise its green space estate. Notably, over the last 12 years the Council has been active in creating community woodlands. The Edinburgh Urban Forest Project created over 100 Millennium Woodlands, which have now been thinned to reduce density and encourage ground flora and accessibility.
- 2.7 In the last couple of years 'Pictorial Meadows' (colourful annual and perennial meadows with a mix of native and non-native species to create a long flowering period) have been trialled in a number of parks and in housing regeneration areas generally with great success.
- 2.8 The Council is also part of the Urban Pollinator Project, a three year scientific collaboration between universities, city councils and wildlife trusts in four UK cities: Bristol, Edinburgh, Leeds and Reading. It is a scientific study to determine which urban environments best support populations of insect pollinators, and to this end 15 wildflower meadows have been sown in parks and greenspaces across Edinburgh.

Main report

- 3.1 In order to get up-to-date information on the extent and type of landscape features maintained by the Council, Parks and Greenspace has been leading an initiative to map the current open space estate on a Geographical Information System. In broad terms, this shows that SfC maintains 1520 hectares of greenspace across parks, housing estates, schools, nature reserves and roadsides. Of this:
 - 58% is Standard Amenity Grassland
 - 23% Woodland
 - 9% Low Maintenance Grassland
 - 6% Sports Pitches
 - 2% Shrubs and Bedding
 - 2% Play Areas, Water Features, Hedges etc
- 3.2 Because such a large proportion of the greenspace estate is intensively maintained grassland, a further exercise was undertaken to determine how much of this could be maintained in a less-intensive manner without impacting on amenity or sports use. As a result, it is estimated that between 10-25% of the Council's standard amenity grassland could be maintained with larger (and less intensive) machinery, or altered to low maintenance grassland (e.g. wildflower meadow), woodland, or as other less intensive landscape features. A successful example of this naturalisation can be seen in Holyrood Park, where once regularly cut/grazed grassland is now cut only once per year; to the benefit of both wildlife and public amenity.
- 3.3 Realising the possibilities for change, twenty-two low amenity grassland trials were undertaken in 2012 and 2013. Some of these were monitored for their benefits to pollinating species by Edinburgh University, and others were assessed for their attractiveness to green space users. In short, all the meadows created attracted large numbers of pollinating species, and those meadows that were particularly colourful over a long period of time proved popular amongst people. Examples of these can be seen in Appendix 1.
- 3.4 Discussions with the Scottish Wildlife Trust led to its Board 'adopting' Edinburgh as the third location within the Trust's Living Landscape programme after Cumbernauld (to enhance, restore and reconnect green areas of the town) and Coigach-Assynt (one of the largest rural landscape restoration projects in Europe). As a result, an Edinburgh Living Landscape (ELL) Programme Board was established to shape and steer the delivery of a programme plan aimed at establishing and maintaining healthy ecosystems throughout the city, both across the Council estate and within other green spaces. It has met on several

- occasions and, chaired by Councillor Gardner, consists of representatives from City of Edinburgh Council, Scottish Wildlife Trust, Cockburn Association, University of Edinburgh, Scottish Natural Heritage, Edinburgh and Lothians Greenspace Trust, OPENSpace, Forest Research, and Scottish Environment Protection Agency.
- 3.5 The Board has agreed a Memorandum of Cooperation, a vision has been drafted and a work programme has been compiled. In short, the Living Landscape approach in Edinburgh will consider the ecosystem as a functioning unit and develop ways to improve the health of the ecosystem as a whole over the long term. This will benefit urban wildlife and improve the quality of 'natural services' upon which city dwellers rely, such as improved air quality, flood amelioration, and increased encounters with nature in daily life. The Edinburgh Living Landscape approach will eventually provide an overarching vision and context for future land management decisions.
- 3.6 Five strategic objectives have been agreed:
 - Ecosystem health of Edinburgh is improving year on year;
 - Improved ecosystem health in Edinburgh is having measurable socioeconomic benefits for the city, particularly in areas of deprivation;
 - More people are engaged in caring for their local greenspaces;
 - More people are making use of Edinburgh's connected network of green and blue spaces to move around the city by walking and cycling; and
 - New developments are planned and delivered in such a way as to create low carbon, walkable neighbourhoods, and workplaces containing high quality green infrastructure.
- 3.7 The proposed work programme can be found in Appendix 2. An essential part of the first year work programme is to develop a set of indictors to measure successful outcomes of the ELL. Indicators are therefore being developed by the indicator subgroup to measure the strategic objectives and the characteristics of the city of Edinburgh. The existing regional habitat network models and Edinburgh Biodiversity Action Plan will inform delivery and projects within the ELL programme.
- 3.8 Another essential part of the programme will be to coordinate action amongst stakeholders, partners, community groups etc. and identify and engage with potential funders to deliver the projects. Although securing external funding for some projects will be required, it is also envisaged that aligning policies and actions with the objectives of the ELL will facilitate the delivery of the projects.

Measures of success

- 4.1 More varied and visually interesting green spaces.
- 4.2 Landscape quality is improved while maintenance requirements are reduced.
- 4.3 Additional external resources are secured to support the initiative.
- 4.4 Increased bio-diversity.

Financial impact

5.1 By operating as a partnership with other bodies, resources that the Council is not able to apply for directly may be accessed via partners (e.g. Climate Challenge Fund, Scottish Natural Heritage grants etc).

A funding application has already been made to support the Edinburgh Living Landscape initiative. This will form part of the national bid to the European Union Green Infrastructure programme by Scottish Natural Heritage and will require match funding from the Council. The success of this should be known by early summer.

Risk, policy, compliance and governance impact

- 6.1 The Edinburgh Living Landscapes Programme Board is chaired by Councillor Gardner.
- 6.2 There are no identified risks, policy or compliance impacts associated with this report.

Equalities impact

- 7.1 There is no relationship between the matters described in this report and the public sector general equality duty. There is no direct equalities impact arising from this report.
- 7.2 An improved natural landscape brings wildlife closer to where people live and work. Access to wildlife is therefore improved for all.

Sustainability impact

8.1 Living landscapes are by their nature more sustainable than traditionally maintained landscape features. They require less intensive maintenance, which reduces carbon emissions and enhances floral and faunal biodiversity.

- 8.2 As a signatory to the Central Scotland Green Network (a national development in the National Planning Framework) the Council has committed to a 'step change' in restoring and improving Edinburgh's green network, including a focus on naturalisation, increased greenspace connectivity, and enhanced landscapes resilient to/reducing the impact of climate change. The CSGN identifies an attractive and diverse physical environment as a principle for the delivery of a healthy and sustainable economic future for central Scotland.
- 8.3 The Council's Local Biodiversity Action Plan contains actions to improve the extent, quality and connectivity of Edinburgh's semi-natural habitats, and forms the key instrument for realising the Council's 'biodiversity duty' under The Nature Conservation (Scotland) Act 2004.
- 8.4 Similarly, the ecosystem approach is advocated across national and local strategic policy, notably:
 - National Planning Framework
 - Scottish Planning Policy
 - Green Infrastructure: Design and Placemaking
 - 2020 Challenge for Scotland's Biodiversity
 - Sustainable Edinburgh 2020
 - Edinburgh Biodiversity Action Plan

Consultation and engagement

9.1 An Edinburgh Living Landscape Programme Board has been established to widen engagement beyond the Council. Chaired by the Council, the Board includes representation from the Scottish Wildlife Trust, Cockburn Association, University of Edinburgh, Scottish Natural Heritage, Edinburgh and Lothians Greenspace Trust, OPENSpace, Forest Research, and Scottish Environment Protection Agency.

The Edinburgh Living Landscape partners comprise the City of Edinburgh Council, The Scottish Wildlife Trust and Edinburgh and Lothians Greenspace Trust.

Background reading/external references

None

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Links

Coalition pledges	 P33 - Strengthen Neighbourhood Partnerships and further involve local people in decisions on how Council resources are used P43 - Invest in healthy living and fitness advice for those most in need P48 - Use Green Flag and other strategies to preserve our green spaces P50 - Meet greenhouse gas targets, including the national target of 42% by 2020
Council outcomes	CO7 - Edinburgh draws new investment in development and regeneration CO10 - Improved health and reduced inequalities CO18 - Green - We reduce the local environmental impact of our consumption and production CO19 - Attractive Places and Well Maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and the delivery of high standards and maintenance of infrastructure and public realm CO23 - Well engaged and well informed – Communities and individuals are empowered and supported to improve local outcomes and foster a sense of community CO24 - The Council communicates effectively internally and externally and has an excellent reputation for customer care CO25 The Council has efficient and effective services that deliver on objectives CO26 The Council engages with stakeholders and works in partnership to improve services and deliver on agreed objectives
Single Outcome Agreement	 SO1 - Edinburgh's Economy Delivers increased investment, jobs and opportunities for all SO2 - Edinburgh's citizens experience improved health and wellbeing, with reduced inequalities in health SO3 - Edinburgh's children and young people enjoy their childhood and

fulfil their potential

SO4 - Edinburgh's communities are safer and have improved physical and social fabric

Appendices

Appendix 1: Trial Wildflower meadow images

Appendix 2: Proposed projects

The Edinburgh Living Landscape Programme

Appendix 1: Trial Wildflower Meadow Images

Figgate Park	Drum Brae Park	Davidson's Mains Primary
Firhill High School	Firhill High School	Harrison Park
Lochend Park	Hailes Quarry Park	Figgate Park

Appendix 2: Proposed projects for Edinburgh Living Landscape

Project	Baseline data	Strategic objectives
Mapping broad and fine-scale greenspace/bluespace connectivity and greenspace typology (including ecosystem services)	CEC have already produced a report Mapping Edinburgh's Natural Green Network- data inputted from: Open Space Audit; Natural heritage sites; woodland sites. Identified 15,288.1 hectares of natural green network, comprised of 488 patches; several categories which will need to be included to increase sensitivity range from school grounds to road verges.	1,4,5
Increase by c. 10 % area of wildflower meadows on council owned land	c. 138 ha, includes biodiversity/grass meadow and low maintenance grass); CEC have assessed that around 10% of CEC managed open space has the potential to be converted to wildflower meadows.	1,3,4
Increase no. of urban trees and urban woodland; selecting trees appropriate for the location (i.e. increase land coverage to 20% inclusive of increasing number of street trees by 1500 street trees. Both would take around a decade to achieve)	17% of Edinburgh's land area is covered by tree canopies and there are c. 638,000 trees in Edinburgh ¹ ; current population of street trees is 8,550; The area of native woodland in Edinburgh is 515 ha, which is 18.1% of the total woodland area, or 2.0% of the total land area of Edinburgh. ²	1-5
Increase the number of green exteriors of buildings (e.g. green roofs and walls) where such armature and building design would be appropriate for the location	No data	1, 2,5
15% of city parks naturalised (excluding wildflower meadows)		1,3,4
At least 10,000 people signed up to wildlife gardening pledge	No data; although CEC has advice about gardening for wildlife on the Council's website.	1,2,3
Increase no. people growing their own food (or increase number of food growing areas)	The City of Edinburgh Council manages 1233 allotment plots, spread over 21 sites across the city.	2,3
Work with planning department to produce a policy statement on the ecosystem approach and planning in Edinburgh	N/A	1,5
Work with volume house builder to showcase exemplar high quality	N/A	3,5

¹ From CEC's Trees in the City Trees & Woodlands Action Plan ² Forestry Commission's Native Woodland Survey of Scotland: City of Edinburgh Council

Project	Baseline data	Strategic objectives
and wildlife rich landscapes in new development (s)		
Work with flood prevention team on nature based solutions to slow water movement	N/A	1,5
Provide accessible, multifunctional, high quality greenspace for all (i.e. within a 10 minute walk) to suit the biocultural needs of residents		2,3,4,5
Increase areas of sealed soil 'depaved'	No data	1
Increase the number of local communities adopting local parks	There are 43 Friends Groups of parks out of a potential 142 parks	2,3,4
Increase and coordinate activity to remove invasive non-native species	No data on total area covered by INNs; CEC has set up a team to tackle Himalayan balsam, giant hogweed and Japanese knotweed on Council owned land.	1
Bringing all Local Biodiversity Sites under active management	29 LBS	1,3
No. of schools having access to a high quality local greenspace for outdoor learning	No data	3
At least 10 'stalled sites' rejuvenated to deliver benefits for local people and wildlife	ELGT prepared a Vacant Land Feasibility Study in 2010 which identified 12 suitable sites	1, 3,4
Increase biodiversity value of active travel routes	No data	1-5
Increase the awareness of nature conservation value of Edinburgh's freshwater and coastal habitats	No data	1,2