

# Policy and Sustainability Committee

10.00am, Tuesday 22 February 2022

## Edinburgh Biodiversity Action Plan update and proposed “Nature Positive City” vision

Executive/routine

Wards

All

Council Commitments

[43, 44](#)

### 1. Recommendations

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- 1.1 It is recommended that Policy and Sustainability Committee:
  - 1.1.1 Approves the Council’s response to the ecological crisis through the development of a Vision for a Nature Positive City, in tandem with a replacement Edinburgh Biodiversity Action Plan; and
  - 1.1.2 Notes the 2021 update for the Edinburgh Biodiversity Action Plan 2019-2021 in Appendix 1.

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# Report

## Edinburgh Biodiversity Action Plan update and proposed “Nature Positive City” vision

### 2. Executive Summary

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- 2.1 A recent [Joint Nature Conservation Committee](#) report has set out the commitment of all United Kingdom (UK) governments to be ‘Nature Positive’ by 2030, alongside other international commitments, in response to the ecological crisis and continued national declines in biodiversity. This report sets out the Council’s response to the ecological emergency and the proposed development of a ‘Vision for a Nature Positive City’ in tandem with a replacement Edinburgh Biodiversity Action Plan. The report also considers the annual update of the Edinburgh Biodiversity Action Plan 2019-21 (Appendix 1).

### 3. Background

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- 3.1 This past year has seen a global focus on the twin emergencies for the climate and the natural environment. As the COP15 meeting on Biological Diversity approaches in spring 2022, international, UK and Scottish Governments all recognise the need for further ambition and transformational change to reverse decades of decline in biodiversity and degradation of ecosystems. This report sets out the Council’s response to this challenge through delivery of the Edinburgh Biodiversity Action Plan 2019-21 and the relationship between the climate and ecological emergencies.

### 4. Main report

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- 4.1 The Edinburgh Biodiversity Action Plan 2019-21 (EBAP) is delivered by the Edinburgh Biodiversity Partnership (EBP), a group of more than 30 stakeholders (led by the Council) which includes Council departments, government agencies, research and conservation organisations, environmental trusts, charities and volunteer organisations. Appendix 2 contains a list of partners. The EBAP was first produced in 2000, and it meets the Council’s statutory duty under the Nature Conservation (Scotland) Act 2004 for all public bodies to ‘further the conservation of biodiversity’. Development of a replacement plan is underway.

- 4.2 Appendix 1 contains the EBAP progress report for 2021, which highlights some of the activity carried out. While some delivery remains impacted by COVID-19, many conservation management activities have been able to resume. These include habitat management and creation, practical conservation work and citizen science survey work. There has also been a focus this year on strategy and policy work relating to the natural environment (for example, the 2030 Climate Strategy and Implementation Plan, City Plan 2030, and development of a Green-Blue Network).
- 4.3 While recognising that there is positive work being delivered in Edinburgh to address the ecological crisis, globally biodiversity continues to decline. Much of this decline is driven by pressures such as habitat loss, inappropriate management, invasive species, increase in chemical use, pollution and climate change. In the UK, 40% of species are in decline and a quarter of mammals are threatened with extinction.
- 4.4 Within the last year each of the four countries of the UK have made significant commitments for nature, with distinct and evolving policies and powers to recover nature and to respond to climate change. All have recognised the need for ambitious, transformative change across sectors and in the way we protect, value, use and engage with nature. Perhaps most notably the UK has committed to:
- 4.4.1 'Halt and reverse biodiversity loss by 2030' at the G7 summit in June 2021, in other words to become Nature Positive by 2030;
  - 4.4.2 The Leaders' Pledge for Nature, which has so far been signed by leaders from over 85 countries; and
  - 4.4.3 The '30by30' commitment to protect 30% of our land and seas for nature by 2030, agreed by more than 60 countries.
- 4.5 There has rightly been an urgent focus on Edinburgh meeting the 2030 net zero target, following the climate emergency declaration by the Council in 2019. However, it is increasingly recognised that the climate and ecological emergencies are linked crises. Biodiversity loss and climate change share many of the same causes and solutions. Restoring wildlife habitats on land and sea locks up carbon. Studies have shown that carbon sequestration in soils and vegetation can help meet as much as 30-40% of emission reductions needed to reach net zero targets.
- 4.6 Nature based solutions are also critical to adapting the city to climate change, such as by reducing flood risk, reducing urban overheating and insulating against extremes of temperatures. Other ecosystem services provided by nature include reducing air and water pollution, pollination services and health and wellbeing benefits.
- 4.7 Alongside the 2030 Climate Strategy and net zero targets, the recently approved ['Vision for Water Management'](#) sets out high level principles for dealing with future drainage, pollution and flooding challenges which include using nature based solutions.
- 4.8 It is proposed that a related 'Vision for a Nature Positive City' is now developed, in tandem with the next Edinburgh Biodiversity Action Plan. This would underpin that

the natural environment is an essential component for meeting our strategic aims on net zero, adaptation, water management and to reverse declines in biodiversity.

- 4.9 The Vision would set out clear guiding principles on land management, infrastructure, developments and projects to ensure that future infrastructure changes result in positive effects for biodiversity and the natural environment. This creates a nature positive, climate resilient city for our residents supporting economic, sustainability and wellbeing outcomes.
- 4.10 The Vision would also give a strategic context for work already underway, such as:
  - 4.10.1 Edinburgh Biodiversity Action Plan;
  - 4.10.2 City Plan 2030 new policies on biodiversity and green-blue infrastructure;
  - 4.10.3 Green-Blue Network;
  - 4.10.4 Thriving Green Spaces programme (including Edinburgh Nature Network); and
  - 4.10.5 Million Tree City project.

## **5. Next Steps**

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- 5.1 Work with Council services and other stakeholders to develop a 'Vision for a Nature Positive City' and other responses to the ecological emergency and prepare a new EBAP. An update report will be submitted to committee in summer 2022.

## **6. Financial impact**

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- 6.1 There are no financial implications arising from this report.

## **7. Stakeholder/Community Impact**

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- 7.1 The Edinburgh Biodiversity Partnership have contributed to the production of the progress report in Appendix 1. The Partnership support the development of a 'Vision for a 'Nature Positive City'. The development of a Vision and the next Edinburgh Biodiversity Action Plan will be produced in collaboration with the Partnership and other stakeholders.
- 7.2 The work outlined in Appendix 1 and the proposal for a 'Vision for a Nature Positive City', all help to meet targets for reduced carbon, adaptation to climate change and increased biodiversity.

## **8. Background reading/external references**

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- 8.1 [Edinburgh Biodiversity Action Plan 2019-21.](#)

- 8.2 Natural England, JNCC, Natural Resources Wales, NatureScot and Northern Ireland Environment Agency (2021) [Nature Positive 2030 – Summary Report](#).
- 8.3 [Edinburgh Declaration, Policy and Sustainability Committee 20 April 2021](#).

## **9. Appendices**

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- 9.1 Appendix 1 - EBAP annual report.
- 9.2 Appendix 2 – List of Edinburgh Biodiversity Partnership members.

# Edinburgh Biodiversity Action Plan

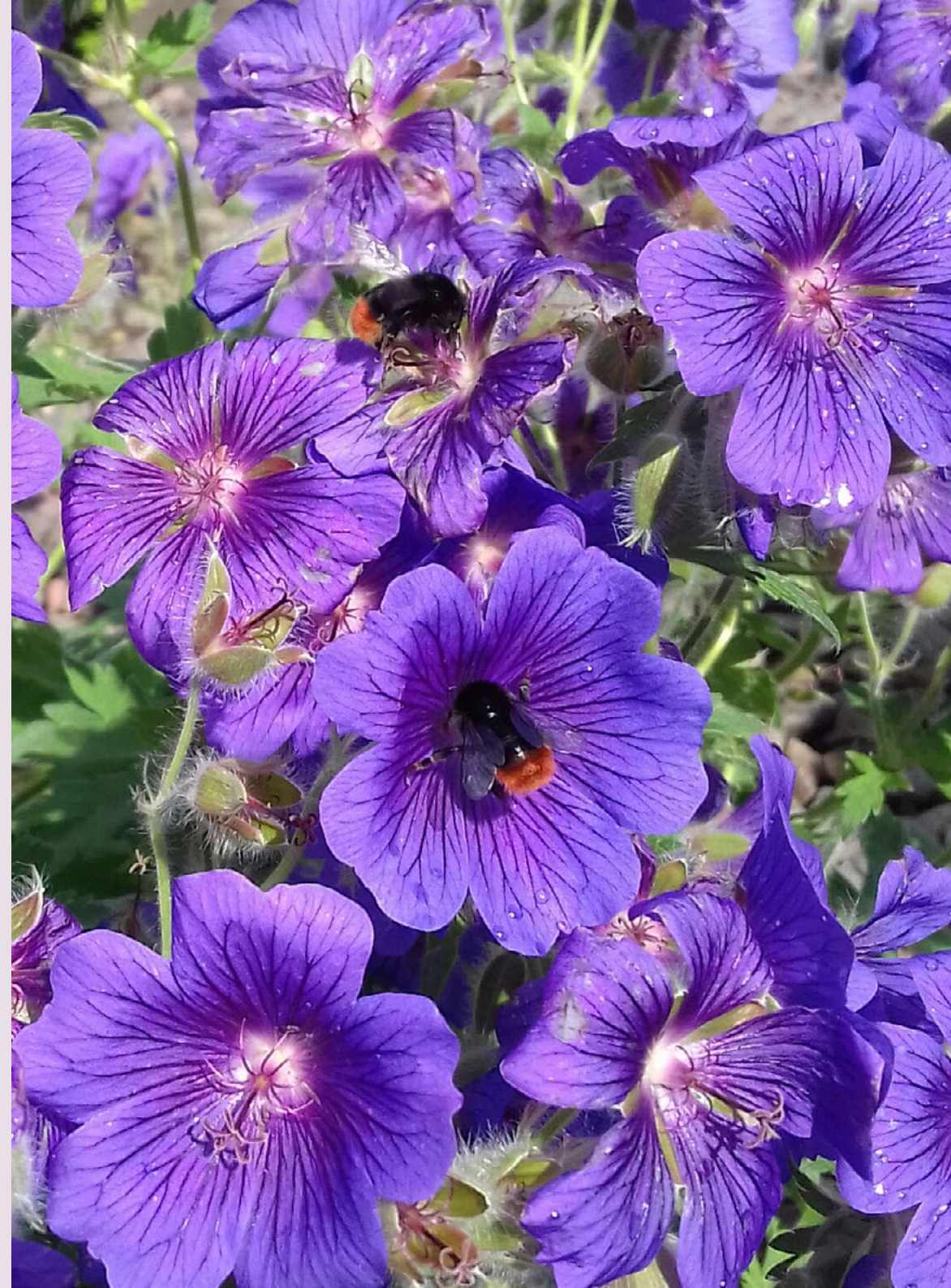
## 2019-2021

### Progress Report 2021



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## Chair's foreword

I am pleased to have continued as Chair of the Edinburgh Biodiversity Partnership as we have returned to some conservation activities in the past twelve months. 2021 has been another year of disruption which has impacted everyone. Across the Partnership, individuals and organisations have adapted to challenges by embracing new and different ways of working. Much has been achieved in policy and strategy changes, and in projects which are using existing data to identify priority areas for future action, such as the work on the Green-Blue Network. We have seen, over the course of this year, a gradual return to some practical conservation work, project delivery and community and volunteer activities to manage and monitor important sites. Face to face indoor events are still mostly paused, but successful use of online meetings, seminars, conferences and training events have in many cases allowed far greater attendance and reach than normal in-person events. We continue to see an increase in valuable citizen science wildlife recording and the number of species records held for Edinburgh has increased by more than 50,000 in the last year. Many previously unrecorded species, as well as species not recorded for years or decades, have been added to Edinburgh's list of wildlife records. A noticeable valuing and appreciation of wildlife and its positive effects on people's wellbeing, has been recognised through the pandemic. These improvements in understanding and appreciating wildlife in our city are even more important, in light of recent reports on the ecological emergency, such as the JNCC report Nature Positive 2030, which highlight the need for transformational change in how we value and invest in the recovery of nature from decades of ecosystem decline.

As the Partnership prepare a new Edinburgh Biodiversity Action Plan for 2022 and beyond, we will set out a vision and principles for supporting nature's recovery by improving the quality and connectedness of our natural spaces across the city, to become a Nature Positive City.

**Dr Max Coleman**

**Royal Botanic Garden Edinburgh**

**Chair of Edinburgh Biodiversity Partnership**



# Introduction

This year has seen a global, national and local focus on the twin emergencies for the climate and the ecological crisis. The work of the Edinburgh Biodiversity Partnership has mirrored this focus, with the Council and partners involved at all three levels:

- Council signed the Edinburgh Declaration in lead up to COP 15 on Biological Diversity
- Partners attended COP 26 to promote nature-based solutions and the links between climate and nature
- Council and other partners contributed to Scotland-wide work on policy and guidance responses to the ecological crisis, eg for National Planning Framework 4 (NPF4), with Scottish Government and NatureScot.
- Collaborating on city wide programmes such as Climate Strategy 2030, Vision for Water Management, City Plan 2030 and development of a Green Blue Network and Edinburgh Nature Network.
- Working with local communities and volunteers to enhance parks and greenspace to increase biodiversity and wellbeing.

The 2019 declaration of a Climate Emergency and target for Edinburgh to be net zero carbon by 2030 have given a new focus for biodiversity action. A healthy natural environment is essential for resilience to deal with the challenges of climate change. Green surfaces, trees and vegetation can all offset the problems caused by climate change in urban areas such as extreme rainfall events, flooding, pollution, poor air quality, urban overheating and building insulation to lower energy and carbon demands. Habitats and soils also act as carbon stores.

The work of the Partnership is reflected in plans and strategies relating to climate change, represented on the Edinburgh Adapts Steering Group and will continue to respond and collaborate on emerging priorities from strategic projects like the Green Blue Network and Million Trees initiative.

The work of the Council and Partnership has also been reflected in the Council signing up to the 'Edinburgh Declaration'. The Declaration recognises the importance of subnational governments, cities and local authorities work to deliver positive gains for biodiversity, and how this help meet global targets. Work is underway to develop post-2020 global targets for biodiversity conservation at the COP 15 Biological Diversity event delayed until May 2022 in China.

The Edinburgh Biodiversity Partnership continues to reap the benefits of strong partnership working. During lockdowns and throughout restrictions, meetings and public engagement have moved on-line. Although not a substitute for face-to-face contact, online training events and meetings have seen an increase in attendance with no travel or cost barriers to taking part.



# Achievements 2021

This review highlights just some of the outcomes and actions from the last year delivered by the Partnership. Further information about the overall programme and aims is available from the [Edinburgh Biodiversity Action Plan 2019-2021](#).

## Aim 1

### Raise awareness of the rich biodiversity in Edinburgh

- **The Wildlife Information Centre (TWIC)** continue to provide records and wildlife and habitat data to help us better manage our biodiversity. They held **5** online workshops attended by 125 people. 6 additional Local Biodiversity Site assessments were carried out. TWIC hold **352,232** species records for City of Edinburgh.
- **The RSPB Swift Cities Edinburgh** project has engaged volunteers and communities in swift conservation activities through online events and training. 8 school and youth group events were held; 5 murals created; swift walking and cycling routes promoted; 311 volunteers trained in swift recording; 112 new nest boxes installed across the city.
- **Water of Leith Conservation Trust** use social media and regular blog posts to promote the importance of the river for wildlife, and support activities such as clean ups and litter reduction. With funding they have trained 15 volunteers this year in plant surveys to monitor habitat projects and invasive plants.



- **Royal Botanic Garden Edinburgh** continue to promote **nature based solutions and green infrastructure**. Interpretation has been installed at the [demonstration raingarden](#) in the garden and it continues to be promoted. A [green wall](#) was installed at Waverley Station during COP 26 as part of a programme of events.
- **Historic Environment Scotland Ranger Service manage Holyrood Park** which is an important site with rare invertebrate and plant species. In 2021 **40** butterfly transect surveys were completed; 6 bumblebee transects undertaken. These surveys contribute to national monitoring schemes for biodiversity.
- **University of Edinburgh** have promoted a **Hedgehog Friendly Campus** project with signage and information.
- Most partners increasingly use **social media** with platforms on Twitter, Facebook, a website and blog for the Edinburgh Biodiversity Partnership to engage with new and existing audiences about the richness and diversity of Edinburgh's wildlife

## Aim 2

### Encourage participation from Partners and others to take positive action to protect and enhance the natural environment

- **Butterfly Conservation Scotland** have worked on a variety of sites to promote better greenspace habitats for butterflies, such as longer naturalised grass and wildflower areas as part of the **Council's Nature in your Neighbourhood** project of parks naturalisation. Silverknowes park is an example of one of the new 'stepping stone' habitat sites and is now home to 14 species of butterfly.
- **Edinburgh Lothians Greenspace Trust** created two 'wee forests' Forests' in West Pilton Park and Peacocktail Close with NatureScot funding. 600 native trees were planted at each location with the help of local schools and local community groups
- **Royal Botanic Garden Edinburgh** completed the first phase of the **Shoreline** project and successfully secured £600k in funding to extend the project to restore seagrass and oyster beds. Seagrass is a very effective carbon store so also supports net zero aims.
- **The Water of Leith Conservation Trust** has carried out 25 practical tasks with volunteers on 11 'Biodiversity Boost' sites along the river. This includes planting 1000 wildflower plugs and 1000 native bulbs this autumn.
- Biodiversity Challenge Funded project, the **B-line**, has delivered pollinator habitat along the **John Muir Way**. Other areas such as the shoreline have also had meadow creation work carried out in partnership with Buglife, Butterfly Conservation, volunteers and CEC.
- **CEC Natural Heritage Service** continue to actively manage meadow sites through cutting, raking and removing arisings. New tree planting at Bonaly Country Park and invasive gorse clearance to protect grassland and woodland habitats has been carried out. Volunteers have undertaken species surveys including bee and butterfly transect surveys.
- **Scottish Wildlife Trust** continue management of their Edinburgh reserves to improve habitat condition such as the species rich grassland at Murder Acre, and for target priority species such as Small Pearl Bordered Fritillary at the Red Moss reserve.
- **CEC Parks, Greenspace and Cemeteries** support over 70 Friends groups and are taking part in a pilot with Aberdeen Standard Life to offer project support to a small number of groups for biodiversity work. 79 urban meadows have been managed in 2021 as part of Nature in my Neighbourhood. Initial funding for the Million Tree project has been secured.
- **Edinburgh and Lothian Greenspace Trust's Tree Time project** raised over **£46k** from donations to plant 115 new street trees throughout the City. With funding from the Biodiversity Challenge Fund, ELGT have also undertaken meadow creation, native hedgerow planting, bee banks, butterfly planters for Northern Brown Argus and scrub creation at Little France Park.
- **CEC Planning** continues to encourage design features for biodiversity such as artificial swift nesting features, landscape features such as swales and living roofs provision in new developments.



## Aim 3

### Aim 3 Promote co-ordination and communication between Partners and others to further conservation action in Edinburgh.

- Collaboration between **Marine Conservation Scotland**, RBGE, CEC Parks, Greenspaces and Cemeteries in promoting **Great British Beach Clean** in September.
- **Historic Environment Scotland Ranger Service** continue to monitor and actively encourage introduction of **rare plant** species in other locations through a programme of seed collection and growing on of plants.
- **Thriving Green Spaces and University of Edinburgh** developed a **Green Infrastructure** modelling tool which has been piloted on the mapping of University of Edinburgh campus locations as part of a 'How Green is you Campus' project. The GI tool has also been used to map 6 city parks and calculate a GI factor.
- **Scottish Wildlife Trust and Thriving Green Spaces** have developed an **Edinburgh Nature Network** with stakeholders. Early outputs have contributed to City Plan 2030 and a Green-Blue Network.
- **Water of Leith Conservation Trust** engage with communities, landowners and others to resolve issues with litter impacts on the river, including in badly affected areas such as the basin at the Shore in Leith. They also co-ordinate a programme of invasive species control along the river corridor.
- **University of Edinburgh and CEC** collaborated on a [ParkLife project](#) looking at innovative ways to manage and value parks and greenspace.
- Edinburgh Biodiversity Partnership has promoted a series of online training workshops organised by **Butterfly Conservation Scotland and Buglife Scotland**.
- **The Wildlife Information Centre** has uploaded 20 datasets for the CEC area to the NBN Atlas to date. For an up-to-date list of all the datasets TWIC has uploaded to the NBN Atlas from its own surveys and on behalf of other organisations, individuals or local groups visit: <https://registry.nbnatlas.org/public/show/dp43>.



## Aim 4

### Influence other plans, policies, projects and strategies relating to Edinburgh.

- **Edinburgh City Plan 2030** – new policies relating to designing in positive effects for biodiversity and green-blue infrastructure in new developments have been included in the recently published draft City Plan 2030.
- **Green Blue Network for Edinburgh** – working to develop a Green-Blue Network for the city, using a nature-based solutions approach to the challenges of surface water and other flooding, and pollution, to make the city infrastructure resilient to the impacts of climate change.
- **University of Edinburgh** have published a [biodiversity strategy](#) and are taking forward a varied programme to understand and promote biodiversity on their estate and beyond.
- **NatureScot** – continuing to provide management advice for protected sites and information in relation to licences affecting the Firth of Forth as well as undertaking site condition monitoring of Firth of Forth SSSI.





## Global and national context

Within the last year, the UK governments have made hugely significant commitments for nature. Each of the four countries of the UK have distinct and evolving policies and powers to recover nature and to respond to climate change, and all have recognised the need for ambitious change. Perhaps most notably the UK has committed to:

- the Leaders' Pledge for Nature, which has so far been signed by leaders from over 85 countries,
- the '30by30' commitment to protect 30% of our land and seas for nature by 2030, agreed by more than 60 countries.
- At the G7 summit in June 2021, the UK also committed to 'halt and reverse biodiversity loss' by 2030, in other words to become Nature Positive by 2030.

These commitments require transformative change across sectors and in the way we protect, value, use and engage with nature.

Scottish Government and NatureScot have both published documents supporting this transformational change. National Planning Framework 4 and position statements from Nature Scot on 'Positive Effects for Biodiversity' both seek the scale of change required to create a 'Nature Positive' future. NatureScot have also announced significant new funding of £55m for the whole of Scotland in its Nature Restoration fund.

City of Edinburgh Council have signed up to the 'Edinburgh Declaration', which was developed when the Scottish Government held a meeting for Post 2020 Global and Sub-national Biodiversity Targets in May 2020.

Local Biodiversity Action Plans were first produced as part of the UK response to the requirements of the United Nations Convention on Biological Diversity signed at the Rio Earth Summit in 1992.

Local action plans continue to contribute to the work required to meet national and global targets. The current UN targets, known as [Aichi Targets](#) are in place until new global targets are agreed at the delayed COP 15 meeting in May 2022, and these are summarised below.



## Aichi Biodiversity Targets

- **Strategic Goal A:** Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.
- **Strategic Goal B:** Reduce the direct pressures on biodiversity and promote sustainable use.
- **Strategic Goal C:** Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.
- **Strategic Goal D:** Enhance the benefits to all from biodiversity and ecosystem services.
- **Strategic Goal E:** Enhance implementation through participatory planning, knowledge management and capacity building.

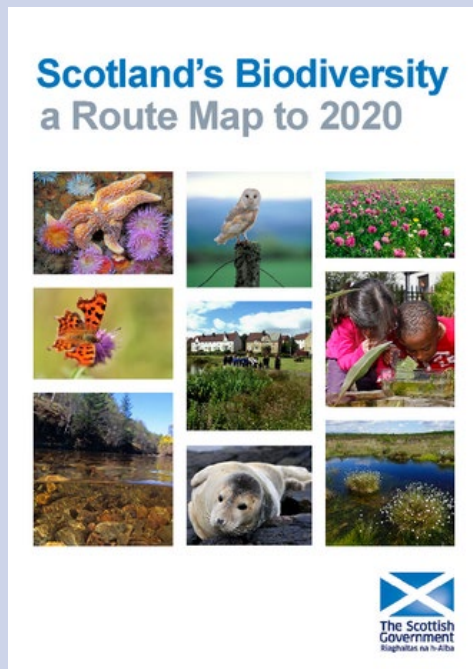
In Scotland, these Aichi targets are translated into national targets in the Scottish Biodiversity Strategy, and in '[Scotland's Biodiversity: A Route Map to 2020](#)'. The Route Map identifies the Six Big Steps for Nature as a mechanism for meeting the Aichi Targets. These are:

- Ecosystem Restoration
- Investment in Natural Capital
- Quality Greenspace for health and education benefits
- Conserving wildlife in Scotland
- Sustainable management of land and freshwater
- Marine and coastal ecosystems restored

All of the actions in the Edinburgh Local Biodiversity Action Plan 2019-2021 can be linked directly to at least one, and in most cases more than one, of these Scottish priorities.

## Singapore Index

The City Biodiversity Index or [Singapore Index on Cities Biodiversity](#) is a self-assessment tool for cities to evaluate and monitor the progress of their biodiversity conservation efforts against their individual baseline. Edinburgh has been a key player in the review of the index. An updated version was produced in October 2021.





## Looking ahead to 2022

2021 is the final year of the current Edinburgh Biodiversity Action Plan 2019-21. Work to prepare a replacement plan for the city is underway. There will be a focus in 2022 on developing a vision for the city to become 'nature positive' in response to the ecological crisis. This will involve working in tandem with the Climate Strategy and implementation plan, Vision for Water Management and Green Blue Network, Thriving Green Spaces programme and other projects, to ensure that future infrastructure changes result in positive effects for biodiversity and the natural environment. This creates a climate resilient city for our residents supporting economic, sustainability and wellbeing outcomes.

Following publication of the draft City Plan 2030 and NPF4, a review of Planning guidance to support new policies on biodiversity and green-blue infrastructure will begin.

Public engagement will focus on the importance of gardens for city wildlife (an estimated 26% of land in the city is private garden space). Online communications will be used to engage individuals and groups with the many opportunities for citizen science, nature and wildlife.

Opportunities for investment through the NatureScot Nature Restoration Fund, and other strategic funding opportunities, will be taken forward.

**The next Edinburgh Biodiversity Action Plan will be integral to the city's drive to be net zero by 2030 and will lead the agenda for being a Nature Positive City.**



# Edinburgh Biodiversity Action Plan

**2019-2021**

## Progress Report 2021



## Appendix 2 Members of the Edinburgh Biodiversity Partnership

<b>Partner</b>
Bumblebee Conservation Trust
Butterfly Conservation Scotland
British Dragonfly Society
Botanical Society of Britain and Ireland
Buglife
City of Edinburgh Council
Edinburgh Biodiversity Partnership
Edinburgh College
Edible Edinburgh
Edinburgh and Lothian Greenspace Trust
Edinburgh Living Landscape initiative
Edinburgh Natural History Society
Edinburgh Raptor Study Group
Edinburgh World Heritage
Forestry Commission Scotland
Forth Estuary Forum
Fungus Group South East Scotland
Forest Research
Forth Seabird Group
Historic Environment Scotland Ranger Service (Holyrood Park)
Heriot Watt University
Lothian and Borders Mammals Group
Lothian Amphibian and Reptile Group
Lothian Badger Group
Lothian Bat Group
Lothian and Fife Green Network Partnership
Lothian and Borders Geoconservation committee
Marine Scotland
New Caledonian Woodlands
Napier University
Rivers and Fisheries Trust Scotland
Royal Botanic Garden Edinburgh
Royal Society for the Protection of Birds
Royal Zoological Society Scotland (Edinburgh zoo)
Saughton Park Project Team
Scottish Environment Protection Agency
Scottish Natural Heritage/Now NatureScot
Scottish Ornithologists Club
Scottish Rural University College
Scottish Wildlife Trust
The Wildlife Information Centre
University of Edinburgh
Water of Leith Conservation Trust