

ITEM No ...6.....

REPORT TO: NEIGHBOURHOOD SERVICES COMMITTEE – 16 NOVEMBER 2020

REPORT ON: DUNDEE CITY COUNCIL'S BIODIVERSITY DUTY REPORT

REPORT BY: EXECUTIVE DIRECTOR OF NEIGHBOURHOOD SERVICES

REPORT NO: 286-2020

1.0 PURPOSE OF REPORT

1.1 To present Dundee City Council's Biodiversity Duty Report, highlighting action for biodiversity from 2018 – 2020, in compliance with its legal duty under the Nature Conservation (Scotland) Act 2004 and the requirement to make the report publicly available, under the Wildlife and Natural Environment Act (Scotland) 2011.

2.0 RECOMMENDATIONS

2.1 It is recommended that the committee approves the report, notes the achievements and remits the Executive Director of Neighbourhood Services to make the report publicly available.

3.0 FINANCIAL IMPLICATIONS

3.1 None.

4.0 MAIN TEXT

4.1 The Nature Conservation (Scotland) Act 2004 places a duty on public bodies 'to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions.' In addition, Local Authorities in Scotland have a requirement to report on their Biodiversity duty every three years as outlined in the Wildlife and Natural Environment (Scotland) Act 2011. The report should be publicly available and should outline the actions the public body has taken to meet this biodiversity duty. This report is due to be submitted before 1st January 2021 and is attached at appendix 1.

4.2 When documenting progress, public bodies should heed the Scottish Biodiversity Strategy. The Scottish Biodiversity Strategy includes the 2004 publication 'Scotland's Biodiversity: It's in Your Hands' and the '2020 Challenge for Scotland's Biodiversity' that was published by the Scottish Government in 2013. The 2020 Challenge document acts as a supplement, to take account of international Aichi targets (named after the location where they were agreed), EU and UK agreements and strategies for biodiversity. NatureScot published guidance for reports in September 2020.

4.3 Biodiversity in Dundee encompasses the multitude of species and habitats present within the city. Dundee City Council has carried out a number of actions which help safeguard biodiversity and encourage communities to take an active interest in the local environment. One of the main accomplishments has been the publication of the new Biodiversity Action Plan for the city in January 2020. This plan builds on the survey of Locally Important Nature Conservation Sites (LINCS) and Local Nature Reserves (LNRs) carried out in 2018/19. It is intended that the Dundee Biodiversity Action Plan will raise awareness of the wildlife (flora and fauna) of Dundee in an international, national and local context. This plan aims to highlight the contribution and influence of the local biodiversity on the quality of life and economic opportunities of everyone who lives in the city. This plan focuses action on the ecosystems, habitats and species most in need and ensures prioritisation of resources at a local level. It sets out clear objectives and targets to enable the monitoring of progress and enables measurement of any achievements. Progress on the Biodiversity Action Plan will be reported annually, with the first such report being produced early 2021.

- 4.4 Other actions within the Biodiversity Duty Report include the Natural Flood Defence project improving the sand dunes at Broughty Ferry, the Dundee Green Health Partnership and community engagement through nature themed events and volunteering provided by the Countryside Ranger Service and the 'Take Pride' Campaign. The report also highlights actions for the future, one of which will be to further reduce the Council's use of herbicide, used in the management of parks and greenspaces.
- 4.5 Over the period of the Biodiversity Duty report, the Council has continued to sow annual flower areas on road side verges throughout the City. They provide a colourful display for passers and also an important nectar source for pollinators. Dundee City Council also have a programme of control for invasive non-native plant species such as Giant Hogweed and Japanese Knotweed, which negatively impact on the native plants found in areas such as the Dighty corridor. Partnership working with the Scottish Invasive Species Initiative and NatureScot should result in further positive progress in the future.
- 4.6 The Dundee Law Heritage Project has also been completed in the Biodiversity Duty Report period. This large scale initiative has seen significant ecological improvements on the Law, including woodland management and further tree planting and establishment of wildflowers, as well as the creation of a new website, signage and footpath improvements.

5.0 POLICY IMPLICATIONS

This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk. A copy of the Impact Assessment is available on the Council's website at www.dundee.gov.uk/ia

6.0 CONSULTATION

- 6.1 The Council Management Team have been consulted in the preparation of this report and agree with its contents.

7.0 BACKGROUND PAPERS

- 8.1 None.

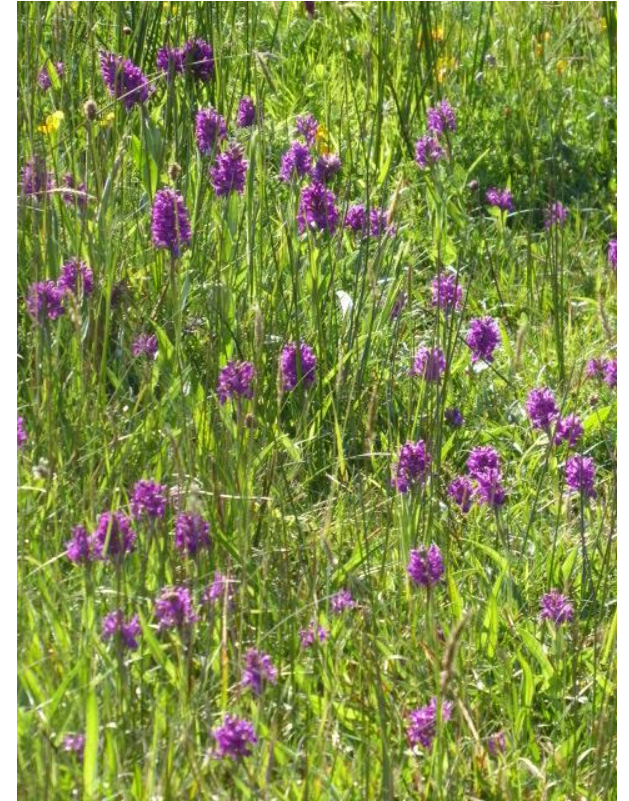
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26 October 2020



Photo Credit: Diane Milne 2020



BIODIVERSITY DUTY REPORT

2018-2020

DUNDEE CITY COUNCIL



Introduction

The Nature Conservation (Scotland) Act 2004 states that “It is the duty of every public body and office-holder, in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions”. This requirement is known as the Biodiversity Duty.

The Wildlife and Natural Environment (Scotland) Act (WANE) 2011 requires all public bodies to prepare and publish a report on their delivery of the Biodiversity Duty. Reports should be produced and made public every three years.

This is the second report for Dundee City Council and covers the period 1st January 2018 to 31st December 2020. It shows how Dundee City Council has delivered its Biodiversity Duty during this time and will follow the format below, suggested in the latest guidance produced by the Scottish Government and NatureScot.

- **Section 1:** Introductory information about your public body
- **Section 2:** Actions to protect biodiversity and connect people with nature
- **Section 3:** Mainstreaming biodiversity
- **Section 4:** Nature-based solutions, climate change and biodiversity
- **Section 5:** Public engagement and workforce development
- **Section 6:** Research and monitoring
- **Section 7:** Biodiversity highlights and challenges

Appendix 1. National and International Biodiversity Targets

This report will be made available on the Council’s website (www.DundeeCity.gov.uk), a copy can be requested via e-mail: environment@dundeeCity.gov.uk.

Section1. Introductory Information

The Dundee City Council area covers 60 square kilometres and is, geographically, the smallest local authority area in Scotland with a population of approximately 149,300. The Council is responsible for the management and maintenance of a large amount of land across the city as well as many buildings. It also provides a planning role in regulating development and infrastructure.

Dundee City Council has five direct service areas. Twenty-nine elected members oversee these through various service committees. The delivery of services by Leisure and Culture Dundee and Dundee and Dundee Health and Social Care Partnership are overseen by boards, on which Dundee City Council is represented.

Dundee City Council service areas:

1. **Chief Executive**- providing strategic leadership for the Council, supporting the management team and elected members in the development and delivery of the Council's aims and policy objectives, achieving better outcomes for the city. Ensures the Council has strong links with partners and the wider Dundee community and national agencies.
2. **Corporate Services**- provide central support functions to all service areas and a number of direct services to the general public.
3. **City Development**- promotion of jobs in the local economy, the maintenance of the city's road network, transportation facilities and Council properties and the control of development and building operations.
4. **Children's and Families Service**- ensures that children, young people and their families are at the heart of the decision-making process to provide them with the best possible start in life.
5. **Neighbourhood Services**- Services include the management and maintenance of housing and the environment, supporting people to develop their communities and keeping people safe and healthy.

The Environment section within Neighbourhood Services takes a lead role in delivering the biodiversity duty. The Greenspace Officer has a specific remit to further the conservation of biodiversity through the delivery of Dundee's Biodiversity Action Plan and provides advice, guidance and support to Council services helping to identify and encourage actions to further the conservation of biodiversity, in line with the Biodiversity Duty.

Section 2. Actions to Protect Biodiversity and Connect People with Nature

**see Appendix 1 for details of targets*

Action/Project	Description	National Targets*	International Targets*
Countryside Ranger Services	<p>Held various Conservation Volunteer afternoons carrying out various tasks to improve local habitats.</p> <ul style="list-style-type: none"> • 2018- Facilitated around 120 hours over 18 conservation volunteer sessions in local greenspaces. • 2019- Facilitated around 100 hours over 15 conservation volunteer sessions in local greenspaces. • 2020- Facilitated around 54 hours over 3 conservation volunteer sessions in local greenspaces. <p>Tasks have included bird and bat box building; wildflower planting; tree planting; litter picking; invasive species removal and citizen science projects.</p>	1.1, 3.1, 3.2, 3.3, 4.1,	1, 2, 9, 15,
Perennial wildflower meadow management	<p>Dundee City Council manages a number of perennial meadows across the city. These areas are cut and lifted on an annual basis in order to maintain and increase their biodiversity. They are an important part of the mosaic of habitats at each site for a number of pollinators as well as other wildlife. Some areas such as Riverside Nature Park and The Law are managed in partnership with local 'Friends' groups, which has greatly contributed to their success. These groups have helped to sow a variety of wildflowers seeds, including yellow rattle, and survey the sites for both flower species and pollinators.</p>	1.1, 3.1, 3.2,	5, 15,
Annual Wildflower meadows	<p>Dundee City Council has created and maintained a number of annual wildflower areas across the city. These are sown each year with a mix of native and non-native species and provide a colourful welcome to the city along key routes as well as food and shelter for pollinators. These areas were highlighted as an example of good practice in the 2019 Progress Report for the Scottish Pollinator Strategy.</p>	3.2	5,
Biodiversity Grassland and Naturalised Grassland	<p>During lockdown many local people got in touch with the Council telling us how much they appreciated the wildlife and particularly pollinators which were attracted to the longer grass. The Council proposed that a number of areas within parks and greenspaces could be identified as potential naturalised/biodiversity grasslands. Following lockdown, once grass cutting resumed, these potential locations were uncut and signage erected informing users of the Council's intentions. Dundee City Council is now reviewing all of the sites and are keen to hear the views of local residents about these areas. An online survey has been launched to aid this and the results will inform the management of these areas in the future.</p>	1.1, 1.4, 3.1, 3.2, 5.6,	1, 2, 5, 15,
Grey Squirrel Control	<p>With support from Scottish Wildlife Trust Red Squirrel Project and funding from Scottish Forestry, Dundee City Council has a programme of grey squirrel control across 13 parks and greenspaces in the City. This helps to</p>	1.3, 4.2, 4.4,	9, 12

	control the grey squirrel population and ensure that the red squirrel population within the city thrives and continues to grow. In 2020 permission was given to The Scottish Wildlife trust to trap grey squirrels on the Belmont Estate, contributing to a landscape scale scheme of conservation.		
Invasive non-native Species control and monitoring	Along with the grey squirrel control, the Council undertakes a co-ordinated effort to tackle giant hog weed, primarily along the Dighty Burn. This involves working together across the organisation and with partners such as The Scottish Invasive Species Initiative, NatureScot, local community groups and volunteers as well as private land owners. The Council also treats patches of Japanese Knotweed when they are identified. Other species, such as Himalayan Balsam, are tackled mainly by local community groups and volunteers. Work is underway to map these areas better and find a cost-effective method of control. Biodiversity Challenge funding was sought in 2019 for a project to assist this, although the project progressed to the second round it was unsuccessful. The Council will continue to look for sources of funding.	4.1, 4.2, 4.4,	9
Tree planting	There have been a number of trees planted both by and with the support of the Council in the last 3 years. In 2018 as part of environmental improvements at Middleton Woods 8500 trees were planted to add to the existing community woodland, which is becoming well established. Many local groups have taken advantage of the Woodland Trust's free tree planting packs, resulting in hundreds of trees being planted across the city in school grounds, community gardens and local greenspaces. Scottish Forestry funded the planting of 500 trees on the Law as part of their Woodlands In and Around Towns fund. Tree planting events have become very popular with 100's of people showing up to some events. Such events are a good way to engage with local people and contribute to the city's urban woodland with all its associated benefits. However, work is required to ensure that suitable locations and species continue to be selected in the future providing a more co-ordinated effort across the city, ensuring that the city's woodlands will be adaptable to climate change and focusing on areas where canopy cover is lacking.	1.1, 3.1, 3.2,	1, 15
Scotland's Beach Awards	Scotland's Beach Awards, administered by environmental charity Keep Scotland Beautiful, are the benchmark for quality beaches in Scotland. Awarded beaches demonstrate excellent beach management and environmental best practice ensuring the maintenance of high standards. The awards recognise Local Environmental Quality which relates to the management of conflicting beach uses such as cleanliness, biodiversity, water quality and pollution as a key area. Dundee City Council applies to Scotland's Beach Awards annually for Broughty Ferry Beach which has retained award status since 2004. The beach is a great asset for Dundee and continues to be enjoyed by locals and visitors throughout the year, but particularly during the summer months.	1.1, 3.1, 3.2, 6.4, 6.7,	1, 2,

Planning	<p>The Greenspace officer provides comments on planning applications where development will have an impact on trees and designated areas. They also provide advice on how landscape plans can incorporate green infrastructure and features which contribute to local biodiversity helping to further connect the city's Green Network.</p> <p>2018- information on number of applications not available 2019- provided comments on 39 planning applications 2020-provided comments on 48 planning applications (as of 29-09-2020) Planning Enforcement Officers deal with cases where planning conditions have been breached or protected trees have been damaged or lost. They also assist with new Tree Protection Orders.</p>	1.4, 3.5, 5.7,	2, 5,
Community Gardens	<p>The Council currently supports all community gardens across the city, around 25 in total. 12 of these were specifically established by the Council.</p> <ul style="list-style-type: none"> • 2018- 2 new gardens created • 2019- 3 new gardens created • 2020- 0 new gardens created (Impacted by Covid-19 restrictions) <p>Many of the gardens also have orchard areas e.g. Fintry, Whorterbank, Douglas, Charleston, Robertson St and Arklay Terrace. Orchards and community gardens lead to a greater diversity of plants and habitats than mown grass and encourage pollinators as well as other wildlife. Participants often develop a strong interest in local wildlife and one group has acquired grant money to purchase wildlife trail cameras, bird feeders and food to create an observation station in one of the most deprived areas in Dundee.</p> <p>The community garden at Robertson St had a pond installed courtesy of Froglife. This has been a magnet for wildlife including a pair of mallard and dragonflies. The new Fruit Bowls garden in Lochee Park also had a pond included in the design to attract birds and pollinating insects.</p>	3.1, 3.2, 3.3,	1, 2, 4, 19,
DCC Community regeneration fund	<p>This fund has supported a number of projects across the City with a biodiversity improvement aspect to them.</p> <p>2018- Trees and fruit Bushes for Robertson Street Community Garden, garden improvement for Caledonian Housing Association, 2019- assisted with the development of a proposed therapeutic garden at the Lily Walker Centre, tree and shrub planting at Myrekirk Stone circle, signage and shrubs for Friends of Clatto 2020- Rabbit fencing to protect the therapeutic garden at Ninewells hospital, employment of a community gardener to provide training and maintenance for the Yusuf Youth Initiative garden project at Balgay.</p>	3.1, 3.2	1, 2
Bee Bank	In 2018 the Countryside Ranger Service gained funding through Volunteering Matters to build a new 'Bee Bank'	3.1, 3.2	1, 5

creation	at Trottick Ponds Local Nature Reserve. This was done based on a design provided by the national organisation Buglife and involved both local volunteers and volunteers from a project at Strathmartine Hospital. The aim of this project was to provide nesting habitat for a variety of bees. This bank continues to be managed by the Countryside Ranger Service and local volunteers.		
Bat Surveys	The Greenspace Officer has provided advice to other colleagues within the Council regarding when projects or planning applications will require a bat survey and possibly a license.	3.5, 4.5, 5.7,	1, 2, 12,

Section 3. Mainstreaming Biodiversity

In order to effectively carry out the biodiversity duty, Dundee City Council incorporates biodiversity measures into its wider policies, plans and strategies. Those most relevant to biodiversity are:

- Dundee’s Biodiversity Action Plan 2020-2030
- Dundee Climate Action Plan 2019

Other plans and strategies which incorporate measures for the conservation of biodiversity are:

- TAYplan Strategic Development Plan 2016-2036
- City Plan 2017- 2026
- The Council Plan 2017-2022
- Local Development Plan 2019
 - Green Network Supplementary Guidance
- Strategic Forest plan for Dundee City Woodlands 2015-2025

Other plans and strategies which refer to biodiversity include the Local Housing Strategy and the Local Food Growing Strategy. All of these are available to view on the Council webpages at www.dundee.gov.uk.

All new policies, plans and strategies are screened for an Environmental Impact Assessment. This process ensures that significant environmental effects arising from the development of strategies, plans and programmes are identified, assessed, mitigated, communicated to decision-makers, monitored and that opportunities for public involvement are provided. All screening determinations and Environmental Reports are publicised on the Council’s website <https://www.dundee.gov.uk/service-area/chief-executive/chief-executives-services/strategic-environmental-assessment>.

Section 4. Nature Based Solutions, Climate Change and Biodiversity

Climate change is one of the direct drivers of biodiversity loss and also increases the effects of other drivers such as the spread of invasive, non-native species and pests and diseases. Nature based solutions can play an important role in helping us to protect and enhance biodiversity whilst working towards achieving net zero targets and improving quality of life for everyone who lives and works in the city.

Climate Action Plan

**See Appendix 1 for details of targets*

<p>In June 2019, Dundee City Council declared a Climate Emergency, recognising the serious and accelerating environmental, social and economic challenges faced by climate change. To respond to this challenge, a partnership Climate Action Plan has been prepared which has been the culmination of collaborative work, led by Dundee City Council and co-designed with public, private and community organisations, recognising that a concerted city-wide effort is required. It represents the first set of actions in a long-term pathway to first surpass the Covenant of Mayors target of 40% reduction in greenhouse gas emissions by 2030 and then to achieve net-zero greenhouse gas emissions by 2045 or sooner. One of the four key themes in this plan is Resilience. The objective of this section is to “Ensure our communities, green networks and infrastructure are adaptable to a changing climate and reduce the risks and vulnerability to unavoidable impacts.” It links to the Biodiversity Action Plan and contains a number of number of actions that involve nature-based solutions.</p>	<p>National Targets* 1.4, 3.5, 4.1,4.3,5.6</p>	<p>International Targets* 1, 2, 4, 15</p>
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The Law Heritage Lottery Project

<p>The Council secured Heritage Lottery Funding for improvements to Dundee Law, a key natural visitor attraction. The Law, with the war memorial on the top, is an iconic landmark in Dundee and forms part of the Council’s logo. It can be seen from almost everywhere in the city and the panoramic views from the top across the city and beyond are stunning. This location is important part of the visitor experience to Dundee and these improvements will help to boost visitor’s perceptions of the city contributing to the economic growth provided by the new Waterfront development and increase in tourism. Biodiversity improvements were a large part of this project.</p> <p>As part of this project in the last 3 years, with community involvement from the ‘Friends’ group, there has been:</p> <ul style="list-style-type: none"> • Creation of bat hibernaculum from derelict WW2 pill box (March 2018) • Purchase of tools for the friends to continue to carry out wildlife conservation tasks (2018) • Sowing of annual and perennial wildflower strips 2000sqm (Several times in 2016 - 2019) • Planting of native scrub strip/hedge 300sqm (April 2018) 	<p>National Targets* 1.4, 3.1, 3.2, 4.1,</p>	<p>International Targets* 1, 2,</p>
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<ul style="list-style-type: none"> • Review of grass cutting including a reduction of mowing to diversify meadows (April 2018) • Surveys of birds, butterflies and bees (lots of times since 2018) • Removal of invasive plant - Himalayan knotweed (2018) • Installing wildlife information boards on site (2019) <p>In addition to this, in 2020 funding was secured from the Scottish Forestry Woodlands in and Around Towns (WIAT) fund to carry out some much needed woodland management across the hill. This will improve the health of the woodlands, increase access and has created a new area of woodland by planting around 500 trees.</p>		
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Dundee Green Health Partnership (DGHP)

<p>DGHP is jointly managed by Dundee City Council and NHS Tayside and funded by NatureScot from 2018 – 2021 as part of the Our Natural Health Service. One of four Scotland wide pilot projects, the DGHP aims to use greenspace and natural heritage to improve the health and wellbeing of local people by establishing sustainable connections between the health and environment sectors. Together with the wider partnership of the third sector, communities, and universities a new referral route of the Green Health Prescription has been established, which links health care professionals, patients and opportunities for nature-based activities together. The Green Health Prescription is being rolled out to all GP surgeries in Dundee and also takes in many allied health professionals.</p>	<p>National Targets* 3.1, 3.3, 4.1</p>	<p>International Targets* 1, 2, 19</p>
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Countryside Ranger Service

<p>The Countryside Ranger Service run a number of projects which specifically aim to engage people with a variety of physical and mental health issues with their local greenspaces. These groups have been run in partnership with Scottish Forestry, NatureScot and local community and health organisations. ‘Branching Out’ is a national programme developed by Scottish Forestry and has been run successfully by the Countryside Rangers in Dundee for a number of years. This allows adults with mental health issues to connect to their local woodlands through a variety of practical task and art-based activities. The Family Fresh Air Club was developed by the Ranger Service in partnership with local Community Officers and funded by NatureScot. This involves taking families with young children to a variety of local greenspaces across the city and showing them how to access them in a fun way with their children, encouraging physical activity and an appreciation for this free, natural resource. The Borealis project in partnership with Options for Life supports young adults with autism, learning and other disabilities to</p>	<p>National Targets* 3.1, 3.3, 4.1</p>	<p>International Targets* 1, 2, 19</p>
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achieve a John Muir Award.		
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Sand Dunes at Broughty Ferry as Natural Flood Defence

As part of a co-ordinated flood risk management plan studies have demonstrated that large areas of Broughty Ferry are at risk from flooding from the Firth of Tay. This risk will increase as climate change raises sea levels. Although hard landscaping will form some of the defences it was decided that the best option in areas with natural sand dunes would be to increase the natural defences. Since 2019 a programme of dune restoration works has been implemented, with the ongoing objective to effectively manage the dune range to provide a natural flood protection. As a result of extensive studies some areas of the dunes were recharged, raising the height and extending the width. Chesnut pale fencing has been installed to limit access by members of the public, with the aim of preventing erosion and protecting the natural grasses and fragile habitat. Non-indigenous plants have been removed and new native species have been planted to stabilise the sand dunes. The management of the dunes is ongoing and regular inspections are being undertaken to identify further ways to protect and enhance the area.	National Targets* 1.1, 1.4, 4.1, 4.2, 5.5, 5.6,	International Targets* 1, 2, 14,15,
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Dundee City Council is also looking at ways in which to incorporate biodiversity outcomes into partnership initiatives of relevance to climate change.

Broughty Ferry and Monifieth Active Travel Improvements Project

Dundee City Council is working with Angus Council and Sustrans to improve connections from the city centre to other outlying neighbourhoods and towns outside the authority's boundary. This is part of a sustained effort towards the promotion of sustainable and healthy transport solutions for local residents and visitors alike. This project runs along the coast of the Tay Estuary from Broughty Ferry castle to Blue Seaway Park in Monifieth. As well as providing a fully segregated cycle lane and widening access across the Dighty Burn it will improve access to the beach front, connect local greenspaces, provide extensive landscaping and the creation of coastal grassland areas as well as new interpretation of natural features and wildlife. Full details of the design can be found here: https://broughtyferryactivetravel.com/ . Sustrans have funded the design and consultation process and the outcome of a further funding to take the project forward is awaited.	National Targets* 1.4, 3.1, 3.2,	International Targets* 2
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St Mary's Stormwater Management Strategy

Dundee City Council, Scottish Water, SEPA and NatureScot are developing proposals for a Sustainable Urban Drainage System (SUDS) within St Leonards Park as part of this strategy. Using a 'One Planet Choices' decision making/option appraisal strategy	National Targets*	International Targets*
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<p>this project aims to reduce surface water flooding, enhance capacity for future waste water connections, reduce the cost of treating sewage and deliver multiple benefits for the community and environment including improved quality of space, access to greenspace and enhanced biodiversity.</p>	<p>1.3, 1.4, 3.1, 3.2, 3.4, 5.5,</p>	<p>2, 15, 19</p>
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Looking ahead, there will be climate related challenges for biodiversity in the future. Some of the challenges in the next 3 years are below. Progress towards addressing these challenges will be monitored through the Climate Action Plan and the Biodiversity Action Plan.

	National Targets*	International Targets*
<p>As the climate changes, species will need opportunities to colonise areas with more suitable conditions. To be able to do that they need to have routes through which they can move from one area to another will be necessary for this to happen and maintaining and improving the green network throughout the city will provide that structure. Dundee City Council will aim to do this by continuing to look for ways to incorporate biodiversity into new projects and developments and encouraging others to do the same through the planning system and by engaging with the public and raising awareness. This is addressed in the Climate Action Plan as action R.16. The Council has been working in partnership with Buglife Scotland to investigate potential new routes through the city, connecting to other routes in surrounding local authority areas for the Beelines project. More information on this can be found here: https://www.buglife.org.uk/our-work/b-lines/.</p>	<p>3.1, 3.2, 3.5,</p>	<p>1, 2, 5,</p>
<p>Rising sea levels may be an outcome of climate change and as a coastal city this is something Dundee needs to consider as it may lead to increased flooding events. Dundee City Council is working to address this with new flood defence measures. Some of these measures involve the building of new sea walls but natural solutions are also being investigated, which are outlined above. This is identified in the Climate Action Plan as action R.1.</p>	<p>1.1, 1.4, 4.1, 4.2, 5.5, 5.6,</p>	<p>1, 2, 14,15</p>
<p>As the climate changes, becoming warmer with drier summers and wetter winters, the city needs to ensure that our greenspaces and woodlands are climate ready. One of the ways in which the Council intends to address this is covered in the Climate Action Plan as action R.20. 'Monitor and review the Urban Tree Policy to identify suitable areas for tree planting with climate appropriate species and with consideration of how planting interacts with surroundings e.g. air quality, active transport, biodiversity etc'.</p>	<p>1.4, 3.2, 5.6,</p>	<p>1, 2, 15</p>

Section 5: Public Engagement and Workforce Development

Public Engagement

**see Appendix 1 for details of targets*

Action/Project	Description	National Targets*	International Targets*
Beautiful Scotland	Beautiful Scotland is a long-established environmental improvement campaign which is run by Keep Scotland Beautiful (KSB) in partnership with the Royal Horticultural Society (RHS) under the Britain in Bloom campaign. This competition supports community groups across Scotland which seek to improve and enhance their local environment. The Council is a key partner in the Dundee city entry, which is known as Bonnie Dundee, working closely with the local volunteers who take forward the entry each year to help support their work. A separate entry is submitted by volunteer group Broughty Ferry in Bloom for the Broughty Ferry ward area which also has the support of the Council. Both entries have had success in recent years having now achieved Gold medal level. In the 2019 Beautiful Scotland campaign, Dundee City Council were awarded the Wright Sustainability award for their work on sustainable transport and projects such as the dune replenishment at Broughty Ferry beach.	3.1, 3.2,	1
It's Your Neighbourhood	It's Your Neighbourhood (IYN) is a sister programme of Beautiful Scotland. This is a non-competitive scheme designed to attract volunteer led community groups who wish to clean and beautify their local neighbourhood. The Council encourages groups to apply where appropriate so that they may benefit from the support, advice and encouragement on offer. In 2019 of the Scottish local authority areas which cover large cities, Dundee was second only to Aberdeen in terms of number of IYN groups. Dundee's entrants vary from community allotments to out of school groups looking to encourage wildlife and grow fresh vegetables	3.1, 3.2,	1
Take Pride in Your City	This campaign aims to encourage people to make positive behavioural changes in regard to their local environmental quality. The overall campaign aim is: <ul style="list-style-type: none"> To encourage positive changes to people's behaviour; improving the image of the city's environmental quality and the public perception of Dundee as a good place to live, work, shop and visit. In addition, recognising the national strategy which outlines three cornerstones of intervention to tackle litter and fly-tipping: information, infrastructure and enforcement. 	3.1, 3.2,	1

	<p>Four key strategic groups (Local Environmental Quality, Recycling, City Centre Businesses and Communications) have been identified which interlink to build on previous efforts.</p> <p>The Council has united a number of initiatives under the banner of Take Pride in Your City. Volunteer sessions and environmental or community events in the city's parks and greenspaces are advertised through the campaign, such as litter picks, habitat improvement and community gala days. In addition to helping promote the activity to a wider audience the aim is to encourage more citizens to get involved in their green spaces and look after their local environment.</p> <p>Litter picks supported as part of the 'Take Pride' campaign: 2018- 40 litter picks, approx.. 627 people = approx.. 627 volunteer hours 2019- 60 litter picks, approx.. 924 people= approx.. 924 volunteer hours</p>		
Green Flag Awards	<p>The Green Flag Award scheme recognises and rewards well managed parks and greenspaces. Sites are assessed by external judges against various criteria, including those considering the environmental management of the site and management and conservation of biodiversity. The Council submits applications to the scheme annually and currently has seven Green Flag Award winning parks and another which has been put forward to the scheme for the first time in 2020. Each park has differing character and habitats and are managed for biodiversity according to their specific needs. There are varying levels of community involvement with regards to biodiversity ranging from general park users enjoying what is on offer and making use of the interpretation provided through to active conservation work by established community groups.</p> <p>In addition to the formal Green Flag applications Dundee City Council also uses the assessment framework provided by the scheme to assess and monitor annual progress on other parks across the city. This helps to highlight the need for any actions and records progress in management, highlighting other parks which may become suitable for formal applications at a later date.</p>	1.4, 3.1, 3.2, 4.2, 5.4	1, 2, 14
Garden & Allotment Competition	<p>Dundee City Council has been running the annual Garden & Allotment Competition for many years. The competition aims to encourage Dundee's community, including individuals, schools, businesses and organisations to take a pride in their local area, to encourage people to enjoy the benefits of gardening and growing vegetables, make use of attractive floral displays and landscaping and to sustain the diversity of plants and wildlife. In 2019 there were 58 entrants, this number is increasing year on year and includes</p>	3.1, 3.2,	1

	<p>individual residents, businesses, churches and community groups.</p> <p>In addition to the main competition a School & Nursery Garden Competition is held each year, there were 6 entrants in 2019 which included a range of Council nurseries and primary schools, one high school and a private nursery. All entrants to the School & Nursery competition are invited to enter a poster into the Dundee Flower & Food Festival's Children's section to highlight their environmental actions.</p>		
Countryside Ranger Service events	<p>The Countryside Ranger Service run a programme of events across the year. This includes family events throughout the school holidays, guided bat and fungi walks as well as wildlife watching events. They also attend a number of local community events providing nature themed children's activities and providing information on the biodiversity to be found around the city.</p> <ul style="list-style-type: none"> • 2018- Engaged around 800 people over 10 environmental public events in local greenspaces. • 2019- Engaged around 500 people over 15 environmental public events in local greenspaces. • 2020- Engaged around 261 people over 10 environmental public events in local greenspaces. <p>They also engage with local schools, nurseries and colleges providing informative talks and interactive outdoor sessions.</p> <ul style="list-style-type: none"> • 2018- Engaged around 750 children and teachers with 21 educational sessions. • 2019- Engaged around 500 children and teachers with 18 educational sessions. • 2020- Engaged around 159 children and teachers with 7 educational sessions. 	3.1, 3.2, 3.4	1
Riverside Nature Park BioBlitz 2019	<p>This was a partnership event with the Friends of Riverside Nature Park and Dundee City Council. It was funded by Volunteering Matters and Sustrans. A Bioblitz is a community event with the aim of recording as many species in a set area within a 24-hour period. This type of event has been held twice before at the Nature Park and although there may be differences in recording efforts across the days it's a good indicator of how biodiversity might be faring here. Other organisations present on the day were The Woodland Trust, The Bumblebee Conservation Trust, Butterfly Scotland, Froglife and the Dundee Naturalists Society. It was miserable weather on the day, which meant that the number of people who attended were low but overall the event was a success with two hundred and twenty-four species recorded, new pond plants planted and new bird and bat boxes installed. This information was also used to inform a new Management Plan for the site and the event used to promote the work the 'Friends of' group do around the site.</p>	3.1, 3.2,	1
Dundee Flower and Food	<p>Held over the first weekend in September, the Dundee Flower and Food Festival, held at Camperdown Park, has been taking place for more than 30 years and is Scotland's largest competitive event and the</p>	3.1, 3.2,	1

Festival	<p>region's top lifestyle attraction, offering the best in horticulture, food and live entertainment. The event has strong community links and has representation from many local charities, businesses and organisations. Approximately 18,000 people visited the three-day show in 2018 and 2019. In 2020 the show was held virtually, due to COVID 19 restrictions. Over the weekend the festival's webpage had over 3000 hits and around a further 5000 people were engaged on social media.</p> <p>The Woodlands4Yew marquee is an integral part of the overall festival and hosts a wide range of environmental and forestry organisations, providing everything from information to practical demonstrations. This Marquee is organised in partnership with Scottish Forestry and NatureScot. The aims of the marquee are to promote woodlands, wildlife and biodiversity and opportunities for the public to enjoy them. In particular, the marquee aims to educate and engage the public on a range of topics which demonstrate that despite the modern world we live in, the natural world is still vitally important for providing much of our resources, health and wellbeing. Each year, a theme is chosen for the marquee - usually something that is topical - which adds specific focus to the overall aim.</p>		
Website update	<p>In 2020 as part of the launch of the new Biodiversity Action Plan a new page specifically for biodiversity was added to the Council's website. https://www.dundee.gov.uk/service-area/neighbourhood-services/environment/biodiversity This provides a link to the plan along and to the relevant parts of the Council that relate to the Key Topics within the plan. It also provided links to websites where members of the public can find out more information on how they can help improve and to downloadable leaflets on where to find wildlife within the city.</p>	3.1, 3.2,	1
Schools	<p>There are currently 12 primary and secondary schools in the city actively working towards their Eco-Schools Green Flag award. In pursuit of this award they are involved in a number of initiatives. Litter picks and recycling in schools have a high profile. Schools actively and regularly participate in competitions related to conservation and the environment, such as the European Clean Air at School project, helping to raise awareness of pollution around their schools. Dundee schools have enjoyed a longstanding association with the John Muir Trust and have partnerships with local conservation groups such as Dighty Connect. Some primary schools have been part of a programme, funded by Scottish Natural Heritage to increase participation in learning in outdoor spaces.</p>	3.1, 3.2, 3.4	1
'Friends of' groups	<p>There are currently around 10 local 'Friends of' parks groups across the city. These are all supported by the Council and a nominated officer attends their meetings whenever possible. This support is from both</p>	3.1, 3.2, 4.1	1

	the Communities and Environment Sections. These groups provide stewardship to their local patches, access funding for biodiversity projects and provide feedback from the community regarding how their parks are managed.		
Bird feeder project	During lockdown the Countryside Rangers in partnership with the Green Health Project provided around sixty bird feeders, with food and ID sheets to four sheltered housing complexes around the city in order to help improve shielded and vulnerable groups' wellbeing during COVID-19 by facilitating a connection to nature.	3.1, 3.2,	1

Workforce Skills and Training

Dundee City Council staff undertake regular training to ensure that they keep up to date with relevant certificates and skills including those relating to practices impacting on biodiversity such as herbicide spraying. They have also taken advantage of the many webinars and online courses that have become available throughout lockdown. Examples of the most relevant training are shown below:

**see Appendix 1 for details of targets*

Greenspace Officer	<ul style="list-style-type: none"> 2018-LANTRA Basic Tree Inspection, Hazard Tree Inspection course, Online GIS training 2019- Scottish Geodiversity Conference, Biodiversity Stakeholders Meeting, Biodiversity Officers Networking Day, The Scottish Biodiversity Science Conference 2020- Various Arboricultural Assoc training including AGM, various webinars and online Applied Tree Biology course 	National Targets* 1.4, 3.5 ,5.1	International Targets* 1, 2
Housing Section	<ul style="list-style-type: none"> Received a presentation from members of the Greenspace team on the benefits of incorporating biodiversity and community growing in to new and existing housing schemes 		
Operational managers	<ul style="list-style-type: none"> 2019- Attended a workshop from Butterfly Conservation on managing road verges for biodiversity 		
Teachers	<ul style="list-style-type: none"> Many teachers are upskilling themselves by undertaking professional learning in programmes such as Climate Ready Classrooms and STEM by Nature. 		
Various	<ul style="list-style-type: none"> In preparation of the new Biodiversity Action Plan a presentation was given to a number of colleagues across the organisation to advise on the biodiversity duty and the format of the plan. After the presentation a workshop style discussion took place where everyone was encouraged to share how their team and sections could contribute. 		

Section 6. Research and Monitoring

Biodiversity Survey of LINCS

<p>Dundee City Council's Local Development Plan (LDP) identifies 35 Locally Important Conservation Sites (LINCS). These were initially identified through a survey carried out by the NCC (now NatureScot) in the mid 1980's. This survey used a methodology which not only looked at the ecological value of each site but also the educational and recreational value. An update to this survey was carried out in 2000 and some sites were removed due to degradation or development and others identified and added. By 2017 this information was deemed historic. As urban biodiversity sites can be under pressure from development and unsympathetic management, robust information is a necessity to protect the interests of the site. This is particularly important when applying LDP policies to protect sites. A new Phase 1 Habitat Survey was commissioned and carried out in 2018. This information helped to provide a basis for the development of the new Dundee Biodiversity Action Plan and as part of that will be used to inform a review of all the sites along with some new potential sites. Work on this review began in 2020 with a virtual meeting held with relevant Council officers as well as representatives from local groups such as the Dundee and Angus RSPB group, The Dundee Naturalists and Tayside Geodiversity Group. One of the main issues facing this project is that Tayside as a whole does not have formal biological recording centre. Information, from public participation such as Bioblitz events and local recording groups is occasionally added to national information networks such as the NBN (National Biodiversity Network) Gateway, but there is a challenge to collate and analyse this information. A trial is to be started using the i-Record website and setting up individual projects for each site. It is recognised that correct management of these sites, as well as their protection, requires ongoing monitoring of the ecology present.</p>	<p>National Targets* 1.2, 1.4, 4.2 4.3,</p>	<p>International Targets* 1, 2, 11, 14</p>
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Giant Hogweed Control

<p>In order to correctly and efficiently control this invasive species along the Dighty Burn annual monitoring and mapping is required. This is carried out by Dundee City Council's Access Officer each spring. This information is then passed to the operatives who spray each section. A re-assessment is carried out in the summer to identify any patches missed or requiring further treatment and this is carried out as soon as possible. These maps are stored in the Council's GIS system. This information has been particularly useful to partnership working with NatureScot, Angus Council and local private landowners allowing for a co-ordinated response at a catchment level and the source of seed highest upstream being identified.</p>	<p>National Targets* 1.1, 1.2, 1.3, 4.1, 4.4, 5.5</p>	<p>International Targets* 1, 2, 9</p>
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Partnership Working with Dundee University Botanic Gardens

In 2020 the Botanic Gardens assisted a student in a research project to look at the feasibility of i-Tree Eco project in the city using volunteers. i-Tree Eco is a software application which allows for the mapping and quantifying urban trees and woodlands and assessing their environmental effects and benefits to society. The Council has supported the student by providing information and interviews and is keen to be a partner in this project in the future. This tool could allow us to develop more effective resource management and a new Urban Tree and Woodland policy.	National Targets* 1.2, 1.4, 3.5,	International Targets* 1, 2, 14
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Citizen Science Projects

The Council does support a number of citizen science projects. The Countryside Ranger Service hold events for the RSPB's Big Garden Birdwatch, they promote various projects to local community groups and assist volunteers in carrying out surveys at nature sites across the city.	National Targets* 1.2, 3.1,	International Targets* 1
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Monitoring of local Plans and Strategies

All local plans and strategies are carefully monitored and progress is reported on through Council Committees. The first progress report of the Climate Action Plan will be available by the end of 2020 and the first progress report of the Biodiversity Action Plan will be available in early 2021. In general Council performance is monitored through the use of a mix of local and national performance indicators which cover all core areas including Environment. These performance indicators are used for Council benchmarking against other Scottish Councils, Best Value Assurance Reports, The Council Plan and The City Plan. Formal complaints are monitored and reported on twice a year and there is also an annual citizen survey which includes questions about the public's perception of local greenspaces.	National Targets* 1.4, 3.2,	International Targets* 1, 2
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Section 7. Challenges and Highlights

Highlights

There have been many highlights, most of which are listed above, but the main one has been the production of a new Biodiversity Action Plan for Dundee. Dundee City Council left the Tayside Biodiversity Partnership in 2011 and Dundee has been without a dedicated Biodiversity Action Plan since 2016 when the Tayside Biodiversity Plan it had contributed to was superseded. Initially it was decided to develop a Biodiversity Duty Action Plan for the Council however on reflection it was felt that a full Biodiversity Action Plan for the City should be developed and maintained in partnership with local organisations.

This plan took more time to develop and was agreed at Council Committee in January 2020. The Council will be the lead partner and will produce an annual report to monitor the actions. This plan aims to highlight the contribution and influence of local biodiversity on the quality of life and economic opportunities of everyone who lives in the city. This plan focuses action on the ecosystems, habitats and species most in need and ensures prioritisation of resources at a local level. It sets out clear objectives and targets to enable the monitoring of progress and enables measurement of any achievements.

Challenges

As with many other Local Authorities and public bodies, Dundee City Council carefully balances resources to provide high quality services, this has become more of a challenge in light of the current global pandemic. However, with challenges there are often opportunities as well. The Council will continue to work hard to improve communication between services and with partners in order to design efficient ways of collaborative working which benefit biodiversity as it works towards a green recovery. External funding will be sought to help us deliver new projects which will help to restore and improve habitats in the city.

In order to maximise the outcomes from the Biodiversity Action Plan all members of staff need to be aware of local biodiversity and the issues affecting it in order to work successfully together, exploring cost effective solutions and to fully realise all opportunities to incorporate biodiversity in projects and areas of responsibility. Dundee City Council will continue to work on ways in which to deliver appropriate training, seeking advice from external organisations where appropriate.

Over the last few years, Dundee City Council has reduced the amount of herbicide used to control vegetation, through the management and design of street scape and greenspace environments. In order to reduce the levels used further, a systematic review is being carried out. The review will consider alternatives, including weed suppressant management practices such as increased mulching, as well as investigation into other weed control methods. However, it should be noted that the use of glyphosate-based herbicides is still the most effective control of invasive non-native plant species such as Giant Hogweed and Japanese Knotweed.

The Council recognises that ecological monitoring of biodiversity actions is important to ensure that actions are effective. Good partnership working is required in order to make the most of local expertise and to maximise the opportunities for external funding. Progress made by The Scottish Biodiversity Information Forum on looking for a solution to the issue of local recording centres will be closely monitored and assistance offered where possible.

As in any city there is increasing pressure for space. In order to prevent further loss of the natural habitat local planning strategy will continue to protect locally designated areas and encourage development in brown space and previously developed areas. In addition, support will be given to projects which create new green infrastructure and habitats in the urban environment, linking in with the existing Green Network Guidance.

Continuing community engagement is essential to raise the levels of awareness amongst the general population and to continue to improve levels of environmental education for children. This increase in understanding of biodiversity will help to allay concerns regarding new projects and reduce the potential for conflict between the different types of greenspace users.

Appendix 1. National and International Biodiversity Targets

The Scottish Biodiversity Strategy has six chapters. These chapters include 32 key steps for biodiversity, which are presented in the table below.

Chapter 1: Healthy Ecosystems	
Outcome: Scotland's ecosystems are restored to good ecological health so that they provide robust ecosystem services and build our natural capital.	
Key Steps	
(1.1)	Encourage and support ecosystem restoration and management, especially in catchments that have experienced the greatest degradation.
(1.2)	Use assessments of ecosystem health at a catchment level to determine what needs to be done
(1.3)	Government and public bodies, including NatureScot, SEPA and FCS, will work together towards a shared agenda for action to restore ecosystem health at a catchment-scale across Scotland
(1.4)	Establish plans and decisions about land use based on an understanding of ecosystems. Take full account of land use impacts on the ecosystems services that underpin social, economic and environmental health.
Chapter 2: Natural Capital	
Outcome: Natural resources contribute to stronger sustainable economic growth in Scotland, and we increase our natural capital to pass on to the next generation.	
Key Steps	
(2.1)	Encourage wide acceptance and use of the Natural Capital Asset Index (2012) ¹² , including a comparable measure for the marine environment. (2.3) Undertake a major programme of peatland conservation, management and restoration.
(2.2)	Use this index to influence decision-making and market-based approaches, so that the wider monetary and non-monetary values for ecosystem services are recognised and accounted for
(2.3)	Undertake a major programme of peatland conservation, management and restoration.
Chapter 3: Biodiversity, Health and Quality of Life	
Outcome: Improved health and quality of life for the people of Scotland, through investment in the care of green space, nature and landscapes	
Key Steps	
(3.1)	Provide opportunities for everyone to experience and enjoy nature regularly, with a particular focus on disadvantaged groups
(3.2)	Support local authorities and communities to improve local environments and enhance biodiversity using green space and green networks, allowing nature to flourish and so enhancing the quality of life for people who live there.
(3.3)	Build on good practice being developed by the National Health Service (NHS) and others to help encourage greenspace, green exercise and social prescribing initiatives that will improve health and wellbeing through connecting people with nature.

(3.4)	Increase access to nature within and close to schools, and support teachers in developing the role of outdoor learning across the Curriculum for Excellence.
(3.5)	Encourage public organisations and businesses to review their responsibilities and action for biodiversity, and recognise that increasing their positive contribution to nature and landscapes can help meet their corporate priorities and performance.
Chapter 4: Wildlife, Habitats and Protected Places	
Outcome: The special value and international importance of Scotland's nature and geodiversity is assured, wildlife is faring well, and we have a highly effective network of protected places.	
Key Steps	
(4.1)	Ensure that the management of protected places for nature also provides wider public benefits.
(4.2)	Align habitat restoration on protected areas with national goals for improving ecosystem health, with local priorities determined at the catchment or landscape scales.
(4.3)	Integrate protected areas policy with action for wider habitats to combat fragmentation and restore key habitats
(4.4)	Develop a wildlife management framework to address the key priorities for sustainable species management, conservation and conflict issues, including reintroductions and invasive non-native species.
(4.5)	Involve many more people than at present in this work and improve understanding of the poorly known elements of nature.
Chapter 5: Land and Freshwater Management	
Outcome: Nature is faring well, and ecosystems are resilient as a result of sustainable land and water management.	
Key Steps	
(5.1)	Promote an ecosystem approach to land management that fosters sustainable use of natural resources and puts biodiversity at the heart of land use planning and decision-making.
(5.2)	Ensure that measures taken forward under the Common Agricultural Policy encourage land managers to develop and retain the diversity of wildlife habitats and landscape features.
(5.3)	Support "High Nature Value" farming and forestry.
(5.4)	Put in place the management necessary to bring Scotland's protected areas into favourable condition and improve the ecological status of water bodies.
(5.5)	Ensure that biodiversity and ecosystem objectives are fully integrated into flood risk management plans, and restore wetland habitats and woodlands to provide sustainable flood management.
(5.6)	Restore and extend natural habitats as a means of building reserves of carbon and to help mitigate climate change.
(5.7)	Provide clear advice to land and water managers on best practice.
Chapter 6: Marine and Coastal	
Outcome: Scotland's marine and coastal environments are clean, healthy, safe, productive and biologically diverse, meeting the long-term needs of people and nature.	
Key Steps	
(6.1)	Adopt a Scottish Marine Plan and develop regional marine plans to aid balanced decision-making in the marine environment.
(6.2)	Establish a coherent network of Marine Protected Areas, promoting sustainable use and conservation.
(6.3)	Collate information on the location and sensitivity of priority marine features, and make this information available to support their protection.
(6.4)	Achieve good environmental status for Scottish seas.
(6.5)	Bring Common Fisheries Policy fish stocks to levels consistent with Maximum Sustainable Yield wherever possible, and take account of biodiversity in managing inshore fisheries.
(6.6)	Implement a rapid-response framework to prevent colonisation of new invasive species in Scotland's seas and islands.

(6.7)	Improve the monitoring of the marine environment to identify changes and guide progress towards the above outcomes.
(6.8)	Improve understanding of how coastal ecosystems are likely to adapt to climate change and develop appropriate strategies for coastal zone management.

Aichi Biodiversity Targets

The UN convention on Biological Diversity (CBD) agreed a strategic plan for biodiversity 2011-2020 and set 20 international targets known as the Aichi Targets (named for the place in Japan where the agreement was signed). The UK is a signatory to the agreement which means that as a public body in Scotland we contribute to these targets. The Scottish Government takes the information from public body's Duty Reports and uses this to show how targets are met and sets this out in the Scotland Route Map to 2020 and the Sub-national Aichi Reporting.

These targets are listed below:

1. Awareness Increased	11. Protected areas increased and improved
2. Biodiversity values integrated	12. Extinction prevented
3. Incentives reformed	13. Genetic diversity maintained
4. Sustainable consumption and production	14. Ecosystems and essential services safeguarded
5. Habitat loss halved or reduced	15. Ecosystems restored and resilience enhanced
6. Sustainable marine management	16. Nagoya Protocol on access to genetic resource in force
7. Sustainable agriculture, aquaculture and forestry	17. National Biodiversity strategy and action plans
8. Pollution reduced	18. Traditional knowledge respected
9. Invasive alien species prevented and controlled	19. Knowledge improved, shared and applied
10. Pressure on vulnerable ecosystems reduced	20. Financial resources increased