



Fife Council Biodiversity Duty Report 2015 - 2017

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Contents

Introduction	1
Fife Council Biodiversity Duty Report 2015 – 2017	2
1. Introductory information	2
1.1 Fife Council's regulatory role	2
1.2 How biodiversity feeds into the decision-making structure	3
1.3 Promotion of biodiversity initiatives.....	6
2. Mainstreaming	8
3. Actions taken to improve biodiversity conservation	11
4. Partnership working and communications	18
4.1 Partnership working.	18
4.2 Communication and awareness raising.....	19
4.3 Training and learning activities	20
4.4 Volunteering opportunities	21
5. Biodiversity highlights and challenges	22
5.1 Main achievements and what Fife Council is most proud of.....	22
5.2 Main challenges over the coming three years	22
6. Monitoring.....	24
6.1 Follow-up actions and monitoring.....	24
6.2 Data and National Biodiversity Network	25
7. Contribution to targets	26

Introduction

Biodiversity is the variety of life on earth. It includes all of the living organisms around us such as plants, animals, fungi, invertebrates, and micro-organisms. It refers to the variety of habitats and ecosystems and the different ways in which organisms interact with one another and their environment.

Biodiversity is a fundamental part of our everyday lives. Our social, economic and emotional wellbeing depends on it. Biodiversity provides us with food, fuel, clean water, health, wealth and other vital services. It enriches our lives and is part of our history and culture.

Pressures such as habitat loss and fragmentation, pollution, climate change and invasive non-native species mean we are losing biodiversity. As a result, action is required to protect and restore biodiversity locally and nationally.

The Nature Conservation (Scotland) Act 2004 places a statutory duty on all public bodies in Scotland to further the conservation of biodiversity when carrying out their responsibilities. This biodiversity duty is about connecting people with the environment and managing biodiversity in the wider environment all around us, not just in specific protected sites. It seeks to secure the public sector's commitment and good practice towards the environment so that this can inspire people across society to take active care of nature whilst carrying out their normal duties.

The Wildlife and Natural Environment (Scotland) Act 2011 further requires public bodies in Scotland to provide a publicly available report, every three years, on the actions which they have taken to meet this biodiversity duty.

Fife Council Biodiversity Duty Report 2015 – 2017

This report outlines how Fife Council has worked to further the conservation of biodiversity in line with its duty under the Nature Conservation (Scotland) Act in the three-year period between 2015 and 2017. It is structured in accordance with reporting guidance.

1. Introductory information

1.1 An overview of Fife Council's regulatory role

As a local authority, Fife Council is responsible for providing a range of public services including education, social care, roads and transport, economic development, housing and planning, environmental protection, waste management, and cultural and leisure services.

Fife Council is structured into five main directorates, each led by an Executive Director joining the Chief Executive to form the Council Management Team responsible for translating the Council's policies and plans into action. Arm's Length External Organisations provide waste and resource management, sport and leisure, countryside and cultural services.

Pre-May 2017, the council operated an executive/scrutiny decision-making model for political management and decision. An Executive Committee was the key policy and decision making group relating to developing policy, setting strategic direction and allocating resources.

Post-May 2017, the council returned to a more traditional committee model, comprising: Fife Council; Policy & Coordination Committee; Assets Property & Facilities Committee; Community & Housing Services Committee; Education & Children's Services Committee; Economy, Tourism, Strategic Planning & Transportation Committee; Environment, Protective Services & Community Safety Committee; Scrutiny Committee; Standards & Audit Committee; three area planning committees; and a Regulation & Licensing Committee.

The Fife Partnership Board is the community planning partnership for Fife. It provides strategic leadership to community planning, overseeing partnership activity to support the delivery of its agreed vision and outcomes, as set out in the new Plan for Fife, Fife's Local Outcome Improvement Plan 2017–2027, previously Fife's Community Plan and Single Outcome Agreement. The group is comprised of representatives from health and social

care, police, fire and rescue, voluntary sector, government, transport, department of work and pensions, skills development and academic institutions.

The [Plan for Fife Local Outcome Improvement Plan 2017-2027](#) was approved by the Fife Partnership Board in November 2017. The plan has a strong focus on addressing inequalities and four key themes will now direct the work of the Partnership: opportunities for all; thriving places; inclusive growth and jobs; community-led services. The Plan also details how people and communities are engaged in decisions on the public services which affect them. It will serve as the new Fife Council Plan and sits alongside Fife's Local Development Plan (FIFEplan), which covers spatial and physical planning issues, and the Climate Challenge Action Plan, which sets out how to address climate change and its likely impacts.

The Plan for Fife builds on previous work undertaken to deliver [Fife's Community Plan 2011-2020](#), which set out long term ambitions for the Kingdom including: reducing inequalities, increasing employment, and tackling climate change.

[Fife's Strategic Assessment](#) published in February 2017 provides the evidence base for identifying priorities across Fife and those facing the seven committee areas. These priorities helped to inform the plan and will be updated to inform future work plans and provide a solid foundation for work at a local and Fife-wide level.

The Plan for Fife will continue to recognize environmental considerations, as required by the Environmental Assessment (Scotland) Act 2005. The Fife Environmental Partnership currently leads on the actions within the Strategic Environmental Assessment.

1.2 How biodiversity feeds into Fife Council's decision-making structure, including initiatives, groups, staff, responsibilities and roles linked to biodiversity conservation.

The [Fife Environmental Partnership](#) was formed by the Fife Partnership to lead on environmental aspects of the Community Plan. This group, chaired by Scottish Natural Heritage, is responsible for the strategic direction to protect and enhance Fife's environment in a sustainable manner to pass on to future generations. Membership includes Fife Council, Forestry Commission, Fife Economy Partnership/Green Business Fife, Scottish Enterprise, Fife Rural Partnership, Greenspace Scotland, NHS Fife, Scottish Environment Protection Agency, Scottish Natural Heritage, Fife College, University of St. Andrews, Fife Coast and Countryside Trust, Kingdom Housing Association, Fife Voluntary Action, Community Groups and elected member representation. The partnership's overarching theme is reducing carbon, and it leads on the 'Sustaining and Improving our Environment' local outcome, which includes the following targets:

- Less waste
- Better local environments and a sustainable natural heritage
- More sustainable transportation
- Lower CO² emissions from energy use
- Better water, air and land quality

One of four outcomes in the new Plan for Fife is 'Thriving Places' which includes "high quality natural spaces that benefit biodiversity as well as people's health and wellbeing".

Resource Efficient Solutions - which delivers resource management services for the council including waste, recycling, energy and carbon - were keen advocates for strong environmental outcomes within the Plan for Fife and pushed for the inclusion of a range of biodiversity and climate change indicators and objectives. The Plan's vision for 2027 now includes the following objectives:

- "Every part of Fife has a high quality local environment and is considered to be a great place to live". This will include: investment in greenspaces and alternative, low-impact management models for parks and greenspaces; implementing a programme of sustainable management for Fife's woodlands; and expanding the coverage of Fife's woodlands in order to improve biodiversity, reduce flood risks, provide carbon sinks, produce local biomass energy, diversify the local economy and decontaminate old industrial sites.
- "Improve affordable and sustainable travel and public transport"
- "Promote investment in sustainable businesses, waste reduction and energy generation, with a focus on mid-Fife" which will include delivering a sustainable energy and climate action plan for Fife, a Zero Waste business development programme, and identifying opportunities for sustainable businesses and energy generation.
- "Implement measures to improve access to green recreation and play space, especially in more deprived communities, in order to maximise health, education and biodiversity benefits, and support initiatives that reduce social isolation".

In all the Council's committee meetings, councillors vote on issues, agree on plans to help Fife Council meet its aims and objectives, and receive regular reports from all Services to assess how well Fife Council is meeting these. For instance, greenspace, biodiversity and climate change reports are submitted to Area Committees annually. As of May 2017, two strategic committees have specific functions regarding the environment: Communities & Housing Committee and Environment, Protective Services & Community Safety Committee. An elected member is also appointed as strategic spokesperson for the environment and as Sustainability Champion.

The Fife Biodiversity Partnership, which steers development and delivery of the [Fife Local Biodiversity Action Plan](#), includes representation from the public, voluntary and private sectors, academia, specialist and community groups, as well as two elected members appointed by Fife Council as spokespersons for biodiversity. Fife Council has acted as Secretariat to the Fife Biodiversity Partnership since the first Local Biodiversity Action Plan was published in 1997, and co-ordinates the work of the Plan.

The FIFEplan was adopted in September 2017 and includes policies which seek to protect habitats and species and enhance biodiversity. The plan also includes green network priorities for many development sites which provide site-specific green network requirements including biodiversity. FIFEplan is supported by approved supplementary planning guidance Making Fife's Places which provides more detail on green networks, natural heritage assessments and enhancing biodiversity as part of new development. The

Planning service utilises data from Fife Nature Record Centre to help inform assessments and decision-making.

The Fife Integration Joint Board, the decision-making body for Fife's Health and Social Care Partnership, agreed priorities for the coming year in relation to climate change and sustainability, including: reviewing the Fife Environmental Partnership Climate Change Strategy and how the board can support this; considering whether the work of the Partnership is fully addressed within Fife Council and NHS Fife Climate Change Impact Assessments and other climate change plans or whether separate arrangements need to be made; work closely with partners to review emissions data and highlight areas where positive impacts can be made.

Fife Council directly employs the following staff with biodiversity in their remit:

- A Biodiversity Team comprised of 4.5 full-time equivalents responsible for mainstreaming biodiversity across the Council, undertaking projects to improve local authority land and Fife's wider environment for biodiversity – often through partnerships, co-ordinating the Fife Local Biodiversity Action Plan, undertaking educational initiatives in urban parks and greenspaces, and running of the Fife Nature Records Centre;
- A dedicated natural heritage officer within the Planning service;
- A Greenspace Officer who co-ordinates delivery of the Fife Greenspace Strategy;
- An Allotments Officer who co-ordinates delivery of the allotments strategy, which includes enhancing community growing spaces for biodiversity;
- Park management and development staff who deliver biodiversity enhancement work across Fife through project delivery and park development plans, for instance through the Green Flag Award, Britain in Bloom and Beautiful Scotland initiatives.

Fife Nature Records Centre is the region's biological records centre which collates information on species, natural heritage sites and habitats and delivers an information request service. This resource is available for use in the decision-making process and to ensure impact on biodiversity is considered. During the reporting period, 77 formal data requests were received from within the Council. A number of informal queries were also received.

Fife Council is represented by elected members on the Board of Directors of both Fife Coast & Countryside Trust and Fife Golf Trust, Arm's Length External Organisations set up as non-profit making companies with charitable status.

- Fife Coast & Countryside Trust undertakes a range of countryside activities and biodiversity functions across the Kingdom on behalf of the local authority and its partners. The organisation's outputs are agreed in a Business Plan and Service Level Agreement. Fife Coast & Countryside Trust is a key member of the Fife Biodiversity Partnership and plays an important role in delivery of the Fife Local Biodiversity Action Plan.
- Fife Golf Trust manages Fife Council's seven municipal golf courses. The Board agreed on a strategic objective for Fife Golf Trust to achieve the internationally-recognized 'GEO Certified' environmental and sustainable accreditation. This is administered by GEO Foundation, an independent non-profit organisation dedicated to providing a credible and practical sustainability system for golf. This certification was achieved in March 2017. Fife Golf Trust is also a delivery partner in the Fife

Local Biodiversity Action Plan through its habitat enhancement and creation initiatives.

- Fife Council contributes core funding to both Fife Coast & Countryside Trust and Fife Golf Trust.

1.3 Examples where staff have promoted biodiversity initiatives.

The Fife Council Development Plan team ensured that [green networks](#) are included as an important consideration for all new developments in the FIFEplan. Green networks in Fife's towns and villages were mapped, showing assets and potential for enhancement. A database was compiled of all projects – community and organisation-led - which contribute to enhancing Fife's green networks, and these were [mapped](#) and made available online. People are being encouraged to contribute to these.

Resource Efficient Solutions held a series of high level Continuing Professional Development workshops for elected members and other senior decision makers within Fife Council on climate change adaptation and how biodiversity enhancement (including green roofs, street trees, blue green infrastructure, and reforestation) can be used to help Fife adapt to the impacts of climate change.

The Biodiversity Team:

- helped raise awareness internally and externally about the threat, identification, treatment and importance of recording invasive non-native species – plants and animals which were introduced to an area by people and have the ability to spread, causing damage to the environment, the economy, our health and the way we live - through online information, meetings with other services, training courses and toolbox talks for parks operations staff, Community Payback by Offenders Scheme supervisors and members of the public in partnership with Forth Invasive Non-Native Species project. Fife Council is an instigating member of the Fife Invasive Non-Native Species Forum, and led on development of the River Eden Invasive Non-Native Species Programme. Park managers helped open a dialogue with elected members and community groups regarding invasive non-native plants.
- manned stands and displays at a range of venues and events promoting Fife Nature Records Centre, the Fife Local Biodiversity Action Plan and associated biodiversity projects.
- contributed to a publication and parliamentary event marking 20 years of Scottish biodiversity partnerships delivering Local Biodiversity Action Plans in 2016
- The Biodiversity Co-ordinator and Chair of the Fife Biodiversity Partnership gave a presentation on achievements of the Fife Local Biodiversity Action Plan to the Council's Scrutiny Committee in January 2017, followed by a media release.

Fife Council's spokesperson for environment and transportation, also an elected member representative on the Fife Biodiversity Partnership, worked to promote biodiversity within the council and raise awareness about the importance of working with nature from a local authority perspective.

The Golf Courses Manager within Fife Golf Trust promoted the importance of habitat creation and enhancement and sustainable management of the seven municipal courses amongst staff and Board members. The manager also drove the 'GEO Certified' initiative within the organisation, achieving this internationally-recognized certification for environmental and sustainable management in March 2017.

The Greenspace Officer reports regularly to all seven Area Committees on greenspace enhancement projects which benefit biodiversity.

A Parks Development Officer has trialled introduction of wildflowers to intensively managed grassland sites as well as different levels of meadow management, and introduced signage to advise the public of the reason for the change in management.

Parks, Streets & Open Spaces Team Managers supported and promoted the grant-funded Fife's Buzzing wildflower meadow creation project, sat on the Steering Group, and were instrumental in creating over 12 ha of species-rich grassland in more than 20 parks across Fife. The North East Fife Manager and team also supported the Corn Bunting Recovery Project and facilitated establishment of 4,879m² of wild bird cover crop in three parks.

The Allotments Officer promoted at a regional and national level the importance of community growing spaces for biodiversity and how allotments can be enhanced for wildlife.

Park managers and development officers promoted and took part in initiatives and campaigns including the Keep Scotland Beautiful Green Flag Award, Beautiful Scotland, Beautiful Fife and Britain in Bloom, all of which encourage biodiversity improvements to parks and greenspaces. Park Development Groups were set up in partnership with communities.

A group of housing, parks and planning representatives was established to ensure development of new greenspaces is sustainable and appropriate for available resources. Guidance notes are currently being created.

2. Mainstreaming

Fife Council has taken numerous steps to incorporate biodiversity into areas of policy, strategies and initiatives.

The new Plan for Fife has through its 'Thriving Places' priority theme committed to improving the Kingdom's environment with an appreciation of the multiple benefits this provides, promoting "wellbeing, where people are proud to be, and where they have access to the services and facilities they need at different stages of their lives". This ambition includes "making the most of Fife's valuable local landscapes, heritage and biodiversity, and meeting challenges of climate and economic change".

The Fife Council Plan 2017, the overarching strategic plan prior to the Plan for Fife's approval, included an aim to 'improve quality of life in local communities', which included improved use of greenspace and 'promoting a sustainable society' with targets to reduce carbon emissions, waste and increase Fife's resilience to climate change impacts. The Environment Outcome Board had a remit to manage delivery of the Council Plan environment theme.

Planning:

- As discussed above, the FIFEplan ensures that [green networks](#) and biodiversity are included as important considerations and an integral part of the design process for all new developments.
- Fife Council commissioned a Green Infrastructure masterplan to be developed for part of Kirkcaldy to take forward outcomes from the Kirkcaldy charrette. Opportunities to enhance biodiversity will be an integral part of this masterplan.
- A draft development framework was created for the Rosyth Waterfront which highlights opportunities for biodiversity enhancement as well as issues that need to be taken into account.
- Planning webpages on Fife Council's website provide information to applicants on the policy requirements for natural heritage and biodiversity. Links are provided to guidance and sources of information to help ensure that biodiversity is protected and incorporated into design.

Resource Efficient Solutions:

- As discussed above, held a series of high-level Continuous Professional Development workshops for elected members and other senior decision makers on climate change adaptation and the importance of biodiversity in this role.
- Drafting Fife's Sustainable Energy and Climate Action Plan under the EU Covenant of Mayors which will be used to guide adaptation and mitigation to climate change in Fife for the next five years and to ensure that the Council plays its part in achieving national climate change targets (such as reducing carbon emissions by 80% by 2050 compared to 1990 levels). The adaptation section recommends how best to integrate biodiversity, community food growing, blue green infrastructure, reforestation, pollinator-friendly planting, and improving habitat connectivity into adaptation planning for Fife.

- Work with Property Services and client services (such as the Education Estate) to help mainstream sustainable and green building solutions (i.e. rainwater recycling, green roofing, passive solar design, building integrated renewables, biomass heating) when designing new council assets so as to reduce their negative impacts on the environment and maximise their potential to enhance the natural environment.
- Currently updating Fife Council's Zero Waste Strategy – the new Resources Strategy (2018-2028) will set waste management policy direction for the next decade and will seek to significantly increase recycling rates, promote a circular economy and minimise waste sent to landfill. The Strategy is subject to Strategic Environmental Assessment and one of the key assessment objectives is to “ensure the maintenance or (where possible) enhancement of biodiversity, and avoid damage to designated wildlife sites and protected species from waste management activities.”

The new [Fife Council Allotments Strategy 2018-2023](#) integrates biodiversity into community food growing policy, with specific objectives to improve biodiversity and connectivity and to promote benefits of pollinators and wildlife. In order to help achieve this, a proportion of the allotment management budget has been set aside for biodiversity projects since 2015.

[Fife Nature Records Centre](#) services are available internally and externally, and the centre is regularly consulted for information on species, natural heritage sites and habitats. This information can be used to inform policies, strategies and initiatives as well as research and work on the ground. 116 formal requests were received in the reporting period by organisations or individuals external to Fife Council, including environmental consultants, Scottish Natural Heritage and academic researchers.

The [Fife Greenspace Strategy 2011-2016](#) aims to increase access to quality, life enhancing greenspace. One of the objectives is to increase the amount of Fife Council land managed for biodiversity.

[Fife Golf Trust](#) has been working to mainstream biodiversity in golf course management alongside the organisation's strategic objective to achieve 'GEO Certified' accreditation.

Fife Environmental Partnership's [Climate Change Strategy 2014-2020](#) has four medium-term outcomes, one of which is to ensure that Fife's ecosystems are used sustainably and strengthened. It has supported delivery of the target to plant 100 ha of new woodland in Fife, originally set out in the Fife Forestry and Woodland Strategy 2013-2018, and management of Fife's Sites of Special Scientific Interest to improve their condition and contribute to the National Performance Framework target of 80% of sites in favourable condition.

In the [Education Service](#), mainstreaming and continued awareness raising is delivered through the National STEM Education and Training Strategy for Scotland agenda and EcoSchools initiatives. Fife Council seeks to include the natural environment in education initiatives. The [Natural Connections outdoor learning programme](#) is designed to support and increase the number of schools providing regular opportunities to learn outdoors, and can also be adapted to work with community groups. The specialist [Outdoor Education Team](#) based at Lochore Meadows Country Park provides an extensive programme of

outdoor learning and activities for all ages. The [Early Years Team](#) is developing an outdoor nursery pilot and working towards increasing outdoor learning provision for all nursery children by 2020. This includes developing further forest, park and beach sites and nursery grounds, to fulfil the Care Inspectorate intention to provide around 20% of any nursery's capacity out of doors.

The second edition [Fife Shoreline Management Plan](#) was completed in 2011 and sets out Fife Council's policies for managing 179km of coastline. The Plan aims to deliver the greatest environmental, social and economic benefit, consistent with the Government's sustainable development principles. It takes into account natural coastal processes and environmental considerations.

In 2017, Fife Council became the first local authority in Scotland to be awarded a five-star rating through the [Eco Stars Fleet Recognition Scheme](#). The council joined the scheme in 2014 and pledged to improve its vehicles and operational practices to be cleaner and more efficient. Initiatives were put in place to increase environmental credentials including: a dedicated fuel champion monitoring and reporting on fuel usage and spend; extensive driver training and skills development; replacement of older vehicles with efficient, cost-effective Euro 6 diesel, electric or hydrogen engines; and support systems to inform drivers of potentially inefficient driving practices. Fife Council was also commended for both 'Public Sector Fleet of the Year' and 'Public Sector Fleet Manager of the Year Award' at the [Green Fleet Awards 2017](#). Furthermore, the service runs a green accreditation scheme for taxis which drivers can buy into.

The [Harbours, Flood and Coast team](#) are undertaking a number of flood studies, all of which at least consider Natural Flood Management options for reduction of flood risk.

The [Fife Tourism Strategy 2014-2024](#) recognizes the importance of environmental sustainability and advocates working jointly with Fife Coast & Countryside Trust, Scottish Natural Heritage, RSPB and others, to protect Fife's outdoor assets through careful promotion and appropriate maintenance.

[Fife Forestry & Woodland Strategy 2013–2018](#) aims to protect and enhance the environmental quality of Fife's woodlands and forests, and supporting biodiversity is one of its key priorities. Fife Council is undertaking a woodland expansion project and bringing its woodlands into better management, aiming to provide multiple benefits, one of which is enhancing biodiversity.

Fife Council's Access Team developed and continue to lead on the delivery of the [Fife Access Strategy 2006-2016](#). "Safeguarding and improving the environment" as one of five themes and objectives, along with health and wellbeing.

Fife Council recognises its responsibility to carry out its procurement activities in an economically, environmental and socially responsible manner. The [Fife Council Sustainable Procurement Policy](#) includes a commitment to purchase goods, materials and services that minimise or reduce the impacts of its activities on the local and global environment, including whole life costing, energy efficiency, supply chain management and sustainably-sourced products. The policy is currently under review.

3. Actions taken to improve biodiversity conservation

Many of the practical conservation projects listed below are either in, or contribute to, the Fife Local Biodiversity Action Plan 2013-2018 and have been delivered through a range of partnerships. Projects have been listed under the lead service.

Communities & Neighbourhoods in partnership with Parks, Streets & Open Spaces:

- The three-year [Fife's Buzzing](#) project – delivered in partnership with Buglife and grant funded by Heritage Lottery Fund and Fife Environment Trust – saw the creation of 13 ha of native wildflower-rich grassland at 23 parks and greenspaces across the Kingdom with the involvement of 27 schools and 10 community groups. Over 4,000 people participated in meadow creation days and other events. The project was made possible by landowners including Fife Council, Woodland Trust Scotland, Fife Golf Trust, St Andrews Botanic Gardens, Commscope and Dalbeath Farm, and with the support of Community Payback by Offenders Scheme. Fife's Buzzing aimed to help address the 97% loss of species-rich grassland in the UK since the 1940s, and the significant associated drop in numbers of native bees, butterflies and other insects. Fife is the most heavily cultivated region in Scotland, so urban greenspace presented an opportunity to address these declines whilst involving communities and raising awareness. Annual monitoring showed that the new meadows had an almost instant benefit to pollinators (see section 6 for details). The project brought colour and life to Fife's parks, making them happier and healthier places for people and wildlife to use and enjoy.
- As a land manager, Fife Council joined farmers, estates and golf courses in the RSPB-co-ordinated [Corn Bunting Recovery Project](#) and created three wild bird cover crop areas (4,879m²) with school children from three primary schools in parks in the East Neuk of Fife to provide cover and winter food for this threatened farmland bird. The corn bunting was one of Scotland's fastest declining birds, but in 2016, surveys saw the highest increase in numbers in Fife in any single year since monitoring began, with an 18% increase on participating landholdings. In addition, birds recolonised areas where they hadn't been seen in years; the first local range expansion since monitoring began.
- Creation of [Starkies Wood community wildlife garden](#) to transform a 1.7 ha area of poor greenspace in Buckhaven into a rich mosaic of habitats, in partnership with CLEAR Buckhaven and Take a Pride in Levenmouth and with funding from Fife Environment Trust, Forestry Commission Scotland, Local Community Planning Budget and trees from Woodland Trust Scotland. The project involved planting 500 trees, 40 fruit trees, creation of 380m² wetland, 1,500m² meadow, 60m mixed native hedgerow, enhancing 220m² woodland ground flora, erecting bird and bat boxes, and installing a path, benches and interpretation.
- Supported [Froglife's Scottish Dragon Finder Project](#) with the identification of ponds and wetlands in need of restoration in Fife, and the delivery of two pond restoration

projects in Riverside Park Glenrothes, and Letham Glen Leven with the support of local communities and volunteers.

- Parks, Streets & Open Spaces sowed a total of 249 plots amounting to 108,010 m² of pollinator-friendly annual 'pictorial' as well as native wildflower mixes in urban areas across Fife.
- Created 1000m² coastal wildflower meadow at East Sands, St Andrews in partnership with The R&A, Keep Scotland Beautiful and Fife Coast & Countryside Trust.
- Created orchards with community groups across Fife, often using heritage fruit tree varieties: 20 trees at Pannie Den Kirkcaldy, 15 at Motray Park in partnership with Transition St Andrews, 40 at Starkies Wood Buckhaven in partnership with CLEAR Buckhaven, 13 at Pittenweem allotments, 70 in Rosyth in partnership with the Community Council, 50 at Balbirnie allotments, 50 at Ravenscraig Park with the allotment group and Greener Kirkcaldy, 60 at Beveridge Park with the Kaleyard community group. Fife Council also supported the Urban Orchard Project to offer summer and winter pruning workshops for the community in the Riverside Park orchard, Glenrothes.
- Community-led pond and wetland creation projects were supported at Leslie, Hill of Beath and Rosyth. The Hill of Beath project was awarded Coalfield Regeneration Trust funding to create a biodiversity area in a public park, including wetlands, flower-rich grassland, willow copses, a boardwalk and seating area. The Rosyth project involved transforming a disused boating pond into an accessible wetland habitat through landscaping, planting and creation of a boardwalk. The wet meadow at Beveridge Park is also being restored.
- Biodiversity enhancement work took place at Letham Glen, Leven, including: undertaking a Phase 1 habitat survey, installation of bird and bat boxes, creation of two amphibian hibernacula, controlling Himalayan balsam, commencing pond restoration works with volunteers and Froglife, including removal of silt, opening surrounding canopy and programming pond planting for early 2018.
- In the Levenmouth area, wildflower seed and plug planting trials were undertaken to enhance the biodiversity value of grassland at: Letham Glen, Leven; Cotlands Park and Kennoway Den, Kennoway; Lundin Mill Primary School, Lundin Links; Starkies Wood, Buckhaven; and Poplar Road, Methilhill.
- The Kirkcaldy parks team invested in two electric buggies.

Communities & Neighbourhoods:

- Fife Council acts as Secretariat to and is a key partner in the Fife Biodiversity Partnership. The current [Fife Local Biodiversity Action Plan 2013-2018](#) contains 200 actions led by 27 partners. The plan aims to protect and enhance biodiversity for its intrinsic value as well as for the health, wellbeing and enjoyment of the people of Fife.
- Fife Council is working to bring its Sites of Special Scientific Interest into favourable condition. With volunteers, work has been underway to restore coastal grassland habitat at St Andrews-Craig Hartle, involving biannual bracken and scrub control events with volunteers. After four years, this has greatly enhanced a 4,500m² area. Fife Coast & Countryside Trust manages three Sites of Special Scientific Interest on behalf of the local authority. At Dalbeath Marsh, significant improvements were made in meeting all but one of the targets; most notably in 2015, the lowland neutral

grassland feature condition improved from 'unfavourable declining' to 'unfavourable recovering'.

- The Lyne Burn Green Network Project is a partnership between Fife Council, Scottish Environment Protection Agency and Lothians & Fife Green Network Partnership to enhance a key green corridor through river restoration, greenspace improvements and habitat creation in an area of multiple deprivation with below average quality greenspace in central Dunfermline. Fife Council was awarded grants of £1.6 million from Scottish Environment Protection Agency to undertake a feasibility and optioneering study and initial works to restore a section of the Lyne Burn. The next stage involves securing funding for delivery, including creation of a 'riverside park' across 19 ha of public greenspace including the Rex Park, Lyne Burn Park and Touch housing scheme.
- Fife Council was a partner in the Living Lomonds Landscape Partnership, a grant-funded landscape conservation programme which aimed to re-connect people with the living legacy of the Lomond and Benarty Hills through a range of community based activities, volunteering opportunities and projects. The three-year delivery phase came to an end in autumn 2016.
- Fife Council with Lothians & Fife Green Network Partnership and Forestry Commission Scotland commissioned an audit of woodlands in its ownership to rank them in terms of multiple uses and benefits. Five top-scoring woodlands were selected to take forward for Woodlands In and Around Towns funding to improve access, amenity, biodiversity and forestry opportunities. Management Plans were created and community consultations held. Woodland management work is currently underway at one of the four woods.
- Fife Council has an ambition to create 100ha of woodland on local authority land by 2028. A scoping study as identified around 30 sites with woodland expansion potential, and two of these are currently being taken forward with public consultations in Kirkcaldy and Dunfermline.
- Fife Council led on behalf of the Fife Invasive Non-Native Species Forum on a bid to Environment Co-operation Action Fund to secure funding for the catchment-scale River Eden Invasive Non-Native Species Programme. The four-year project aimed to engage landowners and managers, raise awareness about the threat of invasive non-native species, survey all watercourses to map the distribution of alien plants, develop a control strategy and management plans, and facilitate the control of these invasive non-native plants. The project was awarded £174,000 prior to the funding scheme being dissolved.
- The Biodiversity Team worked in partnership with RSPB to coordinate a survey of lowland breeding waders in 2017 - a repeat of surveys conducted in 1995 and 2002. The survey will help to assess change and target advice and information to land managers on promoting better conditions for the birds. Further sites will be surveyed in 2018.
- With input from experts, the Biodiversity Team coordinated the ground-truthing of bluebell sightings received by Fife Nature Records Centre in order to better understand the current distribution of the native variety in Fife.
- The Allotments Officer is leading on a programme of works to enhance community growing spaces for biodiversity, starting with a community wildlife garden at Kelty which has included creation of a pond, species-rich grassland, copses of trees, and 115m of hedgerow. A path was created round the site. This is being delivered in partnership with Kelty Greening Group and two local primary schools, who have

been involved in planting and creation of amphibian hibernacula and a bug hotel and will continue to use the site as an outdoor classroom.

- The service supports a range of initiatives to raise awareness about identification, threats, reporting and control of invasive non-native species, including running workshops and toolbox talks and producing information.
- A bid to Scottish Environment Protection Agency's Water Environment Fund to undertake a feasibility and scoping study to restore a section of the Back Burn, from the Lomond Hills via north Glenrothes to Markinch, was successful and £32,500 awarded in autumn 2017.
- The Biodiversity Team undertakes a suite of events annually including practical conservation days to protect and enhance habitats, bioblitzes, wildlife identification workshops, bat and fungi walks, and awareness raising through attendance at other events.
- Improving habitat connectivity through hedgerow creation in locations across Fife in partnership with Fife & Kinross Bat Group. Over 1km has been created since the last reporting period.
- Fife Nature Records Centre co-ordinated and publicised public surveys of five species which are indicators of ecosystem health and were also under-recorded in Fife. These included the blue-ray limpet, green-hairstreak butterfly, hedgehog, barn owl and bluebell.

Assets, Transportation & Environment:

- Financially supporting a project trialling the restoration of coastal saltmarsh habitat for a short section of coast on the Tayport frontage, led by St Andrews University.
- Design is progressing on a project to de-culvert a short length of the Lady Burn in Cupar's Haugh Park and create meanders, wetlands and soft landscaping.
- The Fife Council fleet includes the following ultra-low-emission-vehicles: 19 electric cars, three electric vans, one diesel plugin hybrid, two petrol plugin hybrids, and seven diesel/hydrogen hybrids including two refuse collection vehicles. The Fleet team was awarded £69,389 grant funding for the 2017-18 financial year to increasing the number of electric vehicles. Joined the Eco Stars Fleet Recognition Scheme in 2014 and awarded five-star rating in 2017 as described above.
- The Fleet team is also running alternative transportation delivery models, including a Commercial Fleet Scheme (123 members, 6117 vehicles) and a Taxi & Private Hire Scheme (24 members, 128 vehicles) which includes a green accreditation option which drivers can buy into.
- As part of its commitment to energy efficiency, Fife Council operates a joint Energy Fund, comprised of Council Energy Efficiency Fund, Energy Management Revolving Fund and corporate council investment in energy efficiency and renewables. Fitting LED lights at the new Dalgety Bay Leisure Centre through the scheme will reduce CO₂ production by 32.7 tonnes and an energy saving of 60,800 KWh per annum.
- Aim to be a leading green council and reduce CO₂ emissions by 80% by 2050. Street lighting generates 10% of the council's carbon footprint. Light Fife Green is an initiative to improve energy efficiency of Fife's street lighting network. Upgrades continue with 1500 columns erected and 7000 lanterns replaced with low energy LEDs in 2015-2016.
- In partnership with Communities & Neighbourhoods, the new visitor and sports centres at Lochore Meadows Country Park were fitted with heat source pumps,

solar panels and LED lighting. The new Michael Woods Sports & Leisure Centre in Glenrothes was fitted with a biomass boiler and rainwater tank.

Health & Social Care:

- The service has set up a number of change projects to help individuals and groups take control and make a difference in their communities. These include:
 - Small sparks – providing grants for local people to come together to make new connections, do something they enjoy and make a difference in their local community. Projects with a biodiversity focus include the Sensory Garden with Story Stones in Newburgh, Oor Wellie Boot Garden in Kirkcaldy, and Tayport Community Garden.
 - Independent Living Equipment Recycling Initiative – encourages the public to return unused or no longer needed items of support equipment such as bath lifts, height adjustable seating, zimmer frames, shower chairs and kitchen trolleys. These can then be re-used or recycled.
 - On Your Door Step Community website – this gives staff and the public access to information about what services, resources, activities and groups are available within their local community. This hub of information can help people make choices about their lives, to help improve their health and well-being and create a sense of belonging to their local community. Information also contains guidance on ways in which they can take more choice and control over their care needs as well as how they can get involved in groups to improve their well-being, for instance through the Bums off Seats walking programme. There are currently 1700 organisations and groups listed on the website including Loch Leven Wildlife Explorers, Nature Nursery at Methilhill Community Children's Initiative, Cullaloe Nature Reserve, RSPB Loch Leven and the Secret Garden Outdoor Nursery.
- Within the last two years, the Service has opened two new care homes/villages in Kirkcaldy and Glenrothes and work is ongoing on a third new care home in Lumphinnans. Sustainability and biodiversity have been integrated into building designs, plans and soft landscaping as per recommendations in ecological reports. At the Glenrothes site, meetings have been held to develop a project to encourage biodiversity in the care home grounds in conjunction with residents.

Housing:

- In regular contact with the Biodiversity Team to request advice on or surveys for protected species, most notably bats and birds, as well as habitat management advice. The works to Forth View and Raeburn Heights have been programmed to avoid bird nesting times and confirm that no protected species nest on the roofs.
- The department has commissioned and installed external wall insulation and loft and cavity wall insulation to thousands (just over 1000 in 2016) of council and private properties to increase their energy efficiency and reduce their carbon footprint.
- Co-ordinate with Local office staff to undertake to ensure reinstatement of greenspace and regeneration improvements, most notably in Kirkcaldy after an insulation project involving 500 properties.

Education:

- Primary, secondary and nursery schools in Fife continue to support and improve biodiversity within their outdoor spaces by creating ponds, planting trees and shrubs, composting, erecting bug hotels and creating wildlife gardens. This takes place on a school-by-school basis and is focused around individual school development plans.
- Biodiversity is being introduced at an early age through nursery classes and pupils making the most of their outdoor space.
- Staff at Lundin Mill Primary School in Lundin Links continue to work in partnership with Communities & Neighbourhoods and Parks, Streets & Open Spaces staff to develop a biodiverse school ground demonstration project. This has to date included the creation and management of a wildflower meadow, orchard and hedgerow, willow dome and wildlife viewing area, all with the involvement of pupils.

Resource Efficient Solutions:

Fife Council has two active land fill sites at Lower Melville Wood, Ladybank, and Lochhead, Dunfermline. These sites contain a range of cells where waste is buried; once a cell is full it is sealed and remediated. When Fife Council closes landfill cells, careful attention is paid to remediating the sites in a way that maximises their biodiversity value. A range of native species have been planted on closed cells and careful monitoring is undertaken to assess any impacts on local water bodies from runoff.

Fife Golf Trust:

- Manages Fife Council's seven municipal golf courses, amounting to some 300 ha, with a view to enhancing biodiversity including: creation of a pond at Glenrothes and enhancement of a further two ponds; planting 274m native mixed hedgerow in partnership with Fife & Kinross Bat Group at Kinghorn; bringing woodland into management at Glenrothes and Dunnikier; increasing areas of rough and bringing these into meadow management to encourage botanical diversity; taking part in the Fife's Buzzing project by involving schoolchildren and community groups in meadow creation at Dunnikier.
- Achieving internationally-recognised 'GEO Certified' environmental and sustainable accreditation in March 2017.

Fife Coast & Countryside Trust:

- Lead partner of the Living Lomonds Landscape Partnership landscape conservation programme. Natural heritage work included a survey of upland habitat and production of management proposals for 10 landholdings. A number of landowners delivered recommendations including wetland creation, grassland and heather moorland management. Giant hogweed control took place on a 10km stretch of the upper reaches of the River Eden, with match funding from Fife Environment Trust. A woodland management project took place, including control of *Rhododendron ponticum*. The project included interpretation and access to the hills.
- In partnership with St Andrews Links Trust, Scottish Natural Heritage and Fife Council, over 14,000 tonnes of sand have been moved to restore damaged sections of the West Sands dune system. Close to 1000 volunteers have helped to plant

marram and lyme grasses to stabilise the new dunes. Phase 4 commenced in 2016 and, licenced by Marine Scotland, St Andrews Links Trust relocated 900 tonnes of sand. Urgent works are now complete and the project has moved on to the long-term management phase, which will include biodiversity enhancement. Restoration work was undertaken with funding from St Andrews Links Trust, The R&A, Fife Environment Trust, Fife Council, the local community and local community planning budget. The restoration has strengthened an important coastal defence, helps protect against flooding and erosion from storm surges, and has improved recreational use as well as habitat for biodiversity.

- Protecting and enhancing habitats across Fife through the management of designated sites including four Local Nature Reserves, three of Fife Council's Sites of Special Scientific Interest, Lochore Meadows Country Park, the Eden Estuary Special Protection Area/Special Area of Conservation, as well as a number of species-rich grasslands and woodlands and the Fife Coastal path.
- Coastal restoration at Pathhead Sands, Kirkcaldy, with a grant from Coastal Communities Fund to naturalise the shoreline through dune creation, removal of invasive *Rosa rugosa*, enhancement of coastal grassland and provision of improved amenity.
- Fife Pilgrim Way: funding has been secured to create a new long-distance route through inland Fife and this will include habitat connectivity improvements and enhancement of graveyard habitat. Partners include: Fife Council, Fife Cultural Trust, Fife Tourism Partnership, Forth Pilgrim, Historic Environment Scotland, Scottish Natural Heritage, and Scottish Pilgrim Routes Forum. The project is funded by Fife Coast and Countryside Trust, Central Scotland Green Network Trust, Fife Council, Fife Environment Trust, Heritage Lottery Fund, LEADER, Scottish Landfill Communities Fund - Third Sector Hebrides, Scottish Natural Heritage, Suez Community Trust and WREN.

4. Partnership working and communications

4.1 Fife Council's involvement in partnership working on biodiversity.

Fife Council delivers a significant proportion of its biodiversity projects through partnerships, as described in section 3. In addition to the partnerships already mentioned:

- Fife Biodiversity Partnership, comprised of over 40 member organisations, meets twice a year to exchange progress updates, best practice and national and regional developments. The group is an important communication and networking platform for nature conservation in Fife.
- Fife Nature Records Centre has been a key partner in the Scottish Biodiversity Information Forum review of biological recording infrastructure in Scotland, as a contributor and also member of the Working Group. This review strives to determine the optimum infrastructure and address issues and gaps, such as in data flows and service provision, which inhibit fulfilment of the recommendations tabled in response to Scottish Parliament Petition PE1229 and the overall Forum vision: 'High quality species and habitat data will be collected and managed through a sustainable, co-ordinated and integrated local and national framework of organisations, partnerships and initiatives. These data will be available to ensure that Scotland's biodiversity, ecosystems and people benefit'.
- Fife Nature Records Centre is a member of Biological Recording in Scotland, which promotes the gathering of wildlife data in order to increase public awareness about biological diversity in Scotland and to ensure that effective actions are taken to conserve this resource.
- Fife Nature Records Centre is a member of Association of Local Environmental Records Centres and has made a positive contribution, providing input and perspective on Scottish issues through communication with the National Co-ordinator and attendance at a Director's meeting, and also use of the Association's online forum to share knowledge and experience and learn from others.
- Fife Nature Records Centre is a member of the National Biodiversity Network, alongside many UK wildlife conservation organisations, government, country agencies, environmental agencies, other Local Environmental Records Centres and several voluntary groups with biodiversity focus.
- Fife Nature Records Centre continued to receive input on its activities from a Steering Group, including Scottish Natural Heritage and expert biological recorders. The Records Centre also coordinated and attended specific meetings for expert recorders of a variety of plant and animal groups in Fife. This helped ensure the Centre was well-informed, that work was targeted appropriately and that crucial relationships were maintained.
- On an ad hoc basis, secondary schools work with the John Muir Trust to deliver the John Muir Awards Scheme.

- The education service also continues to maintain links with Scottish Rural University College (formerly Elmwood College), and other universities and colleges, the Woodland Trust Scotland and RSPB.
- Fife Environmental Partnership provides the only Fife-wide forum for discussion and sharing of environmental issues available to senior officers and community partners. This has helped ensure that projects are progressed in ways that maximise environmental benefits.

4.2 Communication and awareness raising activities about biodiversity conservation

- Regular communications about biodiversity are made externally through events, illustrated talks, a web presence and media releases. Internally, biodiversity communications are facilitated through cross-service meetings, presentations, workshops and briefing notes.
- The Fife Biodiversity Partnership submits biannual press releases about achievements through the Fife Local Biodiversity Action Plan and Fife Council raises awareness about the plan through exhibits and presentations at events and meetings. A presentation about the Plan was well-received by Fife Council's Scrutiny Committee in 2017. The group has also started communicating through social media.
- In 2017, Fife Environmental Partnership invited community representation and participation on the partnership from Fife Communities Climate Action Network. This ensures that Partnership activities and priorities are shared with all community groups active in climate change Fife, and provides community groups with named points of contact within large organisations. Fife Environmental Partnership has also worked with Fife Council Communications professionals to develop an engagement strategy.
- The Fife's Buzzing project actively engaged local communities in meadow creation in parks and greenspaces. Press releases and articles covering achievements in communities across Fife were regularly submitted. An interpretation panel and signage were installed. A celebration event was held for all participants to mark the end of the project, also inviting other interested local authorities and stakeholders to learn about the meadow creation project. Following the final press release, a motion in parliament noted the project's achievements.
- The Living Lomonds Landscape Partnership project created a [website](#), which includes a number of downloadable leaflets as well as a 'Passport to the Hills' app for families.
- In partnership with groups and organisations including British Dragonfly Society, Buglife, British Arachnological Society and British Bryological Society, Fife Nature Records Centre held a variety of public workshops to raise awareness about species groups, including training in identification and recording as well as developing appreciation for conservation issues. Further workshops were also held with the wider biodiversity team, River Forth Fisheries Trust and Fife's Buzzing project partners.
- The Biodiversity Team initiated a public call for bluebell sightings in Fife, publicising this alongside issues of hybridisation with non-native varieties including via a web page and through press-releases.

- Fife Nature Records Centre launched a public appeal for hedgehog sightings in Fife, including creation of a web page and use of Fife Coast & Countryside Trust social media. Existing initiatives in the UK were also promoted.
- With the support of local expert biological recorders and schemes and societies, the Biodiversity Team organised a number of public biological recording activities including bioblitzes. They worked in partnership with and supported others in delivery of a number of events to raise awareness about biodiversity, including a survey skills training day.
- Fife Council nominated the farmers, estates and land managers involved in the Corn Bunting Recovery Project for The Nature of Scotland Awards 2017. The Project was shortlisted under the Species Champion category.
- Fife Coast & Countryside Trust maintains a website with information about the countryside and coastal sites the organisation manages, produces a quarterly newsletter, and has an active social media presence. The Trust promoted the new Fife Pilgrim Way project through a [leaflet](#).
- Fife Golf Trust submitted a press release on receiving 'GEO Certified' accreditation, and was subsequently invited to sit on a sustainability panel at the British and International Golf Greenkeepers' Association conference in February 2018.
- Park and greenspace managers regularly erect signage at biodiversity sites to inform the public that areas are being managed to encourage wildlife, for instance at new wildflower meadows.
- The Fife Green Network was promoted at the 2016 Fife Environmental Partnership conference.
- The Fife Coast & Countryside Trust Ranger Service undertakes a suite of awareness raising and educational activities including practical conservation events, guided walks, school sessions, volunteer groups, and production of interpretation and media. The ranger service plays a key role in Fife in engaging the public with nature conservation initiatives.
- In August 2016, Fife Nature Records Centre was key in organising a meeting of Scottish Local Environmental Records Centres and other key record collators. This promoted discussion and sharing of experiences, resulting in a more informed biodiversity data community in Scotland.

4.3 Training and learning activities that were carried out internally or externally relating to biodiversity

- Resource Efficient Solutions held a series of high level Continuous Professional Development workshops on climate change adaptation as discussed above.
- Invasive non-native species:
 - the Biodiversity Team continued to raise awareness about identification, threat, control methods and importance of recording alien species as discussed above. Furthermore this included giving a presentation at Safer Communities Committee in January 2017 and creating a briefing note for elected members.
 - Parks, Streets & Open Spaces staff have been trained in pesticide use adjacent to watercourses in light of increasing need to control invasive non-native species along waterbodies. The department also continues with ongoing training and awareness raising of management practices which are

sympathetic to biodiversity, with a cultural change in this regard in recent years.

- Attendance by Fife Nature Records Centre at annual conferences for Biological Recording in Scotland, Association of Local Environmental Records Centres, and the National Biodiversity Network, learning from peers and contributing to discussion workshops on key issues.
- Internal Continuous Professional Development for the Biodiversity Team and dedicated Business Support role through internal skills sharing, including Phase 1 habitat survey and survey for other wildlife.
- Knowledge of specific plant and animal groups has been furthered within Fife Nature Records Centre and a dedicated Business Support role through attendance at workshops arranged in partnership with experts, and training presented externally on grassland identification and management (June 2016) and Phase 1 habitats (September 2016).
- Through the Fife's Buzzing project, staff in park management and development learnt about species-rich grassland creation and management. A briefing note about the importance of flower-rich grassland was produced to assist in answering questions and raising awareness. Fife Coast & Countryside Trust also held annual grassland identification and management workshops.
- Provision has been made by Parks, Streets & Open Spaces for management of new biodiversity areas through investment in machinery, such as specialist long grass management machinery, and associated training in use of new equipment.
- The Biodiversity Team regularly attends events to raise awareness about and engage people in biological recording and local nature conservation initiatives. Such events include agricultural shows, open days, partner organisation events, conferences and bioblitzes.

4.4 Opportunities for staff to take part in practical action such as volunteering

Fife Council enables employees to volunteer and makes the following two guidance documents available to staff on its intranet:

- 'Employer Supported Volunteer Activities Advice for Managers'
- 'Discretionary Leave Guidelines' which make reference to time off for volunteering

5. Biodiversity highlights and challenges

5.1 Fife Council's main achievements for biodiversity and what the organisation is most proud of

- Green networks and greenspace are now given a much higher priority in the FIFEplan Local Development Plan
- Lyne Burn river restoration project with Scottish Environment Protection Agency and Lothians & Fife Green Network Partnership
- Fife's Buzzing meadow creation project with Buglife
- Woodland management and creation initiatives with Lothians & Fife Green Network Partnership and Forestry Commission Scotland
- Development underway on a new and ambitious waste management policy for the next decade
- Development underway on a Fife Sustainable Energy and Climate Action Plan
- Living Lomonds Landscape Partnership project with 11 other partners
- The West Sands Dune Restoration project with Fife Coast & Countryside Trust, St Andrews Links Trust, Scottish Natural Heritage, Fife Council and project funders
- Taking part as a land manager in the RSPB-co-ordinated Corn Bunting Recovery Project, and the change of fortunes for this threatened bird in Fife
- Fife Golf Trust achieving 'GEO Certified' environmental and sustainable accreditation
- The project development which committed and proactive staff take forward at a time when capacity and resources are increasingly challenging
- Developing the Fife STEM Strategy to link with the National STEM Education and Training Strategy for Scotland, looking at career-long professional learning for practitioners which will include biodiversity

5.2 What will the main challenges be over the coming three years?

Fife Council has put in place strategies, policies and plans for the coming years to protect and enhance greenspace, improve sustainability, increase the environment's resilience to climate change, and enhance biodiversity, with an understanding of the multiple benefits that a healthy, high quality environment brings. The local authority will continue to work with partners to implement these objectives in an increasingly challenging time, and will strive to:

- Consider different ways of protecting and enhancing habitat, instigating and delivering projects and retaining and passing on knowledge in light of fewer resources and staff capacity.
- Commit where possible to maintaining biodiversity projects and also re-evaluating management of greenspace to ensure the best outcome for biodiversity and people.

- Continue to raise awareness and understanding – particularly at a decision-making level - about the importance of protecting and enhancing the environment for the multiple benefits it provides, including ecosystem services. This will help to ensure that environmental and greenspace enhancement projects continue to be supported.
- Ensure that skills and knowledge are shared to minimise the impact of changes in and loss of staff. Encourage staff to be pro-active and develop biodiversity projects where possible in spite of reduced capacity.
- Make the most of accessible grant funding, specifically to deliver landscape-scale conservation
- Engage staff more widely and continuing to mainstream across the council
- Keep abreast of potential changes in nature conservation, environmental and agricultural legislation when Britain leaves the European Union, in the hope that new legislation adequately protects Fife's natural heritage and special places

6. Monitoring

6.1 Follow-up actions or monitoring undertaken by Fife Council to assess impacts of work

- Fife Coast & Countryside Trust undertakes monitoring of a selection of sites in order to inform management. This includes the Eden Estuary Special Protection Area, Special Area of Conservation and Site of Special Scientific Interest, where monitoring of waders, wildfowl, seals, saltmarsh, coastal erosion, invasive non-native species, and human impact feed directly into management objectives for the site. Information is compiled and made available through an annual report. Volunteers make a significant contribution to monitoring initiatives, including birds, invertebrates and invasive non-native species.
- Baseline surveys were undertaken at the start of the Fife's Buzzing project, and newly created wildflower meadows monitored annually for invertebrates through standardised sweep-netting transects and visual surveys carried out by Buglife. Monitoring showed that the meadows had an almost instant benefit to pollinators. Baseline surveys of amenity grassland in 2014 found a total of 8 invertebrate species. At the newly created meadows in 2015, 101 species were recorded, including 56 different types of pollinator. In 2016, this increased to an impressive 122 species, of which there were 65 different types of pollinating insect. Other wildlife was noted, including frogs, swallows and kestrels using the grassland. See [Pollinator Reports](#).
- When the grant-funded Fife Red Squirrel Project came to an end in April 2014, Fife Council continued to support the monitoring of key red squirrel populations by co-ordinating volunteer surveyors in partnership with Fife Red Squirrel Group, and through digitisation of data by Fife Nature Records Centre. The monitoring has shown populations to be stable, and has meant that immediate action can be taken on the rare occasions when grey squirrels are observed.
- The breeding wader survey which is being repeated as a joint project between RSPB, Fife Nature Records Centre and the Biodiversity Team included monitoring of 15 sites with the help of 22 volunteers in 2017. Remaining sites will be monitored in 2018. The monitoring will help to assess change and target advice and information to land managers on promoting better conditions for the birds.
- Fife Council and Fife Coast & Countryside Trust asked Scottish Natural Heritage if Site Condition Monitoring for Craighall Den Site of Special Scientific Interest could be brought forward so as to inform a new management plan for the site. This was completed in spring 2017.
- Fife Golf Trust invested in a Geographic Positioning System moisture meter to monitor moisture levels within turf to enable application of water only where and when it is required, thereby reducing resource consumption and improving sustainability.

6.2 Submission of data to the National Biodiversity Network

Fife Nature Records Centre submitted data to the National Biodiversity Network Gateway on an annual basis before its closure and has begun the process of making data available via the new National Biodiversity Network Atlas.

7. Contribution to targets

Use the following table to indicate the biodiversity targets to which your organisation has contributed.

Targets/key steps from Chapter 1 (Healthy ecosystems) of the "2020 Challenge for Scotland's Biodiversity"	Contribution to key step [Yes/No]	Justification [Include project title or reference for relevant activity]
(1.1) Encourage and support ecosystem restoration and management, especially in catchments that have experienced the greatest degradation	Yes	<p>Fife Local Biodiversity Action Plan 2013-2018 and the work of the Fife Biodiversity Partnership</p> <p>Draft Sustainable Energy and Climate Action Plan – adaptation section</p> <p>Lyne Burn and Back Burn river restoration projects</p> <p>Woodland audit, management plans, Woodland in and Around Town funding bids</p> <p>Woodland expansion targets on local authority land - 100ha by 2028</p> <p>Fife's Buzzing meadow creation</p> <p>West Sands Dune Restoration and Pathhead Sands coastal restoration</p> <p>Saltmarsh restoration at Tayport</p> <p>Wetland and pond creation and restoration projects</p> <p>Bid to Environmental Co-operation Action Fund for River Eden INNS Programme</p> <p>Living Lomonds Landscape Partnership – upland and woodland ecosystem</p> <p>Enhancement of greenspace e.g. Starkies Wood, Kelty and Hill of Beath community wildlife gardens; extensive pollinator-friendly planting</p>
(1.2) Use assessments of ecosystem health at a catchment level to determine what needs to be done	Yes	<p>River Eden Invasive Non-Native Species Programme: was based on catchment-wide survey of invasive non-native plants</p> <p>Living Lomonds Landscape Partnership – restoration based on upland habitat surveys</p> <p>West Sands Dune Restoration – based on landscape-scale surveys and management plan</p> <p>Development of Riverlife: Leven project with River Forth Fisheries Trust</p>
(1.3) Government and public bodies, including Scottish Natural Heritage, Scottish Environment Protection	Yes	<p>Fife Environmental Partnership – leads on environmental aspects of community plan (public bodies include Scottish Enterprise, National Health Service, Scottish Natural Heritage, Forestry Commission Scotland, Scottish Environment Protection Agency, Fife College,</p>

<p>Agency and FCS, will work together towards a shared agenda for action to restore ecosystem health at a catchment-scale across Scotland</p>		<p>University of St Andrews, Fife Coast & Countryside Trust)</p> <p>Fife Biodiversity Partnership – leads on delivery of Fife Local Biodiversity Action Plan (public bodies include Scottish Natural Heritage, Forestry Commission Scotland, Police Scotland, Fife Coast & Countryside Trust, Fife College, St Andrews University, Elmwood College, Fife Golf Trust, National Health Service)</p> <p>Woodland assessment and management (with Forestry Commission Scotland)</p> <p>Lyne Burn & Back Burn river restoration projects (with Scottish Environment Protection Agency)</p> <p>Bid to Environmental Co-operation Action Fund for River Eden Invasive Non-native Species Programme (Fife Invasive Non-Native Species Forum including Scottish Natural Heritage and Scottish Environment Protection Agency)</p> <p>Fife Council is represented on both the Forth Estuary Forum and the Tay Estuary Forum</p> <p>Three coastal erosion/flood studies with input from Scottish Environment Protection Agency and Scottish Natural Heritage</p> <p>'Making Fife's Places' Supplementary Planning Guidance: based on green networks report produced with Scottish Natural Heritage</p> <p>Management of Sites of Special Scientific Interest – with Scottish Natural Heritage support</p> <p>West Sands Dune Restoration – through partnership including Scottish Natural Heritage and Royal Air Force (and more recently Army)</p> <p>Fife Nature Records Centre is run with financial and steering group support from Scottish Natural Heritage</p> <p>Education Service has links with Scottish Rural University College, colleges and universities</p>
<p>(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</p>	<p>Yes</p>	<p>Fife Local Biodiversity Action Plan 2013–2018 – ecosystem approach</p> <p>Draft Sustainable Energy and Climate Action Plan – adaptation section</p> <p>Making Fife's Places Supplementary Planning Guidance – green networks and natural heritage</p> <p>Climate Change Strategy 2014-2020</p> <p>Fife Forestry & Woodland Strategy 2013–2018</p> <p>Fife Shoreline Management Plan</p> <p>Fife Greenspace Strategy 2011-2016</p> <p>Fife Council Allotments Strategy 2018-2023</p> <p>West Sands Management Plan</p> <p>Lady Burn daylighting/meandering project in Haugh Park, Cupar</p>
<p>Targets/key steps from Chapter 3 (Biodiversity,</p>	<p>Contribution to key step</p>	<p>Justification</p>

health and quality of life) of the "2020 Challenge for Scotland's Biodiversity"	[Yes/No]	[Include project title or reference for relevant activity]
(3.1) Provide opportunities for everyone to experience and enjoy nature regularly, with a particular focus on disadvantaged groups	Yes	<p>Fife Coast & Countryside Trust Ranger Service activities, events and volunteering opportunities</p> <p>Natural Connections outdoor learning programme</p> <p>Outdoor Education Team based at Lochore Meadows Country Park</p> <p>Early Years outdoor nursery trial and programme development</p> <p>Bums Off Seats free guided walking initiative</p> <p>EcoSchools and John Muir Award initiatives through schools</p> <p>Fife Nature Records Centre workshops, bioblitzes and identification training</p> <p>Biodiversity Team practical conservation events, guided walks, events and volunteering opportunities</p>
(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	Yes	<p>Fife Greenspace Strategy 2011-2016</p> <p>Fife Local Biodiversity Action Plan 2013-2018</p> <p>Making Fife's Places Supplementary Planning Guidance and green network webpages</p> <p>Beautiful Fife initiative, Beautiful Scotland and Britain in Bloom</p> <p>Above strategies and communities supported by staff including Greenspace Officer, Biodiversity co-ordinator, Park Development Officers, Urban Park Ranger, Community Events Officer, Park Operations teams, Planning Officers – work in partnership with communities to enhance greenspaces for people and biodiversity</p> <p>Fife Coast & Countryside Trust through Countryside Ranger Service</p> <p>Fife Golf Trust / Biodiversity team partnership work to enhance Fife Council's seven municipal golf courses</p>
(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	Yes	<p>Bums Off Seats free guided walking initiative</p> <p>Installation of Green Gyms in parks</p> <p>Entering parks for Green Flag Awards with communities</p> <p>Fife Greenspace Strategy / work of Greenspace Officer</p> <p>Transportation & Roads - development of cycle networks in Dunfermline, Glenrothes and Kirkcaldy. Fife has one of most comprehensive cycling networks in Scotland - over 350 miles.</p>
(3.4) Increase access to nature within and close to schools, and support teachers in developing the role of outdoor learning	Yes	<p>Early Years team developing outdoor nursery provision with trial project underway</p> <p>Primary, secondary and nursery schools continue to improve biodiversity within their outdoor spaces by creating ponds, wildlife</p>

<p>across the Curriculum for Excellence</p>		<p>gardens, planting trees, composting, etc. enhance biodiversity on school grounds</p> <p>Natural Connections outdoor learning programme</p> <p>Outdoor Education Team based at Lochore Meadows Country Park</p> <p>Education service makes use of EcoSchools and John Muir Award initiatives</p> <p>School ground biodiversity 'demonstration' project at Lundin Mill Primary School</p> <p>Community wildlife garden/outdoor classroom being created with children from two primary schools at Kelty</p> <p>Biodiversity Team offers advice to schools on improving grounds for biodiversity</p>
<p>(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</p>	<p>Yes</p>	<p>Plan for Fife Local Outcome Improvement Plan 2017-2027 'Thriving Places' (community plan led by Fife Partnership Board)</p> <p>Delivering Continuous Professional Development series to elected members and senior decision makers on how to adapt to climate change – solutions are focussed on biodiversity enhancement and use of natural systems (i.e. de-culverting watercourses, reforestation) to increase resilience.</p> <p>Fife Local Biodiversity Action Plan 2013-2018 along with Fife Biodiversity Partnership and Biodiversity Team</p>
<p>Targets/key steps from Chapter 4 (Wildlife, habitats and protected places) of the "2020 Challenge for Scotland's Biodiversity"</p>	<p>Contribution to key step [Yes/No]</p>	<p>Justification [Include project title or reference for relevant activity]</p>
<p>(4.1) Ensure that the management of protected places for nature also provides wider public benefits</p>	<p>Yes</p>	<p>Fife Coast & Countryside Trust through their site management also provide access, recreation, interpretation, community engagement and education. Ranger Service important in providing wider public benefits.</p> <p>Fife Council engage the public in designated site management through practical conservation events and also maintain access for public use</p>
<p>(4.3) Integrate protected areas policy with action for wider habitats to combat fragmentation and restore key habitats</p>	<p>Yes</p>	<p>The Fife Integrated Habitat Network model is available to all staff on the internal mapping system. It is used to inform project development and also in planning recommendations and mitigation</p> <p>The Fife Integrated Habitat Network was used as one of selection criteria for Fife's Buzzing meadow restoration sites</p> <p>Green networks are included as an important consideration for all new developments in the Fife Local Development Plan adopted September 2017</p> <p>The Making Fife's Places Supplementary Planning Guidance sets out that biodiversity is a key consideration and integral part of the design process for a new development.</p>

<p>(4.5) Involve many more people than at present in this work and improve understanding of the poorly known elements of nature</p>	<p>Yes</p>	<p>Fife Coast & Countryside Trust, particularly Ranger Service</p> <p>Fife Council Biodiversity Team through Fife Local Biodiversity Action Plan and Fife Nature Records Centre through internal and external initiatives</p> <p>Fife's Buzzing meadow creation in partnership with Buglife. Grant-funded project involved over 4000 people.</p> <p>Resource Efficient Solutions engaged more staff and improved understanding through a series of high-level workshops focussing on adapting to climate by improving resilience through natural systems</p>
<p>Targets/key steps from Chapter 5 (Land and freshwater management) of the "2020 Challenge for Scotland's Biodiversity"</p>	<p>Contribution to key step [Yes/No]</p>	<p>Justification [Include project title or reference for relevant activity]</p>
<p>(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</p>	<p>Yes</p>	<p>Fife Local Biodiversity Action Plan 2013-2018 and the work of the Fife Biodiversity Partnership</p> <p>Draft Sustainable Energy and Climate Action Plan – adaptation section</p> <p>Green networks included as an important consideration for all new developments in the Fife Local Development Plan</p> <p>The Making Fife's Places Supplementary Planning Guidance - biodiversity is a key consideration and integral part of the design process for a new development.</p> <p>Fife Forestry & Woodland Strategy 2013-2018</p> <p>Living Lomonds Landscape Partnership</p> <p>West Sands Dune Restoration</p> <p>Saltmarsh restoration at Tayport through flood/coastal erosion work</p> <p>Bid to Environmental Co-operation Action Fund for River Eden Invasive Non-Native Species Programme</p>
<p>(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</p>	<p>No</p>	<p>n/a</p>
<p>(5.3) Support 'High Nature Value' farming and forestry</p>	<p>No</p>	<p>n/a</p>
<p>(5.4) Put in place the management necessary to bring Scotland's protected areas into favourable condition and improve the ecological status of water</p>	<p>Yes</p>	<p>Service Level Agreement with Fife Coast & Countryside Trust to manage selection of Fife Council designated sites</p> <p>Fife Council working to bring its Sites of Special Scientific Interest into favourable condition – target in service performance plan</p>

bodies		Two projects underway to improve ecological status of water bodies: <ul style="list-style-type: none"> • Lyne Burn restoration through Rex Park • Back Burn feasibility & scoping study - WEF grant awarded
(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	Yes	Shoreline Management Plan Flood risk/erosion studies at Tayport, Newburgh and Kincardine Saltmarsh planting at Tayport as a result of flood/erosion study Back Burn feasibility and scoping study to include riparian planting Fife Forestry & Woodland Strategy 2013-2018 and woodland expansion targets Draft Sustainable Energy and Climate Action Plan – adaptation section Fife Environmental Partnership Climate Change Strategy 2014-2020
(5.6) Restore and extend natural habitats as a means of building reserves of carbon and to help mitigate climate change	Yes	<u>Natural habitats are created and connected with multiple objectives one of which is climate adaptation and mitigation:</u> Woodland expansion targets on local authority land – 100ha by 2028 Fife's Buzzing meadow creation – 13ha at 23 locations in three years Pond and wetland creation and restoration with partner organisations and communities Hedgerow creation with partner organisations Lyne Burn restoration project which will include creation of habitats
(5.7) Provide clear advice to land and water managers on best practice	No	n/a
Targets/key steps from Chapter 6 (Marine and coastal) of the "2020 Challenge for Scotland's Biodiversity"	Contribution to key step [Yes/No]	Justification [Include project title or reference for relevant activity]
(6.4) Achieve good environmental status for Scottish seas	Yes	<u>Limited potential to influence, but initiatives include:</u> Member of Forth Estuary Forum and Tay Estuary Forum Taking part in Blue Flag Award Beach clean-up events including participation in annual Great British Beach Clean Developing Leven catchment project which will raise awareness about and address effect of freshwater pollution and littering on coast/seas

