



**PERTH &
KINROSS
COUNCIL**

Statutory Biodiversity Duty: Perth & Kinross Council Report on Delivery January 2021 to December 2023



Photo: volunteers spraying invasive non-native plants on the River Almond

Date: 20th December 2023

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List of Abbreviations

BTO	British Trust for Ornithology
CCROA	Climate Risk and Opportunity Assessment
GIS	Geographical Information System
HRA	Habitat Regulations Appraisals
IVA	Impact and Value Assessment
INNS	Invasive Non-Native Species
JHI	James Hutton Institute
LBAP	Local Biodiversity Action Plan
LDP	Local Development Plan
NPF4	National Planning Framework 4
NRF	Nature Restoration Fund
OSQA	Open Space Quality Audit
PKCCC	Perth and Kinross Climate Change Commission
PKC	Perth and Kinross Council
PKCT	Perth and Kinross Countryside Trust
PNCP	Perthshire Nature Connections Partnership
SEPA	Scottish Environment Protection Agency
SG	Supplementary guidance
SISI	Scottish Invasive Species Initiative
SRUC	Scotland's Rural College
SSSI	Site of Special Scientific Interest
SuDS	Sustainable urban drainage systems
SuDSNET	Sustainable Urban Drainage Systems Network
TayARG	Tayside Amphibian & Reptile Group
TBP	Tayside Biodiversity Partnership
TPO	Tree Preservation Order

1. Introduction

Under the Nature Conservation (Scotland) Act 2004, all public bodies in Scotland have a duty to further the conservation of biodiversity when carrying out their functions. The Wildlife and Natural Environment (Scotland) Act 2011 further requires all public bodies to report every three years on how they comply with this duty. This is the third report, covering the period from 1st January 2021 to 31st December 2023 demonstrating how Perth and Kinross Council has performed regarding the biodiversity duty for this three-year period.

Perth and Kinross Council (PKC) has achieved much for biodiversity over the last three years with enhanced mainstreaming and prioritisation of climate change and reducing biodiversity loss. Many challenges remain and there are multiple opportunities to further the conservation of biodiversity in our daily activities. Recognising the urgency of biodiversity loss and the interlinkages with climate change, in November 2022 the Council declared a Climate and Nature Emergency.

Perth and Kinross Council is a local authority with responsibility for an area of 5,300km² housing a population of 150,800 people ([Perth and Kinross Council, 2022](#)). The Council is made up of 40 elected Councillors representing [12 wards](#). The Council operates through a system of committees and sub-committees with officers reporting to committees on relevant matters.

[A new Corporate Plan 2022 – 27](#) was approved by the Council in December 2022, and sets the vision for “a Perth and Kinross where everyone can live life well, free from poverty and inequality”. It sets out priorities, corporate outcomes which are aligned with the Council’s values and designed to address or mitigate the impact of the many challenges the Council and the communities across Perth and Kinross are facing now and in the coming years. Biodiversity is aligned with one of the seven corporate priorities ‘*Tackling climate change and supporting sustainable places*’.

Day to day governance concerning biodiversity from May 2022 onwards has been directly through the Climate Change and Sustainability Committee. The committee considers matters relating to climate change, countryside management, parks and open spaces, trees and woodlands, environmental health, flood prevention, reservoirs, environmental assessment, sustainable development and environmental policy, environmental protection and enhancement, and waste management.

Prior to this, biodiversity sat with the Environment, Infrastructure and Economic Development Committee, which has retained responsibility for many linked topics including: the built environment (structures, roads, bridges, transportation networks, parks, recreation spaces and distribution networks for water and energy, fleet assets), the protection of public health, urban and rural regeneration, and economic well-being.

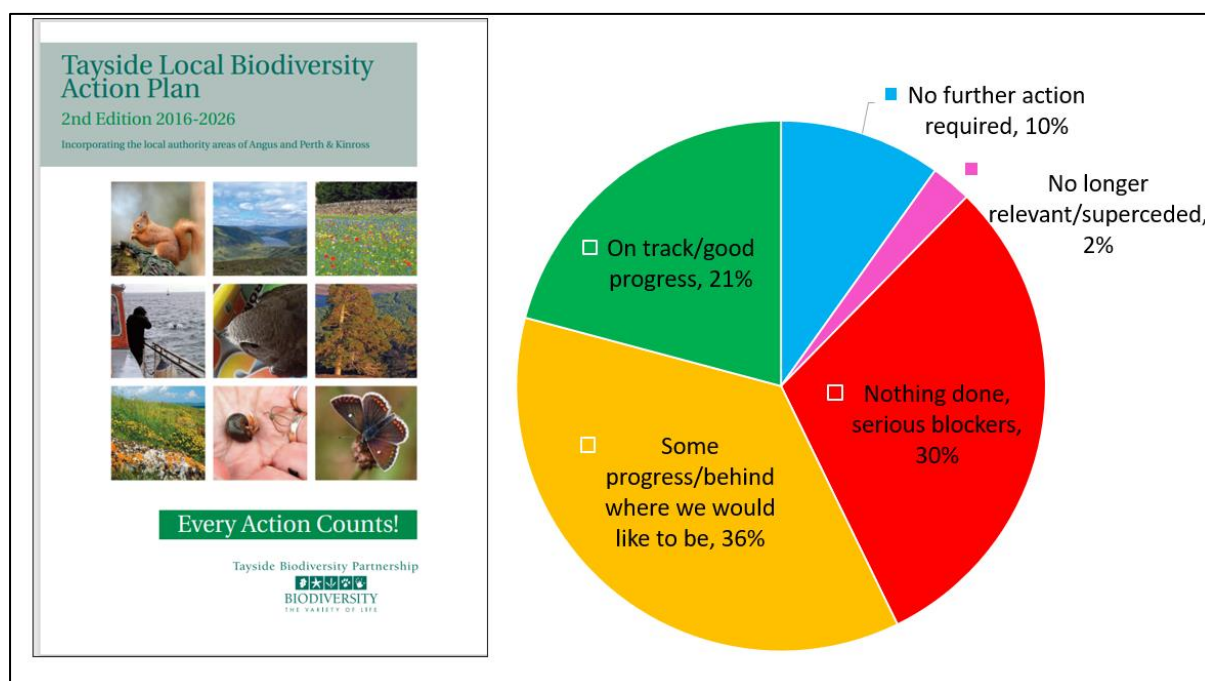
PKC has achieved much for biodiversity over the last three years with enhanced mainstreaming and prioritisation of climate change and reducing biodiversity loss. We are grateful to the Scottish Government and NatureScot for the allocation of funds from the Nature Restoration Fund to allow PKC to carry out practical activities to restore nature. It has also given PKC the opportunity to support and empower local communities to carry out their own projects to enhance nature and increase nature connectedness. Staff Biodiversity Officers and volunteers across the Council area have contributed a vast amount to many projects. Many challenges remain and there are multiple opportunities to further the conservation of biodiversity in our daily activities.

2. Actions to Protect and Enhance Biodiversity

Perth and Kinross Council is a partner of the [Tayside Biodiversity Partnership \(TBP\)](#) which allows cross border collaborative working between Perth and Kinross and Angus Councils in promoting biodiversity through the Tayside Biodiversity Co-ordinator. We are committed to delivering the actions of the [Tayside Local Biodiversity Action Plan \(LBAP\) 2016-26](#) and supporting and working with the TBP to safeguard our habitats and species.

Since 2021 the TBP Co-ordinator has been employed by PKC full-time and is central to advising on biodiversity priorities and projects in the Perth and Kinross area. The Biodiversity Co-ordinator is now embedded wholly within PKC, seconded part-time to the Perth and Kinross Countryside Trust allowing greater focus on integrating actions within the local authority and working closely with local communities.

In 2022, PKC undertook a review of all 284 PKC actions in the [Tayside Local Biodiversity Action Plan \(LBAP\)](#) allocating a traffic light system of red, amber and green to indicate progress and identify gaps. The results are being used to prioritise project work and to guide allocation of the [Nature Restoration Fund \(NRF\)](#).



Protecting Biodiversity in Development Management

Planning applications are screened by the Tree and Biodiversity Officer for potential impacts on biodiversity. The sustainable land use tool on GIS highlights ecological and biodiversity constraints and is used by Officers to inform proposals that require an Environment Impact Assessment and/or Habitat Regulations Appraisal to ensure the Council complies with European environmental legislation and statutory requirements. This systematic approach contributes to the Council's biodiversity duty.

Year	Total number of planning applications	Number of planning applications assessed for biodiversity constraints	Number of planning applications where biodiversity advice and recommendations were provided	Number of planning applications approved with biodiversity conditions
2021	1505	352	332	151
2022	1396	379	342	127
2023 (to 4 October)	995	371	261	61

Planning For Nature Guidance

PKC developed the [Planning for Nature Supplementary Guidance](#), which was adopted in April 2022, to bring together the expectations and requirements for planning applications regarding information on biodiversity. The importance of accurate ecological surveys undertaken in accordance with best practice and carried out by suitably qualified and experienced persons is stressed as well as the need for impact assessments and clear evidence of the mitigation hierarchy. Implementation of the Supplementary Guidance (SG) has been supported by workshops for Development Management Officers and was highlighted at the 2023 Housebuilders Forum to raise awareness to developers.

Enhancing Biodiversity in Development Management

The [Planning for Nature Supplementary Guidance](#) (in Appendix 4) sets out a checklist for all applications and specific developments as well as minimum enhancement requirements. The standard biodiversity enhancement measures set out in the Planning for Nature Supplementary Guidance are strengthened by the National Planning Framework 4 (NPF4). All major housing developments must include the measures below.

Minimum Requirement	Reasoning
Hedgehog Highways to be created in fencing via a 13x13cm gap.	Hedgehogs are a key species in the Tayside LBAP and enhancing connectivity is an objective.
Wildlife Kerbs installed adjacent to all road gullies within 500m of a SUDS pond	Contributes to Tayside LBAP project to mainstream use in mitigating for amphibian migration routes. Tayside are leading the way with this approach.
Swift nest boxes/bricks in settlements with swifts within 2km, at least one integrated swift nest brick into 25% of homes over 2 stories.	Contributes to Tayside LBAP Tayside Swift Conservation Project.
Barn owl nest boxes in rural areas	Contributes to Tayside LBAP action to provide nesting boxes.
House/tree sparrow nest boxes in rural areas	Contributes to Tayside LBAP Sparrows on the Edge Project.
Bat roosting boxes/bricks/tubes in 25% of 2 storey houses	Contributes to Tayside LBAP Urban Bats Project.

Delivering NPF4 Requirements for Enhancement

The National Planning Framework 4 (NPF4) introduced a need for Planning Authorities to require positive effects from development including significant enhancement in major and EIA developments. As no tools or resources were provided nationally alongside this requirement, developers in Perth and Kinross have been encouraged to set out their enhancement following advice in the Planning for Nature SG. PKC is currently developing an interim guidance note to supplement Planning for Nature to further support implementation but recognise that full implementation of NPF4 will not be possible until the tools are developed. The potential for offsite enhancement has been considered and in partnership with the Perth and Kinross Countryside Trust (PKCT) work has been commissioned to explore how this could work using the Riverwoods project as a pilot study.

Local Nature Conservation Sites

The project to identify Local Nature Conservations Sites is well underway with over 200 local biodiversity sites and 90 geodiversity sites initially identified. This involved a significant amount of preparatory work. Survey work was started in 2021 by a graduate ecologist, BSBI recorders and student volunteers. Surveying restarted in 2023 with a new graduate ecologist and a new BSBI recorder. Surveys for both geodiversity sites and biodiversity sites are expected to be completed by summer 2024 with adoption mid-2025. Candidate sites are included on internal mapping and although not yet designated, existing information on these sites is used to inform planning applications in accordance with NPF4 Policy 3, as well as informing responses to forestry consultations.

Tay Forest National Park Bid

In response to the Scottish Government intention to create at least one new national park, PKC agreed to prepare a bid submission for a new national park in northern Perthshire, called the [Tay Forest National Park](#). The opportunity to submit a bid to create a new national park is a rare opportunity to seek international recognition for Highland Perthshire's outstanding natural beauty and rich cultural and landscape diversity. Engagement with communities and stakeholders started in Autumn 2023 to shape the bid proposals further with in-person and online events. A key aim is to ensure that the bid submission and the vision for a national park it sets out reflects the views of the many different people that live and work in the area. The bid is due to be reported in finalised form to the full Council prior to submission to Scottish Government at the end of February 2024. Scottish Ministers are expected to announce the decision in mid-2024.

Case Study: Protecting Swifts in Conservation Buildings

In 2023 a new Protecting Swifts in Conservation Buildings working group was created within PKC, highlighted in the below article from the [Tayside Swifts 2023 Newsletter](#). The TBP [Tayside Swifts Project](#) are a part of the working group who raise awareness of swifts and provide information on how to improve habitats for swifts. Community Swift Conservation Projects have taken place in five Perthshire villages and a new Swift project is now underway in Blairgowrie. Stanley Swifts has undertaken monitoring at newly completed housing developments to ascertain use of swift bricks and to advise PKC on how provision of bricks can be improved. The Saving our Swifts Project was awarded a Highly Commended certificate in the 2022 Nature of Scotland Awards run by the RSPB and NatureScot.

Perth & Kinross Council Champions Swifts



© D. Muir

A new 'Protecting Swifts in Conservation Buildings' Working Group was created within Perth and Kinross Council in May 2023 to ensure swift nest conservation is considered when Listed Building Consents and planning applications for old buildings are submitted to PKC. Council officers are now working with the Perth & Kinross Heritage Trust as they distribute the Perth City Heritage Fund to improve the condition of listed buildings as often these contain nest sites for swifts. Working with the Tayside Biodiversity Partnership and Tayside Swifts, this important species will be considered early in the process and the provision of nesting boxes or bricks considered where appropriate.

Joanna Dick, PKC

Biodiversity Enhancement in New PKC Projects

Colleagues in PKC's Planning and Property departments work together to ensure biodiversity is protected and enhanced through upgrading and new build Council projects. New buildings require biodiversity enhancement measures in line with the Planning for Nature Supplementary Guidance. Careful consideration regarding creating more ecologically friendly planting beside the usual utility type spaces that schools require has resulted in wildflower areas at the new Riverside Primary School. Perth High School and Riverside Primary School will provide bat boxes on buildings and trees and nest boxes for house martin, swallow, swifts, and sparrows. Both school grounds will benefit from compensatory native tree planting and native hedgerows.

The under-construction Blairgowrie Recreation Centre will provide sparrow and swift boxes, poles with bat boxes and native tree and hedgerow planting within the extensive landscaping. The newly transformed Perth Museum has swift boxes above the parapet in the city centre. These measures contribute towards many PKC actions in the Tayside LBAP. Through the process of good design and Planning advice and conditions, biodiversity enhancement measures will be the norm for PKC new build and extension projects.



Photo: swift boxes on Perth Museum

Protecting Trees, Forestry and Woodland in Development Management

The Council aims to safeguard trees and woodlands through the development management process. Since February 2019, two posts with an enhanced tree protection remit have met weekly to review planning applications and work with developers, landowners, and local stakeholders to ensure woodland cover is maintained within the Council area. The Tree Enforcement Officer assesses requests for [Tree Preservation Orders](#) (TPO) and tree works in [Conservation Areas](#) ensuring trees of amenity and biodiversity value are protected.

PKC are robust in requesting [tree surveys and tree protection plans](#) to inform the planning process and projects undertaken by the Council as set out in the Planning for Nature SG. This includes survey best practice, applying the mitigation hierarchy, how to apply the trees and woodland policy of [Local Development Plan](#) (LDP2) and what is expected from tree and woodland surveys. The Tree Enforcement Officer provides training to Council colleagues and in 2023 the Woodland Trust delivered staff training to raise awareness of the importance of veteran trees, ancient woodland, and the new requirements of NPF4.

Protecting and Enhancing Trees, Forestry and Woodland in Land Use Change

A new dedicated woodland enquiries email address was created in 2019 to aid direct communication with partners such as Scottish Forestry and private forestry companies. Advice is provided in line with the [Council's Forest and Woodland Strategy](#) to promote sustainable forest management and planting the right type of woodland in the right place to enhance landscape and biodiversity as well as enhancing carbon capture and storage. The Forest and Woodland Strategy is to be reviewed in 2023/24.

Consultation Type	Number of consultations from 2021 to 2023
Felling permissions	85
Long term forestry and land management plans	48
Woodland creation proposals	67

An annual review is held with Scottish Forestry to ensure PKC adds value to the process. In response, we altered the process to improve communication with the Perth and Kinross Outdoor Access Forum. PKC are working with the PKCT to ensure the Council mapping system includes species rich grassland to inform our responses to woodland creation proposals.

In 2023 PKC responded to the Scottish Forestry grant scheme consultation highlighting the need to support smaller landowners, to fund natural regeneration, increase the proportion of native species and to emphasise the need for sustainable deer management and reduced deer fencing.

Protecting and Enhancing Trees, Forestry and Woodland on PKC Owned Land

Case Study: Protecting Riparian Trees of Value from Beaver Damage

A new project was created in 2022 to identify trees of value at risk from beaver damage on Council-owned land. GIS mapping data was combined with existing beaver territory data from NatureScot to identify priority valuable trees that should be protected from beaver damage.

Trees of value were identified as ancient woodland, trees protected by a Tree Preservation Order, trees within a Conservation Area, and trees of cultural, aesthetic and biodiversity value. PKC Community Greenspace staff have been working with volunteers to protect trees with fencing in several locations



Photo: impact of beavers on trees in Dunkeld.

From 2020, PKC Community Greenspace operations ceased cutting or strimming around trees in parks and greenspaces to avoid damage to trees. The [PKC Forest Plan](#) covers 36 woodland sites in Council ownership and management and is being updated. An Ash-Dieback Plan is in draft, and a new management plan has been created with a further three in draft following public consultation.

The Nature Restoration Fund was used to enhance the condition of three Sites of Special Scientific Interest (SSSI's) and other woodlands within PKC ownership by removing negative pressures such as non-native species and creating open ground. The Woodland Trust provided on-site advice which has been invaluable.

Westbank Nursery

PKC is fortunate to still own and operate a plant nursery with expert staff growing 26 species from local seeds and cuttings. Since 2021 898 shrubs have been planted in local parks and greenspaces ensuring local provenance and genetics. This approach has the added benefits of reduced risk of bringing in pests, diseases, and invasive non-native species, along with the carbon savings associated with having trees delivered from nurseries elsewhere.

The Nursery offers many opportunities to deliver training and develop rural skills and community benefits, but investment is required to realise the full potential of the site.

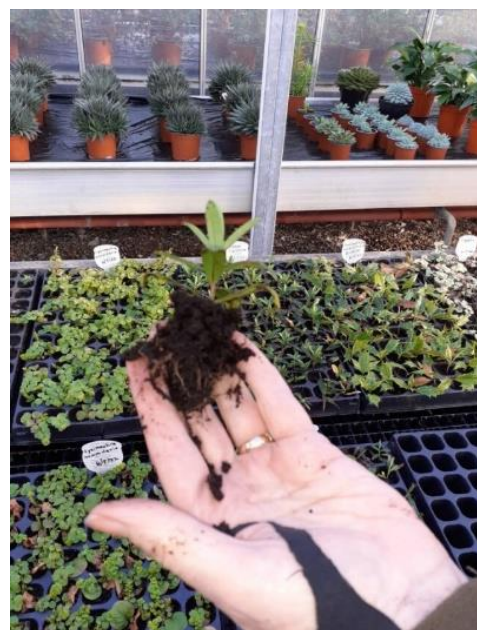


Photo: PKC Westbank Nursery in Perth

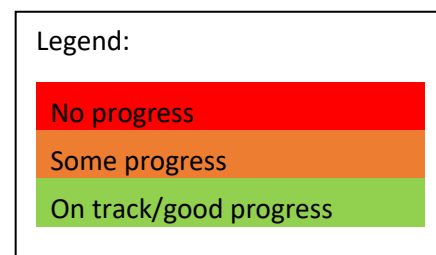
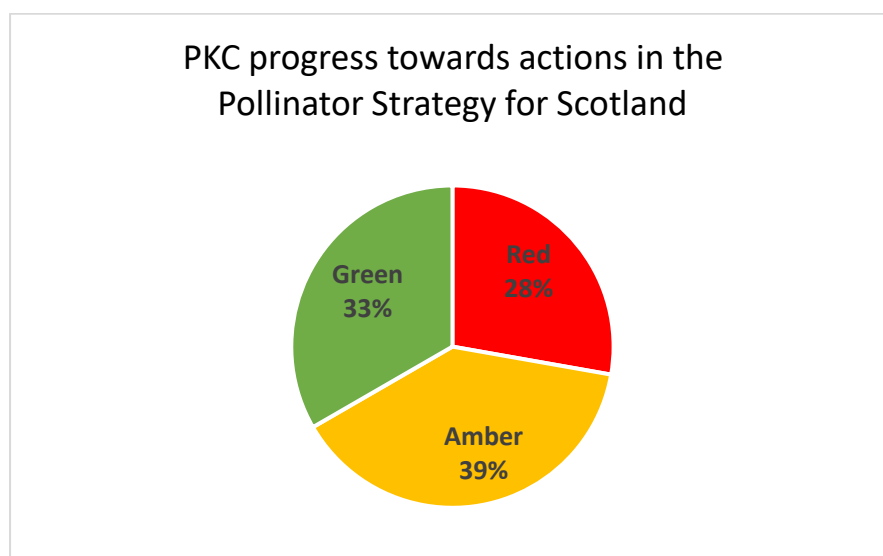
Tree Planting in Parks and Greenspaces

PKC was awarded the Queens Green Canopy City Champion status for Perth City’s Jubilee Avenue, a row of 27 semi-mature hornbeam trees in the South Inch in Perth. The Avenue is marked by special posts at either end commemorating the Jubilee. The status was granted to towns which create an environmental legacy and promote the importance of urban trees and woodland to health, air, quality, and climate. Additional trees were planted using the PKC Climate Action Fund.

Year	Number of trees planted using PKC Climate Action fund and as part of Queen’s Green Canopy	Ongoing maintenance planned
2021/22	1031	Trees watered and ad hoc maintenance as required.
2022/23	670	
2023/24	482	Replaced as required.

Action for Pollinators

In 2022, PKC conducted a review of the 18 actions under 5 objectives of the [Pollinator Strategy for Scotland 2017-2027](#) and the results are provided below. This led to enhanced focus on grassland management, the B-Lines project and creating more connected habitats for pollinators.



Protecting and Enhancing Grasslands



In response to the action in the Climate Action Plan and several requests from communities to manage more greenspaces for biodiversity, in 2021 Community Greenspace undertook grassland management trials encompassing two different approaches. The first involved "Managed for Wildlife" sites where

grass was mowed once annually, and the cuttings removed. The second approach focused on designating "No Mow" areas, where the grass remained untouched.

Year	Number of Managed for Wildlife sites	Area of Managed for Wildlife (acres)	Number of No Mow sites	Area of No Mow (acres)	Public consultation ran
2021	0	0	0	0	No
2022	7	9.03	36	53.68	Yes
2023	7	9.03	36	53.68	No

Biodiversity monitoring was carried out in 2022 by volunteers and PKC Staff Biodiversity Ambassadors. Results indicated that uncut areas contained more wildflowers, more wildflowers in flower, and a higher number of different species compared to amenity cut grass. Bees, butterflies and other insects were more abundant in uncut grass areas than cut, see the [Results and Discussion Paper](#) for more detailed results. An online public consultation in 2022 returned [positive results](#) with 73.8% of 386 respondents in favour of the proposals.



Following these findings, the Climate Change and Sustainability Committee approved proposals to develop a long-term plan, increase the number of sites and ensure close collaboration between Council Officers, community groups, and residents to shape future plans. NRF was used to purchase two pedestrian flails with interchangeable flail head and scythe attachment. Machines will be made available to path groups for

maintaining the core path network with the flail head and the scythe attachment for emerging meadow management groups.

Changes to grassland management has focused on parks and greenspaces and road verges will be considered in future. In 2023 a positive meeting was attended by PKC, Plantlife and the Tayside Amphibians and Reptile Group to discuss a collaborative approach to verge management for wildlife.



Photos: Managed for Wildlife sites in summer 2022

Successes include collecting biodiversity data, engaging with local communities, and receiving encouraging feedback from NatureScot and fellow Councils. Challenges include public perception, ensuring areas have grass mown edges and paths and on-site signage.

Strathmore B-Lines Project

The Strathmore B-Lines Project is the first B-Lines initiative in the Tayside region aiming to restore 20 hectares of wildflower-rich grasslands and other nectar-rich habitats across 20 sites to combat the decline of pollinating insects from Dunkeld to Montrose. Run by Buglife Scotland in partnership with TBP, PKC and Angus Council, PKC have agreed to manage three sites. In addition, a Farm Cluster near Alyth is achieving large-scale hedging and tree planting. The TBP are assisting the community to map a wildlife corridor from Blairgowrie up to the B-Line that runs north of the town.

Case Study: Auchterarder Park Flush of Flowers

In 2023 Community Greenspace led a £290k redesign and build of a community park play facility in Auchterarder Park. Tree planting, wildflower seeding, and wildflower turfing were incorporated into the design resulting in a flush of wildflowers this summer increasing species diversity of the site. A Birds and Bees wildflower turf contained 41 native flowers specially selected to be pollinator friendly and a Species Rich Lawn Turf blended 12 slow growing grasses and 23 native flowers. The creation of wildflower areas within this publicly accessible space improves the visual diversity of the park, raises awareness of the range of wildflowers and pollinators that depend on them and the many benefits to people, place, and nature.



Photo: Auchterarder Park in 2023

Changes to grassland management on Council owned land, the B-Lines and community projects are providing habitat for pollinators. In partnership with NatureScot, a pollinator maze was created in the busy greenspace Kirkgate Park on the banks of Local Leven National Nature Reserve in 2021. The Perth Heather Garden is maintained by a group of dedicated volunteers and contains 550 varieties that are valuable for pollinators.

Green Graveyards

The Tayside Biodiversity Partnership assisted PKC Officers to create a guide to managing graveyards in PKC to become Green Graveyards, a key project in the Tayside LBAP. Twenty Snowdrops for Pollinators projects have taken place in graveyards in 2022 and will be expanded in 2023 and 2024. Homes for Wildlife projects have also included graveyards with 20 communities.

Enhancing Water and Wetlands for Biodiversity

Tayside Biodiversity Partnership Ponds for Puddocks

Using Nature Restoration Funding in 2021-22, the SuDS Ponds Project improved six ponds with the help of local volunteers, including local schools and a commercial volunteer day. A second phase in 2022-23 saw the PKC Biodiversity Ambassadors take part in the launch event at the North Inch Pond where there was a photocall with the Courier and an interview with BBC Radio Scotland Out of Doors. Phase 3 of the project from October 2023 will be the final phase to complete this suite of SuDS ponds across Perth and Kinross. This will specifically safeguard amphibians and enhance the sites for invertebrates, especially dragonflies. The project, collectively called Ponds for Puddocks was nominated in the Nature of Scotland 2023 Community Innovation Award.



Amphibian Ladders

In conjunction with TayARG (the Tayside Amphibian & Reptile Group) gullypot surveys were undertaken as part of the SuDS Ponds Project to detect problem areas. In 2002, 60 amphibian ladders were made by volunteers and installed in gullypots to prevent amphibians falling in and becoming trapped.

This was replicated in 2023 with ladders being made and installed in Guildtown. More volunteer ladder making workshops took place in autumn 2023 in Coupar Angus and Stanley. Other Local Authorities have been in touch requesting further information on our approach.



Photo: gullypot checks © D. Muir

Invasive Non-Native Species (INNS) Treatment

PKC are members of the Perth and Kinross INNS Working Group led by NatureScot with Scottish Forestry, SEPA and TBP. Through the Development Management process and Planning for Nature SG, we require INNS management plans are submitted detailing eradication plans where INNS are present on site. As part of the largest PKC construction project, the Cross Tay Link Road, the contractor BAM facilitated removal of INNS along the Perth Lade in September 2023.

Case Study: New River Almond Project

Using NRF funding, PKC worked in partnership with the Scottish Invasive Species Initiative (SISI) to create a control programme to remove giant hogweed, Japanese knotweed, white butterbur, and



American skunk cabbage from the River Almond. Catchment scale control of a river system requires significant resources and a strategic, multi-stakeholder approach. By working directly with SISI, PKC have been able to follow their model of INNS control, engaging and working with key stakeholders including landowners, contractors, and local volunteers. By doing so, control efforts have been maximised.

A total of 35 people signed up to volunteer and after training attended 15 volunteer sessions on the Almond in May and June 2023, including a session for INNS week. Volunteers carried out spraying where giant hogweed infestations were severe, and contractors treated harder to reach areas.

Overall volunteers contributed 110 hours of control time in 15 working days, with an additional 70 hours of control time contributed by PKC and SISI staff. This gave a grand total of over 25 working days with an additional 6 days of contractor work. This effort has allowed PKC to bring approximately 22km of river under management in 2023, reaching from the upstream source to the current end point for control just past Bertha Park bridge. In 2024 PKC intend to bring another 3km of the river under management to expand control all the way to the Tay confluence.



Tayside Biodiversity Partnership Projects with Young People

Children's Pocket Garden Competition

With mentoring from the Tayside Biodiversity Partnership in 2021, Perth College Nursery and Glenlyon Primary School submitted bids to win the Children's Pocket Garden national competition. Glenlyon Primary's design was selected for the Keep Scotland Beautiful One Planet Picnic Pocket Garden showcase in June and won a Certificate of Achievement. The children designed a garden that supports people and wildlife by providing "a picnic for all" with a pond, bug hotels and fruit and vegetable planting [One Planet Pocket Picnic Garden Project | Glenlyon Primary School \(glowscotland.org.uk\)](https://www.glowscotland.org.uk)

Perth College UHI Nursery completed the 'Virtual Nature School' cohort 3 in 2023, a 6-week training programme exploring the lifecycles of a butterfly, bird watching and nest building. The children wrote a song called 'The River Tay' and created a pocket garden using recycled materials on the theme of rivers. The design was selected to be displayed online on the Keep Scotland Beautiful website.

Going the Whole Hog

NRF monies enabled 20 schools in Perth and Kinross to receive hogilo hedgehog homes and footprint survey equipment in 2021/22. Glenlyon pupils were treated to their first sighting on a trail camera set up in the school grounds. This caused much excitement as it is rare to see hedgehogs that far up the glen. [Video | Facebook https://www.facebook.com/watch/?v=473911141287123](https://www.facebook.com/watch/?v=473911141287123)



Tayside BeeWild

Primary schools, care homes and sheltered housing complexes have worked with the TBP to introduce pollinator-friendly plantings, including fruit trees and herbs into the grounds for the benefit of people and nature. The Tree Council has been introducing its Force for Nature and School Orchards projects across Perth and Kinross and there will be future links with the Perth and Kinross Countryside Trust's "A Tree for Each Child" project.



Photos: (left): the new sensory garden at Parkdale Care Home, Auchterarder; above – the BeeWild garden at Isla Court Sheltered Housing, Bridgend (both NRF funded) © C A G Lloyd

Empowering Communities to Protect and Enhance Biodiversity

Since August 2021 PKC has been awarded capital funding as the area's share of the Scottish Government's [Nature Restoration Fund](#). Although the award could all be spent on Council land or buildings, in line with the Perth and Kinross Offer, the Council has used a proportion of the funding to provide support to community-led biodiversity projects. In subsequent years, the same process has followed with the grant being available for community-led biodiversity projects, as well as Council ones.

Year	Financial support received from Nature Scot (£)	Number of community projects funded by PKC NRF	Number of school projects funded by PKC NRF	Number of SUDS/wetland projects funded by PKC NRF	Number of projects on PKC land funded by PKC NRF
2021	166,000	10	5	2	15
2022	189,000	7	2	5	13
2023	353,000	14	1	7	2

The 2022/23 Report can be downloaded from [NRF 22-23 Web Report.pdf \(pkc.gov.uk\)](#). Going forward, from 2023/24, 50% of the funding must be directed towards projects that contribute towards the development of nature networks across Perth and Kinross.

Biodiversity Villages, Towns and Neighbourhoods Initiative

St. Madoes and Glencarse became Scotland's first biodiversity village in 2020 as part of an exciting project by the Tayside Biodiversity Partnership. The project is led primarily by local communities with a focus on practical projects and citizen science surveys. An extensive Biodiversity Villages Toolkit has been prepared to help communities decide which projects to choose. The Council has applied for external funding to help roll out up to 25 projects across Perth and Kinross.



Blairgowrie is Scotland's [first Biodiversity Town](#) and BBC Countryfile featured this in summer 2022. The Council has assisted by attending the Blair Open Space Group to explain the planning process and how biodiversity is incorporated into decision making. The concept will be shared with other Local Authorities as Dumfries and Galloway, Fife, Highlands, and Aberdeenshire are interested in replicating the project. A Consortium will be set up in 2024 with a good practice conference planned to take place in Perth.



Photos: (left) Biodiversity Blair bioblitz and checking tree guards in the orchard © BRD

3. Mainstreaming Biodiversity

PKC signed the Edinburgh Declaration in November 2021 and in November 2022 declared a Climate and Biodiversity Emergency demonstrating the Council's ongoing commitment to tackling the twin crises of climate change and biodiversity loss together and mainstreaming biodiversity throughout the organisation's functions.

Staff Roles

The Council has several staff with specific biodiversity responsibilities:

- Tree and Biodiversity Officer to advise on and oversee the enforcement of the biodiversity duty within PKC's operations. This includes promoting the enhancement of developments for biodiversity and ensuring developments reduce the impact on biodiversity through the planning process and advising all Council departments on their legal requirements. The Tree and Biodiversity Officer advises on how to protect and enhance wildlife across Council services including Architects, Property, Housing and Education.
- Tayside Biodiversity Co-ordinator to focus on delivering TBP actions within Perth and Kinross
- Tree Enforcement Officer (Development Management)
- Climate Change Land Restoration Officer
- Community Greenspace Policy Officer (Trees and Woodlands)
- Community Greenspace Climate Change Officer.

New Staff

Funding linked with the Council's Climate Action Plan created a new full-time post in Community Greenspace to mainstream climate change and biodiversity, achieve actions in the Climate Action Plan and assist in allocating the NRF to projects on PKC owned land. Another full-time Climate Change Land Restoration Officer post was created within the Climate Change and Sustainable Development team, to deliver landscape scale restoration considering woodland creation, nature connectivity and peatland restoration.

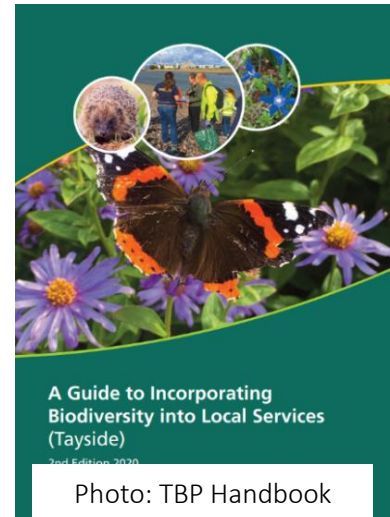
Case Study: PKC Biodiversity Ambassadors



The Biodiversity Ambassadors group consists of 84 members from all sections of the Council who are interested in nature and meet regularly, including in their lunch hour, to take part in webinars and in person events including opportunities to get outside. This includes tree planting, training sessions on species identification and presentations from external organisations. A key role of Ambassadors is to help mainstream biodiversity and nature-based solutions throughout the organisation by raising awareness through reporting back information to their teams and departments. Everyone is welcome to join, and no experience or knowledge of nature is required. Creating this group has been one of the most successful measures to mainstream biodiversity within PKC.

In February 2023, PKC launched a new Sustainable Development and Climate Change Hub for staff with a Biodiversity section. This helps to outline to staff what biodiversity is, the biodiversity crisis, the statutory duty and key milestones PKC have taken in conserving biodiversity. It also provides information on the actions staff can take to help tackle the biodiversity crisis and provides links to helpful resources.

To assist PKC staff and provide inspiration for potential future contributions, a 2nd Edition of the “[Incorporating Biodiversity into Local Services](#)” handbook was published by the Tayside Biodiversity Partnership in 2020 and has been publicised to all staff.



During 2023 PKC staff worked in partnership with three other Scottish Councils to create a nation-wide biodiversity e-learning module for Local Authority staff to raise awareness of the statutory biodiversity duty and the importance of biodiversity in decision making.

Inclusion in Structures Project Toolkit

Increased mainstreaming and awareness of the Council’s biodiversity duty has led to more queries on ecological survey requirements, protection of bat roosts in bridges and how biodiversity can be enhanced through Council projects. The Structures Team now consider impacts to biodiversity as part of their Structures Project Toolkit and in some areas are providing bird and bat boxes in woodland near where bridge repairs have been undertaken. In addition, otter ledges are being fitted to new bridges to deliver biodiversity enhancement. A large-scale river project in Blairgowrie led to creation of two Habitat Regulations Appraisals (HRA) written by PKC and approved by NatureScot in 2020 and 2023. This process was used to create guidance and an HRA checklist for Council staff.

Plans, Policies and Strategies

New Impact and Value Assessment Tool for Sustainable Development

A new Impact and Value Assessment (IVA) tool was launched in 2023 to ensure Council projects, strategies or proposals including all committee reports are screened against a range of statutory and non-statutory criteria, including climate change and biodiversity. The IVA highlights likely positive and/or negative biodiversity, climate change and environmental impacts early in the proposal development stage, allowing time for feedback and/or mitigation to be built into the proposal.

The sustainable land use tool on GIS highlights ecological and biodiversity constraints and is used by Council Officers to inform proposals that require an Environment Impact Assessment and/or Habitat Regulations Appraisal to ensure the Council complies with European environmental legislation and statutory requirements. Work is ongoing to map the connections between the Council’s Quality of Life indicators and the UN Sustainable Development Goals. Goals 14 and 15 have implications for biodiversity and we are in the process of developing further indicators around these goals to monitor the Councils performance towards biodiversity at Perth and Kinross level. By engaging with communities over land use, communities have greater opportunities to raise awareness, influence the future of their areas, and help create a sustainable environment for future generations.

Open Space Strategy

An Open Space Quality Audit (OSQA) was undertaken to inform the preparation of PKC's first Open Space Strategy which will be drafted in 2024 and identify actions to improve ecological functions and connectivity across sites. The OSQA includes +500 sites within or adjacent to settlement boundaries, including all Designated Open Spaces in PKC's Local Development Plan. The audit has been developed by a cross-team working group, including colleagues from the Local Development Plans, Community Greenspace, and Climate Change and Sustainable Development teams.

Biodiversity is one of the five main categories for the audit and includes assessment of habitats, naturalness, species, and connectivity. Results were mapped, highlighting open spaces with high scores for biodiversity. The scores are supplemented with qualitative data gathered through the Big Place Conversation engagement with local communities in 2023 which provided further insight into which sites are important to communities due to biodiversity and recreational value.

PKC Planning for Nature

PKC developed the [Planning for Nature](#) primarily as Supplementary Guidance to inform the planning process but is also used as guidance for all staff to inform design and management of Council projects. It offers advice on the need for ecological surveys undertaken in accordance with best practice and carried out by suitably qualified and experienced persons as well as the need for impact assessments and clear evidence of the mitigation hierarchy.



Photo: Planning for Nature guidance

The recommended biodiversity enhancement measures are being integrated into PKC projects as detailed in Section 2 of this report. This ensures that the requirement from external and private developers is similar to the requirements for PKC projects and plans. The Supplementary Guidance has been advertised through internal channels, email signatures and a training session for all Council staff is planned for 2024.

Internal Guidance Notes

Internal guidance notes for staff have been created on topics including incorporating biodiversity into allotments, creation of green graveyards and native woodland and heathland restoration best practice.

Procurement Changes

PKC Community Greenspace have adopted a sustainable procurement policy by asking for information on what will be done to minimise the environmental impact of proposed activities and services. This is a part of the technical questions that are weighted and contribute to a bidder's tender score.

4. Nature-Based Solutions, Climate Change and Biodiversity

The need to address the cause and effects of climate change and the drive to help meet national targets is a common thread across the topics within the Council's land use planning policy framework. The Climate Change Board, established in 2018, leads on climate change within the Council placing a commitment to tackling the twin crises of climate change and biodiversity loss together.

The Perth and Kinross Climate Change Commission

The Perth and Kinross Climate Change Commission (PKCCC) was formed May 2022, bringing together people and organisations from the public, private and civic sectors who work collaboratively to help drive, guide, support and monitor climate action. The Perth and Kinross Climate Change Commission (PKCCC) provides independent active leadership and support for cross-sector collaboration and action on climate change. The Commission plays a vital role in promoting a climate resilient future which is also fair and ensures that there is climate justice.

It is an independent body responsible for:

- Scrutinising the initial roadmap developed by the Council.
- Identifying ideas and good practice that should be promoted.
- Shaping the expansion of and further development of the roadmap through co-production, guidance, and feedback.
- Promoting appropriate community engagement on climate change.
- Overseeing delivery of the roadmap and its impact through regular monitoring.
- Championing climate change and delivery of priority actions across Perth and Kinross.
- Using its influence across the public sector, private sector and in our schools and communities to drive the necessary urgent action.
- Consider the connections between the climate crisis and other ongoing pressures – including the biodiversity crises, increasing cost of living, fuel poverty, inequalities, and health.

Internally, there are nine climate working groups with two focused on land use and resilience which aims to combine actions for biodiversity and climate change through nature-based solutions. The COSLA Considering Nature in Decision Making Elected Member briefing on Nature-based Solutions was circulated to members to raise awareness and understanding of the principles and benefits of using nature-based solutions.

Commissioned Research

Perth and Kinross Council commissioned Arup to develop a Climate Risk and Opportunity Assessment (CCROA) for the PKC area. Climate risk assessments identify the likelihood of future climate hazards and their potential impacts for cities and their communities along with the wider impacts on nature and biodiversity. This information is fundamental for informing the prioritisation of climate action, investment in adaptation and supporting community resilience groups. The results of the CCROA will be used to inform and update the Council's existing Climate Action Plan in relation to adaptation and resilience.

The James Hutton Institute were commissioned in 2021 to assist in the understanding of the impact and potential contribution of rural land uses to net zero through a Carbon Sequestration Project. The objectives of the study were to:

- i) Summarise carbon equivalent emissions from the Perth and Kinross Council area.
- ii) Provide evidence of the carbon stocks in the Perth and Kinross Council area.
- iii) Identify the potential for the sequestration of greenhouse gases, and how certain uses of land may impact upon the increase or decrease in carbon stocks; and
- iv) Propose approaches for consideration in how communities can contribute to the tackling of climate change (e.g., through social innovation, promotion of local action), and uses of natural capital to inform the achievement of the aims of climate neutrality.

The report highlights the significant potential to reduce emissions and sequester carbon across Perth and Kinross through sustainable land management, particularly in respect of woodland expansion, peatland restoration, the use of nature-based solutions, and a transition to agro-ecological farming practices and systems. The results of the study will be used to inform the Spatial Strategy for Local Development Plan 3, and the review of the Council's Forest and Woodland Strategy.

Working At a Regional Scale to Restore Nature

Conducting a review of all PKC actions in the Tayside Local Biodiversity Action Plan highlighted several actions that PKC had made little or no progress towards due to insufficient resources. It was clear that many of the actions in the LBAP and Climate Action Plan complement each other and are best tackled on a large, landscape scale. Furthermore, the recent decision to ask all Local Authorities to create Nature Networks [Nature Networks explained | NatureScot](#) further strengthens the need to work to collect data and build partnerships to work on a landscape scale within the Perth and Kinross Council area with bodies such as NatureScot, SEPA, the Tay District Salmon Fishery Board, Forth Rivers Trust and local landowners and communities.

PKC's new Climate Change Land Restoration Officer will contribute towards the 19 LBAP PKC Actions including reviewing "cross-boundary" opportunities to join up paths and habitats between Local Authorities, habitat corridors, invasive non-native species control and ash dieback. Afforestation and peatland restoration will also be a focus. A challenge to achieving this is that much of the land is out with the control of the Council, but the Officer will work with landowners and local communities to encourage action.

New Perthshire Nature Connections Partnership

In 2021, the Perthshire Nature Connections Partnership (PNCP) was created as a long-term, nature-based vision for Perth and Kinross that aims to create a connection between the Cairngorms and Loch Lomond and the Trossachs National Parks. As an integrated landscape-scale ecological restoration project, PNCP provides connections to create and re-establish a sustainable and resilient landscape in Perthshire that provides environmental, health and wellbeing, and socio-economic benefits to local communities, landowners, and land managers. The Conservation Officer is part-funded by PKC and hosted by the Perth and Kinross Countryside Trust.

Case Study: Investment Readiness Pioneers - Almond Headwaters

In May 2023 the Perthshire Nature Connections Partnership received £124K from the Esmée Fairbairn Foundation for the [Upper Tay Catchment Communities - Almond Headwaters project](#). It is one of two in Scotland to receive a 'Riverwoods - Investment Readiness Pioneers' award.

Riverwoods - Investment Readiness Pioneers awards grants to develop corporate and private funding for nature and climate recovery, and to increase community benefits from nature restoration projects. This project seeks to create an investable project that implements multiple interventions aimed at restoring the quality of the upper Almond's riparian habitat.

Award Winning Kinross Raingardens Trail

Funded by PKC Nature Restoration Fund, the [Kinross Raingardens Project](#) won the prestigious Construction Industry Research and Information Associations Susdrain 'UK Community SUDS' Award in 2022. The Raingardens Trail is a successful collaboration with Scotia Seeds, the Kinross-shire Civic Trust, PKC, and the Tayside Biodiversity Partnership. The Park and Ride part of the project is a demonstration site that can be used to inform further raingardens in future developments. In effect the trail is a series of smaller-scale projects, starting at the Park and Ride and going along to the industrial estate. Portmoak Primary School, Loch Leven's Larder, Kirkgate Park, and the Loch Leven Boathouse are all part of the wider initiative. Where biodiversity is concerned, the trail provides a series of permanent pollinator steppingstones and supports habitat restoration. Other sites within Kinross are being considered, including amphibian scrapes and a raingarden hedge.



Photos: (left) Park and Ride car park before project and after project

Perth Holds SuDSNET Conference

Perth hosted the SuDSNET (the Sustainable Urban Drainage Systems Network) conference in April 2023. The Scottish Universities Green Infrastructure Research Group first met in 2015 and has recently been holding joint meetings with the Abertay University-based SuDSNET that was set up in 2004 with an international remit to bring together researchers, practitioners, and developers. The Valuing the Benefits of Blue-Green Infrastructure conference was preceded by site visits exploring the award-winning Kinross-shire Raingardens Project to discuss practicalities.



Natural Flood Management and Catchment Management

The Council is a partner with NatureScot, SEPA, the Forth Rivers Trust and others to explore setting up a Landscape Enterprise Network in the Loch Leven catchment. Following a scoping report which built on a Natural Flood Management study for the Kinross South flood scheme, further funding has been secured to develop investible projects over the coming year. Practical work in the catchment for natural solutions to control erosion and reduce nutrient input into the Loch Leven National Nature Reserve has been funded by the Council.

Trialling Nature Based Solutions

Through the Nature Restoration Fund, the PKC Community Greenspace team has undertaken projects to restore native habitats and enhance our local ecosystems. One of the projects involved tree planting over an area of 3370m² at Jeanfield in Perth where using nature-based solutions will help mitigate the ever-increasing flooding issues. These trees will help to increase water absorption, catch rainfall, and slow down surface water run-off.



Photos: new tree planting at Jeanfield in Perth.

Elsewhere, a nature-based solution for bank erosion was attempted by using a Flex MSE vegetated wall solution at Buckie Braes in Perth. This was dislodged during substantial flooding and other natural solutions for bank erosion are being considered.

Main climate change related challenges for biodiversity over the next three years in a PKC Context

The above-mentioned Perth and Kinross Climate Change Risk and Opportunity Assessment looked at the already experienced changes and projected climatic variability at timesteps between 2030 and 2100. There were several occurring and short-term changes identified, which are linked with the following key potential impacts:

- Lack of connected habitats to allow species to move north or higher up the hill to find their preferred 'climate space'. Some species may decline, such as those that thrive on mountain tops such as mountain hare that may not be able to move within Scotland. For many species the loss of suitable habitat may restrict their spread. For example, the Arctic charr lives only in cold lochs that are now being affected by rising water temperatures.

- Continued habitat loss and fragmented habitats on isolated islands located within intensive agricultural and urban areas.
- More extreme weather events such as Storm Arwen causing habitat changes and woodland cover losses. Changes in seasonal rainfall and more extreme weather events will affect rivers, wetlands, hill slopes, and coasts. Rivers may flash flood more frequently in winter, which can wash out spawning beds for salmon and cause erosion and slope instability.
- Snow cover declines cause an increased mismatch in seasonal camouflage for mountain hares, leaving them more vulnerable to predators.
- Warmer temperatures allowing pests and diseases, including invasive non-native species, to establish or spread further. These are difficult to predict, but new plant diseases are already threatening native trees. Ecosystems that are under stress from climate change and other factors, such as pollution, may be more vulnerable to pests and diseases. Ash dieback is causing significant tree loss in PKC area currently.
- Seasonal changes to precipitation is already occurring and decreased summer precipitation with increased drought risk will compound the impact on habitats and species.

In addition to the above-mentioned impacts, more widely, carbon reduction often takes a centre stage of climate action, with the climate impacts on and resilience of biodiversity receiving less focus. Additionally, there are some potential conflicts between carbon reduction maximisation and biodiversity benefits that will need to be considered (e.g., Sitka Spruce has very high sequestration rates, but low biodiversity value). With the joint declaration of the climate and biodiversity crises in November 2022, PKC has stated its desire to address these crises jointly.

5. Public Engagement and Workforce Development

Public Engagement

By engaging with communities over land use, such as the Local Development Plan and greenspace management, communities have greater opportunities to raise awareness, influence the future of their areas and help create a sustainable environment for future generations.

The Big Place Conversation

[The Big Place Conversation](#) was the main engagement activity for the next Local Development Plan (LDP3). This utilised the Place Standard Tool and engaged with over 1500 people and organisations. This included a question specifically on access to nature and participants, including school pupils, older people and community groups provided their views on how their place could be better for nature and areas that should be protected. The information will help in the design of nature networks and identifying areas for protection in LDP3.

New PKC Climate Action Website



PKC launched a new website dedicated to [taking climate action](#) in 2022 following requests for a central source of trusted and knowledgeable climate action advice for residents, businesses, and visitors. The website highlights the PKC Climate Strategy and Action Plan, guidance on how to take action at home and at work, grants that relate to climate initiatives for households, businesses and community groups, and climate related events. Included on the website is a Community Projects & Groups map which captures examples of climate action across Perth and Kinross. Plus, information on community climate action projects and groups, including a variety of Carbon Stories highlighting good practice. The website and Facebook pages are used to regularly update on biodiversity projects, surveys, local events, and news <https://www.pkclimateaction.co.uk/>



Nature of Cities Festival International Conference

The Perth City Leadership Forum shared a vision to make Perth the most sustainable small city in Europe and for each year of this decade it will focus on one theme. In 2022 the focus was nature and biodiversity. PKC was a part of a workshop at the online 3-day event highlighting good practice in new housing developments requiring biodiversity enhancement measures as standard including swift bricks, hedgehog highways and wildlife kerbs.

Perth Winter Festival

PKC Climate Action engaged with people enjoying the Christmas light switch-on in 2022 with a colourful stall. Over 60 people made a pledge for the environment to do their part to help tackle the climate emergency and improve biodiversity.

A range of sustainable tombola items were won, including spring bulbs, pollinator friendly plants, bee homes and bird boxes.



Photo: colourful Climate Action stall

Climate Action Earth Day Market 2023

On 22nd April, community groups, businesses and environmental organisations came together to host an Earth Day Market. The market featured products from local suppliers and stalls showcasing the valuable work being undertaken across Perth and Kinross to help the environment. The Perth and Kinross Countryside Trust delivered a workshop for young people to learn about tree planting.

Youth Climate Conference

In November 2022, PKC hosted their first Youth Climate Conference as a pre-summit to COP27, the 27th annual climate change conference of the United Nations. Through inspiring talks, interactive workshops, and action planning, around 100 secondary school pupils gained a greater understanding of the climate and nature crises, and how to take action for climate and nature.

Among the speakers and workshops were SCOTLAND: The Big Picture Nextgen which focused on discussing threats to nature, the actions pupils could take to help rewild, and making a pledge for the wild. The conference provided opportunities for pupils to learn, collaborate, innovate, and take action locally on climate change and biodiversity. With the success of the first conference, this will now be hosted annually with a range of different speakers and workshop facilitators involved.



Photos: pupils at the Youth Conference enjoying the workshops

A group of PKC Officers welcomed a group of students from Scotland's Rural College (SRUC) who were studying Multipurpose Woodland Management. We toured Kinnoull Hill SSSI in Perth covering the new management plans, proposed actions for biodiversity and visitor management. The Tayside Biodiversity Partnership works with primary schools, care homes and sheltered housing complexes, detailed in Section 3 of this report.

Supporting Volunteers

Community Greenspace supports a range of [community groups](#) who operate in parks, cemeteries and on footpath networks through Perth and Kinross. Community Greenspace support over 30 path groups across Perth and Kinross who undertake path maintenance by clearing footpaths, thinning trees, removing litter and planting wildflower meadows. Rangers support volunteers to remove INNS in some areas. Community Greenspace offers support to over 20 community gardens, allotments, and orchards. The Ranger Service has devoted 182 annual hours in 2022 and 462 so far in 2023 with biodiversity and environmental groups.

As part of TBP's Biodiversity Villages Initiative, Guildtown Biodiversity Group worked with the PKC Community Greenspace Ranger in 2021/22 to enhance the local park and greenspace with bird and bat boxes, hedgehog homes and planting snowdrops. The local school was given bird and bat boxes for their school grounds.



Photos:(left) PKC Greenspace Ranger planting snowdrops with Guildtown Primary School © Kim Robertson and newly planted trees.

The Rangers run woodland activity sessions for people with early stages of dementia tackling social isolation and providing health and wellbeing benefits to participants, carers, and family members. Kinnoull Hill in Perth provides a place for walks, views from the top and The Shed to shelter in on rainy days and enjoy a social lunch at the end of the session. Participants enjoy meeting new people, enjoying nature as well as completing the John Muir Award.

Case Study: Friends of Cemeteries Groups



Photo: wildflowers in double rows

Since 2021, 15 [Friends of Cemeteries Groups](#) have been established with local volunteers dedicated to improving their local graveyard. Some groups started primarily to maintain grass cutting and neatening path edges but now many are providing habitats for nature with additional No Mow and Managed for Wildlife grassland management areas. Plus, four double rows planted with wildflowers and bulb planting in 2023.

The Friends of Jeanfield and Wellshill carried out wildflower surveys as part of the PKC biodiversity monitoring, and Kinnoull Old Burial Ground Group arranged a lichen expert to visit. Through the Tayside Biodiversity Partnership and TayARG (Tayside Amphibian & Reptile Group) an Amphibians in Graveyards Citizen Science Survey is underway. Advice to the Green Shoots Aberdalgie Outreach Project has seen them become a Friends of Cemeteries group and a fledgling Green Graveyard project.

Improving Access to Nature for All

The Community Greenspace Team maintains and repairs public facilities within greenspaces and the wider core path network to ensure they remain safe and attractive. Greenspace have signposted most of the 2048km core path network in Perth and Kinross and support over 30 path groups to help maintain core paths, rights of ways and other countryside paths. Community Greenspace Officers work closely with landowners, access takers and the Local Outdoor Access Forum to ensure the right of responsible access is unobstructed and undeterred.

The Policy Team are actively working on improving a long-distance route between Crieff and Comrie. Since 2020, draft management plans for Council owned countryside sites have been created in consultation with local stakeholders for Den of Alyth, Rumbling Bridge and Black Spout Wood. Support is also given to the Perth and Kinross Countryside Trust on various path improvement projects.

Workforce Development

Biodiversity Ambassadors

Since our last report in December 2020, Biodiversity Ambassador membership has grown from 60 to 84. The group work to help mainstream biodiversity and nature-based solutions through PKC for the benefit of people and nature. A lively Teams chat, regular training sessions and a programme of events are created which allows colleagues from different areas of the Council to work together for the benefit of biodiversity.



Photo: marketplace stall with bird boxes and leaflets

Everyone is welcome to join, and it is a great chance for PKC staff to gain new skills, meet new people, have fun, and help nature recover. To continue spreading the word and to recruit new members, an information stall is held at Corporate Induction events for new PKC staff. Online videos and articles in internal Council correspondence such as the Health and Wellbeing newsletter has also increased awareness of the group.

Biodiversity and Trees Training Sessions and Biodiversity Ambassador Events

Year	No of events total	No of externally led events	Total no. of staff attending events	Topic examples
2021	5	4	90	Grassland management series: Don't Mow, Let it Grow by the Causeway Coast & Glens Borough Council, On the Verge Stirling, Edinburgh Living Landscapes and Dr Phil Sterling from Butterfly Conservation
2022	13	4	229	Tree Reports and Issues for Planners Protecting Trees from Beaver damage Rejuvenating Business Parks Butterfly and Wildflower ID session Training on SUDS and amphibians
2023	10	8	140	Outcomes of COP15 negotiations Woodland Trust Session for Planners Riverwoods webinar Intro to Pollinators and FIT Count by Buglife Bat Ecology Training SSEN Biodiversity Net Gain webinar Local Nature Conservation Sites introduction and site visit

Practical Activities

PKC staff are encouraged to take part in a range of practical activities to learn more about nature, make a positive impact and to raise awareness of the wellbeing benefits of being active outdoors in nature. Articles in the PKC Health and Wellbeing Newsletter helps to promote opportunities. Several events in 2023 were accessible to all and additionally advertised to the diSABILITY Staff Network.

- Biodiversity Ambassadors set up practical volunteering opportunities to record wildflowers and invertebrates for the PKC grassland management biodiversity monitoring using a newly created app (photo below).
- Biodiversity Ambassador guided walks and litter picking in local parks and greenspaces.
- A site visit to the River Almond to learn more about the PKC partnership project controlling invasive non-native species.
- Site visits to Denmarkfield to learn about rewilding and grassland management.
- Walk and talk along the Perth Lade to discuss potential development, impact to biodiversity and local communities.
- Pond clearing to benefit amphibians at the North Inch in Perth in partnership with Tay ARG (photos below).



Get Sett Scotland

Perth and Kinross Council Biodiversity Ambassadors joined Morag from Scottish Badgers for training to find signs of badgers. Volunteers signed up to help with the 3-year project entitled 'Get Sett Scotland' to re-run the Scottish Badger Distribution Survey undertaken by the charity back in 2006-2009. The aim of this new citizen science project is to estimate change in the density and distribution of badger main setts across a range of habitats in Scotland.



Photo: badger survey training

Training was given on how to spot field signs of badgers including their hair (which is distinguishable by how hard it is to break), latrines, badger paths and setts. Any evidence of human disturbance will also be noted. All volunteers were given a 1km square to survey in winter/spring 2023 and feedback the results to Scottish Badgers.

The Impacts of Rubbish on Wildlife

Inspired by the many community groups and individuals volunteering to pick up litter in Perth and Kinross and to coincide with the National Spring Clean, PKC's Climate Change Team organised a series of litter picks for staff in April 2023.

Litter picking was undertaken on land and on the River Tay via canoes. 65 bags of



litter were collected in just four hours. The event highlighted the financial costs of clearing up litter to PKC (over £2 million annually) and the negative impacts to health, wellbeing, and wildlife.

Photos: (left) litter picking on a canoe and Keep Scotland Beautiful mascots

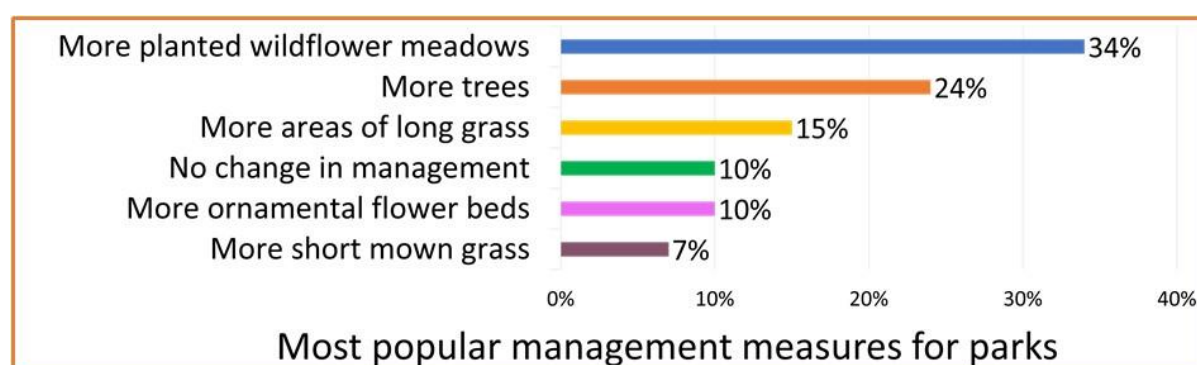
6. Research and Monitoring

Supporting Students

During 2022 and early 2023, the TBP assisted an MSc student studying Environmental Entrepreneurship at the University of Strathclyde with a community SuDS survey.

Case Study: Nature in Parks: A Balance of Established, Wild & Tamed

During 2021 PKC assisted an MSc student studying Countryside Management at SRUC to investigate attitudes towards increasing areas of long grass and wildflower meadows in parks and greenspaces within Perth and Kinross. Results indicated awareness of biodiversity was high, as 94% had heard the term before the questionnaire. Respondents were highly supportive of managing parks to improve biodiversity and 91% were more in favour of wildflower meadows than long grass areas (73%).



Respondents were asked about benefits and concerns regarding wildflower meadows and long grass areas. The majority agreed that both measures would increase biodiversity and be more interesting to look at. Additional benefits identified included educational opportunities, reduction in chemical use, time and money spent cutting amenity grass, and enhanced health and wellbeing benefits. Respondents indicated concerns related to dog fouling, loss of space for sport and activities, increased risk of ticks and a lack of long-term management of areas.

Although respondents were supportive of more wildflower meadows and long grass areas, it was conditional on establishment of 'Park Rules' (see box).

"Education is essential to involve public, to build pride in the wild look, ensuring respect maintained so litter and dog fouling don't become the norm." - Respondent

The findings of this study suggested there is an opportunity to improve parks for nature, improve parks for people and enhance the connection between the two to realise a "win-win". However, support is conditional on long term management plans, community consultation and engagement prior to making any changes.

PARK RULES

1. More information on benefits
2. Community involvement
3. More trees and monitoring of biodiversity
4. Dog fouling enforcement
5. More litter bins
6. A long term plan and commitment to maintenance

© Joanna Dick

Research

In 2023, PKC commissioned Arup to develop a Climate Risk and Opportunity Assessment (CCROA) to identify the likelihood of future climate hazards and their potential impacts for PKC communities. In 2021, the Council commissioned a Carbon Sequestration Project with The James Hutton Institute (JHI).

Monitoring PKC Actions for Biodiversity

Across many Council functions, monitoring activities are hampered by the lack of resources and the inability to use funding such as the NRF for ongoing monitoring. Activities undertaken within the three SSSIs in PKC ownership and larger greenspace sites will be monitored to ensure the desired outcomes are being met. Community Greenspace Ranger staff and volunteers will observe other management programmes and report back.

In 2023 residents reported a lack of wildlife kerbs in a new development in Blairgowrie located close to a SUDS pond used by amphibians and reptiles. An enforcement action was raised with the developers and the wildlife kerbs provided in the required areas within weeks.

Monitoring Grassland Management

Biodiversity monitoring was carried out from April to September 2022 by volunteers and PKC Biodiversity Ambassadors. Areas of uncut grass were compared to nearby short mown amenity grass and the number of wildflowers, pollinators and birds were noted and photos submitted. The aim was to investigate the biodiversity value of sites where mowing will be altered and collect information on the wildflowers that are naturally present in the seed bank but have been suppressed by regular amenity mowing. This created a baseline to provide comparison once future management regimes have been implemented.

A total of 133 surveys were received from 44 surveyors. 135 were completed via the newly created app to collect data online and the rest were emailed forms. Results indicated that uncut areas contained more wildflowers, more wildflowers in flower, and a higher number of different species compared to amenity cut grass. A total of 64 wildflower species were recorded that would not have flowered had these areas continued to be close mown. Bees, butterflies, and other insects were more abundant in uncut grass areas than cut, see table below. The [Results and Discussion Paper](#) contains more detailed information. Results are being used to inform future plans for grassland management in parks and greenspaces in PKC.

Biodiversity Measure	Uncut Areas	Cut Areas as Normal
Wildflowers present	95%	78%
Wildflowers in flower present	88%	32%
Number of different looking wildflower species (average)	6.2	2.3
Butterflies present	30%	6%
Number of different looking butterfly species	7	5
Bees present	46%	11%
Other insects present	65%	15%

Mini Bio-Blitz

Perth and Kinross Biodiversity Village, Town & Neighbourhood communities ran an online mini bioblitz in their patch in July and August 2023 looking for 10 species: hedgehog, slow worm, house sparrow, song thrush, brown hare, red admiral butterfly, common carder bumblebee, harebell, ox-eye daisy, and ragged robin. All sightings were recorded on iNaturalist and will help inform future management decisions.

Contributing to the National Biodiversity Network Gateway

Tayside does not have a Local Records Centre which is a significant limitation, however PKC is a part of the Better Biodiversity Project Group as part of the National Biodiversity Network Trust's Scottish Better Biodiversity Data Project. The staff setting up the project funded by the Scottish Government have met with Perth and Kinross, Angus, and Dundee City Councils and the TBP to discuss the creation of Biological Recording Data Hubs. This is long overdue in Tayside and will greatly help the region's planners and developers.

Case Study: New Young Wildlife Recorders' Group.

Recognising that there is an urgent need to welcome and train new wildlife recorders owing to the aging demographic of species and habitats specialists, the TBP has started to set up a new Young Wildlife Recorders' Group. Liaising with the British Trust for Ornithology and Butterfly Conservation, a funding application - prepared jointly with the Perth & Kinross Countryside Trust - has been submitted to run the first pilot. From a very well-attended online meeting in January, many other local and national organisations and groups have confirmed they are keen to help with a much larger-scale project when the time is right.

In tandem with the Young Wildlife Recorders' Group, the Every Action Counts Citizen Science Initiative will expand the work of the Tayside Recorders' Forum by setting up a similar project to the Forth Nature Counts project. This will expand the programme of wildlife survey, identification skills workshops and events linked to the Biodiversity Villages, Towns & Neighbourhoods Initiative.

The PKC Biodiversity Ambassadors group encourages all staff to take part in citizen science projects and those that contribute towards the National Biodiversity Network Gateway such as BeeWalk, Save our Red Squirrels, Big Butterfly Count, Big Garden Bird Watch, Tayside Swifts and ZoomIn2 time lapse photographic project. An online editable map to record biodiversity within Perth and Kinross parks and open spaces has been developed by the Council and will be expanded in 2024.

7. Biodiversity Highlights and Challenges

2021-2023 Highlights

As described in the preceding sections, there has been an abundance of positive action taken both by the Council directly and by our communities with support from the Council that has led to positive progress in addressing biodiversity loss across Perth and Kinross. From this, the top 10 highlights have been identified.

1. Receiving over £700k of Scottish Government Nature Restoration Funding from 2021 that has enabled more than 30 projects to be successfully delivered by PKC and community groups, with a further 18 on-going in 2023/24.
2. Developing a new approach to grassland management across Greenspace in Perth and Kinross. Biodiversity monitoring of the new sites by PKC Biodiversity Ambassadors and volunteers in 2022 showed positive biodiversity enhancements and the success of a newly created citizen science project.
3. Developing and adopting the [Planning for Nature Supplementary Guidance](#) to set clear expectations and requirements for planning applications regarding information on biodiversity. By clarifying expectations, it is expected to both enhance applicant experience by reducing the need to back and forth requesting further information as well as promoting best practice. Implementation of the Guidance has been supported by workshops for Development Management Officers and was highlighted at the 2023 Housebuilders Forum to raise awareness with developers.
4. Mainstreaming of biodiversity throughout the organisation. An example of this is the new Protecting Swifts in Conservation Buildings working group set up in 2023, where PKC is working in partnership with the Perth and Kinross Heritage Trust in considering swifts in heritage funded conservation projects.
5. Building a successful partnership with the Scottish Invasive Species Initiative and local landowners to deliver a catchment scale approach to INNS control project on the river Almond. Plus, the development of community involvement with 35 community volunteers taking part.
6. Creating the new [Climate Action website](#) and social media channels to raise awareness of actions to tackle the twin crises of climate change and nature loss, with Nature being the key theme of the campaign in Spring and Summer 2023.
7. Developing our [Biodiversity Towns and Villages programme](#), with Blairgowrie named Scotland's first Biodiversity Town and St. Madoes and Glencarse became Scotland's first biodiversity village.
8. Supporting the [Perthshire Nature Connections Partnership](#) and Conservation Officer post to tackle landscape scale challenges.
9. Increasing our biodiversity workforce with the establishment of the Climate Change Officer into Community Greenspace and creation of a new Climate Change Land Restoration Officer to further landscape scale restoration and further upskilling our existing workforce.
10. Growing the membership of PKC staff Biodiversity Ambassadors. This has enabled the sharing of ideas, good practice and creating new collaborations and partnerships has resulted in on the ground actions and changes to Council policies and procedures.

Potential challenges for 2024 - 2026

Several potential challenges to biodiversity delivery have been identified for the upcoming three-year window between 2024 - 2026. A summary of the main challenges include:

1. While the Council has increased its biodiversity resources over the last three years, the increased need to incorporate greater levels of biodiversity enhancement into planning decisions and operational enhancements, still leaves limited staff resource to:
 - a. implement NPF4 requirements and creation of nature networks across Perth and Kinross.
 - b. provide long term management plans and tree planting plans for PKC owned and maintained land.
 - c. undertake long-term biodiversity monitoring of projects.
2. The annual nature of NRF funding and theme confirmation, results in limited implementation windows and impacts on the availability of contractors to carry out the works.
3. Tayside does not have a local biodiversity records centre which is a challenge to the Council as biodiversity data is held in several different locations rather than one centralised database. A records centre or central recording hub as proposed by the NBN would also aid development management and land use decisions as well as creation of nature networks.
4. While the Council has its LBAP, there is an identified gap around the development of long-term Council specific biodiversity and greenspace strategies and policies to improve co-ordinate delivery, prioritise, and secure necessary resources for biodiversity enhancements on Council owned land to deliver multiple benefits.
5. Effective Invasive non-native species (INNS) control requires a catchment-wide long-term plan. There is not currently one for the River Tay catchment, which is a challenge for effective management.

8. Conclusion

The Council recognises it must play a key role in helping to deliver a more sustainable and biodiversity rich area, as an employer with responsibility for staff and buildings, as a provider of local services, and as a community leader working in partnership with a range of stakeholders. Furthering the protection and enhancement of biodiversity is a continual work in progress with links across many Council areas, and this report highlights the diverse range of activities undertaken by various teams as part of their regular work programmes.

There are many exciting opportunities and projects to explore such as the Tayside Biodiversity Partnership's Biodiversity Villages and Industrial Estates/Business Parks projects, designating a suite of Local Nature Conservation Sites, reviewing management of our greenspaces, and developing long term strategies for biodiversity, greenspaces, and invasive non-native species control.

The Council recognises there is still a lot to achieve within a minimal resource environment and we plan to map the resources required working collaboratively with our communities and other partners to deliver biodiversity protection and enhancement in the most efficient manner for the next reporting period in three years.

The Council has made significant progress to raise awareness of biodiversity and collaborate with the local community, neighbouring local authorities, and stakeholders to ensure that biodiversity is at the forefront of our work and will be enjoyed for generations to come. We are grateful to the financial support received from Scottish Government and to the vast contributions made by local communities and volunteers across Perth and Kinross.

Please follow these links for further information on [Enhancing Biodiversity in Perth and Kinross](#) and [Biodiversity Projects in Perth and Kinross](#).



Photo: children planting wildflower plugs at St. Magdalene's Hill, Perth