



BIODIVERSITY DUTY REPORT

APR 2020-DEC 2023



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Introduction

The Nature Conservation (Scotland) Act (2004) created a duty on public bodies, including West Dunbartonshire Council, to further the conservation of biodiversity when carrying out their responsibilities.

The Wildlife and Natural Environment (Scotland) Act 2011 (WANE Act) amends the Nature Conservation (Scotland) Act (2004) and places further obligations on public bodies to report on compliance with the Biodiversity Duty every three years.

Over the time period of this document, a new final-draft **Scottish Biodiversity Strategy** was launched in December 2022 to coincide with COP15, the Convention on Biological Diversity. The new strategy, **Biodiversity strategy to 2045: tackling the nature emergency**, sets out the Scottish Government's vision for halting biodiversity loss by 2030 and reversing declines by 2045.

This supersedes the previous strategy documents, **'Scotland's Biodiversity: It's in Your Hands' (2004)** and the **'2020 Challenge for Scotland's Biodiversity'**. The Delivery Plan for the new strategy is still being consulted on and will provide the detail on the actions required to fulfil the new **Scottish Biodiversity Strategy**. Once published, this will form the basis for a new **Local Biodiversity Action Plan for West Dunbartonshire Council**.

This report sets out how West Dunbartonshire Council has delivered biodiversity conservation and enhancement across a range of functions. As well as achieving the requirement under the WANE Act, this document will also form a useful source of information for the new **Local Biodiversity Action Plan**. Much of the research carried out in the preparation for this work has explored the existing practises across WDC in relation to biodiversity provision and consideration. The timescale of this report has been amended to account for the gaps in 2020 due to the Covid pandemic and to extend it in line with the national reporting period to end of Dec 2023.

The format of this report is based on Scottish Government suggested reporting format, Template 1.

1

Introductory information about your public body

1.1 Context

West Dunbartonshire Council is a Local Authority providing services to the residents of West Dunbartonshire. The Council are responsible for the collection of waste and recycling, the provision of schools and education, the management of planning and building standards and the management of open and green spaces amongst other statutory functions.

West Dunbartonshire extends to some 178 sq. km. (68 sq. miles) with a population of around 88,930 in 2019. In terms of land coverage it is the fourth smallest Council in Scotland. Over 40% of the land is classified as open countryside, representing a notably higher proportion than many other local authority areas in Scotland, and there are sizable areas of native woodland and freshwater. The majority of residents in West Dunbartonshire live within 300m of an area of open space over 1 hectare in size. Open and green spaces in West Dunbartonshire, such as parks, playing fields and woodlands form the green network and link to similar networks in other authority areas. The northern part of the Council area falls within the Loch Lomond and the Trossachs National Park which is one of only two national parks within Scotland. The total area of West Dunbartonshire is 183 km²; the area within the National Park is 57 km².



Much of the northern shore line of the Inner Clyde estuary is designated as a Special Protection Area (SPA) under the EU Birds Directive. The Inner Clyde SPA contains extensive intertidal flats that support large numbers of wintering wildfowl, including an internationally important wintering population of redshank (*Tringa totanus*) which are the qualifying interest under the Directive.

The site is also a Ramsar Site under the Ramsar Convention on Wetlands of International Importance. Upstream of the River Leven, the Endrick Water Special Area of Conservation is an important habitat for Atlantic salmon and river lamprey. The River Leven is the main outflow for Loch Lomond and acts as a critical wildlife corridor. Loch Lomond is designated as a Special Protection Area and under RAMSAR as well as a designated National Nature Reserve (NNR). Loch Lomond Woods are designated as a Special Area of Conservation. 16 local Sites of Special Scientific Interest (SSSI) exist, eight within the National Park and eight outwith the National Park area, reflecting the importance of the flora, fauna, and habitats of the area. There are 48 Local Nature Conservation Sites (LNCS) – these are sites that are recognised on account of certain local important features of habitat, plant or animal communities or geology. The Salting's at Old Kilpatrick is designated as a Local Nature Reserve (LNR) in recognition of the high natural heritage interest and value of the site for education and informal enjoyment of nature by the public, and there are proposals for further LNRs at Brucehill Cliffs and Faifley Knowes.



Mixed early spring bulbs on roadverge.



1.2 Governance and structure

West Dunbartonshire Council has 22 Councillors representing six wards. Over the course of this reporting period the Council has changed from an SNP to a Labour majority run Council.

The Council's functions are delivered by seven main service areas delivered by a Chief Officer under the Chief Executive:

1. Citizen, Culture and Facilities
2. People and Technology
3. Housing and Employability
4. Resources
5. Regulatory and Regeneration
6. Roads & Neighbourhood
7. Education

West Dunbartonshire Council is a signatory to the Central Scotland Green Network (CSGN) Concordat, the Clyde Climate Forest, as well as The Scottish Climate Change Declaration. West Dunbartonshire Council has embedded the CSGN in the Local Development Plan (LDP2). The work of the Glasgow Clyde Valley Green Network Partnership is a regional expression of the CSGN.

Within the seven service areas there are several departments such as Planning and Greenspace which carry out the majority of the practical and regulatory functions pertaining to biodiversity.

A new Biodiversity Officer post was created in March 2021 and the post is hosted within the Greenspace department. The post had not been available for the previous 10 years since the original West Dunbartonshire Local Biodiversity Partnership was created for years 2010-2013.

The consultation period for the Delivery Plan of the new Scottish Biodiversity Strategy concluded in December 2023. Once published, this will form the basis of a new Local Biodiversity Action Plan for WDC. However, with the Biodiversity Officer post now being filled, work has been ongoing to improve the mainstreaming of biodiversity since the last reporting session and has resulted in many other service areas embedding biodiversity promoting principles in carrying out their functions. Some examples are given below:

West Dunbartonshire Council Arts & Heritage Service

Local History and Archives support the provision of public information, research and investigation of resources via holdings in the local collections of a variety of historical environmental and planning documents, books and documents relating to land ownership.

The West Dunbartonshire Libraries team manages eight Public Libraries, five School Libraries as well as a Mobile Library and a Home Delivery service. The library service aims to encourage eco-literacy through its broad community engagement programme, and manage outdoor spaces appropriately to enhance biodiversity.

Housing and Employability

Building Services carry out works and projects where biodiversity issues have been considered and accommodated as necessary within the specifications. Building Services use the Council's IT systems to plan and carry out work in the most efficient and effective way reducing the service footprint by reducing CO2 emissions for example. When procuring goods and services, consultation with the procurement team, ensures the environment and biodiversity issues are considered and where possible built into the weighted selection criteria in line with the Council's procurement policy.

Asset Management

Responsible for all aspects of property management; Statutory Compliance, Fire & Security, Life-cycle & Maintenance of 143 Operational Properties and 591 Non-Operational Properties. Consisting of schools, care homes, libraries, offices, industrial units,

commercial properties.

Education

The children and young people of West Dunbartonshire are citizens of global community who have the opportunity to engage with real-world issues that align with the United Nations' Sustainable Development Goals (SDGs). The SDGs provide a global framework for addressing challenges such as poverty, inequality, climate change and more. Six West Dunbartonshire Competencies have been matched to the Global Competencies and aligned them with the SDGs. West Dunbartonshire's aspiration is for all children and young people to achieve and attain these competencies on their learning pathway in the Broad General Education and Senior Phase, contributing to both Equity and Excellence in education.

1.3 Partnerships

The Council has had agreements in place with 2 partner organisations that are responsible for carrying out a range of functions from growing space, play spaces, habitat creation and community engagement including education. These are:

1. **West Dunbartonshire Environment Trust who have received £400K in funding over the 3 years of this reporting cycle.**
2. **The Leamy Foundation who have received £120K in funding from both Greenspace and Education.**

Additionally, there are 3 key organisations that have delivered biodiversity monitoring and project works that have actively worked in partnership with The Council in delivering their project aims and objectives. These include Green Action Trust, Loch Lomond and the Trossachs National Park and Loch Lomond Fisheries Trust. There are also a range of friends and community groups that operate with the support of the Council to engage people with the natural environment and carry out a range of practical tasks to benefit biodiversity. The Council also work in partnership with a range of environmental organisations such as Woodland Trust, Forest and Land Scotland, Buglife, Froglife and RSPB.



2

Actions to protect biodiversity and connect people with nature

Section 2 will outline programmes of work that have contributed to protecting and enhancing biodiversity through a range of practical conservation tasks delivered by The Council and in partnership with environmental organisations. It will focus on the improvements and how these have helped to connect people with nature. The majority of community engagement is discussed in Section 5.

2.1 Greenspace Department

The Greenspace department sits within the Environment and Neighbourhood division of the Council with around 200 staff and has responsibility for the strategic management on all aspects of the Council's Greenspace service including parks, open spaces, outdoor recreation, play areas, cemeteries and crematoria, litter management, countryside access, Countryside Ranger Service, Community engagement and biodiversity management. Most of the habitat management works is delivered by Greenspace staff and Greenspace Volunteers, local community groups and contractors. Much of the practical conservation tasks are delivered in conjunction with partners and volunteers. This section will focus on the physical projects and the public engagement detail will be discussed more fully in Section 5.

2.1.2 Countryside Ranger Service

The Countryside Ranger Service delivers practical conservation management on Council land and engages in public events covering open space, greenspace and the wider countryside. The operational base is in Balloch Castle Country Park (BCCP) and the service is delivered by one Countryside Ranger managing a core group of Greenspace Volunteers, corporate volunteers and partnering with Loch Lomond and The Trossachs National Park volunteer programme. Practical conservation tasks carried out by the Countryside Ranger Service and volunteers over this reporting cycle have included:

- Two new pond projects were completed in BCCP with lottery funding via Froglife.
- Created new hibernacula adjacent to ponds in BCCP
- Maintenance of the existing ponds in BCCP, in partnership with Froglife.
- Removed Invasive Non-Native (INNS) Himalayan Balsam at BCCP, The Saltings LNR and Havoc meadows in partnership with Loch Lomond Fisheries Trust.
- Planted 200 trees in BCCP (55 standards with Chivas, 100 whips with Arsenal U16 team and others with volunteers)
- Planted 18,000 native flower bulbs in BCCP as part of John Muir Way biodiversity corridor enhancement.
- Planted 300 wildflower plug plants in BCCP
- Planted and nurtured 15 trees from Royal Botanic Garden Edinburgh as part of the International Conifer Conservation programme, erecting and maintaining individual fences to stop predation and removing vegetation build up around the base of the trees.
- Partnered with Loch Lomond Fisheries Trust to remove Skunk Cabbage in BCCP
- Removed invasive Broom in meadow areas of BCCP
- Removed regenerated Western Hemlock in BCCP
- Removed small remaining stands of Rhododendron ponticum in BCCP.
- Wildflower monitoring along planted road verges – across council area.
- Delivered 5 days of corporate volunteering to remove INNS – Himalayan Balsam. Companies included Aggreko and BAE.
- Delivered a large scale volunteering day at BCCP for the company Chivas in partnership with Froglife and Loch Lomond Fisheries Trust hosting approximately 120 employees with a range of tasks including, pond maintenance, hibernacula creations, Himalayan Balsam removal and the planting of 55 standard trees.

- Supported local volunteer group Friends of Havoc Meadows, with Himalayan Balsam removal.
- Coppiced willow plantation for schools for weaving and looked to relocate plantation to another site in the park due to recently identified sensitivities in current area.
- Manage 9 outdoor classrooms in BCCP, The Saltings LNR, Haldane Green Corridor, Christie Park and Auchnacraig woods and continue to help teaching staff by providing materials and advice for school ground improvements and outdoor learning.
- Worked with teaching staff to set up new outdoor classrooms at Goldenhill Park and Dalmeir Park (bringing the total to 11 areas) and continuing to support the education team with accessing local greenspaces with the potential to create more outdoor classrooms.
- Support Loch Lomond and the Trossachs National Park staff (rangers and education team) with sessions in BCCP which have included hard to reach groups and often includes a practical conversation task.
- Supported Visit Scotland (Balloch branch) with a Keep Scotland Beautiful Litter Pick in BCCP.



2.1.3 Invasive Non Native Species

Management of Invasive Non Natives is essential as the spread of these species that out compete native flora. It is recognised as a key driver of biodiversity loss.

Although there is a volunteer element to the management of Himalayan Balsam, *Impatiens glandulifera*, the majority of INNS management is implemented by contractors and overseen by Greenspace.

Japanese Knotweed, *Fallopia japonica*, is managed on Council land and is treated each year in September and October. Giant Hogweed, *Heracleum mantegazzianum*, is treated by contractors as required. One barrier to overcoming the issue with invasive management generally is relying on surrounding landowners to carry out the same level of treatment and thus reduce the spread collectively. This is particularly true of Giant Hogweed that favours railway lines, roads and water courses. American Skunk Cabbage, *Lysichiton americanus*, has been treated in BCCP by LLTNP volunteers and contractors. In recent years the Skunk Cabbage has spread to occupy the open habitat created by a programme of *Rhododendron ponticum* eradication. It's location close the River Leven has caused concern for future transfer downstream and as such has been prioritised for treatment. In addition, it's vast ground coverage occupies space that other native vegetation will recolonise once eradicated and so it's treatment will have an overall benefit to biodiversity.

Information on each of the INNS that the Council manage is on the Council website and the public are encouraged to report incidences to Greenspace where it is mapped and put onto a rota for the next treatment round.

Himalayan Balsam, *Impatiens glandulifera*, lends itself to volunteer tasks as it is easy to hand pull but it's vast spread over recent years has meant the Council will seek to use a combination of volunteer work parties as well as contractors for future management. Where it stands as a monoculture or covers vast areas we will investigate chemical treatment for future management.

There is an ongoing management programme for the eradication of INNS across the district with an emphasis on biodiversity rich areas being prioritised for treatment. Areas such as Faifley Knowes, Auchnacraig and Balloch Park have or will shortly benefit from additional treatment covered under the Nature Restoration Fund direct allocation.

2.1.4 Management of Greenspaces

A variety of maintenance principals have been adopted by Greenspace which are delivered through the course of normal functions. This approach has become embedded which means that in managing parks and greenspaces that biodiversity benefits are being delivered more widely across the district. Examples of this are given below:

- **Grassland Management** – more areas of relaxed grass cutting have been implemented to include an annual cut and lift of the arisings. This practice reduces nutrients in the soil which favour native wildflowers and reduces competition from more rigorous grasses. This provides a net biodiversity gain by allowing flowering plants and grasses to establish on these sites thus improving habitat for pollinators and providing shelter. In addition, less fuel is being used on grass cutting equipment, reducing carbon emissions.
- **Planting enhancements** – many areas of reduced grass cutting have now had supplementary planting including spring bulbs, trees and wildflower areas incorporated into them.
- **Road verges** – several road verge wildflower areas have been implemented throughout the district including along the A82, A814 at Mountblow and at Cardross Road, and the A811 through Balloch. Signage has been incorporated to promote the benefits to wildlife.
- **Tree planting** – In addition to woodland planting projects at Dillichip, Faifley and Clydebank, Greenspace have continued a programme of tree planting throughout the district. These are often within the urban areas which provides additional wildlife benefit as well as other ecosystem services such as cooling and shading, banking stability protecting against erosion and slowing the flow of surface water during weather events.
- **Flower beds** – around 50% of annual flower beds have been changed to perennial flower beds at Christie Park, Levensgrove park and Dalmeir park, reducing the need for replacing bedding plants according to season and thereby reducing costs and minimising resources, including water. A decrease in chemical usage on flower beds will also increase biodiversity.
- **Chemicals** – Greenspace have experimented with various techniques to reduce usage of systemic herbicides. These have included trialling hot foam, steamers and burners. These methods have been found to not last as long as using glyphosate. They are also resource intensive in cost and labour, and still require strimming in most instances or reapplication. They were found to not work as well along path edges, standing cobbles and infrastructure such as benches and signposts. To reduce usage of glyphosate Greenspace have wherever possible; applied by spot treatment methods and reduced to a lower usage. The frequency of spraying has also been reduced to two sprays per annum. Use of Fungicides are limited to recreational facilities such as golf greens and bowling greens. Icade is used for managing mare's tail where necessary, for example to stop the spread onto a rich grassland zone.



Skunk Cabbage Spadix removal.



Cut and lift Havoc meadows.



Hardgate roundabout wildflower meadow.



- **Vertical Planting** - Utilise walls and fences for growing a wide variety of climbing plants which provide shelter and a food source for invertebrates, birds and bats. Examples include Balloch park walled garden, Levensgrove Park bandstand wisteria, schools use of gabion baskets. Safeguard ivy on walls and trees wherever possible and appropriate, removing it only by cutting at the base and allowing it to die down naturally. This safeguards roosting bats and nesting birds who will move away as their habitat deteriorates.
- **Using habitat bundles** - Increased practice of using small, discrete piles of logs, dead wood or prunings from woody plants in appropriate locations to encourage fungi, mosses and invertebrates, as well as refuge for common toads and hedgehogs. Greenspace have also supplied such material for use in school grounds. Where woody prunings cannot be left in situ they are chipped and often distributed throughout the community for use in allotments, school grounds and community gardens where they can be used as mulch for perennial bedding plants or for path or outdoor classroom areas.
- **Retain trees where possible** - as these are particularly valuable to wildlife. Standing (or lying) dead wood should be left in situ if safe to do so. This is now common practice within Greenspace and also where safe to do so will reduce dying or diseased trees to a standing monolith, or totem, to retain biodiversity value of the dead wood which benefits bats and birds such as woodpecker, tree creeper and nuthatch as well as a wide range of invertebrates.
- **Ponds and watercourses** - Greenspace have increased the number of ponds and wetland scrapes in the area

as well as providing maintenance and management of existing ponds, including; Dalmuir Park, Balloch Park, Auchnacraig Estate, The Saltings, Overtoun Estate and Strauss greenspace. There are two additional identified opportunities at Inler Park and Gartocharn Park to create wetland or pond features. A new pond has been created at Linnvale Primary, and plans to include a new pond area with the landscaping at the new Faifley Campus have been approved. Gullies are also managed to keep watercourses flowing with Greenspace managing those in Greenspaces, Parks and Cemeteries and Roads department managing the main road network. General maintenance guidance includes; Carrying out restoration works in late autumn or winter when animals are not breeding. Clear only half a pond or one side of a bank at a time, replacing the aquatic plants as soon as possible. Leave all the cleared plants/soil on the side of the pond for a few days after the work to allow wildlife to disperse as necessary. Any new plantings should only be of native species found in the local area. Litter removal is also carried out to reduce plastic waste within the pond.

- **Peat Free** - Greenspace now use Pod compost which is the end result of food waste composting. Greenspace have also trialled coconut fibre. The Pod compost comes in 2 grades, a rough and a finer grade which means it can be used for a variety of functions such as raised beds, tree planting and mulching. Greenspace supplies this to the local allotments and community gardens. Peat extraction is seriously damaging important wildlife habitats; the UK has lost 96% of its peat bogs in just 50 years. Peat bogs are a huge carbon store and its acidic habitat is home to interesting plants such as the carnivorous insect eating Sundew and Butterwort.



Pond scrapes and new woodland planting.



New mixed native woodland Faifley.

2.1.5 Management of Crematoria and Cemeteries

West Dunbartonshire has a number of crematoria, crematoria and churchyards. These can often be a stronghold for lesser plants such as mosses, liverworts and lichen as well as featuring woodland areas. Here are some of the maintenance tasks that have been incorporated to benefit biodiversity:

- **Include natural areas** - these create a peaceful space for both people and wildlife and have been incorporated into designs for new cemeteries such as New Dumbarton Cemetery and the current new development at Vale of Leven which has wildflower meadow areas and woodland glades in the plan. Contemplation zones with wildlife friendly areas and bird boxes have been included in design plans for the still born babies section. Berry-bearing trees such as holly, rowan and crab apple have been used as well as; native hedge plants.
- **Boundary Features** - Greenspace have left untouched any boundary walls, buildings and older gravestones as far as possible to retain lichens and mosses, growth of ivy where appropriate and no herbicide usage at the base of stone walls to safeguard amphibian hibernacula and small plant growth on the walls.
- **Memorial woodlands** - Greenspace are currently reviewing the options for a formal memorial woodland that would remove pressure for this type of request from public parks. There is also a specific Covid commemoration garden at development stage.
- **Mercury abatement** - All crematoria in Clydebank have now undergone a mercury abatement process which reduces air pollution in turn benefiting people and biodiversity.
- **Commonwealth War Grave Commission** - 10 bird cherries have been planted at the Commonwealth war grave with under planting of early spring flowering bulbs for pollinators.

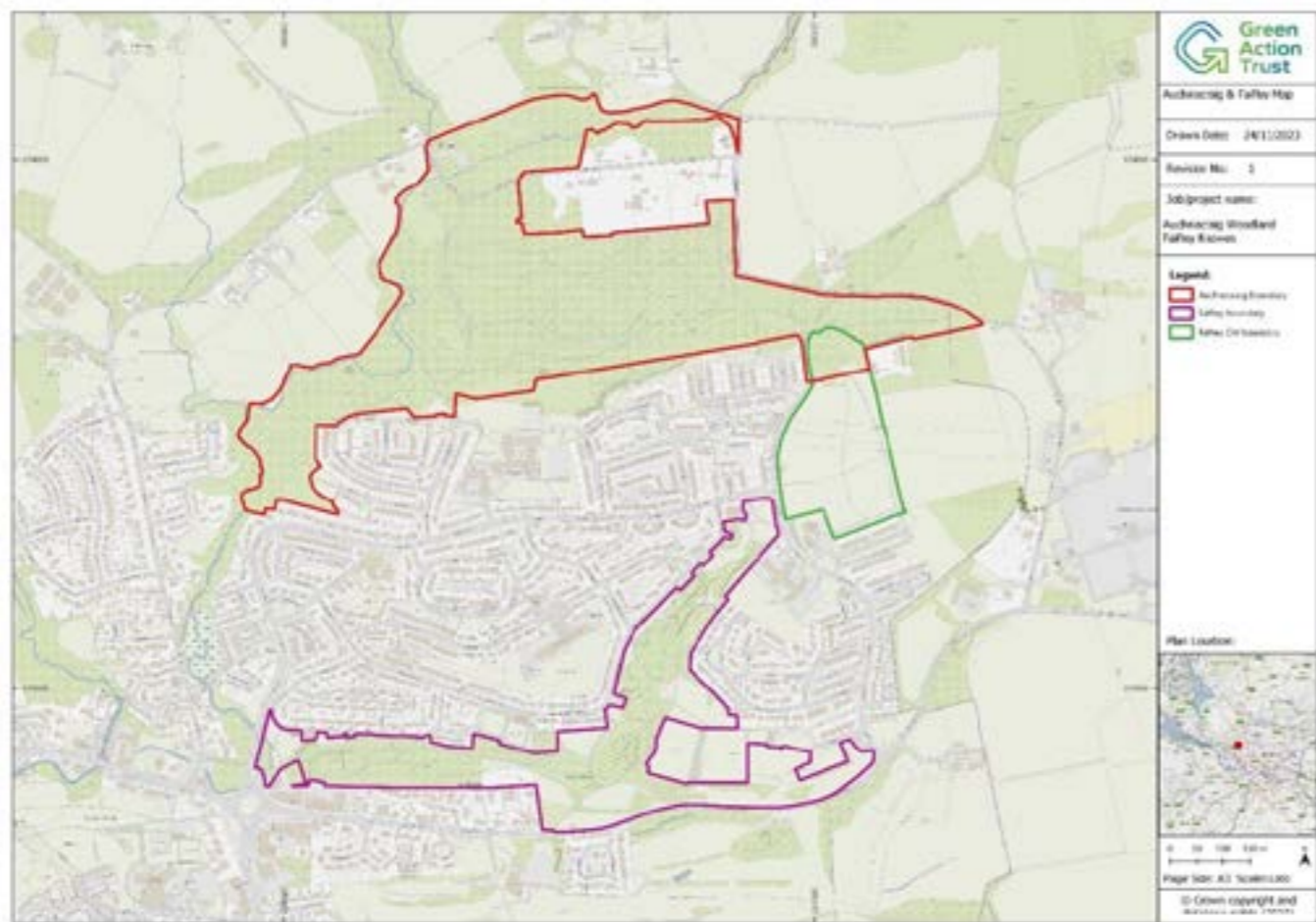
2.1.6 Nature Restoration Fund

Over the course of this report West Dunbartonshire Council have received a direct allocation of funds from Scottish Government. This section will provide an overview of that capital spend and describe the biodiversity benefits.

Faifley Knowes and Douglasmuir Woodland 2021 / 2022 Allocation: 102K

West Dunbartonshire Council and Green Action Trust have been working together to plant a new native woodland at Douglas Muir Road and carry out woodland management and habitat improvements in Faifley Knowes, just north of Clydebank, a few miles west of the Glasgow boundary. An Integrated Habitat Mapping exercise had inspired the creation of an updated management plan back in 2018, delivered by the then CSGNT. A full range of habitat improvements and new planting were identified in the management plan and the NRF contribution has allowed for these to now be delivered. The highlights include: A new community woodland for Faifley which straddles the hillside on the outskirts to the east of the housing development. This is a new native broadleaf woodland with tree and shrub planting covering 2.16ha and 0.4ha respectively.

This new planting extends the native woodland within Faifley Knowes to the south of the site and connects it to the native woodland and policy planting of Auchnacraig Estate which sit just below the Local Landscape Area of the Kilpatrick Hills. The new community woodland also has public access routes throughout the woods and includes a 5 year maintenance programme.



The second part of the project is within Faifley Knowes and includes: new native planting throughout the site; 20% thinning of shelter belt planting to improve woodland structure; bracken control; control of dominant laurel and other scrub; and small scale devegetation works for improving sightlines throughout the site and improving access. The management plan also identified a number of access improvements required on the site and the NRF contribution has been the catalyst for the Council to commit to delivering this second phase of the Faifley project over the summer of 2022. The access works are due for completion early 2024.

New woodland will provide habitat connectivity through the urban areas to the wider countryside. The new woodland planting will provide nectar for pollinators and eventually provide opportunity for shelter and nesting. The woodland management works will rearrange the woodland structure allowing light to the woodland floor and encouraging woodland ground cover as well as providing space to allow the existing trees better room to grow. The bracken treatment is to bring the bracken back to a density of less than 15cm to favour the associated ground flora, such as violets, with the aim of encouraging fritillary butterflies. This has the added benefit for other species such as wood anemone. The woodland edge planting has been expanded to offer a richer mosaic of habitats throughout the site. Much of the

mature shelter planting on site is around 40 years old and consists of only a few species. The thinning of the shelter belt planting, the addition of new mixed native planting and woodland edge thorny species creates a richer variety of habitat which will in turn support a wider variety of wildlife. The thinning works will be suitably arranged onsite to create habitat bundles. The grassland management will bring more favourable conditions to those species which prefer a nutrient deplete substrate which will benefit many native plants and the invertebrates that rely upon them.

3.8 hectares of new native woodland, 2.74 ha planting and 0.38ha open ground at new community woodland and 0.68ha within Faifley Knowes.



Auchnacraig 2022 / 2023 Allocation: 126K

West Dunbartonshire Council and Green Action Trust have been working together to deliver a habitat restoration plan for Auchnacraig estate. This has included woodland management and habitat improvements in Auchnacraig Estate, just north of Clydebank, a few miles west of the Glasgow boundary. An Integrated Habitat Mapping exercise had inspired the creation of an updated management plan back in 2018, delivered by the then CSGNT. A full range of habitat improvements and new planting were identified in the management plan and the NRF contribution has allowed for these to now be delivered.

The highlights include: A freshwater restoration project for the historic pond, INNS management, tree safety works, Phase 1 habitat and services mapping, bracken and grassland management. The native woodland and policy planting of Auchnacraig Estate sit just below the Local Landscape Area of the Kilpatrick Hills. The younger woodland areas have also benefitted from 20% thinning and new native planting has been incorporated throughout the site. Small scale devegetation works for improving sightlines throughout the site and improving access. The pond was in a state of disrepair, over vegetated and stagnant. Following surveywork of the pond by local herpetofauna volunteers the results were that the pond was still viable and could be brought back to health. The pond was desilted and had the inlet and outlets repaired resulting in a better flow of fresh oxygenated water and better levels. The pond dipping platform and boardwalk were repaired also. Overhanging vegetation was thinned out to reduce leaf drop into the pond. This was turned into hibernacula and sited close by. Litter was cleared.

The surrounding wetland will also benefit from this project which is a haven for invertebrates, including dragonfly and damselfly species.

Bracken control - trial areas of bracken control were implemented and an area of cut and lift to reduce the detritus. Common Dog Violet was found during botanical surveys but only on the boundary of the bracken sward. This species typically grows in bracken areas but where the bracken density on the ground layer is too thick this can out compete the violets.

The fritillary butterflies rely on the violets as a food plant. This area is on a large south facing slope and would be ideal for these species to thrive given the right conditions. The aim is not to eradicate the bracken entirely but to create mosaic habitats that support a wide range of wildlife including solitary



Pond restoration and dipping platform.

bees and other invertebrates. The cut and lift of the bracken has reduced the mulch layer to be beneficial for increasing the abundance of violet. Around a hectare has been treated and will be monitored with follow up botanical and invertebrate surveys. Grassland management - an area of 1.5ha of neutral grassland has been cut and lifted.

Removing arisings from the grassland area will reduce the number of nutrients and dominant grasses, allowing more favourable conditions for native grasses and nectar rich native wildflowers to thrive which will in turn benefit pollinators. INNS - invasive non native species and invasive native species have been treated on this site to include: rhododendron ponticum, snowberry, laurel, bracken and butterbur.

Woodland management - a tree safety survey has been undertaken with priority safety and felling works completed. Thinning out of the young woodland areas allows more structure to develop in the woodlands and will lead to the development of a more diverse ground and shrub layer.

All of these woodland projects will form part of the Clyde Climate Forest assisting with carbon sequestration and bring existing woodland into better management which will improve it for biodiversity. It supports ambitions set by West Dunbartonshire Council's Climate Change Strategy and Action Plan in achieving net zero emissions by 2045.

2023 / 2024 Allocation 257K – split between:

Balloch Castle Country Park 2023 / 2024

Development works include:

- Level 1 Arboriculture Survey
- Woodland management plan
- Arboretum succession plan
- Mapping / numbering of existing policy trees
- Habitat management plan
- Invasive-Non-Native-Species (INNS) management

Christie Park 2023 / 2024

- The contract includes carrying out a Level 1 Arboricultural Survey and providing a formally presented report and map of trees surveyed.

Nature Networks 2023 /2024

As part of the Council’s requirement to form a Nature Network, a series of baseline data surveys will be undertaken to assess habitat type, condition and quality. This will help inform development management decision making, project prioritisation and management prescription, tree planting guidance, designations, and give a sound basis on which to map out the Nature Network.

2.1.7 Establish a Biodiversity Network

Over the course of 2022/2023, many policy and strategy changes came in to being that impact directly on biodiversity management. These will have a profound change of focus on how biodiversity is managed from development management, project implementation and through to statutory targets for nature restoration being brought in in 2024 via the Natural Environment Bill.

As WDC begin the process of the creation a new Local Biodiversity Action plan that will incorporate all of these changes, a new biodiversity network was launched in order to have a group of key stakeholders that can input into the new plan. These include:

- Glasgow Museums Resource Centre
- Loch Lomond and the Trossachs National Park
- SEPA
- Scottish Forestry
- Forest and Land Scotland
- NatureScot
- RSPB
- Botanical Society of Britain and Ireland
- Woodland Trust
- Green Action trust
- Clyde Climate Forest
- Glasgow Clyde Valley Green Network
- Loch Lomond Fisheries Trust
- Network Rail
- Clyde Amphibian and Reptile Group
- West Dunbartonshire Council Biodiversity Officer, Planning, Countryside Ranger Service, Greenspace Officer, Community Engagement Ranger, Your Community
- Loch Lomond Countryside Trust
- NHS
- Scottish Canals
- Sustrans
- Butterfly Conservation
- Buglife
- Local recorders
- Green Action Trust
- Glasgow City Council

This list is not exhaustive and other land management organisations have been invited to take part.

There will be a second and third phase of this network to incorporate all the biodiversity work delivered by local communities, whether formal groups or interested individuals. The third phase will concentrate on businesses. This work is planned for 2024.



2.1.8 Health and Social Care Partnership

Work Connect delivers a service at Levensgrove park in partnership with Greenspace which provides the client base the opportunity to engage in various activities regarding horticulture.

Work connect is a specialist employment service within W.D.C Health and Social Care Partnership, working with adults with learning disabilities, mental health, addictions and autism spectrum disorder. Work Connect offers support to help clients along the Scottish strategic skills pipeline, this may include vocational profiling, advice on benefits, better off in work calculations, help in how to prepare a C.V, employability skills work placements, access to training, volunteering, college and employment opportunities and support in the work place.

At Levensgrove there is access to poly tunnels, greenhouses and garden plots including raised beds inside and out, training is provided in all aspects of garden maintenance (grass cutting, weeding, digging, bed maintenance, seeding and planting). The majority of this work focuses on growing vegetables from seeding in the greenhouses to planting out into allotments, raised beds and plots.

The facilities at Levensgrove allows use of purpose built activity areas including a wood workshop, pottery and craft rooms, within this space we are able to support our clients in the construction of simple environmental projects like bird feeders, bird nesting boxes, bat boxes, insect boxes and bug hotels.

In 2023 the Community Greenspace Officer worked with 15 clients from Working 4U, through the John Muir Award. Several clients have gone on to volunteer with local community projects and with WDC Greenspace.

They also formed a garden group that volunteer at 2 local hospitals and were recently finalists in the Provosts Civic Awards 2023.



2.1.9 Litter Management

Pollution is another key driver of biodiversity loss and in particular the issue of marine plastics is now well documented. Greenspace are actively involved in litter management, fly tipping, supporting the community in local clean ups as well as community engagement and enforcement.

The Litter Control section within Greenspace is tasked with upholding the Litter Control Strategy which has a focus on education which will be discussed further in Section 5. The two Litter Control Officers are responsible for a number of areas pertaining to the delivery of the strategy and responsibilities include:

- Improving bin provision for litter and dog waste. From 2023, 1800 plus dual purpose street litter bins both able to take litter and dog fouling
- Now included in this remit is enforcement and education within the legislation of abandoned vehicles under the Refuse Disposable Act 1978, (RDA-1978). WDC offers anyone the chance to dispose of a vehicle for free if they are living within the local area, if this option is taken then the vehicle will be recycled, if enforcement action is taken and WDC removes through this then they will also be recycled under this remit.
- Site patrols and regular engagement with local dog walking services and clubs within the WDC
- Distribution of around 4 million dog waste bags per year. These are biodegradable, and are distributed for free to the public, via various locations throughout the area including Libraries, Community Education Centres, and various other council and privately owned buildings, there is a list of these on the WDC website
- Local PR campaigns to engage the public such as ‘Do the right thing’ campaign, and ‘We think it’s disgusting’. These have included adverts along the A82 and other main routes
- Delivering fixed penalty notices
- Having a presence at community events displaying literature and promotional materials on delivering the Litter Control Strategy

2.2 Arts and Heritage

Your Community and Libraries both sit within this service provision and contribute to practical project delivery as well as strategy.

2.2.1 Your Community

The Communities Team works to empower local communities to participate positively within their community. This includes working to develop individual and community capacity through community development work, in line with the Council's 3 year Community Learning and Development (CLD) Plan 2021 -2024 and Community Empowerment Strategy.

Details of Community Engagement projects and events are given in Section 5.

- Working with local people across West Dunbartonshire to explore the need for a Community Climate Change Forum as part of the Council's Climate Change Strategy.
- Participation in the Shaping Places for Wellbeing review that considered the Council's Open Space Strategy
- On-going work to support the development of Locality Plans that allow communities to consider and set out their own local priorities.

2.2.2 Libraries

- West Dunbartonshire Libraries have contributed to local level biodiversity enhancement. In April 2023, the Sustainability Coordinator assessed current garden infrastructure at Alexandria Library and designed a "Food Forest" permaculture garden (approximately 380 square foot). The garden has become a hub of nature activities: children have made wildflower seed bombs (using native Scottish seeds) and bird feeders.
- West Dunbartonshire Libraries provides opportunities for children and young people to connect with and understand nature (e.g. 63 children were involved with "Nature Immersion" programmes at Alexandria and Faifley Libraries in July 2023)

2.3 Education

Educational Services deliver for biodiversity through a range of practical and curriculum based activity.

There are 12,221 children and young people in Education in West Dunbartonshire:

- 5,541 Secondary pupils (5 secondary schools)
- 6,423 Primary pupils, (34 primary schools)
- 257 Special School pupils (7 specialist settings)
- 1077 LA ELC pupils (29 ELCC's)
- 43% of learners have additional support needs.
- 44% of learners live in SIMD deciles 1 or 2, while 81 % live in deciles 1 to 5.

- 28% of our pupils are registered for free school meals.
- 4% of our pupils are recognised as EAL
- Our smallest primary school has 37 pupils and the largest has 354 pupils.
- Our smallest secondary school has 698 pupils and the largest has 1,556 pupils.

Delivery:

- Schools delivering Pocket Garden project.
- Schools have developed action plans for learning for sustainability following on from COP 26.
- Schools encouraged to work towards/achieve Eco schools green flag award.
- The LEAF initiative being delivered in our establishments which is designed to give Early Years children a deeper connection to the green spaces around them
- Films have been created by secondary schools as part of Young Reporters for the Clyde initiative explore what can be done to tackle marine litter in their local community
- WDC Picnic in the Playground incorporating the One Planet Picnic: Keep Scotland Beautiful initiative. An authority-wide picnic which followed five principles: Local and seasonal foods, organically grown, ethically traded, reduced packaging waste - reduced food waste.

Citizen science survey work:

- Upstream Battle Campaign connecting children and young people in a common goal to prevent litter from getting onto the River Clyde. A local authority conference in 2019 launched the programme and schools have identified ambassadors from this who developed action plans to address pollution, including river pollution of the Clyde.
- WDC Pilot of KSB Climate Ready Classrooms Initiative, with follow up actions identified by the schools who were selected for this.

STEM activity:

- Zoology Club in Dumbarton Academy. Variety of animals from stick insects to axolotls which are used to educate children and young people both within the curriculum and during lunchtime sessions about habitats.
- Dumbarton Academy have created a school pond which has been populated with various species to encourage biodiversity in the school garden. Gardening club meets regularly to maintain this space.
- COP26 resources used across schools. Remote learning resources used during COVID lockdowns to connect young people to nature safely: Five sisters' zoo online learning, Great British Birdwatch.
- S1 STEM course has been introduced at Clydebank High School which includes lessons on Climate change and loss of Beaver habitats.

Food and health:

- Your Body Matters resource updated and shared with schools, which covers the topics of nutrition, physical activity, sustainability and food waste, and body image and self-esteem
- Virtual lessons available for schools to use on Campus@WDC, our virtual learning area.

- Learn and Grow Project and lesson plans delivered to establishments in partnership with Greenspace and the Leamy Foundation.
- Dedicated 'Learning for Sustainability' interactive learning tool created on Campus@WDC with curriculum resources and project based learning during COP 26.
- Seed to plate experiences are planned for within many ELCs.
- Staff in ELC lead learning through leadership roles focused on attaining green flag status, organising forest school sessions and gardening clubs.

Outdoor learning:

- John Muir Discovery Level (Primary) Linked to French & Spanish Languages Learning.
- Outdoor Learning & Languages CLPL for teachers.
- Outdoor Learning & Languages -Survival Camps for primary learners.
- Outdoor Learning & Languages learning and teaching resources
- Continued commitment to developing Forest Schools through delivery of high quality level 3 Forest School leader training and development of Forest school sites across the authority in school grounds and various greenspaces as well as in the National Park.
- Forest Kindergarten training for early learning staff have led to regular, planned and quality learning for our youngest children.
- All ELC encourage children experience 3 hours of outdoor learning per day.

2.4 People & Change

- Volunteering opportunities for staff have been added into policy and volunteering to all employees as part of their annual learning commitment is encouraged.
- Encouraging flexible working leading to less travel. Encouraging a healthy work/life balance and taking breaks and exercise through providing information and supporting local groups and activities.
- ICT is committed to sustainable technology to lessen energy consumption, carbon emissions, enhance resource management, and decrease the amount of technology waste produced.
- To promote higher value, conserve energy, and lower heat production, ICT virtualise hardware when it is practical and effective. ICT continue to deliver collaboration technologies to support a Digital workforce and reduce travel, reduce our carbon footprint and greenhouse gas emissions whilst supporting the council's property rationalisation project.

2.5 Assets

- Management of greenspace within educational establishments, taking into consideration Safe by Design allowing for nature to flourish within the learning environment, but not impacting on building/pupil safety and security. Identification of open previously grassed areas to be managed establishing wild meadow areas.
- National Curriculum establishment of forest schools. Design, implementation and formation of wooded areas within campuses allowing for educational rich curricular learning environments.

2.6 Environmental Health

Environmental Health Services use the provisions of the Environmental Protection Act 1990 to investigate and take action to resolve public health nuisances including:

- odours
- noise
- drainage problems
- insanitary premises
- smoke and fumes

Whilst carrying out these statutory functions, Officers take care to include good practice principles. With regards to biodiversity, a number of actions have been included to protect native wildlife. Examples are given below:

- Protect honey and masonry bees from pest control and advise that wasp nests should only be destroyed where there is a direct public safety risk. These species should be safeguarded where possible. Most calls to the Pest Control Service for wasps at the start of the summer inevitably turn out to be masonry bees and honey bees. EH, do not provide a service to treat any bees at all. EH provide general advice to citizens about the benefits of such insects and also publicise this on the Council website.
- Safeguard garden ants. Garden ants should not be destroyed outside buildings and EH do not provide any pest control services in relation to this.
- EH guard against the use of control methods for house mice or brown rats which might affect birds of prey or other non-target species (such as domestic pets). Suitable assessment methods should be in place and properly applied prior to the implementation of any treatments. WDC Pest Control Service takes cognisance of the Campaign for Responsible Rodenticide Use (CRRU) Code of Practice. This ensures that EH apply best practice to limit the amount of exposure to non-target wildlife such as field or wood mice. EH only treat internal and external properties for brown rats, however, where bait is laid outside it will always be placed within secure tamper proof bait stations to prevent access by non-target species including people, pets, birds and other local wildlife.
- Refrain from using loose bait and collect rodent bodies at the end of the treatment period where poisoned baits are utilised (with all appropriate safeguards in place). Removal of dead rodents is standard practice for WDC Pest Control Officers.
- Use biodegradable non-persistent treatments to minimise transmission effects to wildlife when controlling public health pests (fleas, bedbugs, cockroaches etc). Only approved insecticides are used for indoor use for any such pests of public health significance. No insecticides are used externally.
- Gull egg removal and replacement with imitation eggs service during the gull breeding season in order to reduce any risks to public health and safety from gull

attacks. This service only extends to Council public buildings such as schools, care homes, offices. All such gull control work is undertaken under licence issued by NatureScot. The Council has a non-culling policy in place.

- It may appear to some that in our towns and cities gull numbers are increasing, but this is not the case. Gull populations, like many other species, are declining rapidly, with four of our five most common species (Lesser black backed, great black-backed, common and black-headed gulls) being Amber listed, and Herring gull being Red listed. On top of this longer term decline, gull populations have also been badly affected by the recent outbreaks of avian influenza, resulting in the death of large numbers of the birds.
- In previous years, many of the licences issued by NatureScot were to address behaviours such as noise and dive bombing. For the majority of cases, these behaviours present a nuisance rather than a risk to public health or safety, albeit NatureScot recognise there are important exceptions for example, to vulnerable individuals. Therefore, in order to ensure licences are issued appropriately for the purpose of preserving public health and safety, NatureScot will be providing clearer guidance of what constitutes a risk to public health or safety, and what is considered a nuisance in terms of licensing activity.

meaningful legacy for the communities and wildlife of Dumbarton and Alexandria. Through environmental and community based initiatives, this project aimed to improve the health and the opinion of tributaries that feed into the River Leven. This work was supported and funded by the Greggs Foundation as part of their #Greggs4good campaign.

Invasive species management:

Report and support the eradication of Giant hogweed, Japanese knotweed and Himalayan plants found in and around the River Leven catchment area. All three of these plants are invasive non-native plants that outcompete our native plants, proving detrimental to the overall biodiversity of sites. In the case of giant hogweed it can also prove to be dangerous to the public if touched.

Leven tributary improvements:

A key objective of the Leven Legacy Project was to improve the environmental health and aesthetic value of local streams that flow into the River Leven. This work began by delivering community engagement events, winter workshops, teaching conservation techniques to local schools, tree planting, litter picks and wildlife surveys in or around these local streams. Work is planned to continue to engage the local community with their local green and blue spaces so that these streams will continue to improve for years to come.

Schools projects:

In year one of the Leven Legacy Project LLFT worked in partnership with local biology teachers to design a S2-S4 practical conservation programme for students to actively engage with and contribute to the conservation of their local streams. Through this project we taught students survey techniques that biologists use for their jobs, how to interpret data and how this will influence which improvement will benefit local streams most. At the end of each programme

Partnership organisations



2.7 Loch Lomond Fisheries Trust

LLFT have worked in partnership with WDC over a range of projects including INNS treatment programmes, outdoor learning events, schools engagement and local research such as electrofishing.

The Leven Legacy Project was a multi-dimensional project which aimed to achieve a lasting and



students delivered the improvement works to their local stream (tree planting, litter picks etc). During 2020 and early into 2021, LLFT have remained engaged with our local high schools through Women in STEM events, and other online career events.

Mural on NCN7 with Sustrans Scotland:

Sustrans are a charity making it easier for people to walk and cycle. In 2020 the Trust secured funding from their "Artrroots Fund" for a mural. The mural was completed in 2022 on the support wall of the A82 road crossing near Renton. This location is in need of improvement to enhance users' experience of the National Cycle Route. The mural was designed by local artist "Barry the Cat" using inspiration from local community artwork by members of various community organisations and school children.

Burn restoration with Sustrans Scotland:

In 2020 the Trust received funding from Sustran's "Love Your Network" fund for a burn restoration project. Environmental improvement work is required in this section of the National Cycle Route to enhance local biodiversity and increase awareness of vulnerable species in the area. The burn supports an abundance of fish species but has been negatively impacted by a series of environmental issues such as fly tipping, pollution and reduced tree cover. This project addressed these issues and engaged members of the local community who use this section of the NCN7 regularly.



2.8 West Dunbartonshire Environment Trust (WDET)

WDET undertakes a variety of biodiversity activities in the course of delivering regeneration programmes throughout West Dunbartonshire. The Trust aims to engage people and communities with nature through physical interaction and improved knowledge and respect for the natural environment. Projects endeavour to make greenspaces more attractive to encourage greater use and value. Where possible our projects include tree, shrub and flower planting mainly using native species as a first principle.

Over the reporting cycle WDET have delivered the following improvements:

- **Riverside Nursery** Forest School development, playground development.
- **Dalmonach Nursery** Playground development, wildflower meadow, natural play features. Hedge maintenance.
- **Balloch Primary** Learning in Local Greenspace, woodland planting.
- **Linnvale Primary** Learning in Local Greenspace, Forest School development, Polycarbonate tunnel. Wildflower meadow, Pond.



New cycle surface, bike posts, benches and dog poo bins at River Leven.

- **Kilbowie Primary** Forest School Development, playground development.
- **Lennox Primary** Learning in Local Greenspace, Forest School development, pond/wetland development.
- **St Eunans** Learning in Local Greenspace; playground development.
- **Gavinburn Primary** Forest School development; playground development; running track.
- **Levensvale Primary** Forest School development; playground development; Pond/wetland.
- **St Michael's** Playground development.
- **Gartocharn Primary** Poly tunnel irrigation; woodland planting.
- **St Mary's Duntocher** Playground development.
- **OLSP** Forest School development; wildflower meadow.
- **Our Holy Redeemer** Forest School development; playground development.
- **Kilpatrick** Forest School development; footpaths.
- **St Mary's Alexandria** Playground development.
- **St Martin's** Leaf shelter; woodland maintenance.
- **Whitcrook Primary** Woodland planting; willow tunnel.
- **Dalmuir Square** Hedge maintenance.
- **Radnor Park** Planting and fence and hedge maintenance.
- **Onslow Rd** Orchard planting; woodland development; hedge and fence maintenance.
- **Strathleven House** Hedge planting; fencing; vegetation clearance.
- **Dalmonoch C C** Planting beds remedial work.

- **Dillichip Woodland** CCF woodland planting and maintenance
- **Bedford Gardens** Fence and raised bed construction; footpath.
- **Milton Park** Raised beds; steps; container hardstanding.
- **Leven Cycle Path** Access improvements.

2.9 Clyde Climate Forest

The Clyde Climate Forest will see 18 million trees planted in both urban and rural parts of Glasgow City Region by 2030. The Clyde Climate Forest spans Glasgow City Region and has been endorsed by the Council Leaders of East Dunbartonshire, East Renfrewshire, Inverclyde, Glasgow, North Lanarkshire, Renfrewshire, South Lanarkshire and West Dunbartonshire. CCF are identifying tree planting targets in three areas: canopy; connectivity and carbon.

Trees, woodlands and forests are recognised as essential to address the Climate Crisis by reducing damaging atmospheric emissions and are crucial to assist in a recovery for nature.

The Clyde Climate Forest builds on the current enthusiasm for tree planting and will channel that interest into worthwhile and well-considered tree planting projects that deliver a broad range of climate and ecological benefits to Glasgow City Region.

| SITE | DATE PLANTED | NUMBER OF PLANTS | HEDGING PLANTED |
|------------------|--------------|------------------|--------------------|
| Onslow Road | 2022 | 1750 | 130m beech hedging |
| Dillichip | 2022 | 3000 | 485m mixed species |
| Strauss Avenue | 2023 | 520 | 115m mixed species |
| Inler Park | 2020 | 1600 | 150m mixed species |
| Lennox Extention | 2020 | 900 | 100m mixed species |
| Carleith Primary | 2020 | 300 | 40m beech hedging |
| Edinbarnet | 2020 | 900 | 170m mixed hedging |

All woodland planting mixed native species. Mixed species hedging 40% hawthorn, 40% blackthorn, 20% dogrose.
All hedge planting @ 7 plants per meter.

The project was born out of the Green Network Blueprint and is part of the Strategic Habitat Network.

In 2022/23 CCF undertook a survey of existing tree canopy data in WDC. This found that the average tree canopy coverage in West Dunbartonshire urban areas is around 17%. CCF and WDC have committed to increasing this to reach the 20% target. This survey and report has now given a range of opportunities for tree planting type and style across the Council area and will be used to advise future planting schemes. Below is a list of woodland and hedge planting over this reporting period. Much of this has been delivered in partnership with WDET, WDC, CCF and Trees for Life. Some 400 standard and heavy standards trees have also been planted by Greenspace during this reporting cycle.



Raised beds at Milton Park.



2.10 Green Action Trust

Green Action Trust (GAT) are Scotland's leading environmental regeneration charity. They provide end to end solutions for environmental regeneration project including biodiversity, habitat and infrastructure projects. This means that they can support the Council for idea conception stage, public consultation, habitat surveys, contract management and delivery and follow up monitoring and evaluation.

WDC have worked with GAT to deliver the Nature Restoration Fund projects at Faifley Knowes, Auchnacraig Estate and are currently working together on improvements at Balloch Castle Country Park.



Ground preparation for new woodland planting.

3

Mainstreaming biodiversity

Section 3 will outline the Strategic Framework of Plans, Policies and Strategies which seek to mainstream biodiversity measures so that they are considered at a strategic and operational level. This section will outline the organisation's framework for delivery of fulfilling the Council's biodiversity duty.

3.1 Strategic Plan

The West Dunbartonshire Strategic plan 2022 -2027 establishes the strategic priorities of the Council, and explain how the Council will work to improve the lives of residents. The priorities are guided by the Administration's election commitments, and support delivery of Community Planning West Dunbartonshire's (CPWD) Local Outcomes and Improvement Plan and the West Dunbartonshire Health and Social Care Partnership (HSCP) strategic plan.

The four strategic priorities of the plan are:

1. **Our Communities - Resilient and Thriving**
2. **Our Environment - A Greener Future**
3. **Our Economy - Strong and Flourishing**
4. **Our Council Inclusive and Adaptable**



The second section, **Our Environment A Greener Future**, is most aligned with biodiversity priorities. It has been included to reflect the need to protect and enhance the environment and meet the challenges and opportunities of responding to climate change. This gives cognisance to the wider ecosystem services and how they impact not only biodiversity but also people. Global warming is leading to an increase in the frequency and intensity of storms, flooding and heatwaves and changes in pests and diseases. It will affect social and environmental determinants of health including clean air, safe drinking water, supply of sufficient food and access to secure shelter. It will also damage local infrastructure and services, reduce productivity, increase the likelihood of conflict and climate migration and increase the loss of biodiversity.

In January 2021, West Dunbartonshire Council developed the **Climate Change Strategy**, committing, in response to the global climate emergency, a long term target for West Dunbartonshire to become net zero by 2045.

The Council has different levels of control and influence in protecting the environment and addressing climate change. It is responsible for complying with legislation relating to the environmental impacts from its activities, such as heating and powering our offices, using vehicles and generating waste; managing the environmental impacts from the activities of West Dunbartonshire residents and businesses, such as air pollution from local transport and the reduction, recycling and disposal of household waste; and enforcing environmental legislation on businesses, such as in relation to product packaging, banned substances and energy certificates. It also has capacity to influence wider environmental action by working with partners within West Dunbartonshire.

A further environmental crisis being faced, in addition to climate change and biodiversity loss, is unsustainable resource usage. We are using the planet's resources at a faster rate than they are being replenished and in a way which does not allow most of these resources to be reused within our economic systems. In order to address this crisis, the local authority has a commitment to move to a circular economy model. This is a more resource-efficient alternative to a traditional linear economy (make, use, dispose) where resources are used for as long as possible, and then products and materials are recovered, regenerated, or recycled.

Additionally, a new **Local Housing Strategy 2022 - 2027**, has an important influence on poverty and health inequalities in Scotland. This is through the effects of housing costs, housing quality, fuel poverty and the role of housing in community life. The mixture of house sizes, types and tenures is an important consideration in the creation of strong communities.

3.2 West Dunbartonshire Local Plan and NPF4

The development plan sets out the strategy and policies for the use of land and buildings within a planning authority area. The development plan for the West Dunbartonshire planning authority area consists of the **Fourth National Planning Framework (NPF4)** and the adopted West Dunbartonshire Local Plan (2010). The Proposed Local Development Plan (2020, as modified) is not part of the statutory development plan for the West Dunbartonshire planning authority area but is a material consideration in the determination of planning applications.

The Council has begun preparation of a new Local

Development Plan (LDP3) for West Dunbartonshire. As a first step, the Council has prepared a Development Plan Scheme and Participation Statement.

The National Planning Framework 4 (NPF4) was adopted by the Scottish Government on 13 February 2023. Policy 3, focuses on the Nature Crisis and places biodiversity at the centre of Planning Policy.

Policy 3 sets out that:

- 3(a) Development plans should **facilitate biodiversity enhancement**.
- 3(b) Development proposals should **contribute to the enhancement of biodiversity**.
- 3(c) Design should take into account the need to reverse biodiversity loss
- 3(d) Development should only be supported where it can be demonstrated that the proposal will **conserve and enhance / biodiversity**, so that they are in a demonstrably better state than without intervention
- 3(e) Proposals for local development should only be supported if they include appropriate measures to **enhance biodiversity**, in proportion to the nature and scale of development.

Policy 3 also states that development proposals which integrate nature-based solutions and **deliver positive effects for biodiversity** should be supported. To this end, Scottish Government have produced a guidance document to assist Planners and developers in reaching this commitment. The **Developing with Nature Guidance** can be found here:

Developing with Nature guidance | NatureScot
<https://www.nature.scot/doc/developing-nature-guidance>

West Dunbartonshire Council will use this document to assess applications and their impact on biodiversity.

In addition to Policy 3, a number of other policies within NPF 4 are highlighted as these also have an impact on biodiversity. Policy 1 prioritises the climate and nature crises in all plans and decisions. Policy 4 protects and enhances natural heritage, and this is further supported by policy 5 on soils and policy 6 on forestry, woodland and trees. Policy 20 promotes the expansion and connectivity of blue and green infrastructure, whilst policy 10 recognises the particular sensitivities of coastal areas. Protection of the natural features of brownfield land

is also highlighted in policy 9, and protection of the green belt in policy 8 will ensure that biodiversity in these locations is conserved and accessible to communities, bringing nature into the design and layout of our cities, towns, streets and spaces in policy 14.

Local Development Plan (LDP2) – whilst LDP2 (2020, as amended) will not become an adopted LDP, the Council continues to use it in decision making. LDP2 has Building with Nature ‘Excellent’ accreditation, meaning that the Plan has been recognised in ensuring that green infrastructure is considered from the outset of the development process. LDP2 seeks for green infrastructure and green network enhancements to be incorporated into its key development sites, and identifies a Strategic Green Network consisting of designated open space, green belt, other countryside, and the Kilpatrick Hills. It also identifies a number of strategic green network projects including habitat expansion.

Green Network and Green Infrastructure Planning Guidance (2022) – the Council approved this document, which builds on the green infrastructure and green network approach of LDP2, with guidance on how this should be delivered on development sites, with habitat enhancement identified as an important feature. It sets out the circumstances in which habitat enhancement will be sought on new development sites. The guidance sets out circumstances in which developer contributions towards green network enhancement will be sought. Additional guidance on allocating developer contributions identifies biodiversity improvements to existing green infrastructure and woodland management and planting as suitable projects.

Creating Places Planning Guidance (2022) – the Council approved this document which provides guidance on how green infrastructure, including habitat enhancement, can be incorporated into new development.

Open Space Audit and Strategy – work commenced at the start of 2023 on an extensive open space audit that will inform the Council’s Open Space Strategy. Over 400 sites will be visited to be audited on a range of criteria including diversity of habitat, quality of habitat, connectedness of site to other habitats, and the ability the site offers for human contact with nature. Opportunities for enhancing biodiversity are also recorded.



3.3 Education Services Delivery Plan Priorities

Education Services Delivery Plan Priorities are aligned to the **WDC Community Planning Partnership Priorities of Empowerment, Sustainability and Wellbeing**.

Placing the human rights and needs of every child and young person at the centre of education

- Improvement in children and young people's health and wellbeing
- Closing the attainment gap between the most and least disadvantaged children and young people
- Improvement in skills and sustained, positive school leaver destinations for all young people
- Improvement in attainment, particularly in literacy and numeracy

The children and young people of West Dunbartonshire are citizens of the global community who have the opportunity to engage with real-world issues that align with the **United Nations’ Sustainable Development Goals (SDGs)**.

The SDGs provide a global framework for addressing challenges such as poverty, inequality, climate change and more. WDC have developed six West Dunbartonshire Competencies matched to the Global Competencies and aligned them with the SDGs.

WDC has an aspiration for all children and young people to achieve and attain these competencies on their learning pathway in the Broad General Education and Senior Phase, contributing to both Equity and Excellence in education.

WDC endorses the Scottish Government Learning for Sustainability Action Plan 2023–2030.

WDC is committed to the vision that is set out in the Target 2030 “A movement for people, planet and prosperity Scotland’s Learning for Sustainability Action Plan 2023–2030, published in June 2023 which sets out actions to:

- Accelerate progress to achieve Scotland’s Vision 2030 goals for Learning for Sustainability
- Achieve the ambition to make Learning for Sustainability central to Scottish education
- WDC notes and agrees with challenges for implementation of targets set out in the paper.

West Dunbartonshire Council Educational Services are currently refreshing the WDC Learning for Sustainability Strategy in line with the aspiration of ‘Target 2030’.

WDC is committed to engagement with the Scottish Government officials on the next steps with the Learning for Sustainability Action Plan, and the proposed ‘Call to Action’.

As part of this Education plan to engage with ‘Caring for our Outdoor Spaces’, a new resource published by The Scottish Government that has been developed by practitioners in response to feedback from the sector. It complements the current ‘Out to Play’ series that aims to support ELC and School Age Childcare practitioners/Teachers to provide high quality outdoor play experiences for children.

The focus of the resource is to support practitioners/Teachers to create safe, nurturing and inspiring outdoor learning experiences which help foster a true love of the outdoors in our young people that stays with them for a lifetime. In so doing, the guidance assists practitioners to embed Learning for Sustainability in everyday play and learning. The guidance considers ways to reduce the impact on biodiversity as a result of increasing children’s time outdoors when in ELC or school age childcare and promotes children’s exploration of the natural world.

Within our delivery plan we will include the use of these national guidance documents to ensure WDC:

- collaborate to develop a shared understanding of the importance of values and sustainable outdoor practice;
- support practitioners to care for our outdoor spaces;
- embed caring for our outdoor spaces into planning – including planning for use of off-site spaces and an ‘outdoor calendar’; and
- embed care for our outdoor spaces into children’s experiences – including why soil matters, mud, digging, trees and shrubs, beach visits and animal allies.

3.4 Your Community

During 2021–22 West Dunbartonshire’s Community Planning Partnership embedded three overarching themes to support the work of each of the Delivery Improvement Groups (DIGs). The themes are: Empowerment, Wellbeing and Sustainability. Under sustainability the aim is to promote, ‘new thinking and innovative actions to address resource management and the climate emergency’. By embedding these themes within CPWD structures it ensures an on-going awareness and need to respond through delivery of partnership work. These themes will also support conversations with communities as work progresses to develop Locality Plans, allowing each community to consider and agree specific priorities for their neighbourhoods.

3.5 Housing and Employability

The More Homes Better Homes West Dunbartonshire Local Housing Strategy 2022–27 (LHS) embraces the principles of NPF4 including those on Placemaking, 20-minute Neighbourhoods and supporting biodiversity. The West Dunbartonshire Strategic Housing Investment Plan 2023–2028 (SHIP) details the new housing developments programmed for the next five years and promotes these same principles. By providing native species planting and wild meadow solutions in the green spaces of new housing developments, new developments can contribute to wider biodiversity objectives.

In the Council new build projects, collaboration with the Biodiversity Officer on design of green spaces takes place and Housing encourage other developers to do likewise. Developers seeking support through our SHIP are also need to meet the requirements of our Affordable Housing Design Standard that promotes a higher quality of design in new build. For external areas, the Design Standard complements the Planning Guidance on Residential Development, for example, by encouraging natural solutions to rainwater runoff and planting trees, particularly edible fruit species.

3.6 Waste Strategy and Action Plan 2023–2028

This Strategy sets out a high level plan to manage waste in the coming years. It seeks to build on the work that has been carried out, to enhance the range of opportunities to prevent waste at source, to reuse where practicable, to recycle that which cannot be avoided, and to extract value from the remaining mixed waste stream so that the use of landfill is minimised. It sets out the Council’s aim to deliver a recycling, reuse or reduce rate of zero % to landfill by December 2025.

3.7 Other Plans, Policies and Strategies relevant to biodiversity include:

- Clyde and Loch Lomond Local Plan District – Flood Risk Management Plan
- Greenspace Volunteer Policy
- Food growing Policy
- Core Path Plan
- Equality Outcomes and Mainstreaming Report 2021–2025
- Air Quality Annual Progress report
- West Dunbartonshire Libraries Sustainability Action Plan
- WDC Arts & Heritage strategy

4

Nature-based solutions, climate change and biodiversity



Wildflower meadow at West Bridgend



This section outlines the various ways in which West Dunbartonshire Council has integrated biodiversity into actions on the climate emergency such as through Nature Based Solutions. Project examples have been used to highlight this.

4.1 Greenspace Bio-Sites

Due to budget pressures and a desire to reduce the Council's carbon footprint, the Council has reduced grass cutting on around 100 sites throughout the district. These sites were selected on criteria that included areas that were difficult to cut e.g. steep slopes and waterlogged sites. Whilst many sites have been left to long grass, Greenspace have where possible introduced biodiversity enhancements to many of these sites. Over the previous 3 years many sites have been chosen for:

- Woodland expansion - with native woodland edge species being planted to expand and enhance existing woodland as well as under story planting of established woodlands
- Pictorial meadows - several pictorial meadows have been trialled successfully and rolled out to many sites including road verges
- Grassland management - The long grass areas are being surveyed to record what species are emerging on grass that was previously mown.
- Purchase of a flail collector to bring grassland

into good condition. This includes cutting and lifting the grass arisings from sites once or twice a year. This helps to reduce nutrients on these sites which are fertile given the previous mowing regime. Wildflowers prefer nutrient depleted grasslands and will be given a better likelihood of survival once brought under suitable grassland management. Without cutting, these sites will become rank and ultimately result in a biodiversity loss as one or two rigorous grasses outcompete native grasses and wildflowers.

- Parkland type planting - many sites have had standard and extra heavy standard trees planted on them and a suitable species list has been created to prioritise planting of berry, nectar and nut producing trees to benefit wildlife as well as being aesthetically pleasant for the local residents.

All these actions will serve to enhance these habitats for pollinators and further work is continuing to establish a local implementation of the actions outlined in the Pollinator Strategy for Scotland 2017-2027.

In addition to wildlife benefits, grasslands also act as a carbon store and have longer root systems which help them survive extremes of weather conditions. Grasslands also slow the flow of excess run off water and are particularly important during storm events.

4.2 Managing assets

As part of the historic industrial past within West Dunbartonshire Council, some areas have the unfortunate remains of the by-products left behind as industry closed down. Remediation of sites continues to take place as WDC continues to develop, renovate, and clear sites going forward. Managing water in different ways has led to some innovative projects such as:

- Ground water remediation of the former Singers dump at St Peter the Apostle high school has been completed.
- Works include the cleaning of groundwater contaminants and capping of industrial waste site allowing for provision of external school playing fields.
- Grey water harvesting of rainwater allows it to be used to flush schools toilet systems.
- SUDS system allowing for surface water to percolate to a central holding area below ground and slowly released into the waste water infrastructure. This mitigates deluging the surrounding local network.

Managing the Council's assets includes a continued commitment to develop strategies at design stage and retrospectively adapt current estate buildings in reduction of fossil fuel usage.

Below are some examples of applying new technologies to new builds and existing estate buildings:

- Installation of geo-thermal heating systems within 3 of our largest high schools allowing for large internal areas to be heated by this method.
- One primary school heated solely geo-thermally.
- Passivhaus design of our latest co-located primary school, ELC and community hub facility. Reduction in heating costs with no gas installation.
- Roll out of installation of photo-voltaic cells within new building design and retrospectively installing throughout estate properties.

4.3 People and Technology

Reuse of work equipment such as chairs, footrests and screens. A store of these items has been created, reducing the need for new equipment. ICT ensure technology hardware is disposed of properly, recycled, or repurposed whenever possible, and sustainable disposal options, such buy-back programmes, are used. When procuring, suppliers' Energy star rating programmes that certify their products for energy efficiency are considered. Power consumption is reduced with effective power management policies and tools.

For all Procurement awards and in accordance with contract strategy development and the Scottish Government Sustainability toolkit, the council explore sustainability opportunities in all tenders.

People & Change officers have promoted volunteering and support employees with this; have invested in upskilling the workforce to identify waste and remove from processes; moving towards digital and away from printing and unnecessary activities; ensured awareness sessions were delivered across office buildings on recycling and environmentally sound practices.

ICT officers continue to encourage best practice regarding data storage and usage and electronic records keeping.

4.4 Biodiversity included in new development

The development management planners, strategic planners, architects, project managers and biodiversity officer have collaborated on a number of larger scale council developments including:

Exxon regeneration site – the Council has sought funding from the Vacant and Derelict Land Improvement Programme fund to provide green infrastructure on the Exxon regeneration site, which would have the dual benefit of enhancing biodiversity on the site, and offering protection to the adjoining Inner Clyde Special Protection Area when the site is opened up for development. Whilst funding has not yet been offered encouragement has been given to seek funding for delivery in year 2024/25 onwards. As part of this process, a detailed landscape framework will be developed for the site, with Biodiversity Officer and Nature Scot involvement.

Bellsmyre redevelopment – granted consent in February 2022, the proposal contains a linear park through the development, creating a central, multifunctional open space, for recreation and biodiversity. Landscaping incorporates biodiversity positive drainage, such as swales and raingardens.

Mitchell Way redevelopment – The Council's Biodiversity Officer and the applicant have worked together to improve the soft landscaping surrounding the food store. The agreed landscaping plan introduces tree planting, ornamental shrub planting, species rich flowering lawn as well as naturalising bulb planting. Recommendations have also been made by the Council's Biodiversity Officer regarding species of trees and hedges to be planted

in order to increase the biodiversity value of the site. These requirements are covered via conditions. The addition of soft landscaping will provide two fold improvements of increased biodiversity to the site but also the softening of the appearance of the site, particularly as the existing site is bounded with a green area. It will also add interest to this town centre site.

New development using ivy screening to surround bin areas:



New housing development with a SUDs system that is working for wildlife and has community engagement to assist with the management :



4.5 Biodiversity consultations on planning applications and Council development proposals

4.5.1

The Biodiversity Officer is a consultee on planning applications and works with a range of departments on their development proposals. Over this reporting period responses have been provided for a range of small to large scale applications. Providing this service and working with colleagues ensures that biodiversity considerations are captured in any new development going forward. Advice includes information on protected species and habitats, survey requirements, biodiversity enhancements, landscaping and planting schedules as well as tree planting and retention within developments. Applications and proposals have included but are not limited to:

- Cardross Road housing development
- Vale of Leven windfarm
- Network rail bridge works
- Individual housing developments
- Bonhill Quarry
- Auchencarroch landfill
- Faifley Campus
- Pappert Housing development
- Supermarket landscaping
- Crosslet Estate
- Bat lighting at storage facility
- Erskine Bridge works
- Balloch Park Mountain Bike trail
- Lomond Bank

4.5.2 Biodiversity Officer contributions to strategic changes at national and local level

The Biodiversity Officer has attended a number of Scotland wide biodiversity related events and contributed to many consultations during this fast paced policy change era for the biodiversity crisis. Below are some examples of this:

- Holyrood Events – Nature Crisis- SBS consultation launch; Dasgupta Review; Butehouse Agreement; biodiversity intactness index; natural capital index.
- Sustainable Scotland Network – Local Authority and Land, Sequestration and Climate Action – Green Financing
- Local Authority Pollinator conference- Athayde Tonhasca What is Pollination – bee requirements for feeding , nesting and pollination; Lindsay Grant – Edinburgh Living Landscapes – management of amenity grassland; Carol MacLean

- collaboration with partners. Louisa – South Lan – green flag biodiversity requirements, projects – GROW 73 in Rutherglen and Clyde Valley Orchards – national inventory of orchards for Scotland; Philip Stirling –butterfly conservation – road verge biodiversity and focus on reducing substrate in new developments; Dr Philipp Unterweger –meadow management.
- Report to Council for COSLA meeting of Signing the Edinburgh Declaration
- Active member of Climate Change Action Group
- Contribute to LHEES local housing strategy – visited new housing developments – consultation workshop 17.8.21 – ‘develop a biodiversity guide for communities to help local residents’
- Contribute to Active and Sustainable Travel Strategy and Action Plan
- Smarter choices smarter places
- Biodiversity Officers NPF4 workshop
- Scoping of peatland projects with NatureScot
- Ash dieback raise awareness and establish working group
- CCF working group
- STOG tree officers working group and Ash Dieback Working Group
- Develop management plans for greenspaces and new biodiversity enhancements
- Regular updates with surrounding LBOs including LLTNP
- Deer Management Statement
- Attended 30 x 30 launch
- Contributed to SBS consultation
- Nature Networks Co-design Workshops
- Member of LLTNP Future Nature network working group – routemapping
- Biodiversity Network meetings
- May 2021 – topics – biodiversity net gain in planning, Adopted NPF
- August 22 – topics – SBS and delivery plan, nature networks, LNCS review, Wee Forests – in programme for gov, funding, spatial mapping
- Dec 22 – NRF, LNCS assessment, Habitat connectivity mapping with CSGN
- April 23 – In person meet at Vogrie – SBS, NPF4 and developer guidance, LNCS guidance review, NRF
- May 23 – local authorities responsibility in delivering SBS delivery plan actions. 33 priority actions in SBS, 1st 5 year plan has 172 actions at draft stage, 67 of which are for LA delivery.
- LNCS Scoping meeting Ivan Clark NatureScot
- Su Campbell – ScotGov – Edinburgh process
- Elisa Bevacqua – nature based solutions
- Scottish Biodiversity Information forum SBIF – data systems
- GCVGN grassland, woodland and wetland mapping
- Review of Vacant and Derelict Land for biodiversity opportunities.

- Contribute towards Canopy coverage survey of urban WDC – Woodland creation opportunities, community, street trees, individual trees.
- National Marine Planning forum NMP2
- COSLA REPORTS Summary

4.6 Antonine Wall

In Feb. 2022, the Antonine Wall project partners took part in a series of workshops to apply the Climate Vulnerability Index (CVI) to the Antonine Wall. The CVI is an established values-based, science-driven, and community-focused methodology designed to rapidly assess climate impacts – both to Outstanding Universal Value (OUV) and the associated ‘community’ (local, domestic, and international) – for all types of WHS properties (natural, cultural, or mixed). Attendees at the CVI workshop included experts, site managers from across the FRE, academics, responsible management agencies, and other stakeholders. Three key climate stressors that present the greatest threat were identified: precipitation change; temperature change; and intense precipitation. Modelling events over a time scale to c. 2050 determined that the OUV Vulnerability is in the highest category (high), indicating the potential for major loss or substantial alteration of most of the values that comprise the OUV and assessed the Community Vulnerability to be in the middle category (moderate). Historic Environment Scotland will integrate the findings from the CVI workshop into the forthcoming revision of the Antonine Wall Management Plan due out in early 2024; the impact of climate change on the monument, and the biodiversity surrounding the world heritage site, will continue to form part of the future monitoring and management of the property.

Greenspace have also worked with HES at the fort at Goldenhill Park. The project involved GPS marking of the fort boundary and implementing a differential cutting regime that will both outline the fort walls but also provide additional habitat for pollinators. This has been beneficial for both natural and cultural history elements.

4.7 Educational Services

Development of natural spaces in school grounds

- Many of our establishments have food growing spaces outside for the children to grow a variety of produce, including raised beds and polytunnels and fruit orchards
- Most Early Learning Centres have committed to reducing waste, recycling and reusing resources where possible. This is done through toybanks, foodbanks, clothes banks, going paperless where they can etc.

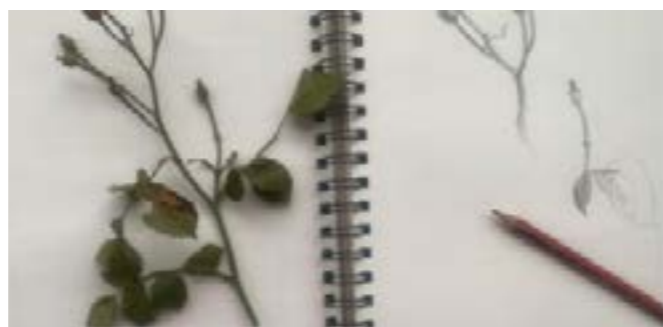


4.8 West Dunbartonshire Council Arts & Heritage Service

Projects have included identifying opportunities to use green and open spaces in programming activities and encouraging participants to lead active lives. These form part of the WDC Arts & Heritage strategy.

Arts Development Service programming currently includes increased opportunities to connect with nature and the outdoors via a Sketch & Stroll activity.

Tutor led, this programme co-ordinates visits across the area to inspire drawing and sketching and provide opportunity for walking and exercise to enhance health & wellbeing. Working with Greenspace, sessions offer engagement in parks, greenspaces and waterways focusing on local areas of natural beauty. Sketching sessions have taken place in a local library community garden in which participants engaged with the planting to inspire their work.



****SOLD OUT**Beginners Botanical Drawing with Sandi Anderson**

Thu, Jan 12, 13:00

Alexandria Library • Alexandria

Free

4.9 Libraries

West Dunbartonshire Libraries have contributed to local level biodiversity enhancement, whilst providing a space for people to connect with nature. In April 2023, the Sustainability Coordinator assessed current garden infrastructure at Alexandria Library and designed a “Food Forest” permaculture garden (approximately 380 square foot). The planting throughout 2023 has been delivered to enhance the environment for pollinators (E.g. in October 2023, 22.5 square foot of Scottish wildflowers were sown beneath hedgerows; in May 2023, 24 square foot of edible flowers were planted for pollinators). West Dunbartonshire Libraries collaborated with the Heritage Seed Library to increase the biodiversity of open-pollinated crops, and are acting as “Seed Guardians” of Clydebank mangetout (a pea variety native to West Dunbartonshire).

4.10 Your Community

During 2021-22 the team worked in collaboration with partners within WDC Greenspace Service and WD Health & Social Care Partnership (HSCP) to develop a pilot approach to Participatory Budgeting (PB) mainstreaming. The pilot was an opportunity to work towards developing a corporate approach to mainstreaming and to contribute to the annual Community Choices Framework Agreement. The Framework Agreement requires councils to direct at least 1% of local government budgets through participatory means, i.e. local people are engaged in directing resources.

The Pilot project was an opportunity to integrate biodiversity and improved wellbeing into a PB approach. It focussed on a total budget of £100,000, equal contributions from WDC Greenspace and Health & Social Care Partnership. It took place in Clydebank and was designed as an ‘idea generation’ approach to allow communities to suggest ways to improve green space / walking / cycling routes to promote health and wellbeing. The project was conducted on-line and attracted 267 votes for the suggested projects. The winning project was for, ‘Improvements to Breval Park’ and was awarded £80,000 and the second place project, ‘Hardgate Knowes’ was awarded £20,000. Work is now on-going within WDC Greenspace Service to deliver the agreed projects, improve the area and increase opportunities for people to benefit from being active outside.



Melfort Park bioblitz.

5

Public engagement and workforce development

Section 5 will detail public engagement and education activities that have been undertaken to inform or engage directly or indirectly, with communities, young people and the public.

These include actions to raise enjoyment and understanding of, and connection with, biodiversity and nature. All activities in this section seek to address the disconnect of people with the natural environment, a recognised driver of biodiversity loss. Providing opportunity for quality interactions with nature is essential in engaging people with their environment. Many environmental projects that provide a physical element to benefit wildlife, such as the creation of a new woodland or pond, don't come as a stand alone project anymore. It is well recognised that these habitat enhancements should be delivered with a community engagement element and that is true of all the habitat improvement works considered in Section 2.

This section will provide an overview of the public engagement associated with these works and a range of biodiversity projects, in recognition of the need to involve schools, community groups, businesses, residents and visitors with their natural environment. There has been considerable focus on the development of volunteering and food growing as part of achieving this objective. This section also outlines educational projects that are partnerships with the Education department, however, as biodiversity cuts across many broad

themes in education, much of the work carried out by Education is outlined under Section 3, Mainstreaming.

Where progress has been made on workforce development in relation to biodiversity this has been listed here also.

5.1 Education

- Working closely with WOSDEC, a third-sector organisation, and trusted provider of professional learning in Global Citizenship to educators.
- Ourcloud.buzz linked to Greenspace page to engage schools -links to resources and ideas for activities as well as the details of members of the Council's Greenspace team that support activities in school grounds or local park/woodland area.
- <https://sites.google.com/ourcloud.buzz/wdc/greenspace/home>
- Professional learning ensures that all newly qualified teachers begin to understand, explore and develop issues shaping the world.
- CLPL - LfS/ Forest school/outdoor first aid, Forest kindergarten
- CLP offered to establishments on various elements of Learning for Sustainability from Keep Scotland Beautiful
- CLPL delivered to all Newly Qualified Teachers on Learning for Sustainability and Global Citizenship.
- Supporting educators to undertake masters level learning and further studies in Learning for Sustainability

5.2 Greenspace – Volunteering opportunities

Greenspace have 3 posts which deliver community engagement opportunities. Volunteering opportunities for members of the public, groups and corporate interest are included. Broadly these are offered as habitat management practical tasks, events and activities support, citizen science, litter picking support and community food growing.

Countryside Ranger Service

The Countryside Ranger Service delivered a total of 1507 volunteer hours on practical conservation and maintenance tasks since Feb 2022, this includes a regular fortnightly volunteer day at BCCP. Additionally, a total of 103 volunteer hours were spent on public engagement activities since 2022. Biological monitoring has continued with a large majority being completed by local volunteers under other organisations such as Butterfly Conservation and the Botanical Society of Britain and Ireland under their 10 year project to update records for the local area. These can be park based but also cover the wider countryside and other greenspaces.

Community Engagement Ranger

The Community Engagement Ranger delivered a total of 424 volunteer hours assisting with practical tasks, surveys, events and activities, on over 40 occasions with 1300+ people involved. These are usually park based.

Community Greenspace Officer

The Community Greenspace Officer assists and supports solo litter picks, corporate events, community clean ups and community growing. These are sometimes in parks but usually extend beyond into community growing spaces and other greenspaces.

5.3 Greenspace – Education, Activities and Events

Greenspace provide opportunities for the public to get involved through a series of both public and private events, education, guided walks and activities. By providing a wide range of tasks and activities Greenspace seek to engage wide spectrum of society to become engaged in outdoor activities in the natural environment and have sought to do this indirectly through wellbeing, art and cultural activities as well as more direct activities such as tree planting.



5.3.1

The **Countryside Ranger Service** has delivered the following opportunities for public engagement:

Outreach Events – aim to engage underrepresented groups in the countryside:

- Assisted LLTNP in leading a walk to Whinny hill and around BCCP for the group Bonnie boots.
- Assisted LLTNP with a Kurdish Family Forest School Day in BCCP.
- Supported a visit to BCCP by Licketyspit theatre group for a Picnic and Play session in 2022 and 3 more sessions in 2023.

Educational input by Countryside Ranger Service

- Forest schools – Maintained and managed 9 Forest School outdoor classrooms around the district in greenspaces nearby schools with the help of Greenspace Volunteers and Community Payback. Created an additional 2 Forest School outdoor classrooms in greenspaces close to schools.
- Approx. 50 education staff were trained to Level 3 Forest School practitioners in 2022 and have been supported by in lesson planning and managing their sites.
- 5 sets of Forest school equipment were purchased by the Countryside Ranger Service for use in BCCP but also for new Forest School practitioners to borrow on a long term basis to help them get set up and figure out what they need and to fundraise for their own equipment.
- Unfortunately due to the Covid pandemic the West Dunbartonshire Outdoor and Woodland Learning (WD OWL) cluster group was unable to deliver their Literacy in nature project based on The Lost Words Book by Robert MacFarlane. However work has been underway since 2022 to get the group and this project up and running again. This group is a partnership between educational establishments and many of the outdoor learning providers operating in WDC as well as businesses and charities. There were 60 participants at the initial meeting (March 2020), the largest of any local group in Scotland so hopefully once operational again it will be a great network and resource locally. The Countryside Ranger Service is leading on the refreshing of this and currently maintains the digital network (facebook group).
- Held a WD OWL networking event in BCCP in March 2022 but with limited attendance, regularly post on the facebook group to keep the network connected.
- The newly created citizen science opportunities created with LLTNP in the last reporting phase (OPAL packs for loan, including maps of suggested areas for use) were unable to be used

during the pandemic however they have started to be put to use in 2023 to engage schools/groups in citizen science.

- In partnership with the West Dunbartonshire Environment Trust have engaged local schools with 3 separate tree planting sessions at Dillichip Park, Bonhill and a tree planting session at Strauss Avenue, Clydebank.
- Provided 11 separate 'Meet the Ranger' sessions with primary school groups covering a variety of topics including birds and bugs which have often included supporting the group to improve biodiversity in their school grounds (bird feeders, bug hotels) and/or to visit their local greenspace.
- Supported the whole of Gartocharn Primary School to explore nature in their local area and with a visit further afield to BCCP.
- Created a digital resource within the WDC Education departments OurCloud intranet space to help with engaging with nature and the outdoors. Including guidance and links to resources for outdoor learning, forest school, gardening, litter and many others including potential funding and current citizen science initiatives.
- Refreshed the Countryside Ranger Service website to also include a dedicated outdoor learning area for schools and groups outside of West Dunbartonshire Council who wish to visit.
- In partnership with a Stirling University and the LLTNP showcased outdoor learning practises in BCCP to a group of Italian head teachers.

Public Events delivered by Countryside Ranger Service

- Delivered 1 community tree planting day at Dillichip park, Bonhill.
- Delivered 1 community tree planting day at Strauss avenue, Clydebank
- Delivered 1 community litter pick/tidy up at Auchnacraig Woodland Park.
- Delivered 1 volunteer open day for practical conservation at BCCP.
- Delivered 2 outdoor meditation/mindfulness sessions with Green Tree remedies in BCCP
- Delivered 13 foraging/medicinal herb walks with Jean Senior of Beechtree clinic at BCCP, The Saltings LNR and Havoc meadows.
- Delivered 1 family nature/forest activities session at BCCP
- Delivered 1 Family Fun Day at Auchnacraig Woodland Park supported by Dr Kenny Brophy of the University of Glasgow (cup and ring marked rocks/Cochno stone) and Amphibian and Reptile Conservation Society.
- In partnership with the Woodland Trust held a nature event for the opening of the new path through BCCP to Whinny Hill.
- Delivered 2 bat nights in partnership with Loch Lomond Bat Group.
- Delivered 1 Creatures of the night Halloween event which also involved moth trapping.
- Supported Froglife with a public engagement 'Pond Doctor' stall in BCCP

- Roman fun day at Goldenhill Park as part of the Rediscovering the Antonine Wall project – celebrating local history and nature in 2022
- In partnership with Arts and Heritage team we delivered 3 events at Goldenhill Park to celebrate the Antonine wall becoming a UNESCO site 15 years ago – events included a family activities stand, guided walk and family sketch and stroll session.
- Delivered 2 family nature activity stands at BCCP one in partnership with the Balloch Castle Country Park Regeneration Group.
- Autumn bulb planting event in partnership with the Sustainability Officer for WDC libraries.

Group Events delivered by Countryside Ranger Service

- Corra Foundation 3 sessions – 1 session of den building at Havoc meadows, 1 session of nature activities and lawn games at Levensgrove park, 1 nature storytelling session with a storyteller at Havoc meadows.
- Tree planting with 1st Loch Lomond Scouts at BCCP.
- Provided a practical conservation session in BCCP as part of a John Muir Award for a Health and Social Care WorkConnect group from Levensgrove Park in 2022. In 2023 supported another cohort with a visit to RSPB Gartocharn to work with the seasonal ranger.
- Halloween/creatures of the night session

- (including moth trapping) with 1st Loch Lomond Scouts at BCCP.
- Supported TCV trainees and Arsenal Academy under 16 team for a conservation session as part of a sustainability tour at BCCP (tree whip and wildflower plug planting).
- Supported 121st Glasgow Scouts with a visit to Balloch
- Supported Operation Play Outdoors to run John Muir Award Sessions with school groups in BCCP.
- The Countryside ranger also supported a variety of other groups such a scouts and out of school care groups with visits to local greenspaces and nature based activities including some practical conservation such as litter picking and Invasive non-native species removal (Himalayan Balsam).
- Supported LLTNP to bring visiting groups to BCCP and provide some activities.

Countryside Ranger Service- Communications and networks

- Manage the 2 noticeboards in BCCP and one at The Saltings LNR.
- Manage signage relating to ground works to keep the public updated on habitat management works (across WDC area)
- Update, print and distribute c20,000 BCCP leaflets.
- Continue to ensure the WDC website content for greenspaces in the council area are up to date with the ICT team.



- Updated the BCCP webpage to include more detailed information to manage expectations on facilities, added a 'planning your visit' page which includes a map and more information which can also be found in the paper leaflet.
- Refreshed the Countryside Ranger Service website to advertise the option for groups to 'hire a ranger' and also include a dedicated outdoor learning area for schools and groups outside of West Dunbartonshire Council.
- Advertise volunteer opportunities via social media and through posters and word of mouth.
- Advertise free public events via WDC website, social media, posters and word of mouth.
- Connect with local organisations to advertise the volunteering opportunities and free public events that are available locally, particularly as getting out in nature is becoming a well-recognised benefit for health and wellbeing.
- Attend Outdoor Woodland Learning (OWL) Scotland annual networking events
- Attend LLTNP volunteer partnership meetings
- Created a digital resource within the WDC Education departments OurCloud intranet space to help them engage with nature and the outdoors with the premise it will also help education staff network with the Greenspace department easier.
- Continue to have a good working relationship with the LLTNP ranger and education teams to support each other to support groups visiting the national park to enjoy and learn about nature.

5.3.2

The **Community Engagement Ranger** is involved in a range of activities which add value to people's enjoyment of greenspaces. These include educational activities, community events and volunteering opportunities. Over this reporting period the following opportunities for public engagement were carried out:

- 8 Activities occurred across 8 different greenspace sites and with some visits to school grounds
- 95 public events covering variety of themes including art making and exhibitions in conjunction with the libraries, nature, wellbeing, family friendly games all of which were supported by volunteers
- 38 education sessions with young people
- 22 volunteer sessions
- 6 volunteer training sessions for cycle without age project

These events and activities are broad ranging and have included, but are not limited to the following:

- Art Exhibition
- Bird Watch
- Bulb Planting
- Clyde In the Classroom
- Clyde River Foundation School Invertebrate Identification in the burn.
- Communities Team Staff Walk
- Community Art Exhibition
- Community Day
- Community Fun Day
- Community Lawn Games Activity in partnership with CORRA Foundation.
- Drop in and Draw and Lawn Games
- Foraging in the Park
- Goldenhill Park Community Event in partnership with WDC Regeneration
- Inspirational Walk
- Joint Community Engagement Event re Lisset Glen Developments in partnership with AOK and Communities Team
- Joint working day with Police Volunteers Park Activities
- Kids Youth Club Games Activity
- Kilpatrick School Nature Sessions
- Lady of Loretto School Nature Sessions
- Linnvale Community Day Joint Working
- Manual Handling and Tools Training for young people
- Mindfulness
- Nature Activity
- Nature activity with Clydebank College. Animal and tree identification and pond dipping
- Nursery Trip Kids Activities from Lanarkshire
- Nursery Visit 5 sessions
- Observation Surveys (Visitors to the Park)
- Park Surveys (Visitors to Levensgrove Park)
- Plant identification Surveys at Orchard Levensgrove & Havoc
- RSPB Pop up Activity Stand
- Santa Activities
- Santa and Face painting Activities
- Sketch N Stroll Partnership with WDC Libraries
- St Eunans Primary Bird Watch and Kids Lawn Games
- St Michaels Outdoors activities (Animal Identification and bird identification).
- St Patricks Primary, Bird Watch and Kids Lawn Games
- Story Telling Event Anne Pitcher
- Swings Theatrical Event
- Travelling Gallery
- Volunteer Botanical Surveys
- Volunteer Greenhouse Activity
- Volunteer Hedge Planting at Orchard
- Volunteer Memorial Bed Maintenance & Orchard
- Volunteer planting at cenotaph
- Volunteer training for Cycle Without Age Projects
- Walking Wednesday

- Willow Weaving in Partnership with WDC Libraries
- Young People Garden Activity

5.3.3

The **Community Greenspace Officer** (CGO) service delivery includes capacity building with community group; food growing; biodiversity projects with businesses and community; partnership working across a range of public, business and third sector organisations; input to strategies and policies and litter management opportunities.

Capacity Building and Food Growing.

Greenspace continue to support food growing projects though out the area working in partnership with allotments and community garden projects, community councils, tenants and resident associations, local charities and local schools and nurseries. Support has included providing advice on developing sites, purchasing raised beds and start up tool kits for schools and nursery projects, regular donations of topsoil and compost and the provision of Green Waste skips for the sites.

Schools and community groups have been provided with fruit bushes, herbs and seeds to enable participants to work on sites to grow their own food. Recent project success include:

- The Green Corridor, Central Alexandria
- Bonhill Community Garden, Bonhill
- Knoxland Square, Dumbarton
- Knowetop Farm, Dumbarton
- King George V Park, Milton
- The Secret Garden, Faifley
- The Wee Chatty Café, Old Kilpatrick
- Bedford Ave, Drumry
- Levensgrove Working 4U, Dumbarton
- Growing Beardmore Community Garden Dalmeir

Growing spaces have also been refurbished or created at schools since lockdown eased. One of the major projects was eight 1.2 x 2.4 m beds build at St Michaels Primary School and 4 beds at the Aitkenbar campus. 32 planters from a traffic management project in the Vale of Leven have been repurposed as raised beds in the Vale of Leven and Dumbarton. Barrels donated through the Social Benefits project have also been used to build wheelchair friendly raised beds.

There are 2 new combined allotment / community garden sites which have now reached the planning stage.

- Dillichip, Bonhill
- Broadmeadows, Dumbarton.

Among recent success Growing Beardmore received a national sustainability award from Link Housing Scotland. Bellsmyre Community Garden continue to innovate their garden and are in the process of replacing their original raised beds which are around 10-12 years old. They have now reached the planning stage to install 10 solar panels on site. They hope to become a net zero garden in the near future.

Biodiversity Projects

Many of the community groups and schools have been creating small pockets for wildlife within their gardens or local areas. Greenspace have donated wildflower seeds and bulbs to plant for biodiversity. This provides added value to the other wildflower meadow projects and community woodland areas that have been coordinated by the WDC Biodiversity Officer and the Countryside Ranger. Some examples include:

- St Partick's Primary School are planting a bulb meadow to commemorate the 50th anniversary of the school moving to the current site
- Wee Chatty Café are creating a wildflower area behind the café building
- Friends Of Leven Valley sowed wildflowers along the NCN 7 cycle path where the verge had been dug up to lay fibre optic cables
- Alexandria Green Corridor planting wildflower pockets are pollinator stations within the local street network
- Knowtop Farm planting bulbs and wildflowers to increase pollinators stations throughout the site
- Levensgrove Working 4U clients Greenspace volunteers at Balloch Park have undertaken invasive species management.
- BAE Systems Balsam Bashing Dumbarton Foreshore and Bowling

Partnership Working

Greenspace continues to work with a variety of partners including other WDC departments such as Your Community and Working 4 U and a number of local charities to provide opportunities to work outdoors or within food growing projects. The CGO has encouraged local groups and schools to sign up to the WDC Social Benefits register which links groups to procurement partners. This has meant groups have received donations of materials or funding for projects.

Examples include:

- Barrels for planters
- Monoblock and fencing lifted from house demolition reused as bases for poly tunnels
- Funding for a generator
- Donations of POD Compost

Logitech, a local business based in Old Kilpatrick, approached WDC to seek advice on increasing biodiversity within the factory grounds. The company are planning to create a forest schools area within the grounds to be used by local schools and nurseries. They are also planning to create wellbeing spaces for staff and have planted a wildflower meadow this summer. Over winter the plan is to plant native trees within the site.

Strategies

The WDC Food Growing Strategy is now active and a working group has been formed to take the strategy forward including the 2 new Community Garden / Allotments.

Working 4 U clients at Levensgrove have been collecting and potting up tree seeds. It is hoped that if successful a small tree nursery can be created at Levensgrove Park to provide locally grown native trees to increase biodiversity in the WDC Area.

Litter Picking

Greenspace have supported a variety of litter events including schools and nurseries and community litter picks. There were several established groups including the Friends of Dumbarton Foreshore and Action Old Kilpatrick who undertake regular litter picks. Since lock down several new litter pick groups have been formed in the West Dunbartonshire Area.

These include:

- The Friends of the River Leven Valley
- Linnvale Community Group
- Flourishing Faifley
- The River Leven and Linnvale groups have links with Sustrans and the Linnvale Group also link in with Scottish Canals who have both provided support in the form of equipment. The Flourishing Faifley group have formed a men's group who have taken undertake litter picks in the Auchnacraig area.

There have been several corporate events including:

- McDonalds, Clydebank Canal
- Merck Group, Auchnacraig Woods
- Jones Lang and Lassall, Bowling
- Clydebank Sea Cadet Force, Clydebank Canal
- Working 4U clients will be using the Chatty Café at Old Kilpatrick as a base for weekly litter picks.

One of the major successes of the last 18 Months is the partnership that has developed between WDC and BAE Systems at Govan. From an initial event on the River Clyde at Clydebank, BAEs have now undertaken around 15 litter picks linked to the Upstream Battle Project. They have covered areas from Clydebank to Dumbarton on the North of the

Clyde and between Govan and Port Glasgow on the South Bank.

5.3.4

The **Litter Control Officers** carry out a public engagement and educational element of the Litter Control Strategy to engage school children and the wider community in managing litter and learning about recycling. Projects include:

- All primary 4 pupils within WDC receive an input from Greenspace Litter Control Team and Community Waste Services, the programme is called Binman and highlight the effects of littering and managing household waste.
- Experiential Learning is a hands on programme delivered to all P7's in West Dunbartonshire. This is an in depth programme where the dangers of litter are exposed, covering needles, syringes and the consequences of leaving litter has in the overall community. The pupils also receive a session delivered by LLTNP on responsible access in the countryside and water safety. Sessions are also delivered by Road safety, British transport police, internet safety, Alternatives (Drug Misuse) and emergency services.
- The Community Waste Team also carry out visits to residents to advise them of when they have contaminated a brown or blue bin. Information and advice is then given to the resident to maximise the amount of recyclable material we are collecting. They also carried out visits to LLTNP and Tenants Associations to advise on recycling and have delivered talks on composting to primary schools, P6/7.

5.4 West Dunbartonshire Council Arts & Heritage Service (AHS)

5.4.1

The service currently supports Community Learning via a Heritage Lottery Fund funded arts programme. As part of the programme AHS have co-ordinated a range of activity for public engagement to include:

- recycled crafts sessions;
- establish links with Flourishing Faifley community garden
- organised a foraging session with Green Tree Remedies along the River Leven.
- contributed to the development of a Green Heritage corridor in Alexandria.
- Developed a Neighbourhood Walking Project looks to create a new community heritage trail focusing on favourite walks and places to visit.
- Worked with the WDC Libraries Sustainability Officer to deliver a plant swap to encourage a sharing of plants grown rather than purchased,

saving costs for local gardeners and providing opportunity to enhance garden spaces. This event enabled our service to connect with community gardens and gardeners across West Dunbartonshire.

- Development of a River Leven heritage kit to include information on the history of the river and riverbanks, surrounding environment and biodiversity. The kit will include books and poetry inspired by the river highlighting its importance to the communities throughout history.
- Delivered a natural dye workshop to encourage knowledge of plants and their uses in creative initiatives
- Delivered recycling and upcycling workshops discourage waste and inspire creative endeavours to re-use materials.

The Arts & Heritage team have liaised with the Sustainability Officer - Libraries, local Rangers and Greenspace colleagues in support of developing team knowledge and creation of relevant programmes highlighted above.

5.4.2 Libraries

- West Dunbartonshire Libraries has worked with Christie Park Primary School to facilitate weekly biodiversity gardening sessions (started June 2023) at Alexandria Library Community Garden for P6 children with additional support needs. 30 people reached through this initiative, including parents.
- Citizen science initiatives: In partnership with Buglife, West Dunbartonshire Council Greenspace and Loch Lomond Fisheries Trust, Libraries organised Citizen Science training and surveying of freshwater invertebrate populations in the River Leven. From June 2023 - present, 7 regular volunteers, trained by Buglife, completing monthly surveys of freshwater invertebrate populations.
- Hosted 7 author events centred on nature and biodiversity to increase eco-literacy, reaching 151 adults. Authors include: Amanda Thomson (November 2021), Paul Murdoch (September 2022), Leonie Charlton (November 2022), Kirsty Wilson (June 2023), Norman Bissell (June 2023), Sally Huband (September 2023) and Malachy Tallack (September 2023)
- In July 2023, 63 children were involved with "Nature Immersion" workshops at Alexandria and Faifley libraries. Workshops were aimed to increase connection with nature.
- Indirect community engagement through social media posts on Facebook and Twitter about biodiversity and nature.

- In November - December 2023, West Dunbartonshire Libraries are piloting an Environmentalist in Residence - a graduate artist to lead creative outdoor learning workshops at Alexandria Library for young people aged 12-17

5.4.3 Your Community

The Communities Team has worked with Greenspace colleagues to encourage local people to form "Friends Of" groups for local parks and open spaces. This model has been successful for Greenspace in Levensgrove Park and joint work continues to support the development in Melfort Park, Clydebank. The Your Community Team continue to support the Biodiversity Officer in establishing the community strand of the newly formed Biodiversity Network.

Recent activities include:

- Supporting the local community to establish the Drumry Community Orchard in 2021. This included working with the areas Community Council and Tenant's group (12 local people) and involving children from two local schools in the design, planting and use of the orchard.
- The completion of the Bedford Garden Project that resulted in the creation of One Bedford (Shire) Community Garden which engages 10-15 local people on an ongoing basis to grow their own produce whilst maintaining a wild area within the garden for biodiversity.
- Securing UK Shared Prosperity Funding to work in partnership with local people to deliver 4 community spaces or gardens across West Dunbartonshire. This project will also increase local people's knowledge of their communities' needs and aspirations in relation to the natural environment.

5.5 Providing support to groups

WDC has an ongoing commitment to support a full range of community groups and interested parties.

These include but are not limited to:

- Friends of Dumbarton Foreshore
- Friends of Havoc Meadows
- Friends of Levensgrove Park
- Action Old Kilpatrick
- Balloch Castle Country Park Regeneration Group
- Kilmarnock Community Trust



5A Workforce Skills and Training

Details of training activities that have been undertaken to support the development of the workforce, particularly in relation to skills relevant to biodiversity, nature, outdoor learning and community engagement in the natural environment, are given below:

5A.1 Greenspace

Countryside Ranger Service

- attended a selection of nature identification courses to be better able to support others to identify plants, amphibians and reptiles.
- Approximately 50 teachers achieved Level 3 Forest School BTEC.
- Countryside Ranger attended 2 x Outdoor Woodland Learning (OWL) Scotland networking events to gain ideas and skills to bring back to the local network.
- Countryside Ranger and Greenspace volunteers underwent a training session with Froglife to better manage and maintain ponds within BCCP.
- WDC Greenspace staff including the Countryside ranger and some Greenspace volunteers underwent water safety training provided by LLTNP in conjunction with RNLI to better be able to work close to water safely.

5A.2 Biodiversity Officer

- In house training on Habitat Regulation Assessment – Anthony McGuiness
- Bats and Artificial Lighting bats- BCT
- Ash dieback Webinar – local authority groups and Tree Council and Scottish Forestry
- CIEEM – Preliminary Ecological Appraisal guidance update
- CIEEM – aaoc of local environmental records alerc.org.uk
- TEMPO method training for delivering TPO's
- Wee Forests
- Ecosystem services
- BREEAM native tree planting
- BSBI plant anatomy class
- Tree Design Action Group –Stirling event

In addition to attending the above training events, the Biodiversity Officer, in collaboration with Highland, North Ayrshire, East Lothian and Perth and Kinross Councils, has contributed to the development of a Local Authority Biodiversity Duty e-learning module for all Council staff to help them understand the Council's Biodiversity Duty. This will be implemented in 2024.

5A.3 Libraries

West Dunbartonshire Libraries are members of the Green Libraries Network, an online platform for Green Champions across the UK Library and Information Sector to share best practice on sustainability and biodiversity in libraries, and shape the future of the Green Libraries Partnership.

West Dunbartonshire Libraries work collaboratively with local organisations, such as Bellsmyre Community Garden and West Dunbartonshire Community Foodshare, and national organisations, such as the Heritage Seed Library, to promote the importance of biodiversity for food and agriculture.

West Dunbartonshire Libraries have supported the Sustainability Coordinator in undertaking a week-long **“Creative Climate Leadership”** course with Julie's Bicycle to explore the cultural dimensions of climate change and biodiversity, and take action with impact, creativity and resilience.

West Dunbartonshire Libraries are members of the Green Libraries Network, an online platform for Green Champions across the UK Library and Information Sector to create ideas, collaborate, support, and shape the future of the **Green Libraries Partnership**.



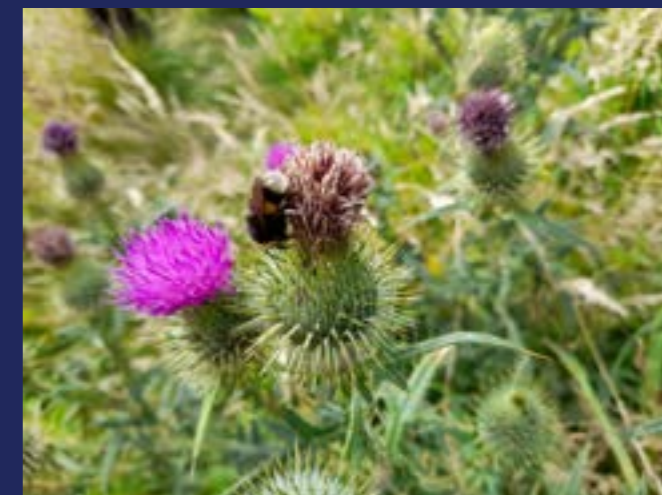
Otter Print.



Greater butterfly orchid.

6

Research and monitoring



Volunteers and species specific organisations. Over the course of the reporting period there has been a focus on increasing botanical knowledge over several sites, passive camera trapping monitoring and exotic trees in BCCP. Results of these surveys are sent to the biological records centre in Glasgow. These projects are described below:

Botanical surveys

In 2021 the Botanical Society of Britain and Ireland (BSBI) launched a brand new network with an ambitious aim: to achieve a fresh record for every one of the 703 monads (1km square) in the vice county of Dunbartonshire (VC99) within ten years, initially prioritising areas never recorded before, or with no data for over 30 years. This project is going very well and many greenspace volunteers have been involved expanding their knowledge and helping to survey many areas. The records are also shared with the WDC Biodiversity Officer and are helping inform management strategies across the council area.

Passive camera trapping and monitoring

This has mainly occurred in BCCP to help provide a better understanding of the wildlife that uses the park and carrying on from the feeder box surveys by Saving Scotland's Red Squirrels. Unfortunately there was a gap in the surveying due to the pandemic and staff changes.

A camera was also recently loaned to a primary school with the hopes to do a trial run of the previous camera trapping project and to look at engaging schools more in citizen science to also help monitor wildlife populations locally.

Balloch Castle Country Park trees (BCCP)

BCCP continues to be included as a National Tree Collection of Scotland site. With Greenspace volunteers the Countryside Ranger Service

6.1

A number of habitat reviews and mapping and opportunity studies have been carried out over this reporting period. These will contribute to a more updated biodiversity baseline and inform WDC decision making on prioritising habitat management projects in the future and will contribute to the Council's Nature Network mapping obligations.

- Tree canopy mapping and planting opportunity study
- Deer management statement
- Grassland mapping study
- Wetland mapping study
- Phase 1 of Auchnacraig Estate prior to works
- Phase 1 of Balloch Park commissioned
- Gallant- Saltmarshes and coastal erosion project –Dr Alejandra Vovides
- Beaver reintroduction consultation
- Buglife Bee Lines
- Watervoles survey- hardgate bridges
- Melfort park bioblitz

6.2

The Countryside Ranger Service carries out a range of biological monitoring projects with Greenspace



Bees on allium planted at road verge.



Cinnabar moth on ragwort.



Small tortoiseshell in allotment.



continued the work to record and highlight trees in BCCP. A digital tree trail has been created and work is underway to get signage in place and to include the trail in the BCCP leaflet. A digital trail of the trees planted from the International Conifer Conservation Programme (RBGE) has also been created.

Additional tree planting has taken place around the edge of the manicured lawn area of BCCP with a view to reduce the extent of the lawn landscape and create more biodiverse habitats with trees and uncut grass areas bolstered by native wildflower planting.

Butterfly Conservation

In February 2020, 4 butterfly transects/ surveys were identified and mapped for The Saltings LNR, Havoc Meadow, BCCP and Levensgrove Park. These were set up with Butterfly Conservation to create a formal monitoring process for butterflies in these areas. Volunteers who underwent training with Butterfly Conservation have managed to collect monthly records at both The Saltings LNR and Havoc Meadows sites.

PhD research at Havoc Meadows

PhD student Samantha Suter contacted the council in 2021 to ask for use of Havoc Meadows as a study site. The research focused on areas of grassland with high floral diversity which have declined by 97% since last century, in hopes of conserving species that use that habitat such as important butterfly species. Havoc Meadow was identified as being an interesting site due to its industrial past and ongoing restoration of a wildflower meadow. It is an important site for monitoring continued changes and how this affects the associated species presence. Using a mixture of techniques including high powered drone surveys Samantha conducted research at Havoc Meadows in the summers of 2021 and 2022. It is hoped that techniques used in this research may help set up large scale surveillance for identifying important butterfly habitats in the future.

University of Glasgow Mosquito Scotland Research project

Assessing the risk of mosquito vector-borne diseases in Scotland and their response to environmental change (Mosquito Scotland). The objective of this research is to conduct mosquito surveillance (ecology, abundance, species diversity and pathogen prevalence) at wetland sites across Scotland in order to assess the risk of mosquito vector-borne disease transmission under current and future climate conditions. Some of this initial field work was conducted at The Saltings LNR in 2023 with potential for future work to take place as well.

University of Hull carnivore psychology research
BCCP was used as a study site in November 2023 for the nationwide British Carnivore Project (BCP). An on-going field study that aims to explore the psychology of wild carnivores, such as red foxes (*Vulpes vulpes*), European badgers (*Meles meles*), and pine martens (*Martes martes*).

The Countryside Ranger Service also carries out:

- Annual bat surveys of the maternity Soprano pipistrelle roost in BCCP
- Ad hoc moth trapping events and surveys
- Bio blitzes covering a wide variety of species

6.3 Educational services

Collaborative action research. Research is under development on nature connection and outdoor play using digital technologies in primary settings in collaboration with University of Strathclyde

6.4 Libraries

In partnership with Buglife, West Dunbartonshire Council Greenspace and Loch Lomond Fisheries Trust, organised Citizen Science training and surveying of freshwater invertebrate populations in the River Leven. This research has supported a shift in the role of Libraries: as lenders of research materials (e.g. nets and wildlife ID sheets) and vibrant site of eco-literacy training and development.

6.5 People & Change

Have undertaken studies of employee travel to work behaviour and this resulted in changes to employees contracts in relation to how they work. Monitoring has shown an increase in employees working from home and less travel to and from office.



7

Biodiversity highlights and challenges

This section will conclude this report by examining the highlights achieved over recent years and challenges faced in the coming years.

7.1

Staffing - addition of the Biodiversity Officer post and appointing a new Countryside Ranger has been integral to moving forward the biodiversity agenda. The inclusion of a Sustainability Officer for Arts and Heritage service to complement the work of existing community engagement posts. Replacing the Council's Climate Change and Energy Officer in Dec 2023 will also drive forward the Climate Change Action Plan.

7.2

Establishing a new Biodiversity Network with a launch event in November 2023 for all key stakeholders is the first step to establishing a core group of consultees as a base for taking forward all the new duties that will be placed upon Local Authorities going forward. The second and third phases of this are planned for Summer 2024 and will include a community network and a business network to make up the 3 strands of the Biodiversity Network in WDC.

7.3

Biodiversity Highlights focussing on Plans, Policies and Strategies include:

- The West Dunbartonshire Strategic plan 2022 -2027 placing the biodiversity crisis as a second chapter and recognising the importance of safeguarding biodiversity and understanding the importance of ecosystem service.
- Creation of a Deer Management Statement in collaboration with NatureScot
- Creation of a woodland and tree planting study
- Contribution to the many biodiversity strategy consultations over the past 3 years

7.4

Biodiversity Highlights focussing on delivery of large scale nature restoration projects. These have been made possible by the direct allocation funding receipt from the Nature Restoration Fund.

- Faifley Woodland Management plan completed
- Creation of a new woodland connecting Faifley Knowes and Auchnacraig Woods
- Auchnacraig Management Plan delivery



Bee orchid.

7.5

Biodiversity Highlights focussing on Community Engagement:

- Ongoing habitat management and maintenance work delivered by Greenspace Volunteers
- Contribution made by the Greenspace Volunteers survey group to the biological monitoring process

7.6 Educational Services

- Food for Thought Grant awarded to various schools to develop sustainable food initiatives each year.
- The continued commitment to Forest School and Forest Kindergarten developing high quality regular and planned learning in the outdoors.
- Our commitment to high quality professional learning to build the understanding of staff at all levels to deliver high quality learning experiences linked to learning for sustainability.
- The partnerships that add depth to learning in biodiversity and sustainability; Keep Scotland Beautiful,
- The success of the coherent learning

programmes that were put in place for COP26 that led to all schools having learning for sustainability ambassadors and action planning in line with the Sustainable development goals.

- The achievements of Rights Respecting schools award and the commitment of all establishments to placing the human needs and rights of children at the heart of their planning and provision.
- The developments in establishment grounds that promote sustainability including growing, recycling and opportunities to learn in and about nature.
- The achievement of Eco School Green flags.
- The introduction of curriculum pathways in the Broad general education and senior phase curriculum.
- Employability experiences provided for senior phase learners in green/sustainable work environments.
- Partnerships across ELCC, primary and secondary to improve local areas.
- A commitment to sustainability through Forest Kindergarten CLPL run twice annually for practitioners
- Partnerships with local supermarkets to provide toy banks, food banks and clothes banks within local communities.

7.7 West Dunbartonshire Council Arts & Heritage Service

Public engagement activities relating to the environment have increased within this service area programming. They have offered potential to create interesting combinations of creative and environmental activity that not only enhance health and well-being but increase knowledge and engagement with local greenspaces. Activities have been well received and indicate a growing awareness, knowledge of and interest in the environment.

West Dunbartonshire Libraries main achievement for biodiversity has been achieving funding for a Sustainability Coordinator, who has organised and delivered a successful provision of public engagement activities for approximately 313 people from May 2023 - October 2023. The Sustainability Coordinator is an externally-funded position by the Scottish Library and Information Council Public Library Improvement Fund

7.8 Biodiversity Highlights Focussing on species:

- Bee orchid and Frog orchid being found in WDC as part of the BSBI survey. Both found on old red blaes pitches.
- In particular the Bee Orchid, *Ophrys apifera*, is a most significant find, as it's the first record of Bee Orchid north of the Clyde in the west of Scotland. The plant is known to be migrating

swiftly northwards and is becoming less of a rarity in Scotland over time. Credit to Michael Philip of BSBI and local recorder Su Futter for this wonderful find.

- Continued success of Red squirrel population.

7.9 The main challenges going forward include:

- Economic and resource pressures and requirement to meet targets
- Provision of clear funding routes to deliver biodiversity projects relevant to local need
- Locating suitable space for implementing Food Growing Strategy
- Locating suitable space for further woodland planting
- Staffing resource to manage biodiversity and green infrastructure projects
- ICT - Budget pressure will impact technology sustainability ambitions
- No GIS officer in house to deliver Nature Network spatial strategy or provide any other mapping support
- Education - Requirement for an empowered system for schools to drive their own improvement priorities 'vs' national directives in climate change and biodiversity; The creation of crude league tables through the creation of key learning for sustainable indicators without taking into account diverse communities; Commitment to develop sustainable learning estates 'vs' available resources to achieve this; a national entitlement to outdoor learning.



Photograph credits with thanks to Zoe Weir, Michael Philip, Jim Duncan, Gillian Neil and Stan Campbell.



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This document is also available in other languages, large print and audio format on request.

Arabic

هذه الوثيقة متاحة أيضا بلغات أخرى والأحرف الطباعية الكبيرة وبطريقة سمعية عند الطلب.

Hindi

अनुरोध पर यह दस्तावेज़ अन्य भाषाओं में, बड़े अक्षरों की छपाई और सुनने वाले माध्यम पर भी उपलब्ध है

Punjabi

ਇਹ ਦਸਤਾਵੇਜ਼ ਹੋਰ ਭਾਸ਼ਾਵਾਂ ਵਿਚ, ਵੱਡੇ ਅੱਖਰਾਂ ਵਿਚ ਅਤੇ ਆਡੀਓ ਟੇਪ 'ਤੇ ਰਿਕਾਰਡ ਹੋਇਆ ਵੀ ਮੰਗ ਕੇ ਲਿਆ ਜਾ ਸਕਦਾ ਹੈ।

Urdu

درخواست پر یہ دستاویز دیگر زبانوں میں، بڑے حروف کی چھپائی اور سننے والے ذرائع پر بھی میسر ہے۔

Chinese (Cantonese)

本文件也可應要求，製作成其他語文或特大字體版本，也可製作成錄音帶。

Polish

Dokument ten jest na życzenie udostępniany także w innych wersjach językowych, w dużym druku lub w formie audio.

British Sign Language



BSL users can contact us via contactSCOTLAND-BSL
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