Appendix 1

Glasgow City Council

Biodiversity Monitoring Report

April 2021-March 2022

1. Background and Context

1.1 This annual monitoring report has been compiled with the support of the Council's partners in the Glasgow Biodiversity Partnership. The purpose of the partnership is to bring a broad range of expertise to the development of Glasgow's Local Biodiversity Action Plan (LBAP). The Council established a Glasgow Biodiversity Partnership consisting of representatives from 18 different environmental organisations. Key partners include NatureScot, Forestry and Land Scotland (FLS), Scottish Environment Protection Agency (SEPA) and the Royal Society for the Protection of Birds (Scotland) (RSPB) along with other environmental interest groups.

1.2 The Council announced a Climate and Ecological Emergency in May 2019. The implementation of the Local Biodiversity Action Plan and Pollinator Plan (PP) play a vital role in addressing these emergencies through protecting, enhancing and creating biodiverse habitats, protecting and enhancing a diversity of species; and providing nature-based solutions to support climate mitigation and adaptation.

1.3 Over the past year, officers have been working with partner organisations to deliver the implementation of key actions as detailed within Glasgow's LBAP and PP.

1.4 Projects and actions reported on are related back to the relevant actions from the LBAP and PP to ensure that monitoring tracks the Implementation Plans for both documents. Other projects and activities help achieve the general aims and objectives of the LBAP by improving biodiversity in the city.

1.5 Projects and actions continue to link to, support and benefit from a range of other workstreams including:

- Climate change adaptation,
- Volunteering and employability opportunities,
- Curriculum for Excellence,
- Health and wellbeing,
- The Glasgow Open Space Strategy
- Parks and Greenspaces Vision
- Metropolitan Glasgow Strategic Drainage Partnership (MGSDP)

1.6 Under the Nature Conservation (Scotland) Act (2004), all public bodies in Scotland are required to further the conservation of biodiversity when carrying out their responsibilities. The Council fulfils this primarily through the implementation of the Glasgow LBAP.

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

1.8 The content of this annual biodiversity report will contribute towards the statutory Biodiversity Duty Report due for publication in January 2024.

1.9 There are implications for future resourcing and management of greenspaces as we aim to address the ecological emergency and continue to engage with communities and encourage people to enjoy and interact with nature.

1.10 Glasgow hosted COP26 Climate Conference in November 2021 which raised awareness of the climate & ecological emergencies and the value of nature-based solutions and the conservation of biodiversity.

1.11 The Seven Lochs and NE Glasgow Water Vole Conservation Action Plan 2022-2026 has been produced by LUC, funded by NatureScot, GCC and Seven Lochs Wetland Park. The Plan will set out the revised actions which will be incorporated into the LBAP implementation actions when renewed in 2023

1.12 Biological recording is essential to valuing our greenspaces for biodiversity and for providing baseline data to help address the ecological emergency and allow management plans to be drawn up for individual sites, taking cognisance of LBAP habitats and key species. New recording started in 2017 to celebrate the Botanic Gardens Bi-centenary and is ongoing, with scientific papers being produced from 2018 onwards.

In 1998 and 1999, The Glasgow Naturalist published a set of papers under the heading “On the Wildside: The Natural History of the Glasgow Botanic Gardens”, which reported the results of wildlife surveys carried out over the previous four years in the Glasgow Botanic Gardens. As the year of the Botanic Gardens’ bicentenary (2017) approached, Glasgow Natural History Society (GNHS) members felt that this could provide a good motivation for a new look at the biodiversity (in the wild state) of the Gardens. After discussion, it was decided that the new survey would be in two parts. First, a collation of new records made since the last surveys, a period of about 20 years. Second, the results of a BioBlitz in the Gardens, which would launch the RSPB’s Giving Nature A Home.

As part of the Glasgow Natural History Society, and others’ work, over ten papers were published in The Glasgow Naturalist Vol 27 for *On the Wildside Revisited* including individual papers on the Botanic Gardens fungi, birds, lichens, bryophytes, moths, non-avian vertebrates, arachnids, molluscs, crustaceans and flowering plants.

In 2021/2022 the following papers were produced:

On the Wildside 2: what the Glasgow Botanic Gardens Wildside project has achieved and what remains to be done R.B. Weddle and J.R. Downie
The birds of Glasgow Botanic Gardens C.J. McInerny
The lichens of Glasgow Botanic Gardens I.C. Wilkie
Further insect and other invertebrate records from Glasgow Botanic Gardens, Scotland , R.B. Weddle
Edwardsiana alnicola (Hemiptera: Cicadellidae): a leaf-hopper new to Scotland, in Glasgow Botanic Gardens R.B. Weddle
The landhopper *Arcitalitrus dorrieni* (Crustacea: Amphipoda) in Glasgow Botanic Gardens, Scotland R.B. Weddle
The molluscs and crustaceans of Glasgow Botanic Gardens, Scotland R.B. Weddle
Increased observations of comma butterflies in Glasgow Botanic Gardens and south-west Scotland C.J. McInerny

The arachnids of Glasgow Botanic Gardens C. Cathrine, K. Godsman, J. Ahmed & N. Currie
The bryophytes of Glasgow Botanic Gardens K.J. Watson

2. Monitoring Report

2.1 The year to end March 2022 saw further progress on the main Ecosystems covered by the LBAP. Many initiatives are take place over a number of years; and each year there are new projects and activities.

2.1.1 Urban: Parks and Open Spaces

Action	Date	Lead	Progress
1. Maintain and update the Biological Audit	2018-2023	GL	• Over the year 75,404 records were added to the biological audit database managed by Glasgow Museums Biological Records Centre, covering Glasgow and the Clyde River Catchment • 30 new species were added to the database including Spoonbill, Green Shieldbug and Pale Water-veneer (moth) • At the end of March 2022 there was a total of 884,500 records in Glasgow Museums Biological Records Centre's database

			• SOC collect bird records from all over the Clyde area and upload to BirdTrack monthly • SOC share notable bird sightings via a daily Grapevine to SOC members • SOC encourage observers to submit bird records • As part of the Glasgow Natural History Society and others' work, over ten papers were published in The Glasgow Naturalist Vol 27 for On the Wildside Revisited including individual papers on the Botanic Gardens fungi, birds, lichens, bryophytes, moths, non-avian vertebrates, arachnids, molluscs, crustaceans and flowering plants • GNHS members made significant contributions to the Glasgow Museums Biological Record Centre database from sightings made on their own personal excursions, and from butterfly transects and moth-trapping • Yorkhill Green Spaces Biodiversity list updated on monthly basis with new finds, and information about new species posted on YGS Facebook page. Current species list has 1159 species. Pollinators recorded in Yorkhill's parks and green spaces include: 29 species of bees, 21 species of wasps, 209 species of moths, 12 butterflies, 118 flies (includes 38 species of hoverflies)

Action	Date	Lead	Progress
2. Designate additional LNRs to reach target of 1 Ha per 1000 population	2023	GCC-NRS	• 22 new or extended LNRs were proposed (reported to Environment, Sustainability and Carbon Reduction City Policy 15th March 2022, and then 2022 to City Administration Committee: https://www.glasgow.gov.uk/councillorsandcommittees/submissiondocuments.asp?submissionid=104744 • Hamiltonhill Claypits Local Nature Reserve opened to the public on 31st July 2021. A greenspace in the heart of local communities with wooded walks and paths alongside the Forth & Clyde Canal between Firhill and Applecross. https://claypitslnr.co.uk/

Action	Date	Lead	Progress
3. Continue to co-ordinate butterfly transects at a minimum of 4 sites	2018-2023	GCC-NRS/BCS	See Pollinator Plan

Action	Date	Lead	Progress
4. Deliver Community Rewilding project across Yoker area, engaging with local communities to plant wildflowers, trees and wilding of sites	2018-2023	TCV	• See monitoring report 2018- 2019. Project concluded in March 2019. Final evaluation report available on request

Action	Date	Lead	Progress
5. Develop Citizen Science and Environmental Monitoring projects for key habitats and species	2018-2023	TCV/ GCC-NRS	• SOC carry out winter gull monitoring in Glasgow parks • TCV taught volunteers how to carry out an air quality survey using the lichen growing on trees at Glasgow Green as a pollution indicator • TCV Volunteers undertook the Dead Good Deadwood Survey to assess the health of

			the woodland at Dawsholm Park LNR • RSPB Staff and volunteers assisted with the Urban Gull Census (part of the JNCC Seabirds Count)- recording nesting gulls in Glasgow • 70+ nest boxes in Linn Park LNR monitored by FoLP with volunteers regularly checking and monitoring via selfie stick and micro camera next to boxes as part of a breeding survey • FoGLNRS undertook monitoring of bird nest boxes by observing the boxes at a distance and/or by using an endoscope: Dawsholm Park LNR - 12 prs Blue Tits, 5 prs Great Tits & 1 pr of Nuthatch Hogganfield Park LNR - 4 prs Blue Tits & 4 prs Great Tits Cardowan Moss LNR - 3 prs Great Tits & 1 pr Blue Tits Bishop Loch LNR - 2 prs Great Tits Bingham's Pond pLNR - 1 pr Great Tits & 2 prs Blue Tits • FoGLNRs erected 10 additional bird nest boxes – 6 at Dams to Darnley LNR and 4 at Gartloch Woods SINC • Yorkhill Greenspaces installed nine new bird nest boxes at Yorkhill Park and Overnewton Park • Yorkhill Greenspace installed bird feeders in all green spaces (Overnewton, Cherry Park & Yorkhill Park), and YGS members have installed more feeders in

			their own gardens around Yorkhill • Hamiltonhill Claypits LNR group conducted two surveys of plants at the Claypits in collaboration with BSBI Lanarkshire • YGS promoted & took part in a number of national biodiversity surveys including City Nature Challenge 2021 (April 2021), FIT counts for UK Pollinator Monitoring scheme; National Bee week daily social media posts about bees found in Yorkhill (June 2021); Big Butterfly Count (July 2021) & Big Garden Bird Watch (January 2021)

Action	**Date**	**Lead**	**Progress**
6. Ensure SUDS designs incorporate biodiversity	2018-2023	GCC-NRS	• Comments on individual planning applications provided to support biodiversity-rich SUDs where appropriate • NRS Flood Risk Management continues to collaborate with planning colleagues to promote above-ground blue-green SuDS as part of new development and redevelopment, which will benefit biodiversity • Retrofit blue-green SuDS are being delivered by the Avenues Project • Retrofit blue-green SuDS are core elements of the surface water management plans that have and are being delivered by NRS Flood Risk Management, including basins, ponds,

			swales, trees and highway raingardens

Action	Date	Lead	Progress
7. Seek to assess and update the list of derelict sites of particular importance for biodiversity and outline management needs	2023	Buglife	• Buglife assessed and updated the VDL register for Open Mosaic Habitats on Previously Developed Land (OMHPDL) • Of the initial 927 sites on the vacant and derelict land register in Glasgow in 2011, 346 have now been removed. Of the sites removed, 45 had the potential to support OMHPDL, these sites could have been lost to development or other reasons • Of the 63 sites added to the register 12 were identified as potentially supporting OMH

Action	Date	Lead	Progress
8. Aim to ensure connectivity of integrated habitat networks throughout the city through the planning process	2018-2023	GCC-NRS	• The Glasgow Green Urban Connectors project received £88,419.65 from the Biodiversity Challenge Fund (BCF) Round 3 with the project completed in March 2022. The project involved Glasgow City Council working in collaboration with the Royal Society for the Protection of Birds Scotland (RSPB Scotland) and involved other volunteers and community groups, including Friends of Rosshall Park, in practical conservation/biodiversity enhancement tasks thus providing green skills and

			training (a future report will be brought to this committee outlining how this pilot project will inform future investment citywide) • Malls Mire Green Infrastructure Project works now complete – an additional 16ha greenspace enhanced. Biodiversity improvements included planting of trees, bulbs and wildflower seeds. Maintenance agreement between Clyde Gateway, Glasgow City Council and Urban Roots now in place. Official opening took place in June • Planning policy incorporated into the City Development Plan 2017 (policy CDP7) and associated Supplementary Guidance (SG7) • advice provided on planning applications to implement policy/SG as appropriate. • Adoption of Open Space Strategy (Feb 2020) and preparation of OSS Delivery Plan, will provide an opportunity to pro-actively promote habitat connectivity at an early stage • The GCC open space and Connecting Nature team continue to work closely with NRS Biodiversity to ensure we can more proactively plan for habitat connectivity via the open space delivery plan

			• A first version of the delivery plan will focus on community spaces and further iterations will identify opportunities for better habitat connectivity and management for enhanced biodiversity. In doing so, it will need to take account of the identification and creation of nature networks to improve ecological connectivity in the city, as required by the draft NPF4. On adoption, NPF4 will become part of the statutory development plan • Magnificent 11 path route waymarking and promotion will assist with public perception of connectivity of these sites • Active Travel Route planting for pollinators, new planting at the riverside field and behind the Burrell at Pollok Country Park

Action	**Date**	**Lead**	**Progress**
9. Maintain swift trigger map showing locations city-wide of flocking/breeding swifts	2019	GCC-NRS/RSPB	• Swift Mapper recording app launched in 2020. Between 1st April 2021 and 31st March 2022: 21 records of swift screaming parties (indicating possible nests nearby) and 4 different swift nest sites were recorded in Glasgow • Swift records put into wildlife records by CRS

Action	**Date**	**Lead**	**Progress**
10. Align LBAP to emerging Parks and Greenspaces Vision	2020	GCC-NRS	• Biodiversity information provided for annual GCC

			climate change update report • Implementation of the LBAP is a key action within the Parks Vision

Action	Date	Lead	Progress
11. Ensure biodiversity is considered within the Glasgow Open Space Strategy	2018-2019	GCC-NRS	• The OSS identifies the need to enhance biodiversity (OSS section 12) and connect habitats as being two of the key uses to which Glasgow's Open Spaces can be put • Data is being gathered to identify those open spaces that can do either or both with a view to identifying them for this purpose (and, where appropriate, other complementary purposes) through the preparation of an Open Space Strategy Delivery Plan, on which work is currently underway

Action	Date	Lead	Progress
12. Ensure that biodiversity is considered in the Stalled Spaces planning process	2018-2023	GCC-NRS	See pollinator plan actions

Action	Date	Lead	Progress
13. Encourage the development of Green Roofs through the planning process	2018-2023	GCC-NRS	• The CDP (and associated Supplementary Guidance) is supportive of the provision of green roofs for a variety of purposes, but principally for biodiversity and as part of the SUDS trail • It is anticipated that the Positive Effects for

			Biodiversity (net gain) approach being developed in the next iteration of the CDP will put a much greater emphasis on the use of green roofs in new development

Action	Date	Lead	Progress
14. Ensure new developments enhance biodiversity wherever possible	2018-2023	GCC-NRS	• Collaborate with colleagues across NRS to promote biodiversity enhancement opportunities incorporated into development • NRS Flood Risk Management continues to push through the Planning system above-ground blue-green SUDS for new development and redevelopment, which will benefit biodiversity • Active Travel route to Burrell Collection includes habitat creation and wildflower planting

Action	Date	Lead	Progress
15. Encourage incorporation of spaces for building dwelling species such as swift in new buildings where appropriate	2018-2023	GCC-NRS/RSPB	• Swift advisory information provided to NRR planners for appropriate development proposals • The Biodiversity Positive Effects (net gain) approach being developed will emphasise the importance of delivering easy wins, such as bat and bird boxes, in new development

			• Weekly planning lists in Glasgow monitored by RSPB Scotland staff for opportunities to install swift bricks or nest boxes. RSPB swift casework volunteer role developed, focused on Glasgow. Seven volunteers recruited to identify opportunities for installation of swift bricks or boxes

Action	**Date**	**Lead**	**Progress**
16. Create and maintain House Sparrow Plots as funding allows	2018-2023	RSPB/GCC-NRS	• RSPB house sparrow project completed • Glasgow Botanic Gardens has interpretation funded by Glasgow University about the management of an area for house sparrows, working with RSPB. This includes meadow and hedgerow to benefit this species

Action	**Date**	**Lead**	**Progress**
17. Erect a minimum of 30 House Sparrow boxes at targeted sites across the city	2018-2023	RSPB	• RSPB house sparrow project delivered house sparrow boxes across Glasgow • RSPB Scotland has installed at least 30 house sparrow boxes across Glasgow

Action	**Date**	**Lead**	**Progress**
18. Undertake Phase 1 Habitat Survey of Pollok Country Park	2018-2019	GCC-NRS	• Woodland flora has declined during Covid, currently no vegetation to survey. Woodland requires restoration through Flower Power

			project and other positive interventions • Invasive Species have been recorded by Countryside Ranger Service, with action taken by staff and volunteers to address

Action	Date	Lead	Progress
19. Undertake a review of SINCS	2018-2023	GCC-NRS	• In progress with brief and assessment criteria produced and contractors JBA Consulting appointed in March 2022

Other actions for Urban: Parks and Open Spaces

2.1.2 **Grassland**

Action	Date	Lead	Progress
1. Update grassland map on GIS	2018	GCC-NRS	• Grassland sites mapped on GIS showing year and area of cuts

Action	Date	Lead	Progress
2. Manage 30 key grassland sites as traditional meadows in a sustainable manner, on GCC land	2018-2023	GCC-NRS	• 13 meadow sites across city managed by contractor along with one site meadow cut and lift for Green Connectors project • TCV managed a further 8 meadow sites including meadows at Bellahouston Park, King's Park, Linn Park and Cart and Kittoch Valley SSSI • Three meadows managed and maintained By Countryside Ranger Service at Pollok Country Park. Self- seeding birch removal ongoing at Glade Meadow, along with spirea. Brambles and dock removed at the Ash path meadow and Woodland slope meadow. Himalayan balsam

			removed and cut and lifted every September. New plants added regularly from polytunnel stock • RSPB Scotland staff and volunteers cut and lifted existing wildflower meadow behind Kelvingrove Art Gallery to reduce dominance of grasses and enhance floral diversity • New wildflower strips behind Kelvingrove Art Gallery created by turf removal and sown in Spring 2021 with Scotia Seeds 'Urban Pollinator' & 'Get Nectar-rich Quick' wildflower seed mixes containing native annuals, biennials and perennial wildflowers and grasses. Due to trampling additional wildflower seed sown in early 2022 • RSPB Scotland and GCC delivered the 'Glasgow Urban Green Connectors Project across 53 sites in south-west of the city. The BCF-funded project involved improving key green spaces for biodiversity and enhancing habitat connections between them. Part of the project involved creation of new meadows through sowing wildflower seed mixes, but mainly managed by change of mowing regime to cut and lift. As part of the project over 1ha of meadow at Crookston Castle was cut & lifted, then sown with yellow rattle • Two wildflower strips at Overnewton Park cut &

			arisings lifted by volunteers in Autumn 2021 • Approximately 0.6 ha of meadow areas at Yorkhill Park cut by GCC team, then arisings raked and lifted by YGS volunteers. Arisings moved to shrubby areas on site and under trees to reduce nutrients in meadow areas • 750g Yellow rattle seed sown on cut meadow areas of Yorkhill Park • Tollcross Park Orchard-Enhancement of meadow, through strimming/raking, scraping and sowing wildflower seed by SACRO community payback
Action	**Date**	**Lead**	**Progress**
3. Enhance areas of unmown grassland by introducing local provenance wildflowers. Enhance 1 Ha annually	2018-2023	GCC-NRS	• This action has been achieved annually over the last 4 years. This year over 14,900 m2 was enhanced, see below • Pictorial meadow strips (1m wide) maintained with perennial wildflowers at the front of uncut grass totalling 7500m sq over 23 sites • Green Connectors project (Rosshall/Nitshill area): wildflower plugs (total planted no. 14,725) • spring bulbs 0.6ha (5,840m2) • Queens Park Pollinator Park - 1400m2 of Perennial Wildflower and approx. 5000m2 of grass being left uncut • Pollinator-friendly bulbs planted at Ruchill Park by

			CR with local school children • Countryside Ranger Service planted out wildflowers into the meadows and wildlife garden with Flower Power Project, The Scouts, FoPCP, School groups, 50+ groups, Milldale and Kelvin College • Pollinator-friendly bulbs planted at PCP lime avenue by Countryside Ranger Service with local school children and Woodland Kindergarten groups • An area near Aikenhead House in Kings Park was planted with pollinator-friendly wildflower plugs and bulbs and seeded with yellow rattle • Yorkhill Greenspaces planted over 2,000 spring bulbs & corms including 240 crocuses, 377 winter aconites, 534 native bluebells, 180 grape hyacinths, 350 snowdrops, 130 blue (blanda) anemones, 100 wood anemones, and 100 snake's head fritillaries at Yorkhill Park and Overnewton Park into grassy meadow areas, flower borders and naturalised under trees

Action	**Date**	**Lead**	**Progress**
4. Create or extend 5 new meadows city-wide	By 2023	GCC-NRS	• This action has been achieved over the last 4 years with new meadows at Springburn Park, Keal Avenue, Bellahouston Park, GG, Ruchill Park, King's Park, Castlemilk Park, Claypits, Kelvin

			College, 7 Lochs, Green Connectors Rosshall/Nitshill • Green Connectors project (Rosshall/Nitshill area): meadow created through maintenance change 16.5ha (165,405m2) • Green Connectors project (Rosshall/Nitshill area): meadow created through cultivation 2.3ha (23,612m2) • Seven Lochs Wetland Project SpRiNT project planted 22,815 wildflower plugs, 3600 bulbs and seeded wildflower areas totalling 1160m2 • Froglife sowed wildflower seeds at Glasgow Kelvin College Haghill campus, Glasgrow Community Garden, Woodside Community Garden • Froglife planted Pollinator friendly bulbs (~1000 bulbs total) at Glasgrow Community Garden, Glasgow Kelvin College Haghill campus, Miltonbank Primary School • Wildflowers planted in the PCP Glade meadow, Ash Path Meadow, Woodland Slope Meadow and the Wildlife Garden Meadow

Action	**Date**	**Lead**	**Progress**
5. Enhance existing meadows by wildflower planting at 8 sites	2018-2023	GCC-NRS	• Green Connectors project: yellow rattle sown 1.0ha (10,000m2) • Butterfly Conservation Scotland carried out work parties at 3 urban meadows at Springburn, Elder and Ruchill Parks, to enhance plant diversity

			and improve them for butterflies

Action	Date	Lead	Progress
6. Establish and identify mechanism to maintain GCC wildflower nursery at Pollok Country Park	2018-2023	GCC-NRS	• Flower Power nursery at PCP maintained with volunteer support • A variety of groups helped Countryside Ranger Service with seed collection, sowing, pricking out, repotting, • watering and planting out into the meadows. These included: Flower Power, Friends of Pollok Country Park (FoPCP), Milldale, Kelvin College, school groups • New polytunnel cover has been secured by FoPCP. Countryside Ranger Service attended a training day to learn how to attach new polytunnel cover

Action	Date	Lead	Progress
7. Encourage sowing and growing of Scottish provenance wildflowers	2018-2023	GCC-NRS	• Countryside Ranger Service encourage this with many different groups. Seeds gathered in Pollok Country Park and Scotia seed stock are grown • Wildflower seed collected in Overnewton Park and Yorkhill Park by YGS during 2021 to be sown in new areas to help with sustainability

Action	Date	Lead	Progress
8. Trial new council cut and collect equipment for meadow management	2018-2019	GCC-NRS	• Two Venezia 140s (tractor towed cut and collect units) purchased https://campeyturfcare.

			com/portfolio-items/omarv-venezia-2/ • Used to prepare a grass area for wildflower/bulb planting in Greenbank Park, Auldhouse • Scheduled for managing the pollinator areas in Queens Park

Action	Date	Lead	Progress
9. Implement dwarf shrub heath annual management at 1 site	2018-2023	GCC-NRS	• Annual monitoring completed; no further management action was required. Will be further assessed in 2023

Action	Date	Lead	Progress
10. Carry out survey of rare plants (Burnet-saxifrage) annually	2018-2023	GCC-NRS	• Location and improved population of Burnet Saxifrage at Cathkin Braes LNR Grasslands recorded • Butterfly Orchid populations at Hogganfield Park LNR and Bishop Loch surveyed

Action	Date	Lead	Progress
11. Carry out annual management of Glasgow Museums Resource Centre meadow	2018-2023	GL	• Not carried out during 2021

Action	Date	Lead	Progress
12. Enhance water vole meadow at The Bridge, Easterhouse	2018-2023	GL/SLWP	• Annual low intensity management for water voles

Other actions for Grassland:

2.1.3 **Woodland**

Action	Date	Lead	Progress
1. National Vegetation Classification (NVC) survey of Pollok Country Park Wood Pasture and Parkland Habitat to identify exact species compositions and	2018-2023	GCC-NRS	• Countryside Ranger Service have created a plan to implement with

conditions as base point for future management planning and assessments			Kelvin College as a training opportunity

Action	Date	Lead	Progress
2. Individual management plans for Ancient and Veteran trees within Wood Pasture and Parkland Habitat in Pollok Country Park	2018-2023	GCC-NRS	• Available NRS resources have focussed on woodland habitat creation (in the context of Glasgow's declaration of a climate and ecological emergency in May 2019)- we will recommended that this action is reviewed within 2023 as part of the engagement with stakeholders to support preparation of the next LBAP

Action	Date	Lead	Progress
3. Improve condition of Upland Mixed Ashwoods and Upland Oakwoods woodlands at Cart & Kittoch SSSI	2018	GCC-NRS	• TCV undertook Himalayan Balsam removal

Action	Date	Lead	Progress
4. Assess all UK BAP Woodland Priority Habitat types (excluding Lowland Mixed Deciduous Woodland), to confirm council ownership and establish woodland condition and management requirements	2018-2023	GCC-NRS	• Available NRS resources have focussed on woodland habitat creation (in the context of Glasgow's declaration of a climate and ecological emergency in May 2019)- we will recommended that this action is reviewed within 2023 as part of the engagement with stakeholders to support preparation of the next LBAP

Action	Date	Lead	Progress
5. Commence city wide NVC survey of woodlands (not already	2018-2023	GCC-NRS	• Available NRS resources have focussed on woodland habitat creation

surveyed) to ascertain UK BAP Priority Habitats extent in Glasgow			(in the context of Glasgow's declaration of a climate and ecological emergency in May 2019)- we will recommended that this action is reviewed within 2023 as part of the engagement with stakeholders to support preparation of the next LBAP

Action	**Date**	**Lead**	**Progress**
6. Develop 8 Urban Woodland Management Plans for larger woodlands city-wide (over 400 Ha in total)	2018-2023	GCC-NRS	• Cadder Woods SINC project is developing access to the native woodland for local community groups over a 14 hectare site and a woodland management plan was commissioned in 2021 in support of this. • Available NRS resources have focussed on woodland habitat creation (in the context of Glasgow's declaration of a climate and ecological emergency in May 2019)- we will recommended that the remaining 7 woodlands associated with this action are reviewed within 2023 as part of the engagement with stakeholders to support preparation of the next LBAP

Action	**Date**	**Lead**	**Progress**
7. Deliver a woodland management strategy for the Greater Easterhouse area	2018-2023	GCC-NRS	• Forestry and Land Scotland have carried out woodland management plans for Cardowan, Todds Well, Bishop Loch and Lochend Burn

Action	**Date**	**Lead**	**Progress**

8. Promote woodland as a temporary greening and bioremediation on vacant and derelict land	Ongoing	GCC-NRS	• Cadder Woods SINC project is developing access to the native woodland for local community groups and enhancing the management of this habitat

Action	**Date**	**Lead**	**Progress**
9. Create 3 new woodlands within city boundary (or expansion of existing woodlands) totalling 10ha or more	2018-2023	GCC-NRS	• This action has been achieved by the development of the Cart & Kittoch Woodland and Lost Woods project • 15 ha of oak woodland mix (minus ash) planted to support biodiversity and climate mitigation as well as creating valuable foundation for future physical and access links from Cart and Kittoch SSSI to Cathkin Braes LNR for wildlife and people. https://greenactiontrust.org/new-woodland-takes-root-in-glasgow/ • Lost Woods along with 1,200 children, representing 148 schools from all across the city, planted thousands of oak saplings grown by pupils on a 13ha site at Cart & Kittoch in the run up to COP26 to create the Glasgow Children's Woodland. https://www.thelostwoods.earth/ • Green Connectors Project (Rosshall/Nitshill area) created hedgerow linear 1,425m, woodland edge whips 1.1ha (11,440m2, total planted no. 13,730), hedgerow/ woodland seeding, linear 4,765m • 400+ native mix whips planted in Kings Park

			• Hamiltonhill Claypits LNR group undertook a number of tree planting events with local residents, school children and community groups in the autumn and spring. These included planting a mix of native species, including hawthorn, pine, oak, and rowan, received from the Woodland Trust, as well as local donations • The first Tiny Forest for Scotland planted at Avenue End Road, Easterhouse and 6 other Tiny Forests across the city including at Glasgow Green and Maxwell Park. • https://www.glasgow.gov.uk/index.aspx?articleid=27626 • Seven Lochs Wetland Park SpRiNT project planted 600 trees and 80m2 of hedgerow

Action	**Date**	**Lead**	**Progress**
10. Protect and enhance habitats for wildlife as part of continued management at Drumchapel and Easterhouse Woods lease	2018-2023	FLS	• Wildlife habitats protected and enhanced through the implementation of management plans at Drumchapel and Easterhouse woodlands, undertaken as part of the lease which ran to January 2022.

Action	**Date**	**Lead**	**Progress**
11. Remove invasive species where appropriate and manage sites to encourage a varied tree age, species and structure at Drumchapel and Easterhouse Woodlands	2018-2021	FLS	• CRS and FOPCP removed Himalayan balsam, yellow archangel, spirea and dock at PCP. Dock behind the Burrell was sprayed and dug out to make way for wildflowers

			• TCV removed 530m2 of invasive species at Linn Park LNR and 2,480m2 of invasive species at Dawsholm Park LNR and Kelvin Walkway • At Cathkin Braes, TCV volunteers worked to remove beech saplings from the woodland

Action	**Date**	**Lead**	**Progress**
12. Carry out annual monitoring of rare woodland plants	2018-2023	GCC-NRS	• Sanicle, Lords and Ladies, Enchanter's Nightshade and Giant Bellflower monitored in Linn Park LNR by Countryside Ranger Service

Action	**Date**	**Lead**	**Progress**
13. Undertake strategic tree planting programme annually	2018-2023	GCC-NRS	• 507 trees planted in parks, open spaces, road verges to ensure the tree cover of the city is maintained and enhanced whilst supporting historical and aesthetic landscape settings, climate change mitigation and biodiversity • 35,000 native species sapling/ whips have been planted to create new woodlands of various sizes at Cathkin (Carmunnock), Kings Park, Glenora Drive, Heathcote Avenue and other sites • 500 trees donated by the FoPCP were planted into PCP by The Green Team, FoPCP, The Scouts, several school groups

Other action for Woodlands:

Sakura cherry tree planting was carried out at Queen's Park, Bellahouston Park, attended by the Lord Provost and involved council officers, TCV and other volunteers in the planting

Friends of Linn Park installed 20 bat boxes within Linn Park

Friends of Linn Park nest box project started with 13 boxes in 2018 and has grown to over 60 with a team of volunteers monitoring the boxes through the nesting season. The results go to BTO

Urban Roots delivered traditional hedge laying workshop in March – participants helped to lay 100m of hedge at Polmadie Plots Community Garden. The hedge consists of hawthorn, blackthorn and hazel and stakes cut from the hazel coppice in Malls Mire Community Woodland were also used

2.1.4 **Wetland**

Action	**Date**	**Lead**	
1. Carry out annual blue green algal monitoring at 43 sites city-wide	2018-2023	GCC-NRS	• Countryside Ranger Service arranged for warning signage to be erected in early June at all water bodies with history of >100,000ppm readings.

Action	**Date**	**Lead**	**Progress**
2. Carry out annual WeBS counts at 15 key sites	2018-2023	GCC-NRS	• Countryside Ranger Service continue to monitor key sites for wetland birds • Webs undertaken from Aug 2020 – March 2021 and data inputted online

Action	**Date**	**Lead**	**Progress**
3. Carry out water quality tests at key sites- Hogganfield Loch, Queen's Park, Richmond Park and Knightswood Park ponds	2018-2023	GCC-NRS	• Hogganfield Loch water testing for floating island installation completed. Water testing at other sites as required

Action	**Date**	**Lead**	**Progress**
4. Naturalise 50% of Queen's Park boating pond	2018-2019	GCC-NRS	See monitoring report 2018-2019

Action	**Date**	**Lead**	**Progress**
5. Carry out riparian water vole surveys at 2 sites per year	2018-2023	GCC-NRS	• Survey of Cleddans Burn carried out

Action	Date	Lead	Progress
6. Identify Bog Rosemary populations and monitor health and spread	2018-2023	GCC-NRS	• Bog Rosemary population Commonhead Moss – 200 spikes counted • Bog Rosemary population at Commonhead Moss has spread to the west of the raised bog

Action	Date	Lead	Progress
7. Carry out wetland management at 5 Local Nature Reserves, including water level control at Robroyston Park for wading birds	2018-2023	GCC-NRS	• Habitat improvements were carried out to the man-made pond in Malls Mire community woodland - overhanging vegetation has been removed, a hedge has been created and the pond has been lined • TCV cleared a pond at Linn Park LNR

Action	Date	Lead	Progress
8. Monitor frog populations at Robroyston Park and Cathkin Braes, to assess health of population in north and south of city	2018-2023	GCC-NRS	• Common Frog spawn monitoring carried out at Robroyston Park LNR and Millerston Wetland

Action	Date	Lead	Progress
9. Continue to restore 3 raised bogs and monitor results for water levels and biodiversity	2018-2023	SLWP/GCC-NRS	• Commonhead Moss monitored for birch regrowth, water levels and bog rosemary

Action	Date	Lead	Progress
10. Promote river restoration and deculverting projects	2018-2023	GCC-NRS	• Water Environment Fund grant secured by NRS for Capelrig-Auldhouse Burn River Restoration Project - a blue-green urban regeneration project along the Capelrig-Auldhouse Burn on the southside of Glasgow, undertaken in partnership with East Renfrewshire Council.

			The scope has set the following objectives: Environmental improvements Access improvements Amenity improvements

Action	Date	Lead	Progress
11. Monitor INNS and protected freshwater fish species	2018-2023	CRF	No update

Action	Date	Lead	Progress
12. Monitor snipe species at key wetland sites	2018-2023	GCC-NRS	• Snipe monitored at Cathkin Marsh, Windlaw Marsh and Hogganfield Loch

Action	Date	Lead	Progress
13. Implement Integrated Green Network proposals as part of the Cardowan Surface Water Management Plan and Blairtummock	2019	GCC-NRS	• The Cardowan surface water management plan has delivered green network improvements through Blairtummock Park in Easterhouse, as well as at Croftcroighn Road and Cranhill Park

Action	Date	Lead	Progress
14. Implement wetland management for biodiversity as part of 7 Lochs Wetland Project	2018-2023	SLWP	• Wetland habitat creation and management carried out at sites within Seven Lochs Wetland Park

Other actions for Wetland:

Froglife carried out pond restoration at NGCFI Milton Community Garden and Springburn Allotments.

Froglife created new ponds at Glasgrow Community Garden, Glasgow Kelvin College Haghill campus, a bog garden at Miltonbank Primary School, NGCFI Milton Community Garden and a mini-pond at NGCFI Milton Community Garden + TASK Afterschool Care, Gorbals.

Froglife created hibernacula at Miltonbank Primary School and Lambhill Stables

CR created a new pond at Pollok Country Park riverside field and plan to naturalise the PCP Fish Pond to link amphibian habitat

Invasive Weed removal from PCP Wildlife Garden pond which was planted up along with the PCP Riverside Field pond

Friends of Glasgow's LNRs Bird Ringing Project, with a grant from the Alpkit Foundation, organised two bird ringing sessions in conjunction with the Clyde Ringing Group. These were held at Hogganfield Park LNR on 19 September 2021 and 30 October 2021. 62 birds were caught consisting of 13 different species – from Goldcrest to Sparrowhawk. Over 100 people participated and learned about the lives of various species of birds, the importance of bird ringing and bird migration

FoGLNRs monitored the usage of Biohavens at Hogganfield Loch - successfully used by a breeding pair of Great Crested Grebes and a pair of Coot. They were also used by a variety of species for preening and resting

2.1.5 **Farmland**

Action	**Date**	**Lead**	**Progress**
1. Manage 50 hectares as traditional meadow on GCC owned farmland at Carmunnock	2018-2023	GCC-NRS	• All meadows at Cathkin and Windlaw continue to be managed by either local farmer or contractor

Action	**Date**	**Lead**	**Progress**
2. Use cattle grazing as a management tool at Dawsholm Park, Carnbooth and Pollok Country Park	2018-2023	GCC-NRS	• Cattle grazed at Dawsholm Park and Pollok Country Park

Action	**Date**	**Lead**	**Progress**
3. Continue hedgerow management by creating new hedges and enhancing existing hedges	2018-2023	GCC-NRS	• New hedges created in the woods behind the Burrell at PCP. • Hedges planted at the PCP bluebell slope to protect the native bluebell population • Kelvin College and CR planted hedging to protect the bluebell plots in front of The Burrell • 150 Native flowering hedging and trees (Blackthorn & Hawthorn, Sallows) planted in Yorkhill Park along fence line at rear of park and along 'Roman Road' footpath • Wildflower hedgerow seed mix sown with TCV &

			YGS volunteers along Yorkhill Park footpath in October 2021 • TCV planted 31m of hedgerow at Kelvin Walkway/Dawsholm Park

Action	Date	Lead	Progress
4. Maintain and enhance wild bird plot at Carmunnock	2018-2023	GCC-NRS	see monitoring report 2018-2019

Action	Date	Lead	Progress
5. Monitor breeding tree sparrow populations at Millichen farms	2018-2023	RSPB	• RSPB discussed monitoring with Clyde Ringing Group and offered continued support

Action	Date	Lead	Progress
6. Develop and deliver the 7 Lochs Co-operative Habitat Restoration project in partnership with landowners and land managers	2018-2021	SLWP	• Species Rich Networks Team (SpRiNT) project has delivered habitat creation, enhancement and management at 6 sites for woodland and grassland

2.1.6 **Water Vole**

Action	Date	Lead	Progress
1. Develop and produce water vole Plan	2018-2019	GCC-NRS/NatureScot/U of G	• The Seven Lochs and NE Glasgow Water Vole Conservation Action Plan 2022-2026 has been produced by LUC. Funded by NatureScot, GCC and SLWP • This was developed by a Steering Group of GCC (Planning and Biodiversity), NatureScot, SLWP, NLC and UofG and involved stakeholder consultation

Action	Date	Lead	Progress
2. Seek funding to extend the fossorial water vole project. The water vole project is required for scientific monitoring of habitat creation, management and development of guidelines as well as assessing the wider water population dynamics	2018	GCC-NRS/NatureScot/U of G	• Funding sourced for specific projects

Action	Date	Lead	Progress
3. Host the East End Water Vole Project meetings	2018-2023	GCC-NRS	• Water Vole Conservation Action Plan workshop (aimed at steering group organisations) organised by LUC and delivered by LUC, NatureScot, GCC and SLWP

Action	Date	Lead	Progress
4. Carry out scientific assessment of disturbance caused by grass cutting, under licence	2018-2021	GCC-NRS/ NatureScot	• 3 year Grassland water vole habitat management project developed and Year 2 actions implemented by University of Glasgow, GCC, NatureScot and SLWP

Action	Date	Lead	Progress
5. Develop, review and update guidance on habitat management	2018-2023	GCC-NRS/ NatureScot	• Interim report of grassland management trial produced by University of Glasgow, and awaiting further surveys/analysis for final report and incorporation into guidelines • Review of Interim Guidelines started

Action	Date	Lead	Progress

6. Update water vole distribution map and annually update trigger map for development planning	2018-2023	GCC-NRS	• Water vole records being sent to Local Biological Records Centre (Glasgow Life) • Update of trigger map delayed due to GIS issues

Action	Date	Lead	Progress
7. Create fossorial water vole habitat at key sites as part of the Water Voles in the City project (including Blairtummock Park, Cranhill Park, Hogganfield Park and Auchinlea Park)	2018-2021	SLWP	• Transforming Avenue End Greenspace project progressed and works started. Partnership project run by SLWP with GAT, GCC and NatureScot, with Heritage Lottery and GCC funding • Baldragon project in development phase

Action	Date	Lead	Progress
8. Trial habitat management at key sites as part of Water Voles in the City project	2018-2021	SLWP	• Year 3 actions of the 3 year Grassland Management Trial (GCC, NatureScot, SLWP, University of Glasgow) completed. Work completed included perimeter/assess cuts (delayed), pre and post plot cut surveys, spring surveys, grassland management, planting wildflowers, licence return and application for amendment to licence to include soil sampling which was also completed. Final surveys still to be carried out later in 2022 to complete this project

Action	Date	Lead	Progress
9. Implement Integrated Green Network proposals as part of the Cardowan Surface Water	2018-2019	GCC-NRS	• First phase complete. Wider Blairtummock Park

Management Plan and Blairtummock			proposals in development by SLWP, NS and GCC

Action	Date	Lead	Progress
10. Carry out riparian water vole surveys at 2 sites per year	2018-2023	GCC-NRS	See Wetland

Action	Date	Lead	Progress
11. Monitor and assess success of habitat creation and management projects	2018-2023	GCC-NRS/NatureScot/U of G	• Monitoring and assessment ongoing

Action	Date	Lead	Progress
12. Develop a project protocol for assessing the population dynamics of water voles in Glasgow	2018-2019	GCC-NRS/ NatureScot /U of G	• Further updates planned as part of the Conservation Action Plan

Action	Date	Lead	Progress
13. Survey 20km squares annually as part of fossorial water vole landscape scale monitoring	2018-2023	GCC-NRS	• On hold for reporting period 2021-2022 • University of Glasgow are currently producing a methodology to monitor water vole population (funded by NatureScot, GCC and SLWP), and the aim will be to seek funding to resource delivery of this action

Action	Date	Lead	Progress
14. Develop training programme of specialist groups including operations staff, ecological consultants and pest control operatives	2018-2021	GCC-NRS/ NatureScot /U of G	• Toolbox talk delivered by GCC Operations staff

Other actions for water voles:

- GCC webpage www.glasgow.gov.uk/watervoles, Glasgow Water Vole Project (GWVP) facebook page and SLWP facebook page regularly updated

- University of Glasgow scientific research paper on Spatial Habitat Mapping for water voles published in the Journal of Applied Ecology. This created positive publicity for Glasgow's water voles on social media including articles on the websites of STV news, British Ecological Society and The National. Paper published in the Journal of Applied Ecology (Feb 2022) - *Predicting habitat suitability and connectivity for management and conservation of urban wildlife: A real-time web application for grassland water voles* - https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2664.14118
- Glasgow's water voles featured in two books on wildlife (A Scottish Wildlife Odyssey and Wild City), after input from GCC and University of Glasgow
- Glasgow's water voles appeared on BBC Springwatch, in a short feature, as well as previous footage of Glasgow's water voles appearing in general BBC Springwatch promotion
- University of Glasgow hosted a knowledge sharing site visit with the Northumberland Wildlife Trust water vole project Restoring Ratty
- Glasgow's water voles were promoted in the Parklife Newsletter in June 2021

2.1.7 **Urban**: **Awareness Raising**

Action	**Date**	**Lead**	**Progress**
1. Produce LBAP Communication Plan	2018-2019	GCC-NRS	• 54 biodiversity tweets were put out on GCC Twitter Feed. These were well received with lots of interactions and reach (people viewing the post)

Action	**Date**	**Lead**	**Progress**
2. Produce Pollinator Plan for the city	2018	GCC-NRS	• See monitoring report 2018-2019

Action	**Date**	**Lead**	**Progress**
3. Produce Water Vole Plan for the city	2018-2019	GCC-NRS	See Water Vole

Action	**Date**	**Lead**	**Progress**
4. Raise awareness of biodiversity value of habitats and species within Glasgow through monthly articles for the Evening Times advice column on Gardens and Wildlife	2018-2023	GCC-NRS	• Biodiversity highlighted through GCC twitter feed, rather than articles • Biodiversity articles feature in the new ParkLife newsletter circulated to community groups, interest organisations, elected members, council staff • CR put out Weekly Ranger Corner tweets,

			different species every week according to season and national days with 54 tweets put out • Posters erected throughout PCP informing public of the native bluebells and asking them to stick to the paths. Posters out also to highlight the problem with dogs and deer • YGS raised awareness of the importance of deadwood with social media updates about saproxylic species and species using deadwood as a nesting habitat. Including solitary bees (2 species) and solitary wasps (7 species) nesting in a standing dead tree in Yorkhill Park and fungi and invertebrates using fallen deadwood • YGS regular social media posts about wildflowers/ weeds growing in pavements and verges to highlight biodiversity, and generally raise awareness of native plants

Action	**Date**	**Lead**	**Progress**
5. Raise awareness of biodiversity value through delivering Outdoor Learning sessions for Glasgow Schools (Curriculum for Excellence)	2018-2023	GCC-NRS	• Total of 12 Curriculum sessions delivered to 7 schools and 220 pupils in 5 Glasgow parks by CR. This was 10% of the target of 126 CFE sessions due to covid restrictions • CR continue to advise and liaise on establishment of new Forest School hub sites, considering the impact of increased site usage on local biodiversity

			• CR monitor the conservation status of existing Forest School hub sites • GCC staff assisted in the creation of new woodland at the Lost Woods site created in Cathkin Braes LNR along with volunteers and school groups • Friends of Linn Park contributed to a project between Netherlee Primary School and Linn Park adventure playground to increase the knowledge of the local wildlife through developing games and a trail within the adventure playground site, and also contributing to a sensory garden there

Action	**Date**	**Lead**	**Progress**
6. Promote LNRs by holding celebration events	2018-2023	GCC-NRS	• Friends of Glasgow's LNRs participated in a 'Kelvin in the Kibble Exhibition' facilitated by the Kelvin Biodiversity Network • FoGLNRs purchased a display board and used it at events to help illustrate the birds and animals to be seen in LNRs and continued to distribute copies of leaflets on Pink Feather, the LNRs, Hogganfield Park LNR, and The Birds of Hogganfield Park LNR • FoGLNRs regularly updated the Group's website and Facebook page, including sharing details of events and projects being undertaken by other groups within the City's LNRs

			• FoGLNRs bird ringing project - over 100 people participated and learned about the lives of various species of birds, the importance of bird ringing and bird migration FoGLNRs held five Wildfowl Feeding and Bird ID advice events at Hogganfield Park LNR • Hamiltonhill Claypits LNR group organised a photographic competition with the local community, which involved exploring and photographing the site's habitats • Hamiltonhill Claypits LNR group invited two guest speakers to lead a walk around the Claypits, introducing those who attended to local plants and the post-industrial ecology of the site

Action	**Date**	**Lead**	**Progress**
7. Organise annual Wild About Glasgow countryside events for the public	2018-2023	GCC-NRS	• During 20/21 there were no range led walks or events due to covid restrictions and three 50+ club events held in 21/22

Action	**Date**	**Lead**	**Progress**
8. Promote Glasgow biodiversity and engagement through teacher training events and Eco Schools days	2018-2023	GCC-NRS	• 5 Forest School CPD sessions were run for 41 nursery school teachers in the North and East of the city to support sustainable use of parks & new PTU applications • No Eco Schools days attended due to covid restrictions

Action	**Date**	**Lead**	**Progress**

9. Produce Biodiversity Duty Report for Scottish Government	2018-2023	GCC-NRS	• This biodiversity annual monitoring report with contribute to the Biodiversity Duty Report for Scottish Government due in Jan 2024

Action	**Date**	**Lead**	**Progress**
10. Continue to promote biodiversity projects within the 7 Lochs wetland park	2018-2023	GCC-NRS/ SLWP	• Biodiversity projects promoted through Seven Lochs events website and social media

Action	**Date**	**Lead**	**Progress**
11. Continue to engage with communities in practical activities within 7 Lochs area	2018-2023	SLWP /TCV	• Seven Lochs Wetland Park staff delivered 5 heritage and nature events to 65 participants • Seven Lochs Wetland Park staff delivered 112 outdoor learning sessions to children and young people using nature-based activities • Seven Lochs Wetland Park volunteers delivered 31 days of volunteer time on biological survey and recording • Seven Lochs Wetland Park volunteers delivered 520 days of volunteer time on practical conservation tasks, management and maintenance of sites

Action	**Date**	**Lead**	**Progress**
12. Continue to promote and implement 'Giving Nature a Home' project city-wide	2018-2020	RSPB/ GCC-NRS	• Through the Urban Green Connectors project, 576 attendees including community groups and school children helped with 25 RSPB habitat creation and skills training events across the south-west of Glasgow

Action	Date	Lead	Progress
13. Continue Ambassador Schools project	2018-2020	RSPB/ GCC-NRS	• Face to face Ambassador Schools activities were paused due to COVID 19 • During this phase of the project RSPB Scotland have been reflecting on the work done from COP 26 with schools in the Seven Lochs area and have been trialling new ways of working with other projects across the city that can be used to enhance work in Seven Lochs Wetland Park area

Action	Date	Lead	Progress
14. Hold annual Glasgow Wildfest	2018-2020	RSPB/ GCC-NRS	• Bioblitz event held as part of City Nature Challenge 2021 (30th April – 3rd May 2021) - a global citizen science competition to record wildlife in cities. Seventy-two people took part in the City Nature Challenge event in 2021 with 1,307 records of 378 species across Greater Glasgow

Action	Date	Lead	Progress
15. Continue Young Roots project	2018-2020	RSPB	• This project has now been completed

Action	Date	Lead	Progress
16. Continue to encourage conservation volunteering through undertaking projects and holding events at LNRs and other wildlife sites	2018-2023	GCC-NRS/TCV/ FoGLNRs	• Green Connectors project (Rosshall/Nitshill area) involved RSPB working with the community: 250 volunteers participated in workshops, 30 days of volunteer habitat creation were carried out, 1 ha of wildflower meadow created by volunteers,100m of

			hedging created by volunteers • Across the city, TCV carried out 938 volunteer days (3752 volunteer hours) of conservation volunteering on practical biodiversity tasks • Total of 2622 individual volunteers were engaged with CR in biodiversity enhancement tasks, accounting for 6,400 volunteer hours and added value of £58,320 • Flower Power programme of events to encourage wildflower planting. Fortnightly visits from Milldale and Kelvin College, both Conservation volunteer groups • CR worked with a variety of groups including the Scouts, FOPCP, corporate days, schools, Out Of School, 50+ group, Flower Power • Brockburn Family event held • Urban Roots ran Malls Mire Woodland volunteer sessions every Thursday • Urban Roots delivered a new youth programme called Get Outdoors for the Towards Better Futures programme. 8 recent school leavers not in work or ongoing education gained John Muir Awards for conservation work across Malls Mire, including making bird boxes, a hibernaculum and bulb planting

			• 'Hello Spring' public event in Yorkhill park in March 2022 attracted over 100 people who helped plant 1,400 wildflower plugs and made seed bombs using native cornfield annual seed mix • Yorkhill Green Spaces sites hosted a number of COP26-related events during October and November 2021 including a virtual walking trail with videos about each park, and podcasts made in the park about urban biodiversity • Yorkhill Park, Overnewton Park and Cherry Park were part of a Keep Scotland Beautiful 'Doors Open Day' walking trail that launched in September 2021, that had virtual tour of each park and interview videos about the work of YGS

Action	**Date**	**Lead**	**Progress**
17. Organise biodiversity-themed activities at park venues	2018-2023	GCC-NRS	• Countryside Ranger Serviceproduced the biodiversity-themed 50+ programme for 2021-2022 and delivered several of these walks and talks as part of the citywide activities • Countryside Ranger Service ran the Flower Power programme of events, FOPCP programme of CR guided walks

Other actions for Urban: Awareness Raising:

Biodiversity Officer attended URBACT Local Group – Global Goals for Cities workshops identifying Sustainable Development Goals for Glasgow including goals for biodiversity on land and sea

Biodiversity Officers attended national Biodiversity Network meetings

Glasgow LBAP Partnership meeting held

A lecture by Scott Shanks to Glasgow Natural History Society on the topic of Brownfield Biodiversity highlighted Glasgow sites and acted as a stimulus for a Brownfield Biodiversity conference which took place subsequently

Urban Roots hosted a site visit and gave a talk about Malls Mire for the Brownfield Biodiversity Conference (organised by GNHS as part of Glasgow Science Festival)

4 bursaries were awarded by GNHS for attendance at FSC taxonomy courses during 2022.

GNHS held 4 field excursions in Glasgow in Summer 2021 and members participated in the City Nature Challenge in their own neighbourhood.

Further GNHS surveys at Glasgow Botanic Gardens were carried out as part of the 'Wildside revisited' project.

2.1.8 **Pollinator Plan**

Action	**Date**	**Lead**	**Progress**
1. Monitor the Pollinator Plan through annual LBAP Monitoring Report and Biodiversity Duty Reports	Annually	GCC-NRS	• The Pollinator Plan actions are included in the Biodiversity Annual Monitoring Report and in the Biodiversity Duty Report

Action	**Date**	**Lead**	**Progress**
2. Continue to protect habitat and species value through the designation and maintenance of SSSIs, LNRs and SINCs	Ongoing	GCC-NRS/ NatureScot	• SSSIs and LNRs are statutory designations that are designated via separate legislation to the development planning process but the Council has a duty to protect them. SINCs are non-statutory designations identified through the development planning process and are currently being reviewed

Action	**Date**	**Lead**	**Progress**

3. Aim to ensure connectivity of integrated habitat networks throughout the city through the planning process (LBAP Action)	2017-2022	GCC-NRS	• Planning policy incorporated into the City Development Plan 2017 (policy CDP7) and associated Supplementary Guidance (SG7) and advice provided on planning applications to implement policy/SG as appropriate • Adoption of Open Space Strategy (Feb 2020) and preparation of OSS Delivery Plan, will provide an opportunity to pro-actively promote habitat connectivity at an early stage

Action	**Date**	**Lead**	**Progress**
4. Manage 30 key grassland sites as traditional meadows in a sustainable manner, on GCC land (LBAP Action)	2017-2022	GCC-NRS	See Grassland

Action	**Date**	**Lead**	**Progress**
5. Enhance areas of unmown grassland by introducing local provenance wildflowers. Enhance 1 Ha annually (LBAP Action)	2017-2022	GCC-NRS	See Grassland

Action	**Date**	**Lead**	**Progress**
6. Grow pollinator-friendly plants in the Pollok Wildflower Nursery	2017 onwards	GCC-NRS	See Grassland

Action	**Date**	**Lead**	**Progress**
7. Plant pollinator-friendly wildflowers city-wide at SINCS, LNRs and Parks	2017-2022	GCC-NRS	• Heart of Scotstoun Community Garden created 3 specific areas with wildflower planting across the area of the garden and ‘wild’ areas under tree mounds

Action	Date	Lead	Progress
8. Incorporate nectar-rich plants into formal planting schemes in parks and open spaces	2017-2022	GCC-NRS	• Ongoing as part of parks and open spaces management plans • Heart of Scotstoun Community Garden have moved to perennial plants only being planted in the formal flower borders, particularly pollinator friendly plants • Tollcross Park Orchard-orchard trees mulched and nectar rich crocus planted by SACRO community payback

Action	Date	Lead	Progress
9. Assess nectar-rich plants for use in Parks bedding schemes/planters	2018	GCC-NRS	• See monitoring report 2018-2019 • Pollinator-friendly plants – Ajuga, heathers and Bergenia used in city centre planters • Three wildflower planters in crane-yard kept weeded and monitored for plant suitability by CR

Action	Date	Lead	Progress
10. Aim to ensure early and late nectar sources in plantings	2017-2022	GCC-NRS	• Pollinator-friendly bulbs planted at PCP Lime avenue and ash path meadow with local school children. Early pollen sources such as lesser celandine, early crocus etc planted and late sources, such as Devil's Bit Scabious • Encouraged reduced ivy cutting by gardeners and no mow areas around cuckoo flower at PCP. Rich nectar sources

			such as Bird Cherry and other flowering trees planted

Action	Date	Lead	Progress
11. Create a butterfly garden within a Glasgow park	2017-2018	BC/GCC-NRS	• See monitoring report 2018-2019 • Bee wall built in PCP Wildlife garden and butterfly garden created around it

Action	Date	Lead	Progress
12. Identify a park and/or LNR to promote as a pollinator demonstration site	2018	GCC-NRS	• Hogganfield Park LNR and Queen's Park are designated Pollinator Parks with wildflower meadows managed for pollinators

Action	Date	Lead	Progress
13. Carry out events for Urban Butterfly Project (LBAP Action)	2017-2018	BC/GCC-NRS	• See monitoring report 2018-2019

Action	Date	Lead	Progress
14. Work with Buglife, Butterfly Conservation, Friends of the Earth Scotland and others to ensure best practice for pollinator action in Glasgow	2017 onwards	GCC-NRS/BL/ FoES(GG) /SLWP	• BCS ran a workshop at PCP on practices for planting and maintaining plugs which are now followed by CR. BCS given plants from polytunnel to augment Helping Hands project meadows at Ruchill Park, Springburn Park and Elder Park • Heart of Scotstoun Community Garden - education for biodiversity integrated into all aspects of garden management and development • Yorkhill Greenspaces installed five new solitary bee hotels (for

			mason bees and leaf-cutter bees) at Overnewton Park, Cherry Park and Yorkhill Park • Yorkhill Green Spaces won the NatureScot & Keep Scotland Beautiful Pollinator-Friendly Award in 2021, and were awarded a Green Flag Award for management of Overnewton Park (second year running) for work improving the park for the local community and wildlife

Action	**Date**	**Lead**	**Progress**
15. Raise awareness of the importance of pollinators through website information, leaflets, events	2017-2022	GCC-CRS/ /BL/ BC/FoES (GG)/SLWP	• Progress on the Pollinator Plan and case studies provided to SNH for the national strategy progress report and SNH pollinator blog • Biodiversity Officer gave presentation on Glasgow pollinator action to the NatureScot Pollinator Conference • New pollinator signage at the Pollinator Parks raises awareness of pollinators, biodiversity, carbon storage and the climate & ecological emergencies • Heart of Scotstoun Community Garden has installed an informative display board and small posters illustrating types of bees and butterflies observed in the garden with pollinator friendly plants growing within planters

Action	Date	Lead	Progress
16. Carry out surveys and monitoring of butterflies, bees and hoverflies at key sites	2017-2022	GCC-CR/BC/ SLWP	• See butterfly transects

Action	Date	Lead	Progress
17. Continue to co-ordinate butterfly transects at a minimum of 4 sites	2017-2022	GCC-NRS/BCS	• New butterfly transects established at Ruchill Park, Malls Mire, Hamiltonhill Claypits and Greenoakhill • Butterfly transects carried out at 11 sites throughout the city: Hurlethill, Mall's Mire (new 2022), Commonhead Moss, Ruchill Park (established 2021 but first walked 2022), Hamiltonhills Claypits (new 2022), Linn Park, Castlemilk park, Cathkin Braes, Greenoakhill (new 2022), Cardowan Moss, Hogganfield Park, Robroyston Park • CRS are currently designing transects at 4 sites with Kelvin College as part of their conservation training

Action	Date	Lead	Progress
18. Encourage Stalled Spaces projects to include pollinator friendly practices	2017-2022	GCC-NRS	• Stalled Spaces Programme has been completed

Action	Date	Lead	Progress
19. Provide information to support creation of additional nectar-rich plantings to compensate for new honeybee hive locations	2017-2022	GCC-NRS	• Bee keeping and Biodiversity Factsheet includes advice to help reduce competition with native pollinators

Action	Date	Lead	Progress

20. Provide information to support creation of additional nectar-rich plantings at allotments and community growing spaces	2017-2022	GCC-NRS	• Heart of Scotstoun Community Garden dedicated 'biodiversity garden' has native species flourishing including willow, buddleia, birch, alder, holly, hazel, dog rose (mostly transplanted from wild growth on original garden site or procured through tree planting schemes) and planting of perennial native species wildflowers & pollinator friendly plants – particularly wild primroses, wood anemone, cornflower, borage, and from 'mixed meadow' seed mixtures • Six Sensory Garden planters at Overnewton Park topped-up with peat-free compost and additional pollinator-friendly herbaceous perennials planted by YGS

Action	**Date**	**Lead**	**Progress**
21. Seek funding opportunities for Pollinator Projects	2017-2022	GCC-NRS/TCV	• Weekly funding information provided to parks & greenspaces community groups with some successful projects likely to benefit pollinators • The Glasgow Green Urban Connectors project received £88,419.65 from the Biodiversity Challenge Fund (BCF) Round 3 with the project completed in March 2022

Action	**Date**	**Lead**	**Progress**

22. Investigate the potential for a B-Line within the city to connect to the wider countryside	2018	GCC-NRS/BL/ SLWP	• Green Connectors project focuses on the B-Lines and makes connections between them

Action	**Date**	**Lead**	**Progress**
23. Seek volunteers to set up Beewalk transects at key sites	2018	GCC-CRS/BBCT	• BBCT co-ordinated 8 Beewalk transects • BBCT set up 2 new Beewalk transects

Action	**Date**	**Lead**	**Progress**
24. Carry out a survey of Marsh Violet at Commonhead Moss and adjacent sites (food plant for Small Pearl-bordered Fritillary)	2018	GCC-CR/SLWP	• See monitoring report 2018-2019

Action	**Date**	**Lead**	**Progress**
25. Investigate propagation of local provenance Marsh Violet for planting at appropriate sites to aid Small Pearl-bordered Fritillary populations	2018	GCC-NRS/SLWP	• See monitoring report 2018-2019

Acronyms

BBCT	Bumblebee Conservation Trust
BCS	Butterfly Conservation (Scotland)
BL	Buglife
BTO	British Trust for Ornithology
CDP	City Development Plan
CP	Country Park
CRF	Clyde River Foundation
FLS	Forestry & Land Scotland
FoES (GG)	Friends of the Earth Scotland (Glasgow Group)
FoGLNRs	Friends of Glasgow's Local Nature Reserves
GCC	Glasgow City Council
GIS	Geographic Information System
GL	Glasgow Life
GNAH	Giving Nature a Home
GNHS	Glasgow Natural History Society
Ha	Hectare
ID	Identification
INNS	Invasive Non-Native Species
LBAP	Local Biodiversity Action Plan
LNR	Local Nature Reserve
NLC	North Lanarkshire Council

NRS	Neighbourhoods, Regeneration & Sustainability
OMHPDL	Open Mosaic Habitats on Previously Developed Land
OSS	Open Space Strategy
PCP	Pollok Country Park
PP	Pollinator Plan
PTES	People's Trust for Endangered Species
PTU	Permission to Use
RSPB	Royal Society for the Protection of Birds
SEPA	Scottish Environment Protection Agency
SG	Supplementary Guidance
SIMD	Scottish Index of Multiple Deprivation
SINC	Site of Importance for Nature Conservation
SLWP	Seven Lochs Wetland Park
SOC	Scottish Ornithologists' Club
SpRiNT	Species Rich Networks Team
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Drainage System
SWT	Scottish Wildlife Trust
TCV	The Conservation Volunteers
U of G	University of Glasgow
UKBMS	United Kingdom Butterfly Monitoring Scheme
YGS	Yorkhill Green Spaces

LBAP Partners

Buglife

Butterfly Conservation (Scotland)

Clyde River Foundation

Forestry & Land Scotland

Friends of Glasgow's Local Nature Reserves

Froglife

Glasgow City Council

Glasgow Life

Glasgow Museums Resource Centre

Glasgow Natural History Society

NatureScot

Royal Society for the Protection of Birds (Scotland)

Scottish Canals

Scottish Environment Protection Agency

Scottish Ornithologists' Club

Scottish Wildlife Trust

Seven Lochs Wetland Park

The Conservation Volunteers

Urban Roots

Woodland Trust