Renfrewshire Biodiversity Action Plan
2018–2022

Renfrewshire Council

Introduction

This is the first Biodiversity Action Plan to be produced solely for Renfrewshire. It follows on from the 2004 Local Biodiversity Action Plan which covered the administrative areas of Renfrewshire, East Renfrewshire and Inverclyde.

While the focus of this plan is Renfrewshire's biodiversity, a coordinated approach to delivery will be required.

This plan sets out a positive and ambitious approach to biodiversity conservation and promotion. Partnership working and community involvement are key if successful outcomes for biodiversity are to be achieved and delivered.

Scotland's Biodiversity: Route Map to 2020

A key element of this plan is the closer integration between the Renfrewshire Biodiversity Action Plan and Scotland's Biodiversity Strategy: 2020 Challenge, particularly its "Route Map".

This is to ensure that resources deployed locally are aligned to national priorities identified in the Route Map and to maximise opportunities for external funding support from national agencies. All of Renfrewshire's priority habitats are included on the current Scottish Biodiversity List and categorised in the top priority as 'conservation action needed'.

Scotland's Biodiversity—A Route Map to 2020 places strong emphasis on both an ecosystem approach and landscape scale operations to promote biodiversity with an aim of reversing biodiversity decline.

The Renfrewshire Biodiversity Action Plan embraces these principles and provides a framework to support organisations involved in promoting biodiversity in Renfrewshire to deliver landscape scale projects where opportunities arise.

Renfrewshire's biodiversity baseline sits at a relatively modest level in comparison to many other parts of Scotland with biodiversity-rich habitats and ecosystems tending to be held within small, isolated and dispersed sites, especially in the lowlands, where intensive human activities have had a significant impact.

Early actions in the Renfrewshire Biodiversity Action Plan aim to safeguard and improve these sites, harnessing resources before embarking on more ambitious targets.

Biodiversity Conservation Approach in Renfrewshire

The Renfrewshire Biodiversity Partners' approach in this Action Plan is to conserve current biodiversity and capacity and where possible support enhancement. There are strong signs that a growing awareness of the importance of biodiversity in Renfrewshire is having a very positive impact.

Biodiversity is embedded in the suite of policy documents of the Biodiversity Partners and is a key consideration in the delivery of actions and projects. Several community led initiatives have also embarked upon projects to enhance local environments in and around Renfrewshire's settlements.

Opportunities exist to "join up" these pockets of activity and to coordinate how they benefit biodiversity for the wider communities of Renfrewshire.

Policy Framework

A policy framework to support biodiversity is embedded at national, regional and local levels through Scotland's National Planning Framework, the Central Scotland Green Network, the Clydeplan Strategic Development Plan and Local Development Plan.

The Scottish Government's third National Planning Framework retained the Central Scotland Green Network (CSGN) as a National Development. The Central Scotland Green Network is a visionary initiative seeking to achieve a fundamental transformation across 19 local authority areas in terms of environmental improvements, economic benefits and enriched quality of life.

A key part of the Central Scotland Green Network's vision is to create an environment where nature can flourish. Planned general outcomes for achievement by 2050 are that:

- habitats and species will become more resilient as a result of an integrated habitat network;
- characterful, high quality landscapes add value to the region.

Cascading down from these outcomes are two ambitions:

- delivering an integrated habitat network across the CSGN with wildlife corridors joining up important sites and habitats;
- making sure every settlement in Central Scotland sits within good quality landscape.

As the Central Scotland Green Network is a National Development, it brings with it the possibility of additional resources for biodiversity projects. Its importance is reflected in this document in which prioritised habitat actions and broader landscape scale projects have been brought together under a Green Networks chapter.

The Green Networks chapter also reflects the importance of the Glasgow & Clyde Valley Green Network Partnership which champions greenspace initiatives across eight local authority areas in the Glasgow and Clyde Valley Region.

Clydeplan aims to support the delivery of the Glasgow and Clyde Valley Green Network by identifying, protecting, promoting and enhancing the green network, including cross-boundary links between adjoining local authorities.

As well as adopting policies which safeguard and enhance biodiversity, the 2014 Renfrewshire Local Development Plan also places a strong emphasis on developing and reinforcing local green networks as an integral part of its Place Strategy by identifying and mapping strategic green network opportunities.

There is a growing emphasis on geodiversity in underpinning biodiversity conservation, supporting landscape-scale conservation and providing ecosystem services. This has been emphasised in Scotland's Geodiversity Charter, which was launched by the Minister for Environment and Climate Change in June 2012 and relaunched in November 2017. The Charter has over 50 signatories across organisations including local authorities, government agencies, industry and higher education.

Renfrewshire's Biodiversity Action Plan— Lessons Learned

One of the lessons learned from the 2004 Local Biodiversity Action Plan was the recognition that Species Action Plans which made the most positive progress were those with local champions to take the required work forward, for example Lesser Whitethroat and Aspen.

These champions then inspired other people to become actively involved in conservation actions. In view of this, the Renfrewshire Biodiversity Action Plan incorporates a number of species and actions within the "People Power" chapter.

Renfrewshire Biodiversity Action Plan's Vision for 2030: Renfrewshire Renewed Naturally

By 2030 Renfrewshire will have a species-rich system of green and blue networks from the uplands of the Renfrewshire Heights to the tidal waters of the Clyde estuary. It will be an environment abundant in wildlife that is enjoyed and respected by people, making Renfrewshire a beautiful place to live, work and visit.

Delivering the 2030 Vision

A number of key principles will assist in achieving and delivering the vision by 2030. These are summarised under the headings below, recognising that some are interlinked.

1 Climate Change

Actions developed and delivered by the Biodiversity partners will assist Renfrewshire's characteristic habitats and species to be more resilient to the impacts of climate change. Actions in relation to the suite of designated sites (local and national) will aim to support improved connections and management, protecting species against climate change where possible, and allowing them to adapt through moving to new areas.

Geodiversity often responds dynamically to climate change, and these responses may affect the survival, extent or ground conditions of local ecosystems. Careful consideration of geodiversity may help in the identification of suitable corridors through which species might adapt and move.

The creation of habitats providing important ecosystem services, such as carbon storage or flood mitigation, will be supported (for example through Sustainable Urban Drainage Systems) or by restoration in some cases, (for example, some of Renfrewshire's peatland habitats are currently degraded in both the lowlands and upland areas.) The maintenance of other intact habitats and their enhancement will also be supported. Native woodland and wetlands are particularly important for these purposes and their roles should be recognised through appropriate conservation management.

Actions should maximise the levels of carbon storage and other ecosystem services such as control of soil erosion and water regulation. It is important that a range of partners continue to support actions which increase production of renewable energy, for example by expanding the amount of woodland established with a biomass component, whilst ensuring such developments aim to prevent significant impacts to existing biodiversity interest and where possible enhance local biodiversity.

2 Landscape Scale Conservation (Ecosystem Approach)

There are a number of opportunities in Renfrewshire for organisations from all sectors to work together to improve the economy, environment and social opportunities across areas by focusing on biodiversity and geodiversity targets as the impetus for cohesive action. This could include the Renfrewshire Heights or areas within some of the river valleys in which a catchment wide approach could reap dividends for all sectors.

3 Designated Sites

An examination of the spatial distribution of designated sites in Renfrewshire shows that there are already clusters or linear series of sites which have been recognised as being of at least local significance for biodiversity. These clusters sometimes follow watercourses or line the steeper slopes of hill ridges. Adopting the principle of better linkages between these sites, in line with Green Network aims, should reduce habitat fragmentation and allow key species to distribute to other areas.

Knowledge about the biodiversity interest of some sites is either insufficient or not fully up to date. Biodiversity partners will therefore pursue opportunities to reduce these knowledge gaps.

Some designated sites also have geodiversity value, so comprehensive recording of both of these elements of the local ecosystem will be encouraged, along with evaluation of the significance of inter-relationships between the rock, soil substrate and biodiversity.

4 Invasive Non Native Species

It will be important that biodiversity partners continue to contribute to research regarding Invasive Non Native Species and participate in coordinated action where appropriate. In addition, where opportunities arise, individual Invasive Non Native Species will be tackled as part of the implementation of comprehensive habitat management plans for individual sites. Vigilance and biosecurity will be required when any management activities are planned or implemented on any sites with biodiversity importance, especially watercourses.

5 People and Partnership

The conservation and enhancement of biodiversity plays a fundamental role in the wellbeing of communities and the health of the economy throughout Renfrewshire. People and communities will be encouraged to become more involved in maintaining local biodiversity, contributing directly through voluntary conservation activities like ground works, recording species groups and monitoring sites.

6 Education

Supporting the People and Partnership principle, opportunities will be pursued to continue to invest in local programmes to raise public awareness of Renfrewshire's biodiversity and its relevance to our communities. Information about biodiversity will be readily available on a variety of platforms so that it is accessible to children, students, researchers, land managers, consultants and developers.

7 Knowledge

Biodiversity partners will consider and progress opportunities to improve the collection, storage, processing and dissemination of scientific information about Renfrewshire's biodiversity. This knowledge flow is needed to ensure appropriate development, land management and conservation action–including the identification of situations in which more research is required before decisions can be made.

Action plan

The People Power Priority

Continuing to increase the involvement of people is essential for the future conservation of Renfrewshire's biodiversity. Some of the more notable successes arising from the 2004 LBAP were the result of efforts by community groups and local specialists working to conserve and promote biodiversity interests. Therefore many of the actions within Renfrewshire's Biodiversity Action Plan seek to encourage and support the engagement of more specialists and enthusiastic communities to drive the plan forward and enable actions to be delivered.

This Biodiversity Action Plan places people at the forefront of actions, designed to assist delivery of the Scottish Government vision for safeguarding, supporting and encouraging growth of biodiversity.

The following actions are designed to stimulate and sustain increased involvement by people in conserving Renfrewshire's biodiversity resources.

People Power: Communication and Engagement

Actions identified in the following table promote biodiversity and provide a framework for engaging people more effectively in biodiversity work. As part of this, it is recognised that people's interest in biodiversity conservation issues is more generally linked to individual species than to the broader concept of habitats.

Therefore a range of actions are designed to conserve individual species, where it is clear that people power will generate positive outcomes.

This approach enables the inclusion of actions supporting species of local concern which are not yet included in the "conservation action required" column of the Scottish Biodiversity List.

People Power: Communication and Engagement Action plan

Action No.	Benefits and/ or beneficiaries	Action/Activity	Partners (Leads in Bold)	Potential Timescales
PP01	Communication and engagement	Review the role of the Local Biodiversity Action Plan Steering Group in taking forward biodiversity initiatives in Renfrewshire	**LBAPSG**,	2018–2019
PP02	Communication and engagement	Develop a Community Engagement Strategy for Renfrewshire's Biodiversity Action Plan.	**LBAPSG**,	2018–2019
PP03	Communication and engagement	Organise events in urban areas to emphasise the link between biodiversity and Renfrewshire's built heritage.	**LBAPSG**, RC, RL, CRF, RSPB, SOC, CfS	2018–2021
PP04	Communication and engagement	Support funding bids and implementation of the planned reconstruction and redesign of the garden spaces at Paisley Museum, including features linked to the natural history collections. This should include incorporation of interpretative geological features that link the local landscape to the geology collections.	**RL**, RC, RGGF,	2018–2021
PP05	Communication and engagement	Continue to use Paisley Museum's natural history collections and Renfrewshire Leisure's various exhibition spaces to engage people on Renfrewshire's biodiversity and geodiversity.	**RL**, RC,	2018–2022
PP06	Communication and engagement	Carry out bioblitzes in publicly accessible sites in Renfrewshire's towns and villages as events highlighting the potential importance of urban areas for biodiversity and to engage local communities.	**LBAPSG**	2018–2019
PP07	Communication and engagement	Continue to support volunteers monitoring Renfrewshire's plants (as shown in Appendix 1) and to draft proposals for conservation initiatives to prevent significant decline of plant species.	**BSBI**, PNHS, RSPB, RC	2018–2022

Action No.	Benefits and/ or beneficiaries	Action/Activity	Partners (Leads in Bold)	Potential Timescales
PP08	Communication and engagement	Continuation of volunteers monitoring Renfrewshire's birds (as shown in Appendix 2) and to draft proposals for conservation initiatives which aims to reverse decline of bird species.	**SOC**, RSPB, CfS, RC	2018 -2022
PP09	Communication and engagement	Continuation of volunteers monitoring Renfrewshire's butterflies and drafting conservation proposals where required. Priority species are: Green Hairstreak, Purple Hairstreak, Common Blue, Small Copper, Small Pearl-bordered Fritillary, Large Heath and Small Heath.	**BCS**, RSPB, RC, PNHS	2018–2022
PP10	Communication and engagement	Use the Butterfly Conservation's Urban Butterflies project to increase the levels of public interest and engagement in Renfrewshire's biodiversity.	**BCS**, PNHS, RSPB, SOC, BSBI,	2018–2022
PP11	Communication and engagement	Delivery of the "Clyde in the Classroom" project, introducing school pupils to the life cycle of the native Brown Trout and its conservation needs.	**CRF**,	2018–2022
PP12	Communication and engagement	Delivery of the "Flying Fish" project, taking school children out in the field to visit and study their local river or burn.	**CRF**,	2018–2022
PP13	Communication and engagement	Use the various existing and planned Aspen conservation projects to increase the numbers of people actively engaged in practical biodiversity projects in Renfrewshire.	**Eadha**, CMRPA, FCS, RC	2018–2022
PP14	Communication and engagement	Use various surveys and channels to identify and map places where Swifts still nest in Renfrewshire, particularly by encouraging people to report locations on RSPB's online Swift Survey. Investigate opportunities for Swift conservation projects in Renfrewshire, in line with SNH's 2017 Swift Best Practice Advice Note and the Concern for Swifts (Scotland) website.	**CfS**, RSPB, SOC, RC, PNHS	2018–2022
PP15	Communication and engagement	Continue to offer undergraduate students the opportunity to gain knowledge and practical skills in biodiversity conservation through the provision of relevant course modules.	**UWS**,	2018–2022

Action No.	Benefits and/ or beneficiaries	Action/Activity	Partners (Leads in Bold)	Potential Timescales
PP16	Communication and engagement	Investigate opportunities for students to obtain practical skills in biodiversity conservation through partnership projects involving individual research or class exercises or longer term placements which support local initiatives.	**UWS**, RC, RSPB, CMRPA, SL	2018–2022
PP17	Communication and engagement	Provide low cost, nesting, roosting and habitat boxes, plus planters and other garden structures for community greenspace projects.	**RC**	2018–2022
PP18	Communication and engagement	Monitor birds through ringing and deliver events to the general public, a schools programme and involve students with research through universities.	**CMRPA**, BTO, Glasgow University, UWS and SRUC Auchincruive	Ongoing to end of 2018
PP19	Communication and engagement	Continue to offer biodiversity audits and biodiversity enhancements to Renfrewshire schools.	**SL**	2018–2022

People Power: Managed Sites

There are a number of sites in Renfrewshire which are managed predominantly or partially for biodiversity conservation. These provide opportunities to communicate with local people and encourage them to become involved directly in conserving Renfrewshire's biodiversity. These opportunities are highlighted in the following table.

People Power: Managed Sites Action Plan

Action No.	Benefits and/ or beneficiaries	Action/Activity	Partners (Leads in Bold)	Potential Timescales
PP20	Managed site users	Continue to deploy staff to supervise groups of volunteers carrying out biodiversity conservation work in priority habitats.	**CMRPA, RCEC, RSPB, SWT, Finlaystone, FCS, FES, Sustrans** (each the lead agency on its own land), **TCV**	2018–2022
PP21	Managed site users	Continue to support local community organisations playing an active role in biodiversity conservation, e.g. Castle Semple Volunteer Group, in their funding bids for their own projects which support the Biodiversity Action Plan.	**CMRPA**, RC, RSPB, SOC, SL	2018–2022
PP22	Managed site users	Continue to encourage the formation of Friends groups covering Renfrewshire's parks, local nature reserves and other publicly managed greenspaces (e.g. woodlands) and support their efforts to enhance biodiversity.	**RC**, CMRPA, CSGNT, SNH	2018–2022
PP23	Managed site users	Provide facilities and services at Gleniffer Braes to encourage local community engagement in biodiversity conservation.	**RC**, PNHS,	2018–2022
PP24	Managed site users	Provide facilities and services at Clyde Muirshiel Regional Park managed centres in Renfrewshire to encourage local community engagement in biodiversity and geodiversity conservation.	**CMRPA**, RC, FCS, RSPB, Eadha,	2018–2022
PP25	Managed site users	Provide facilities and services at Aird Meadow and Barr Loch (Lochwinnoch Nature Reserve) to encourage local community engagement in biodiversity conservation.	**RSPB**,	2018–2022
PP26	Managed site users	Ensure people have access to Glen Moss Wildlife Reserve in order to engage with biodiversity.	**SWT**	2018–2022

Action No.	Benefits and/ or beneficiaries	Action/Activity	Partners (Leads in Bold)	Potential Timescales
PP27	Managed site users	Continue to recruit, train and retain volunteer Wildlife Champions for the National Cycle Network through the Greener Greenways project.	**Sustrans**, RSPB, RC,	2018–2022
PP28	Managed site users	Provide facilities and services at Boden Boo, Erskine, Johnstone Woods, Windyhill, Howwood Community Woodland and Knockmountain, to encourage local community engagement in biodiversity conservation.	**FES**	2018–2022
PP29	Managed site users	Actively encourage participation through volunteer wardens, local schools, Phoenix Futures, locally organised community events, OWL groups and Branching Out programmes in Boden Boo, Johnstone Woods, Windyhill, Howwood, Knockmountain, Parkhill and Muirshiel Woods.	**FES**, CMRPA	2018–2022
PP30	Managed site users	Production of "Woodlands of Renfrewshire" publication, in line with FCS's Renfrewshire Woods Land Management Plan 2016-2026	**FES**	2016-2018
PP31	Managed site users	Provide facilities and services at Finlaystone Country Estate to encourage local community engagement in biodiversity conservation.	**Finlaystone**	2018–2022
PP32	Managed site users	Submit funding applications to ensure Lesser Whitethroat research, habitat management and monitoring work can continue at Brownside Braes within Gleniffer Braes Country Park beyond 2018.	**PNHS**, RC, SOC, RSPB, SNH,	2017-2018
PP33	Managed site users	Implement the Brownside Braes Lesser Whitethroat 2 Project, maximising opportunities for involvement by volunteers.	**PNHS**, RC, SOC, RSPB, SNH, TCV	2019-2022
PP34	Managed site users	Deliver project to electronically tag Lesser Black-backed Gulls and monitor their movements within Clyde Muirshiel Regional Park and beyond by satellite tracking.	**CMRPA**,	2018–2019

Action No.	Benefits and/ or beneficiaries	Action/Activity	Partners (Leads in Bold)	Potential Timescales
PP35	Managed site users	Communicate widely the biodiversity benefits, community capacity gains and health promotion gains associated with community growing.	**RGGF**, RC,	2018–2022
PP36	Managed site users	Increase the number of allotment and community growing sites/ plots in Renfrewshire and encourage the lease of appropriate sites to engaged communities, in line with the Community Empowerment Act and as a key step in the process of reconnecting people with nature.	**RGGF**, RC, CSGNT,	2018–2022
PP37	Managed site users	Train people to garden in wildlife-friendly ways, as well as showing them how to grow and cook their own food, producing benefits for biodiversity and health.	**Engage Renfrewshire**, PDRC, RGGF, SL	2018–2022

Geodiversity

Biodiversity is fundamentally linked to underlying geological features. Geodiversity is a term abbreviated from geological diversity and encompasses rocks, minerals, fossils, soils, sediments, landforms and associated processes, all of which are the foundation for habitats, niches, and ultimately biodiversity.

The 2004 Local Biodiversity Action Plan included a general description of the area's geodiversity resources and summarised how the geological framework had led to the formation of today's landscapes and their habitats.

It is recognised that there are links and opportunities for complementary actions which could benefit both biodiversity and geodiversity.

One key example of where biodiversity is closely linked with geodiversity is in soil, which comprises a mixture of components derived from both geological and biological processes.

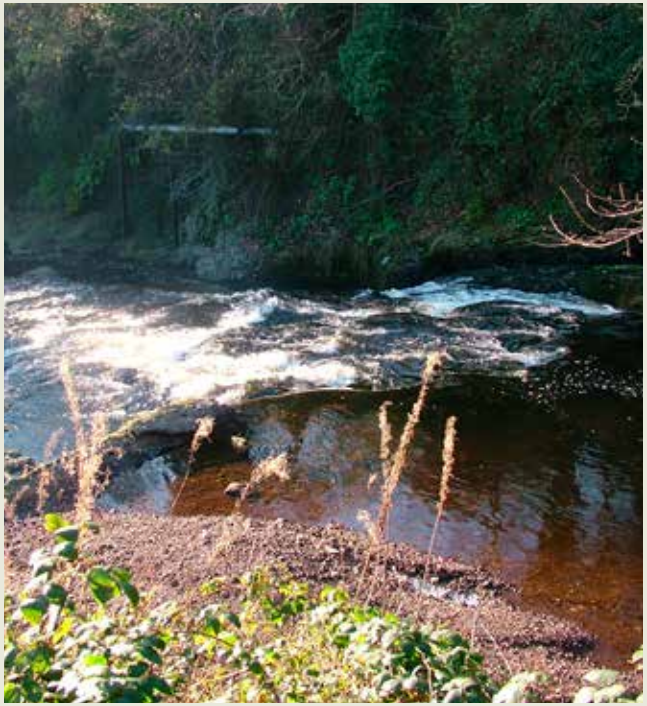
The varying nature of this and other combinations between geology and biology has presented us with a diversity of landscapes, habitats, niches and species.

It is recognised that geodiversity conservation has to be a key part of biodiversity conservation. There is therefore the need to have a better understanding of the geodiversity resources in Renfrewshire.

Renfrewshire's rolling hills and valleys have been extensively extracted for mineral resources in the past. Historic maps show quarries and other mineral extraction excavations dotted across the landscape but the current significance of surviving relicts has not been evaluated. They have the potential to become valuable resources for public education and interpretation.

Similarly, Renfrewshire's glacial history means that some watercourses flow through spectacular gorges as a result of natural excavation processes, where sequences of rock strata have been exposed. One of these sequences, the River Gryfe between Bridge of Weir and Crosslee, is considered to be of national importance by Scottish Natural Heritage and the Joint Nature Conservation Committee.

In other places water has been held by impermeable rocks and superficial deposits, as well as filling hollows formed during the last Ice Age, thereby allowing the development of deep layers of peat bearing distinctive blanket bog and raised bog habitats. These accumulations of dead organic matter represent both important geodiversity and biodiversity conservation resources, and therefore appear in the Geodiversity Actions table below and in the Green Networks Action table.



Geodiversity Action Plan

Action No.	Benefits	Action/Activity	Partners (lead in bold)	Potential Timescales
GD1	Geodiversity	Compile a schedule of locally important geodiversity sites in Renfrewshire, with summary descriptions produced for each location.	**SGF**, SG, RC.	By end of 2018
GD2	Geodiversity	Review requirements for promoting geodiversity in Renfrewshire through publications (online or other media)	**SGF**, SG, RC.	Reviewed by end of 2018
GD3	Geodiversity	Following established best practice guidance, liaise with relevant statutory bodies to ensure appropriate geodiversity conservation measures are incorporated into their respective policy statements and practices.	**SGF**, SG, RC.	By end of 2019
GD4	Geodiversity	Develop a programme for geodiversity site monitoring and review.	**SGF**, SG, RC.	By end of 2019
GD5	Geodiversity	Document any existing educational visits and/or investigate the opportunities to expand such uses by UWS, geological societies, etc.	**SGF**, SG, RC.	By end of 2020
GD6	Geodiversity	Devise programmes to recruit local volunteers to support geodiversity conservation.	**SGF**, SG, RC.	By end of 2020
GD7	Geodiversity	Develop proposals for Renfrewshire's first demonstration geodiversity conservation project and implement proposals.	**SGF**, SG, RC.	Project completed by end of 2022.

Green Networks

Integration of environmental issues with social considerations, economic regeneration and health in a coordinated manner is a key consideration in this Action Plan.

In particular, the Plan identifies actions supporting the development of Green Network principles, in which biodiversity and geodiversity are considered alongside access, active travel, healthy living, community growing, flood control, air quality, climate change adaptation and other quality of life issues. This holistic approach maximises the opportunities for action, diversifies delivery mechanisms and assists access to resources.

This integrated, multiple benefits approach is also seen at a national level in Scotland's Biodiversity–A Route Map to 2020, which identifies "Six Big Steps for Nature":

1. Ecosystem restoration;
2. Investment in natural capital;
3. Quality greenspace for health and education benefits;
4. Conserving wildlife in Scotland;
5. Sustainable management of land and freshwater;
6. Sustainable management of marine and coastal ecosystems.

In aiming to tailor the approach in the 2020 Route Map to Renfrewshire, targets have been aligned through focusing on habitats included on the Scottish Biodiversity List and prioritised as "Conservation Action Required".

Green Networks Action Plan

Action No.	Site, topic or habitat type	Action/activity	Partners (leads in bold)	Potential Timescales
GN01	Designated sites in Renfrewshire	Review the Sites of Importance for Nature Conservation network across Renfrewshire, resurveying and reassessing sites as required and evaluating candidate sites suggested for addition to the schedule.	**RC**, SOC, CMRPA, RSPB, BSBI,	2018–2022
GN02	Designated sites in Renfrewshire	In relation to SPAs, SSSIs, SINCs, LNRs, nature reserves and other designated sites, ensure opportunities to maximise gains for biodiversity are identified, supported and implemented as part of statutory functions. At the same time, seek opportunities to integrate geodiversity, create new habitats, enhance habitats and form links between areas rich in biodiversity.	**SNH, FCS, FES**, RC,	Ongoing 2018–2022. SRDP FGS only until 2020.
GN03	Designated sites in Renfrewshire	Explore opportunities for managed realignment on the Inner Clyde SPA.	**RSPB, SNH,** SOC, RC	2018–2022
GN04	Designated sites in Renfrewshire	Explore the effects of recreational disturbance on the Inner Clyde SPA and methods to reduce this.	**RSPB, SNH,** SOC, RC	2018–2022
GN05	Designated sites in Renfrewshire	Prepare the ground for the return of a breeding population of Hen Harriers in the Renfrewshire Heights SPA, including community engagement work and building stakeholder support.	**SOC, Scottish Raptor Group, SNH,** CMRPA, RSPB	2018–2022
GN06	Green Network enhancement	Identify, develop and support strategic green network and landscape scale partnership projects to restore, create or reconnect habitats.	**GCVGNP**, CSGNT, RC, CMRPA	2018–2022
GN07	Green Network enhancement	Develop and deliver the Greener Greenways Project in Renfrewshire, creating and enriching corridors for wildlife along the National Cycle Network, particularly creating priority habitats, e.g. ponds, lowland fens, wet woodland.	**Sustrans**, SNH, RC,	2018–2022

Action No.	Site, topic or habitat type	Action/activity	Partners (leads in bold)	Potential Timescales
GN08	Green Network enhancement	Assist the creation of community gardens, allotments and other food growing opportunities in support of community aspirations in various locations across Renfrewshire.	**RGGF**, RC, CSGNT, GCVGNP,	2018–2022
GN09	Green Network enhancement	Refresh the Open Space Audit for Renfrewshire, ensuring that biodiversity is fully recognised in any evaluation process, and promote the development of an Open Space Strategy based on the results	**RC**, GCVGNP,	2018–2020
GN10	Green Network enhancement	Implementing Renfrewshire Council's Access Strategy and the revision of the Renfrewshire Council Core Paths Plan take advantage of opportunities to encourage people to access sites rich in biodiversity and, where feasible, incorporate opportunities to create and enhance habitats.	**RC**, CSGNT, GCVGNP	2018–2022
GN11	Green Network enhancement	Identify, promote and carry out temporary greening of sites in line with the Stalled Spaces Scotland initiative, in partnership with community organisations	**RC**, RGGF	2018–2022
GN12	Green Network enhancement	Support community organisations' efforts to create or enhance biodiversity rich habitats within existing publicly accessible greenspaces.	**RC**, CSGNT,	2018–2022
GN13	Climate Change Resilience	Use climate change spatial analyses produced by GCVGNP and others to build a case for adaptation interventions which involve using new or enhanced natural habitat elements at specific localities and generally across Renfrewshire.	**GCVGNP**, RC, SEPA, SNH	2018–2022

Action No.	Site, topic or habitat type	Action/activity	Partners (leads in bold)	Potential Timescales
GN14	Climate Change Resilience	Review Biodiversity Action Plan, site management plans and other conservation strategies, plans and projects to ensure that: a) all risks from adverse climate change have been identified, b) future changes in these pressures are assessed, c) that these are being explicitly addressed wherever possible incorporating adaptation measures, d) carbon capture within habitats is considered.	**LBAPSG**, RC, SEPA, SNH, FCS, RSPB, SWT,	2018–2022
GN15	Habitats–Lowland Fens	Complete an inventory of lowland fen sites in Renfrewshire, including an assessment of their current conservation condition.	**RC**, SOC, BSBI, RSPB, SNH, FCS,	2018–2020
GN16	Habitats–Lowland Fens	Ensure all good quality Lowland Fen sites are included within SINCs.	**RC**, SNH	2018–2022
GN17	Habitats–Lowland Fens	Continuation of habitat enhancements at Paisley Moss LNR to control scrub invasion, drying out of the fen, etc.	**Glasgow Airport, SOC**, RC,	2018–2022
GN18	Habitats–Lowland Fens	Implementation of the Dargavel Burn SSSI Management Plan 2017-2021	**FES**, SNH	2018–2021
GN19	Habitats–Lowland Fens	Continuation of habitat management at Glen Moss to control scrub invasion, drying out of the fen, etc.	**SWT**	2018–2022
GN20	Habitats–Lowland Raised Bogs	Complete an inventory of lowland raised bog sites in Renfrewshire, including an assessment of their current conservation condition and their suitability for the implementation of restoration projects.	**SNH**, RC, BCS, SOC, BSBI, RSPB, FCS,	2018–2020
GN21	Habitats–Lowland Raised Bogs	Continue surveying for the presence of Large Heath butterflies on Lowland Raised Bog sites.	**BCS**, RCEC,	2018–2022

Action No.	Site, topic or habitat type	Action/activity	Partners (leads in bold)	Potential Timescales
GN22	Habitats–Lowland Raised Bogs	Explore opportunities to restore Sergeantlaw Moss (if landowners are supportive) through drain blocking and scrub control projects.	**BCS**, RC,	2020 -2022
GN23	Habitats–Lowland Raised Bogs	Develop and present case for Barochan Moss to be restored as part of reclamation of ROF Bishopton and "community woodland park" attached to the new community of Dargavel.	**BAE Systems**, RC, BCS,	2018–2022
GN24	Habitats–Blanket Bogs	Complete an inventory of blanket bog sites in Renfrewshire.	**CMRPA**, RC, SOC, BSBI, RSPB, SNH, FCS,	2018–2020
GN25	Habitats–Blanket Bogs	Implement the approved Muirshiel Country Park Woodland Management Plan 2016-2025, specifically the sections relating to the removal of invasive Sitka Spruce regeneration from deep peat areas.	**CMRPA**, FCS, RC	2018–2022
GN26	Habitats–Blanket Bogs	Complete and evaluate map of moorland drainage channels in the Renfrewshire Heights SPA.	**CMRPA**, SNH,	2018–2020
GN27	Habitats–Blanket Bogs	Continue developing a (biodiversity focused) moorland restoration project with appropriate partners for the Renfrewshire Heights Special Protection Area.	**CMRPA**, SNH, SOC, RSPB, Eadha	2018–2020
GN28	Habitats–Blanket Bogs	Continue restoration of juniper at the Cample Burn, Renfrewshire Heights.	**CMRPA**, Eadha	Ongoing to 2022
GN29	Habitats–Lowland Heathland	Complete an inventory of lowland heathland sites in Renfrewshire.	**RC**, FCS, SNH, BSBI, BCS,	2018–2020
GN30	Habitats–Lowland Heathland	Ensure best examples of lowland heathland are included within SINCs.	**RC**, SNH,	2018–2022

Action No.	Site, topic or habitat type	Action/activity	Partners (leads in bold)	Potential Timescales
GN31	Habitats–Lowland Heathland	Implement pilot Heathland Restoration Project at Gleniffer Braes Country Park to increase locally declining butterfly populations	**RCEC**, RC, FCS	2020–2022
GN32	Habitats–Lowland Meadows	Ensure best examples of lowland meadow sites in Renfrewshire are included within SINCs.	**RC**, BSBI, BCS, SNH,	2018–2020
GN33	Habitats–Lowland Meadows	Devise strategy for affording some degree of protection and positive management for best examples.	**RC**, SNH,	2018–2022
GN34	Habitats–Lowland Meadows	Update inventory of Greater Butterfly Orchid locations in Renfrewshire, including appeal for information about the presence of the species, as a good indicator of quality grassland habitats and a Scottish Biodiversity List species categorised as “conservation action required”.	**BSBI**, RC,	2018–2022
GN35	Habitats–Lowland Meadows	Ensure that sites which are discovered to hold significant Greater Butterfly Orchids colonies during field surveys are covered by SINCs or afforded protection by other means.	**RC**, BSBI,	2018–2022
GN36	Habitats–Lowland Dry Acid Grassland	Investigate the extent and quality of lowland dry acid grassland sites in Renfrewshire.	**RC**, BSBI, BCS, SNH, Finlaystone	2018–2020
GN37	Habitats–Lowland Dry Acid Grassland	Ensure best examples of lowland dry acid grassland are included within SINCs.	**RC**, BSBI, BCS, SNH,	2018–2022
GN38	Habitats–Lowland Dry Acid Grassland	Implement Rosebay Willowherb control operations at Boden Boo in an attempt to restore lowland dry acid grassland and encourage local butterfly populations, e.g. Small Copper.	**FES**, BSBI, BCS,	2016 -2026

Action No.	Site, topic or habitat type	Action/activity	Partners (leads in bold)	Potential Timescales
GN39	Habitats–Rivers	Support SEPA's efforts to improve access for fish migration along the River Calder-Calder Water, River Gryfe and Dargavel Burn by 2021.	**SEPA**, CRF, CMRPA, RC, SNH, Eadha	2018–2022
GN40	Habitats–Rivers	Support delivery of Green Infrastructure in developments at Johnstone South West to enhance quality of two tributaries of the Black Cart Water, the Spateston Burn and the Floors Burn.	**RC**, SEPA,	2018–2022
GN41	Habitats–Ponds	Investigate compilation of a basic list of ponds of potential conservation interest in Renfrewshire, with a view towards future monitoring as resources permit, perhaps via the Freshwater Habitats Trust's National Pond Monitoring Network.	**RC**, CARG, SEPA, FES, SWT, RSPB, Freshwater Habitats Trust	2018–2020
GN42	Habitats–Ponds	Investigate opportunities for a Froglife Renfrewshire Living Ponds Project.	**Froglife, RC**	2018–2022
GN43	Habitats–Ponds	Use existing knowledge to compile a list of ponds currently used for spawning by Common Toads, with a view towards possible future monitoring purposes.	**LBAPSG**	2018–2022
GN44	Habitats–Ponds	Trial the use of planted artificial floating islands at RSPB Scotland's Lochwinnoch Reserve.	**RSPB**	2018–2019
GN45	Habitats–Ponds	Maintain and extend network of small ponds along the National Cycle Network	**Sustrans**, RC,	2018–2022
GN46	Habitats–Lowland Mixed Deciduous Woodland	Produce FCS approved WIAT management plans for selected Lowland Mixed Deciduous Woodland sites across Renfrewshire.	**RC**, FCS	2018–2020
GN47	Habitats–Lowland Mixed Deciduous Woodland	FES to implement its published Renfrewshire Woods Land Management Plan 2016-2026 at Boden Boo Johnstone Woods, Windyhill, Howwood Community Woodland and Knockmountain.	**FES**	2016–2026

Action No.	Site, topic or habitat type	Action/activity	Partners (leads in bold)	Potential Timescales
GN48	Habitats–Upland Birchwoods	Implement the approved Muirshiel Country Park Woodland Management Plan 2016-2025, particularly the sections for Orblis Hill and Monument Hill. (Will also benefit examples of Upland Oakwood and Lowland Mixed Deciduous Woodland habitats).	**CMRPA**, FCS, RC,	2018–2022
GN49	Habitats–Upland Oakwood	Produce FCS approved management plan for an Upland Oakwood site in Renfrewshire.	**RC**, FCS,	2018–2020
GN50	Habitats–Upland Oakwood	Investigate linear section of Upland Oakwood lining the River Calder upstream of Lochwinnoch and devise management prescriptions for proposing to landowners.	**CMRPA**, Eadha, RC, FCS,	2018–2022
GN51	Habitats–Wet Woodlands	Produce FCS approved WIAT management plan for a Wet Woodland site in Renfrewshire.	**RC**, FCS,	2018–2020

Invasive Non Native species

"Scotland's Biodiversity: A Route Map to 2020" recognises non-native species and wildlife diseases as key pressures on biodiversity. In Renfrewshire the issues and challenges are most readily seen along its watercourses, where invasive non-native plant species like Giant Hogweed, Japanese Knotweed and Himalayan Balsam can dominate some stretches of river bank.

The presence of North American Mink in the same water systems has been one of the major contributory factors towards the believed loss of Water Vole in Renfrewshire. The White Cart Water also has widespread populations of Bullhead and Gudgeon, both non-native fish which the Clyde River Foundation fears may be damaging trout and salmon breeding success through egg predation.

The requirement for ongoing active detection of Invasive Non Native Species is illustrated by the tree disease, Ash Dieback Disease, which was first found in the UK only in 2012 but which saw confirmed infections in eastern and central Renfrewshire during 2016. In other parts of the UK initial identification of Ash Dieback Disease has been followed by rapid spread, so further outbreaks can be expected in Renfrewshire.

Other invasive non-native species have been with us for much longer and cause concern for biodiversity conservation, for example Rhododendron ponticum and a variety of other imported trees and shrubs. These non-native species have adapted to Renfrewshire's wet climate and soils and now threaten a number of sites containing Lowland Raised Bog, Blanket Bog, Lowland Mixed Deciduous Woodlands, Upland Birchwood and Upland Oakwood habitats in particular.

Invasive Non Native Species Action Plan

Action No.	Site, topic or habitat type	Action/activity	Partners (leads in bold)	Potential Timescales
INNS01	Giant Hogweed, Japanese Knotweed & Himalayan Balsam mainly	Monitor and control invasive plant species in publicly owned and managed greenspaces	**RC**, FCS, SNH, SEPA, SNH, CMRPA, RCEC, RSPB, SWT, Sustrans	2018–2022
INNS02	Japanese Knotweed in particular	Provide information about Invasive Non Native Species identification and control to various people to reduce the risk of further accidental spread to new sites	**RC**, SEPA,	2018–2022
INNS03	Rhododendron ponticum	Continuing control of invasive non native trees and shrubs at Muirshiel Country Park and Parkhill Woods, in line with the approved management plans.	**CMRPA**, FCS	2018–2022
INNS04	Rhododendron ponticum	Continuing control of invasive non native trees and shrubs at Finlaystone Countryside Estate.	**Finlaystone**, FCS	2018–2022
INNS05	Giant Hogweed	Continuing Giant Hogweed control along the White Cart Water in Paisley town centre.	**RC**, SEPA,	2018–2022
INNS06	Rhododendron, Japanese Knotweed & Himalayan Balsam	Implement control measures for Rhododendron ponticum, Japanese Knotweed and Himalayan Balsam at Johnstone Woods.	**FES**	2016–2026
INNS07	Himalayan Balsam	Implement control measures for Himalayan Balsam in Howwood Community Woodland.	**FES**	2016–2026

Monitoring and Review

In spring 2016 a performance review of the 2004 Local Biodiversity Action Plan and its 2009 additions was undertaken. This exercise revealed that monitoring and review were two areas which had presented some difficulty for the LBAP partners and that a reappraisal of the approach was needed.

The introduction of a Biodiversity Duty reporting regime for public bodies, to comply with the provisions of the Wildlife & Natural Environment (Scotland) Act 2011 has placed a greater focus on monitoring and review since 2014. The emphasis of this process is however much more focussed on the policies and actions of the public bodies, rather than their impact on biodiversity resources on the ground.

At a national level, focus is being brought to the monitoring and evaluation of different habitats and species by the RSPB led State of Nature Partnership, which is producing State of Nature Reports every three years for the UK and its constituent nations, including Scotland.

As part of the monitoring and review process, this Biodiversity Action Plan envisages the LBAP Steering Group acting as a Renfrewshire “State of Nature Partnership” and preparing periodic reports which evidence the populations and distributions of identified key species and progress in delivery of the Action Plan.

Monitoring and Review Action Plan

Action No.	Habitat or topic	Action/Activity	Partners (Leads in Bold)	Potential Timescales
MR01	All	Production and circulation of a periodic report, including both a State of Nature Report for Renfrewshire and a progress summary for delivery of the Renfrewshire Biodiversity Action Plan.	**LBAPSG**	Every 3 years, as per national reports.
MR02	All	Participate in national species monitoring schemes as opportunities arise.	**LBAPSG**	2018–2022
MR03	All	Create and publish online national habitats mapping and develop capacity to access and extract partial data analyses for individual areas like Renfrewshire	**SNH**	2018–2022
MR04	All	Production and online publication of public bodies' Biodiversity Duty Reports under the Wildlife & Natural Environment (Scotland) Act 2011 on a three year cycle.	**RC**, LBAPSG,	Due on 01/01/18 and 01/01/21
MR05	All	Involve LBAP Steering Group members in the collection, analysis and presentation of a series of reliable measures which can be used to evaluate biodiversity losses and gains in Renfrewshire, and which can then be proposed to the Community Plan partners as suitable indicators for performance monitoring.	**RC**, LBAPSG	2018–2022
MR06	Birds	Compilation and publication of the Clyde Bird Report as a guide to fluctuations in local bird populations.	**SOC**	Annual
MR07	Rivers	Continue collecting river quality data from annual sampling sites on the River Gryfe and Black Cart Water, and encouraging local angling clubs to participate in the Clyde Riverfly Monitoring Programme.	**CRF**	2018 -2022

Glossary

BAP	Biodiversity Action Plan
BCS	Butterfly Conservation Scotland
Bioblitz	An intense period of biological surveying in an attempt to record all the living species within a designated area. Groups of scientists, naturalists and volunteers conduct an intensive field study over a continuous time period
BSBI	Botanical Society for the British Isles
BTO	British Trust for Ornithology

CARG	Clyde Amphibians & Reptiles Group
CfS	Concern for Swifts
CMRPA	Clyde Muirshiel Regional Park Authority
CRF	Clyde River Foundation
CSGNT	Central Scotland Green Network Trust
Eadha	Eadha Enterprises
ER	Engage Renfrewshire
FCS	Forestry Commission Scotland
FES	Forest Enterprise Scotland

Finlaystone	Finlaystone Countryside Estate, Langbank
GCVGNP	Glasgow & Clyde Valley Green Network Partnership
LBAP	Local Biodiversity Action Plan
LBAPSG	Local Biodiversity Action Plan Steering Group
PDRC	Paisley Disability Resource Centre
PNHS	Paisley Natural History Society
RC	Renfrewshire Council
RCEC	Renfrewshire Council Environment and Communites

RGGF	Renfrewshire Growing Grounds Forum
RL	Renfrewshire Leisure
RSPB	Royal Society for the Protection of Birds
SEPA	Scottish Environmental Protection Agency
SG	Strathclyde Geoconservation
SGF	Scottish Geodiversity Forum, provides guidance and help to find national geological agencies and individual geologists who can assist projects.

SINC	Site of Importance for Nature Conservation
SL	Starling Learning
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SOC	Scottish Ornithologists Club
SSSI	Site of Special Scientific Interest
Sustrans	Sustrans

SWT	Scottish Wildlife Trust
UWS	University of the West of Scotland

Appendix 1: Plant Species of Conservation Concern in Renfrewshire

This information has been compiled from a range of sources including the audit process which preceded the production and publication of the 2004 Local Biodiversity Action Plan, from Keith Watson's 2013 Flora of Renfrewshire, from Phase 1 Habitat Surveys undertaken in 1991 and 1999 and from SINC surveys undertaken since 2016.

The information is presented below in three levels of National Significance and three levels of Local Significance. Higher plants are one of the better groups for information held, because of a history of surveying and data compilation at both national and local levels, as can be seen below.

Nationally Significant Plants Growing in Renfrewshire:

Found in less than 5% (141) of 10km squares in GB

Scientific Name	English Name	No. of 10km squares recorded in the Atlas
Cicuta virosa	Cowbane	139 ("Caplaw" in Renfrewshire)
Corallorhiza trifida	Coral Root Orchid	102
Elatine hydropiper	Eight-stamened Waterwort	33
Hierochloe odorata	Holy Grass	18
Lysimachia thyrsiflora	Tufted Loosestrife	51

Found in less than 10% (281) of 10km squares in GB

Scientific Name	English Name	No. of 10km squares recorded in the Atlas
Carex aquatilis	Water Sedge	219
Meum athamanticum	Spignel	164
Salix myrsinifolia	Dark-leaved Willow	276
Sedum villosum	Hairy Stonecrop	211
Zostera noltei	Dwarf eel-grass	159

Found in less than 20% (562) of 10km squares in GB

Scientific Name	English Name	No. of 10km squares recorded in the Atlas
Asplenium viride	Green Spleenwort	435
Carex diandra	Lesser Tussock Sedge	378
Carex lasiocarpa	Slender Sedge	461 (Walls Hill and Hartfield Moss in Ren.)
Carex limosa	Bog-sedge	423
Carex pauciflora	Few-flowered Sedge	377
Carum verticillatum	Whorled Caraway	296
Diphasiastrum alpinum	Alpine Clubmoss	539
Drosera intermedia	Oblong-leaved Sundew	508
Hammarbya paludosa	Bog Orchid	302
Oenanthe lachenalii	Parsley Water-dropwort	551 (“Erskine” in Renfrewshire)
Pseudorchis albida	Small-white Orchid	Old records only
Pyrola minor	Lesser Wintergreen	558
Rubus chamaemorus	Cloudberry	394
Ruppia maritima	Beaked Tasselweed	363 (“Langbank” in Renfrewshire)
Saxifraga hypnoides	Mossy Saxifrage	406
Stellaria nemorum	Wood Stitchwort	432
Trientalis europaea	Chickweed Wintergreen	514 (Bardrain Glen in the 1940s)

Renfrewshire Significance

Found in 5 sites or fewer in Renfrewshire: very uncommon

Scientific Name	English Name	SINC No. or other sites where found
Campanula latifolia	Giant Bellflower	087
Carex acuta	Slender Tufted-sedge	104
Carex arenaria	Sand Sedge	“Erskine”
Carex dioica	Dioecious Sedge	048
Carex disticha	Brown Sedge	105
Carex paniculata	Greater Tussock Sedge	016, 055, 067
Carex pauciflora	Few-flowered Sedge	061
Carex pilulifera		051
Carex pulicaris		030
Carex spicata	Spiked Sedge	096
Centaurium erythraea	Centaury	051
Chrysosplenium alternifolium	Alternate-leaved Golden Saxifrage	030,
Corallorhiza trifida	Coral Root Orchid	062, Glen Moss SSSI
Cystopteris fragilis		030,
Ceratocapnos claviculata	Climbing Corydalis	005, 034,
Cruciata laevipes	Crosswort	076
Drosera anglica	Great Sundew	“Linwood, Houston”
Dryopteris carthusiana	Narrow Buckler-fern	055, 065
Eleocharis quinqueflora		048
Empetrum nigrum	Crowberry	024
Galium odoratum	Sweet Woodruff	033
Geranium pratense	Meadow Cranesbill	073, 077, 096, Rashielee Quay, 101

Scientific Name	English Name	SINC No. or other sites where found
Gymnadenia conopsea	Fragrant Orchid	Whinnerston
Gymnocarpium dryopteris		030, 033
Hippurus vulgaris	Marestail	066, 90,
Huperzia selago	Fir Clubmoss	061
Juniperus communis	Juniper	061, 106
Lathraea squamaria	Toothwort	“Finlaystone”
Listera cordata	Lesser Twayblade	“CMRP”
Listera ovata	Twayblade	072, St. Cuthbert’s Playing Fields in Johnstone, Newshot Island LNR
Littorella uniflora	Shoreweed	066,
Lysimachia thyrsiflora	Tufted Loosestrife	051
Lythrum salicaria	Purple Loosestrife	076
Melica uniflora		030
Menyanthes trifoliata	Bogbean	027, 051, 053, 055, 066
Nuphar lutea	Yellow Water Lily	066, 067
Ophioglossum vulgatum	Adder’s-tongue	“Skiff Wood” old record
Paris quadrifolia	Herb Paris	“Bardrain Glen in the 1940s”
Phegopteris connectilis	Beech Fern	033
Platanthera bifolia	Lesser Butterfly Orchid	Dargavel Burn SSSI,
Polystichum setiferum	Soft Shield Fern	“Paisley”
Pyrola minor	Lesser Wintergreen	001,
Rhinanthus minor	Yellow Rattle	051, 055, 073, 077
Rorippa palustris	Marsh Yellow-cress	025
Salix aurita	Eared Willow	061
Salix myrsinifolia	Dark-leaved Willow	Shovelboard SSSI

Scientific Name	English Name	SINC No. or other sites where found
Stellaria nemorum	Wood Stitchwort	033
Triglochin palustris		
Trollius europaeus	Globeflower	
Utricularia minor	Lesser Bladderwort	033, 048
Utricularia vulgaris	Greater Bladderwort	Glen Moss SSSI
Vaccinium oxycoccos	Cranberry	"CMRP, Corsliehill"
Vaccinium vitis-idaea	Cowberry	"CMRP"
Viola lutea	Mountain Pansy	030, 037,
Viola tricolor	Wild Pansy	061
Vulpia bromoides	Squirreltail Fescue	051

Found in 10 sites or fewer in Renfrewshire: uncommon

Scientific Name	English Name	SINC No. or other sites where found
Carex aquatilis	Water Sedge	020, 056? 066, Barmufflock Dam SSSI, 095, 104, 105
Carex diandra	Lesser Tussock Sedge	001, 048, 055, Barmufflock Dam SSSI, Dargavel Burn SSSI, 008
Carex echinata	Star Sedge	023, 024, 033, 039, 055, 066, Lawmarnock Rd West,
Carex limosa	Bog-sedge	029? 048, 055, Barmufflock Dam SSSI, Glen Moss SSSI, Shovelboard SSSI
Carum verticillatum	Whorled Caraway	001, 003, 010, 019, 039, 061, Lawmarnock Rd West,
Drosera rotundifolia	Sundew	001, 029, 033, 048, 049, 051
Hydrocotyle vulgare	Marsh Pennywort	002,051,053,055,066, Lawmarnock Rd West,
Lychnis flos-cuculi	Ragged Robin	027, 067, 073, 085, 099, Lawmarnock Rd West,
Meum athamanticum	Spignel	019, 026, 044, 046, 088, Lawmarnock Rd West,

Found in 20 sites or fewer in Renfrewshire: less common

This table will be populated as ongoing survey work across Renfrewshire progresses during the lifespan of this Biodiversity Action Plan.

Scientific Name	English Name	SINC No. or other sites where found
Platanthera chlorantha	Greater Butterfly Orchid	SINCs 026, 030, 036, 038, 046, 65, Glen Moss SSSI, Dykebar Hospital, St. Cuthbert's Playing Fields in Johnstone, Lawmarnock Rd West, Barcraigs Reser-voir,

Appendix 2: Bird Species of Conservation Concern in Renfrewshire

Since the outset, the LBAP process in Renfrewshire has depended on the expertise and inputs of the Scottish Ornithologists' Club Clyde Branch for its ornithological components. This continues to be the case for the Renfrewshire Biodiversity Action Plan and SOC has provided updated information on local bird species of conservation concern, which is based on many years of monitoring bird populations and distributions.

The SOC has reviewed the latest Red and Amber lists included in Birds of Conservation Concern 4 and concluded that the following species are the most pertinent for the Renfrewshire Biodiversity Action Plan:

Red List	Amber List
Hen Harrier	Whooper Swan
Lapwing	Shelduck
Cuckoo	Red Grouse
Skylark	Oystercatcher
Starling	Common Sandpiper
Song Thrush	Redshank
Mistle Thrush	Snipe
Spotted Flycatcher	Black-headed Gull
Whinchat	Lesser Black-backed Gull
House Sparrow	Short-eared Owl
Tree Sparrow	Swift
Grey Wagtail	Kingfisher
Tree Pipit	Kestrel
Linnet	House Martin
Lesser Redpoll	Dipper
Yellowhammer	Meadow Pipit
	Bullfinch
	Reed Bunting

SOC Clyde Branch has narrowed down these lists further to a selection of species which are realistically viable for conservation measures in Renfrewshire. Even within this selection, SOC has recognised the resource challenges faced by all the biodiversity partners by identifying local priority (*) candidates and indicated the summary reasons for selection in the following tables below.

Red List

SPECIES	SOC comments on conservation requirements	Notes on status and distribution
Hen Harrier *	The Renfrewshire Heights Special Protection Area (SPA) lies entirely within Clyde Muirshiel Regional Park. The designation was applied because of its national importance for breeding Hen Harrier. This is one of the highest categories of nature conservation importance in the UK, indeed Europe, and there is a responsibility to monitor the breeding population and address the habitat requirements of this species.	The breeding population of Hen Harriers declined after the publication of the 2004 LBAP and there are currently no breeding pairs in Renfrewshire.
Lapwing *	This is a declining species in Renfrewshire, thought to be mainly due to lack of suitable 'honeypot' breeding sites, which theoretically could be relatively easily created through habitat manipulation and cooperation from farmers.	Only a handful of sites in Renfrewshire believed to still hold nesting Lapwings.
Starling	Really requires action at national and farming policy level, but maintained grassland under public ownership, private golf courses, etc., could be managed more sympathetically towards sustaining the bird's natural (invertebrate) food supply.	Reasonably common and widespread as a breeding species in Renfrewshire.
Song Thrush *	Conservation of scrub woodland habitat and selective naturalisation of public parkland; also education on use of garden pesticides.	Reasonably common and widespread as a breeding species in Renfrewshire.
Mistle Thrush	Creation of native woodlands in semi-upland habitats.	Reasonably common and widespread as a breeding species in Renfrewshire.
Spotted Flycatcher	Habitat manipulation, mainly by appropriate tree planting at suitable sites.	No recent records of nesting in Renfrewshire.

SPECIES	SOC comments on conservation requirements	Notes on status and distribution
Whinchat *	Habitat manipulation by creating open neutral grassland habitats, lightly grazed; advising farmers and foresters on glade requirements.	Has declined as a result of changing agricultural practices.
Tree Sparrow *	Retention of traditional colony sites, e.g old farm buildings; erection of nest boxes in suitable habitat; supplementary feeding.	Has declined as a result of changing agricultural practices.
Grey Wagtail	Suitable light woodland management and creation along water courses; installation of nesting niches in bridge construction and maintenance works.	Reasonably common and widespread as a breeding species in Renfrewshire.
Linnet	Conservation of areas of gorse scrub and farmland hedgerows; control of burning by farmers, especially during nesting season; sensitive road verge maintenance planning.	Has declined as a result of changing agricultural practices.
Yellowhammer	Encourage farmland biodiversity appropriately for the species.	Has declined as a result of changing agricultural practices.

Amber List

SPECIES	SOC comments on conservation requirements	Notes on status and distribution
Whooper Swan *	Urgent action required to sustain Renfrewshire's internationally important flock of Icelandic Whooper Swans. Specifically, encourage an appropriate land management regime on the sanctuary area within the Black Cart Special Protection Area.	Reduction in recent years as a wintering bird in Renfrewshire.
Shelduck *	Encourage research into the decline of wintering and breeding Shelduck on the Inner Clyde Special Protection Area.	
Red Grouse	Encourage moorland management of the Renfrewshire Heights SPA to produce a naturally sustainable population of Red Grouse, as part of an overall plan for the conservation of biodiversity focusing on Hen Harrier.	
Redshank	Integrate with appropriate wetland habitat plans. Encourage research into the decline of wintering and passage Redshank on the Inner Clyde Special Protection Area	Reduction in recent years as a wintering bird in Renfrewshire. Only a handful of sites in Renfrewshire believed to still hold nesting Redshank.
Snipe	As Redshank for breeding habitat, also moorland water table management.	Only a handful of sites in Renfrewshire believed to still hold nesting Snipe.
Black-headed Gull	Review previous draft plan. The species has continued to decline.	
Lesser Black-backed Gull	Attempt to halt and where possible reverse the effects of illegal persecution.	
Short-eared Owl	Integrate ecological requirements to the Hen Harrier prescribed management plan for the Renfrewshire Heights SPA.	Only occurs in Renfrewshire as an occasional winter visitor.
Swift	Being tackled through Action PP14 above	Scattered and to be clarified by the survey element of Action PP14
Kingfisher	Design riparian tree planting to discourage disturbance of nests by anglers.	Localised breeding population.
Kestrel	Create more open neutral grassland areas and wider woodland glades to facilitate improved hunting habitat.	Has declined as a result of changing agricultural practices.

SPECIES	SOC comments on conservation requirements	Notes on status and distribution
House Martin	Initiate public education programme to deter illegal destruction of nests on residential and other properties.	Widespread but dependent on small, isolated habitats.
Dipper	Installation of nesting niches/boxes in bridge construction and maintenance works.	Widespread but dependent on small, isolated habitats.
Bullfinch	Encourage conservation and retention of scrub woodland, and inclusion of Prunus and Malus fruit tree species.	Small but widespread population in Renfrewshire.
Reed Bunting	Integrate with appropriate wetland habitat plans, and conserve areas of purple moor grass Molinia caerulea (winter seed supply).	Widespread but dependent on small, isolated habitats.

Other Bird Species of Local or Regional Significance

Only species with potential practical opportunities for local conservation measures are listed here.

SPECIES	SOC comments on conservation requirements	Notes on status and distribution
Lesser Whitethroat	Lesser Whitethroat is retained as an LBAP species in Renfrewshire because: 1.They are locally rare in both Renfrewshire and Ayrshire. 2.The breeding habitat in itself is extremely rare in those counties. 3.It remains a perfect indicator species for quality scrubland habitat, which benefits other important scrub species i.e. Song Thrush & Linnet. 4.Long term field research in Renfrewshire & Ayrshire (SW Scotland) is still ongoing and vitally important as, according to the British Trust for Ornithology, this is the only research project in the UK that is looking into the Lesser Whitethroat specifically and the distribution results are an important source of information for a migratory species which has benefited from climate change. 5.Funding for habitat management (restoration & replanting) is still ongoing in Gleniffer Braes Country Park. 6.Scientific papers about habitat management / distribution and habitat preference changes for the Lesser Whitethroat are in preparation for future publication.	Species has only a tentative presence in Renfrewshire, nesting intermittently at a single site in Gleniffer Braes Country Park.

For more information visit Renfrewshire Councils website at

www.renfrewshire.gov.uk

or contact

strategyandplace@renfrewshire.gov.uk

Customer service centre
Renfrewshire House
Cotton Street Paisley
PA1 1AN

0300 300 0300

Renfrewshire Council