

The background of the slide features the Falkirk Council Coat of Arms. It is a shield divided into four quarters. The top-left quarter shows a castle tower. The top-right quarter shows a stag's head with antlers. The bottom-left quarter shows a sailing ship on water. The bottom-right quarter shows a bird with spread wings. Above the shield is a crown with four fleurs-de-lis. Below the shield is a ribbon with the motto 'A'NE FOR A'.

Agenda Item 6

Second Nature: A Biodiversity Action Plan for the Falkirk Council Area

Falkirk Council

Title: **Second Nature: A Biodiversity Action Plan for the Falkirk Council Area**
Meeting: **Executive**
Date: **16 October 2018**
Submitted By: **Director of Development Service**

1. Purpose of Report

- 1.1. The third Biodiversity Action Plan for the Falkirk Council area has been finalised following public consultation. It is entitled “Second Nature: A Biodiversity Action Plan for the Falkirk Council Area”. This report details the results of the public consultation process and seeks Executive approval of the finalised plan.

2. Recommendation(s)

- 2.1. **It is recommended that the Executive:**

- (1) approves “Second Nature: A Biodiversity Action Plan for the Falkirk Council Area”.**
- (2) instructs officers to publish and implement the Action Plan.**

3. Background

- 3.1 The Council-led Falkirk Area Biodiversity Action Plan process works to conserve and enhance the wild plants, animals and habitats of the Falkirk Council area. It aims to coordinate and focus the work of numerous local organisations and individuals, to help conserve our most important and/or threatened local wildlife.
- 3.2 Maintenance of an up to date Biodiversity Action Plan is vital to Falkirk Council fulfilling its statutory duty to further the conservation of biodiversity detailed in the Nature Conservation (Scotland) Act 2004.
- 3.3 The first Biodiversity Action Plan for the Falkirk Council area was published in 2002. A revised plan was published in 2011. These plans set out the actions or projects required to conserve this area’s most important and/or threatened wildlife. To date over 450 actions or projects have been completed to help conserve and improve local wildlife.
- 3.4 A third, updated draft plan was presented to the Executive on 15th May 2018. The Executive:
- i) approved the draft plan for consultation purposes
 - ii) instructed officers to undertake public consultation on the draft plan

- iii) instructed officers to prepare a finalised plan and report back to the Executive for final approval

4. Consultation process

- 4.1 The draft plan went out to public and stakeholder consultation for a period of 8 weeks during June and July 2018.
- 4.2 The draft plan and an invitation to comment was posted on the Council's website. Links to this were included in three Facebook posts on 'FalkirkExplored' during the consultation period. These posts reached at least 1150 people.
- 4.3 The link to the draft plan online and an invitation to provide comments was sent directly to:
- all active Community Councils
 - all elected members
 - 9 interested individuals or environmental experts
 - 50 representatives from conservation, community and landowning organisations
- 4.4 Paper copies of the plan were made available in all the areas libraries and at Abbotsford House.
- 4.5 10 consultation responses were received from:
- Buglife Scotland
 - Central Scotland Green Network Trust
 - Falkirk Community Trust
 - Plantlife Scotland
 - Royal Society for the Protection of Birds
 - Scottish Environment Protection Agency
 - Scottish Natural Heritage
 - Scottish Water
 - 2 individuals
- 4.5 The responses were all broadly supportive of the approach taken by the document; the vision, the priority habitats and species it identified and the actions included in the action plans. Most of the suggested changes related to either:
- providing additional information and descriptive text, or
 - adding additional actions.
- 4.6 A summary of the responses received and how these have informed the final plan is attached in Appendix 1.

5 The Finalised Plan

5.1 The finalised plan (in Appendix 2) includes:

- An introduction to the area's wildlife and why we need to conserve it;
- A vision and targets for local wildlife conservation and enhancement; and
- A series of 9 action plans. These list 147 actions or projects to conserve and enhance our most important or threatened local wildlife.

Important measures introduced in the plan include:

- Developing and implementing long term management plans for the protected sites at Bothkennar and Kinneil Lagoons;
- Creating additional new meadows and other pollinator habitat as part of the 'Pollinator Parks' and 'John Muir Pollinator Way' projects;
- Reviewing the Council's open space maintenance regimes, establishing a range of grass cutting options including some of benefit to wildlife;
- Restoring 10 raised bog sites;
- Implementing a pond project – mapping our existing ponds, raising awareness of pond wildlife and improving and creating networks of ponds for wildlife;
- A range of projects to protect and conserve important species including: mud snail, water vole, pine marten, bluebell, great crested newt, large heath butterfly, and bean goose;
- A project to enhance the wildlife value of our existing woodlands;
- Integrating action for wildlife in community growing and orchard projects.
- Enhancing and promoting our Local Nature Reserves; and
- Projects to promote our local wildlife and encourage people to look after it.

6 Publication & delivery

6.1 It is anticipated that the finalised document will be published in early 2019. While the document will be primarily made available in electronic form, a limited number of paper copies will also be produced.

6.2 Delivery of the action plan will commence as soon as Executive approval has been achieved. It is anticipated that a partnership event will be held following publication of the document in early 2019. This will help to fully engage partner organisations in helping to deliver the action plan.

7 Implications

Financial

7.1 Funding for project work will be met from existing budgets and through bids for support from external funding sources. Over the last five years over £39,500 of external funding has been directly secured by Falkirk Council to help deliver our current plan. In addition significant external funding has been secured by partner organisations working with Falkirk Council on its delivery.

Resources

- 7.2 The Biodiversity Action Plan will be implemented using existing staff resources.

Legal

- 7.3 None

Risk

- 7.4 None

Equalities

- 7.5 An equality and poverty impact assessment is not required.

Sustainability/Environmental Impact

- 7.6 The Biodiversity Action Plan will have a positive environmental effect. It has been agreed in consultation with the Scottish Government's SEA Gateway that a full Strategic Environmental Assessment is not required.

8 Conclusions

- 8.1 Production of a revised and updated Biodiversity Action Plan is necessary to ensure continued success in conserving and enhancing our local wildlife. The plan is also an essential part of the Council's response to its statutory duty to further the conservation of biodiversity.
- 8.2 The public consultation process resulted in a number of comments. All were broadly supportive. Most of the suggested changes and additions to text and actions have been incorporated into the finalised plan.

Director of Development Services

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Date: 02 October 2018

Appendices

Appendix 1 - Summary of consultation responses and changes to the draft plan

Appendix 2 - "Second Nature: A Biodiversity Action Plan for the Falkirk Council Area"

List of Background Papers:

The following papers were relied on in the preparation of this report in terms of the Local Government (Scotland) Act 1973:

Second Nature: A Biodiversity Action Plan for the Falkirk Council Area - consultation draft (April 2018)

Falkirk Area Biodiversity Action Plan 2011-2014

Appendix 1

Second Nature: A Biodiversity Action Plan for the Falkirk Council Area

Summary of consultation responses and changes to the draft plan

Category of response	Summary of consultation responses	Changes made to the plan	Comment
General, over-arching comments	All respondents were supportive of the plan. Some highlighted specific species, habitats or actions that they were pleased to see included.	No change	
	Several respondents made positive comments about the format of the plan, praising its clear and concise text.		
	One respondent suggested the inclusion of a map.	No change at present	A map will be included during the final design and publication phase.
	1 respondent suggested that the plan should cover a specific time period and should indicate in which year specific actions should be delivered.	No change	Time constraints can have benefits for promoting and tracking progress. However, it is considered that the plan should be left as flexible as possible. This will ensure that resources and opportunities can be best used as they become available. More specific work programmes will be agreed as actions are developed and delivered.
Corrections & minor additions	Several respondents asked for additional contact details or details of more volunteer opportunities to be added to section 7.	All suggested corrections and minor additions made	

Vision	<p>All comments about the vision were supportive.</p> <p>1 response suggested referring to invasive non-native species in the vision.</p>	No change	The vision was developed with a range of stakeholders. Actions relating to invasive non-native species still fit well within the existing vision.
Additional or amended actions	A range of new actions were suggested by respondents.	<p>13 suggested new actions added. (See below for detail.)</p> <p>4 suggested new actions not added</p>	Suggested new actions were not included where they are: i) already a legal requirement or ii) there is no capacity or resource to deliver them.
	Several amendments to actions were suggested.	5 actions amended (See below for detail.)	
	Several respondents requested aspirational actions to be 'upgraded' to main actions.	No change	No change has been made to the aspirational actions as they will only be possible should the right opportunities or resources become available.
	Several respondents suggested the same action should appear in several action plans, as they were relevant to both.	No change	Actions will appear in just one action plan. In some cases text has been added to refer readers to relevant actions in other action plans.
Requests for more detail	3 respondents requested greater detail (timescales, costs, detailed plans etc.) for specific actions.	No change	More detail for each action will be made available as the actions are delivered.

Offers of help to deliver actions	Several respondents offered to help deliver a number of the actions.	All offers of help added	Those offering support have been added as 'delivery partners' in the appropriate parts of the plan.
Additional descriptive text	Several respondents suggested additional text to: <ul style="list-style-type: none"> highlight the importance of certain habitats and the services they offer reflect the social and economic value of wildlife reflect the social or economic benefits of certain actions 	Additional text added	Additional text has been added, as suggested. However, this has been kept brief to maintain the concise, easy to read nature of the document.
	Several respondents suggested additional text to show how the plan fits with: <ul style="list-style-type: none"> Other council policies and strategies Scottish biodiversity targets International biodiversity targets 	Additional text added.	Additional text has been added, as suggested. However, this has been kept brief to maintain the concise, easy to read nature of the document.
	1 respondent asked that Snowberry be highlighted in the text of the Invasive non-native species action plan.	No change.	The plan names those species of most immediate concern in this area. However it makes clear that there are many other species of concern.
Resources	1 respondent highlighted the importance of the Council's Ranger Service and the need to fully resource it. 1 respondent noted the Council's 'Biodiversity Duty' and the need to adequately resource work to fulfil this duty.	No change.	
	1 respondent highlighted the valuable role of volunteers and asked that the council try to quantify this value.	No change.	Volunteers are recognised as incredibly important and valuable.

The 13 new actions that have been added to the Plan are:

1	Ensure bird data gathered for the Grangemouth Flood Protection Scheme is made available for use by others.
2	Support the development and implementation of the Inner Forth Futures Project.
3	Continue the enhancement of Policy Bing, Lionthorn to deliver benefits for wildlife and local people.
4	Review the condition of non-council owned grassland SINC's and Wildlife Sites and promote beneficial management where possible.
5	Promote well designed SUDs features in new developments to benefit wildlife.
6	Do a de-culverting project, should an appropriate opportunity arise. Use this as a demonstration site to promote other local de-culverting projects.
7	Promote high quality design and maintenance of openspace secured through development, to benefit wildlife. Including maximising native plant diversity in new planting schemes.
8	Renew and update relevant Local Development Plan policies and supplementary guidance to protect and benefit wildlife.
9	Prepare supplementary guidance on Green Infrastructure, promoting careful design and location to benefit wildlife.
10	Promote relevant environmental education resources to schools and other local groups (e.g. the RSPB's Forth estuary resource boxes).
11	Develop an online volunteering hub to help people find local opportunities for environmental volunteering.
12	Promote the control of invasive non-native species which currently occur in relatively few locations but which have a high risk of becoming widespread and more costly to control in the future.
13	Do a pilot project to control Himalayan Balsam on one tributary or small burn.

The 5 actions that have been amended in the Plan are:

1	Agree and implement a long term restoration and management plan for Kinneil Lagoons.
2	Take opportunities to raise awareness of the Firth of Forth Special Protection Area amongst local communities, landowners <u>and businesses;</u> <u>highlighting its positive benefits as well as the protection it has.</u>
3	A pilot project to safeguard and enhance wildlife road verges, <u>including provision of advice on road verge management to benefit wildlife.</u>
4	Undertake <u>the Upper Avon Enhancement</u> Project to enhance the upper reaches of the River Avon – aiming to improve its current 'bad' classification.
5	Survey areas of suitable water vole habitat close to known or suspected water vole sites. Assess the need for habitat enhancement <u>and mink control</u> where water voles are found.

The 4 suggested actions not added to the Plan are:

1	An action relating to carrying out Habitat Regulations Assessments and implementing any appropriate mitigation.
2	Apply biodiversity policies through the development management process.
3	Undertake deer management to improve woodland condition and ground flora.
4	Extend the action to control Japanese knotweed and giant hogweed on the river systems, to control of all invasive non-native species on river systems.

Appendix 2: Finalised Biodiversity Action Plan

Second Nature

*A Biodiversity Action Plan
for the Falkirk Council area*

August 2018

Contents

	Page
Our wildlife!	1
Why is our wildlife important?	3
What threats does our wildlife face?	3
Whose job is it to look after our wildlife?	4
What do we want to achieve?	4
What do we need to do?	5
What can you do?	6
 Action Plans	
• Estuary	8
• Farmland and grassland	10
• Heath and bog	12
• Inland water and wetlands	14
• Urban	16
• Woodland	28
• Bean goose	20
• Connecting people and wildlife	22
• Invasive non-native species	24
 Project summary tables	26

1. Our wildlife!

The Falkirk Council area is home to a rich variety of wildlife.

It has a fantastic array of habitats ranging from estuary to peat bog; from parks and gardens to ancient woodland.

Our many different habitats support thousands of different types of plants and animals, some of them nationally important or rare.

We also have some really special natural places where wildlife can thrive. Over one hundred local sites are protected because of their special importance for wildlife.

There are many accessible sites where you can discover and enjoy our fascinating local wildlife.

By 'wildlife' we mean all living things – plants, animals, micro-organisms, habitats, and wild places. You might sometimes hear this called 'Biodiversity'.

Our habitats

This area has a wonderful variety of different habitats. This includes 24 types of habitat which are UK priorities for conservation action.

- There are over 580km of rivers and burns locally. They are great places for wildlife & people!
- Woodlands, ancient and new, cover about 33 km² of this area. Why not get out and visit one?
- We have many ponds, pools and lochs. They are home to a huge number of plants & animals!
- Nature is great at recolonising derelict industrial sites. These sites can be amazing havens for wildlife.
- The Forth & Clyde canal and the Union canal are wonderful wildlife corridors.
- Several new meadows have been created recently. Their wildflowers and grasses are perfect for pollinating insects.
- Farmland covers much of this area. Features like hedgerows, trees, pools & field margins can be great for wildlife.
- The Forth Estuary stretches for 48kilometres. It includes mudflats, saltmarsh and rare saltwater lagoons.
- Raised bogs take thousands of years to form and are nationally rare. We have many raised bogs in this area.
- Our parks and gardens cover a huge area. They are a home to wildlife right on our doorsteps.

- About 20% of our area is urban. Greenspaces in towns and cities provide vital refuges for wildlife.

Our plants and animals

This area is home to many fascinating plants and animals. Some of them are nationally important or threatened. At least 45 of our plants and animals are UK priorities for conservation. A further 19 are Scottish priorities.

- Great crested newts are a European protected species. They thrive in several local ponds.
- Every year the Forth Estuary is home to thousands of wintering waders and wildfowl.
- The much loved bluebell brings spring colour to our woodlands.
- A unique group of orchids grows in this area. Only a handful of places in the country have similar ones.
- Specialist invertebrates, like the rare Hobo spider, love disturbed ground on old industrial sites.
- Salmon now live and breed in the River Carron and the River Avon.
- If you are lucky you might spot a lizard. Slow worms and adders also live here but are rarely seen.
- Our rivers and streams are home to otter families. In a few places water voles can also still be found.
- The round-leaved sundew grows on bogs. It doesn't get its food from the soil. Instead it catches bugs to eat!
- Over the last 10 years 38 young barn owls have fledged from nest boxes put up in this area.

- Insects like hoverflies and bees love wild flowers. They do a vital job pollinating crops.

2. Why is our wildlife important?

Wildlife plays a crucial role in our lives. A healthy and diverse natural environment is important.

- It is good for our physical and mental health.
- It creates pleasant places where we can live, work, play and grow.
- It provides us with many vital resources including food, textiles, timber, fuel, and medicines.
- It is estimated to be worth about £17.2 billion to the Scottish economy!
- It does an amazing job filtering our water, cleaning our air, storing flood waters, and soaking up carbon dioxide.
- It has a really important place in our culture, art and national identity.

Plus, our wildlife has intrinsic value; it is important in its own right. It's amazing, beautiful, awe inspiring and pulsing with life!

These benefits are not just for now. We need to make sure that future generations can enjoy them too.

3. What threats does our wildlife face?

The last century has seen dramatic declines in the number and health of many of our wild plants, animals and habitats. Human activities are placing ever-increasing demands on the natural environment.

Major threats to our wildlife include:

- **Fragmentation**
Our remaining natural areas are becoming smaller and more isolated.
- **Land use**
Much of our land is developed or intensively managed, often making it less attractive for wildlife.
- **Invasive non-native species**
Invasive plants and animals that have been introduced to an area by people can cause big problems for our native wildlife.
- **Pollution**
Pollution can weaken or kill our wild plants and animals, and damage the habitats where they live.
- **Our connection to nature**
Society is becoming less connected to nature. Fewer people are experiencing first-hand the wildlife around them.
- **Climate change**
Our plants and animals have to cope with a changing climate. Some may benefit but others will struggle to adapt.

4. Whose job is it to look after our wildlife?

We have a shared responsibility to look after our local wildlife for the good of current and future generations.

Everyone can play a part, including:

- Individuals
- Communities
- Falkirk Council
- Environmental organisations
- Landowners
- Wildlife experts
- Businesses
- Local clubs & interest groups
- Land managers
- Public bodies (like NHS or Scottish Canals)
- Schools and colleges

Over the past 17 years all these sorts of groups have helped to take action to protect and improve our local wildlife. This action plan will guide and encourage us all to keep working together, so that we can do more.

By law, public bodies like Falkirk Council have to look after our local wildlife. The 'Biodiversity Duty' places a legal duty on all public bodies to help conserve wildlife during their day to day work.

This plan is a vital way for the Council to make sure it is fulfilling its duty to protect and enhance our local wildlife. It is linked to other strategies and initiatives which also help to look after our environment. These include the: Falkirk Greenspace Strategy, Local Development Plan, Food Growing Strategy and Central Scotland Green Network.

5. What do we want to achieve?

By 2040 ...

Respecting, enjoying and looking after our wildlife is second nature to everyone.

So that:

- We all consider our impact on wildlife and look for opportunities to help wildlife as part of every job, project or activity we do.
- We have a rich variety of local wildlife which is healthy, robust and thriving.
- Our natural habitats are home to the full range of plants and animals we would expect to live there.
- Our natural habitats connect up to form an extensive habitat network for wildlife to live in and move through.
- We, and future generations, are able to enjoy and benefit from the many vital services and resources our local wildlife can deliver.
- Local organisations, groups and individuals are encouraged and supported to look after and improve their local wildlife.

This plan helps to focus our action where it is most needed. It aims to ensure that we use our time, money and enthusiasm to get the best results for local wildlife. It will also make sure that we concentrate on helping the wildlife that needs action most urgently.

We have already identified 20 local priority habitats and 102 local priority species. These are the habitats and species that we should

focus on. Lists of these habitats and species can be found on pages 36 and 37.

The Scottish Biodiversity Route Map 2020 identifies six big steps to improve the state of nature in Scotland. This action plan contributes to a number of these including:

- Ecosystem restoration
- Quality greenspace for health and education benefits
- Conserving wildlife in Scotland to secure the future of priority habitats and species;
- Sustainable management of land and freshwater
- Sustainable management of marine and coastal ecosystems

The Convention on Biological Diversity set 20 global targets, known as the Aichi Targets in October 2010, to be met by 2020. This action plan contributes to a number of these international targets, including:

- Awareness increased
- Biodiversity values integrated
- Sustainable consumption & production
- Habitat loss halved or reduced
- Pollution reduced
- Invasive species prevented and controlled
- Pressures on vulnerable ecosystems reduced
- Protected areas increased and improved
- Ecosystems & services safeguarded
- Ecosystems restored & resilience enhanced
- Knowledge improved, shared and applied

6. What do we need to do?

The following action plans detail projects which will benefit our local wildlife. They focus especially on work to help the habitats, plants and animals which we know are local priorities for action.

There are action plans covering the following themes:

- Estuary
- Farmland and grassland
- Heath and bog
- Water and wetland
- Urban
- Woodland
- Bean geese
- Connecting people and wildlife
- Invasive non-native species

The projects will be done by all sorts of different organisations, often working together. The action plans list some of the groups most likely to help get the work done. However, other groups and individuals are actively encouraged to join in.

Lots of other local projects are already happening to help wildlife. Other new projects (not included in these plans) may also happen. That's great! We will try to support and encourage any projects which help local wildlife.

This plan needs to be able to respond to new opportunities and challenges. Projects may be altered if needed and new projects might come forward. The action plans include some 'aspirational projects'. These are projects that it would be good to do if the resources and opportunities arise.

It is important that we check that these projects are being done and are benefiting our local wildlife. We will:

- Check annually that the projects in the action plans are being done.
- Encourage local wildlife recording, to help us measure how our plants, animals and habitats are doing.
- Review and update the action plans when necessary.

7. What can you do?

Everyone can help look after our local wildlife.

If you want to help us deliver some of the projects in the action plans please do get in touch.

There are also lots of other things you can do. Here are some ideas:

- Create areas for wildlife in your garden
- Help us record local wildlife
- Develop a space for wildlife in your local community, school or workplace
- Get involved in a local conservation group like the Falkirk Wildlife Volunteers Group
- Enjoy and look after your local green space.
- Get out and about to explore our local wildlife, and let us know what you find.

For more information about this plan or help to take action for local wildlife contact:

The Biodiversity Officer
Falkirk Council
Abbotsford House
David's Loan
Falkirk
FK2 7YZ

E-mail: biodiversity@falkirk.gov.uk
Tel: 01324 504950
www.falkirk.gov.uk

For inspiration, advice and how to get involved:	Contact or have a look at:
Wildlife gardening and making a home for nature	Jupiter Urban Wildlife Centre, Grangemouth: www.scottishwildlifetrust.org.uk Royal Society for the Protection of Birds www.rspb.org.uk/get-involved/
Local wildlife and wild places to explore	Facebook - falkirkexplored
Wildlife walks & activities	Falkirk Council Outdoor Rangers www.rangers@falkirk.gov.uk Facebook – falkirkexplored Falkirk Community Trust: www.falkirkcommunitytrust.org Facebook – FalkirkParks
Wildlife volunteering	Falkirk Wildlife Volunteer Group lesley.sweeney@falkirk.gov.uk Falkirk Community Trust: www.falkirkcommunitytrust.org Facebook – FalkirkParks
Wildlife spotting and recording	The Wildlife Information Centre: www.wildlifeinformation.co.uk Plantlife Scotland – Flora Guardians: www.plantlife.org.uk/scotland Plantlife Scotland Great British Wildflower Hunt: www.plantlife.org.uk/wildflowerhunt/ RSPB Big Garden Bird Watch:

	www.rspb.org.uk
Invertebrates	www.buglife.org.uk www.butterfly-conservation.org
Amphibians and reptiles	www.froglife.org
Birds	www.rspb.org.uk

Action Plans

Estuary Action Plan

The Forth Estuary is one of the major estuaries of the British coastline. It stretches for approximately 48km from just above Stirling to the Forth Road Bridge. Estuary habitats include saltmarsh, saltwater lagoons, and mudflats. They support a vast range of different plants and animals, many of them uniquely adapted to estuary life.

The Forth Estuary is home to thousands of waders and wildfowl. In winter there are internationally and nationally important flocks of birds such as pink-footed geese, knot, dunlins, and shelducks. The Forth Estuary is a designated Special Protection Area because of these wintering birds. The millions of invertebrates found in the estuary mud provide food for birds as well as for other aquatic animals. The estuary provides nursery grounds for fish and is home to marine mammals like seals and porpoises.

The estuary experiences a lot of human activity. As well as high levels of industrial activity there is also a lot of fishing and recreational use. These human pressures can have a significant impact on the ecological health of the estuary.

The conservation of our estuaries is further complicated by the impacts of climate change and sea level rise. It is important that our estuary wildlife is able to adapt to these changes.

Estuary habitats provide many ecosystem services, like absorbing flood waters. The Inner Forth Landscape Initiative recently completed about 50 projects around the Forth. A study suggests that these projects have the potential to deliver ecosystem services with a potential economic value of over £11.2 million.

What we have already done

Over the last ten years, many projects have helped to protect and improve the wildlife of the Forth Estuary. These include:

- Enhancement projects at Kinneil Foreshore, Bothkennar and Kinneil lagoon.
- Several other Inner Forth Landscape Initiative projects.
- A detailed bird survey and assessment of disturbance factors on the Forth Estuary from Dunmore to Blackness.
- Enhancement and management work at RSPB's Skinflats Reserve.
- Ongoing legal protection of the Firth of Forth Special Protection Area.
- Beach cleans by community and school groups.

What we need to do next

1	Agree and implement a long term management plan for Kinneil Lagoons.
2	Ensure restoration of Kinneil Landfill includes wildlife benefits.
3	Undertake further green network enhancement & management around the harbour area at Bo'ness and Grangepans (linking to Bridgeness and Kinneil Foreshore).
4	Deliver environmental enhancements as part of the Grangemouth flood prevention scheme, potentially including compensatory habitat for SPA species.
5	Produce and implement a management plan for Bothkennar Pools Site of Special Scientific Interest.
6	Do at least one beach clean / litter pick per year.
7	Deliver appropriate management and enhancement of the island and shoreline at Kinneil Foreshore Local Nature Reserve.
8	Monitor the use of the tern rafts at Bothkennar, doing maintenance as necessary and assessing the need for additional rafts if the original ones are used.
9	Take opportunities to raise awareness of the Firth of Forth Special Protection Area amongst local communities, landowners and businesses; highlighting its positive benefits as well as the protection it has.
10	Promote responsible recreation and dog walking along the

	foreshore, to minimise disturbance to the SPA bird species.
11	Ensure bird data gathered for the Grangemouth Flood Protection Scheme is made available for use by others.
12	Support the development and implementation of the Inner Forth Futures Project.

What we should do if we get a chance

As well as the above projects, it would be beneficial to do the following projects if resources become available.

1	Promote biological recording at important estuary sites.
2	Monitor invasive species in estuarine habitats and take action to control them.
3	Promote monitoring of nurdles (and other plastics) along the shoreline, with associated awareness raising campaigns and litter picks.
4	Reduce the use of disposable/one-use plastics within Falkirk Council and other partner organisations, to help combat marine pollution by plastics.

Who can help?

The following groups are likely to be important in getting these projects done:

Falkirk Council
Forth Estuary Forum
Friends of Kinneil (Kinneil Foreshore Management Group)
Inner Forth Landscape Initiative
Royal Society for the Protection of Birds
Scottish Natural Heritage
Volunteer biological recorders

..... but other groups and individuals can also help.

Priority estuary species, habitats and sites

Priority Species	Priority Habitats	Important Sites
Birds Black-tailed godwit Common Tern Dunlin Golden plover Great crested grebe Greylag goose Knot Pink-footed goose Pintail Red-breasted meganser Redshank Shelduck Teal	Estuary Intertidal mudflats Saline lagoons Saltmarsh	Skinflats Reserve Bothkennar (aka Skinflats) Kinneil Kerse Kinneil Foreshore Blackness Bay
Fish Atlantic salmon European eel River lamprey Sea trout Sparling Twaite shad		

Farmland and Grassland Action Plan

This area's countryside is dominated by farmland. Grassland and farm crops cover over 17,000 hectares. That is about 61% of the whole Falkirk Council area. Farming has a big impact on how the landscape looks and the wildlife it supports.

Farms often include features such as crops, set-aside, grassland, hedgerows, trees, dykes, ditches and field margins. They may also have areas of natural habitat like heath, rough grassland, woodland and wetland. All these can be good for wildlife, if managed appropriately. They provide food, shelter and breeding areas as well as corridors to help wildlife to move around the countryside. This is especially important where intensive farming makes the cropped area of fields less hospitable. Farm wetlands can also have major benefits for flood alleviation.

Our agricultural landscape is, to a large extent, a man-made environment. Continued management is essential to maintain many of the features and habitats that are valuable to wildlife. Agri-environment payment schemes have a big influence on how we deliver wildlife conservation on farmland.

This area also has 950 hectares of amenity grassland and further small pockets of unimproved or semi-improved grassland in urban areas. These include a number of recently created wildflower meadows.

Pollinating insects are critical to our food and farming industries, as well as our natural environment. In Scotland the value of pollinators for agricultural and horticultural crops is around £43million each year.

What we have already done

Over the last ten years, many projects have helped to protect and improve our farmland and grassland wildlife. These include:

- A barn owl nest box project

- An integrated habitat network study
- Management and enhancement of grassland at 8 Wildlife Sites, Sites of Importance for Nature Conservation and Local Nature Reserves
- A "Save the Wee Bees" campaign
- Meadow creation and management at 10 sites
- 'Pollinator Parks' and 'John Muir Pollinator Way' projects
- A tree sparrow nest box and feeding project

What we need to do next

1	Continue the Barn owl nest box project – relocating unused boxes and doing habitat enhancement at box sites.
2	Review Falkirk Council's open-space maintenance regimes. Work with Falkirk Council to establish a range of grass cutting options (including some of increased benefit to wildlife) - supported by appropriate machinery, training and awareness raising.
3	Carry out appropriate grassland management at all council owned Sites of Importance for Nature Conservation and Wildlife Sites.
4	Continue the Falkirk pollinator project (creating or enhancing several pollinator parks, John Muir pollinator way sites, or other sites for pollinators annually).
5	Promote the creation of pollinator habitat through awareness raising and training activities associated with the pollinator project.
6	Tree sparrow project – work to restore the number of tree sparrows using the Bo'mains site, including nest box cleaning and habitat improvement.
7	Kestrel nest box project - erect kestrel nest boxes alongside existing roost boxes and monitor their use.
8	Management and monitoring of the butterfly orchid site and meadow at Muiravonside Country Park.
9	A hedgerow project – establishing species-rich native hedges where they can provide habitat corridors between existing sites of value for wildlife.

10	Continue the enhancement of Policy Bing, Lionthorn to deliver benefits for wildlife and local people.
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What we should do if we get a chance

As well as the above projects, it would be beneficial to do the following projects if resources become available.

1	Farm ponds & wetlands project –creating a network of farmland ponds and wetlands.
2	A pilot project to safeguard and enhance wildlife road verges, including provision of advice on road verge management to benefit wildlife.
3	Monitor, influence and promote agri-environment schemes where possible.
4	Identify previously recorded Whorled caraway, Annual knawel, Purple rampion-fumitory and Moonwort sites and survey to see if the plants are still present.
5	Promote work on golf courses to benefit wildlife.
6	Review the condition of non-council owned grassland SINC's and Wildlife Sites and promote beneficial management where possible.

Who can help?

The following groups are likely to be important in getting these projects done:

Buglife	Callendar Estates
Central Scotland Green Network Trust	Falkirk Community Trust
Falkirk Conservation Volunteers Group	Falkirk Council
Individual farmers/landowners	Scotland's Rural College
Inner Forth Landscape Initiative	Scottish Wildlife Trust
Royal Society for the Protection of Birds	

..... but other groups and individuals can also help.

Priority farmland and grassland species, habitats and sites

Priority Species	Priority Habitats	Important Sites
Mammals Brown hare Birds Barn owl Bean goose Curlew Grasshopper warbler Grey partridge Kestrel Lapwing Linnet Skylark Snipe Swallow Tree sparrow Yellowhammer Invertebrates Common blue butterfly Swordgrass moth Plants Annual knawel Field scabious Greater butterfly orchid Harebell Lesser butterfly orchid Moonwort Ox-eye daisy Purple rampion-fumitory Smooth cat's ear Whorled caraway	Arable Neutral grassland Lowland dry acidic grassland Boundary features	The low lying carse-land in the northeast and east and the Avon valley are the main arable farming areas. Farmland to the west and south is dominated by grassland. Meadow sites include: Bonnyfield nature park Grangepans Kinneil Foreshore Camelon public park Policy Bing

Heath and Bog Action Plan

Heaths

In Scotland we most commonly associate heath with vast stretches of upland heather moorland. However other types of heath, supporting slightly different groups of plants, occur in lowland or coastal areas.

Heaths are home to many different animals. These include birds such as the meadow pipit, twite, and merlin, and moorland invertebrates like the large heath butterfly.

Heath in the Falkirk area tends to occur in relatively small pockets. These areas are important remnants and may still support valuable heathland species. Changing land use and poor management of heaths continues to be a threat.

Bogs

Bogs can basically be divided into two types: blanket bogs and lowland raised bogs. Although intermediate bogs can show characteristics of both.

Locally our most important bogs are raised and intermediate bogs. Raised bogs have a characteristic dome of peat which forms over thousands of years. They do a remarkable job absorbing greenhouse gases, filtering and slowing the release of water, alleviating flooding and supporting a distinctive range of plants and animals. Scotland's peatlands are estimated to store ten times more carbon than all of the UK's trees. If that was released (by the bogs being damaged) it would equate to more than 140 years of Scotland's carbon dioxide emissions.

Raised bogs are very vulnerable to drainage, over grazing, tree growth and peat removal. Across the UK over 95% of our raised bogs have been seriously damaged or destroyed. Many of our remaining peatlands could take hundreds of years to fully recover from past damage.

What we have already done

Over the last ten years, many projects have helped to protect and improve our heath and bog wildlife. These include:

- A survey for the large heath butterfly (which also identified Small pearl-bordered fritillaries and Green hairstreaks).
- Management of Darnrig Moss SSSI and Howierig Muir SSSI
- Start of the Falkirk Bog Restoration Project
- Review of bog and heath Wildlife Sites and Sites of Importance for Nature Conservation.
- Vegetation, protected species and peat depth surveys on many of our raised bogs.
- Development of planning policies to protect carbon rich soils such as peat.

What we need to do next

1	Falkirk Bog Restoration Project – implement practical restoration on at least 10 sites.
2	Encourage or put in place appropriate management of Wildlife Sites and SINC's that support heath habitat.
3	Provide advice to landowners of heath and bog sites (covering both habitat and species management).
4	Undertake a Large Heath butterfly survey at suitable sites.
5	Quantify current peat use by Falkirk Council and, if necessary, work to stop the purchase of peat or products made/grown using peat.
6	Maintain the protection of peat habitats through the planning process.
7	Survey or resurvey known or possible small pearl-bordered fritillary sites.

What we should do if we get a chance

As well as the above projects, it would be beneficial to do the following projects if resources become available.

1	Monitor the use of Letham moss and Gardrum Moss to identify opportunities for restoration and enhancement if possible.
2	Carry out reptile surveys at appropriate bog and heath sites, and identify any actions needed to protect or benefit reptiles.
3	Explore potential for enhancement at Dunmore Moss by trying to make contact with the landowner.
4	Extend the action to cease peat use to other partner organisations, as appropriate.
5	Establish the historical location(s) of <i>Lepidozia pearsonii</i> and survey to determine if it is still present.

Who can help?

The following groups are likely to be important in getting these projects done:

Buglife
 Butterfly Conservation
 Callendar Estates
 Central Scotland Green Network Trust
 Falkirk Council
 Froglife
 Landowners
 Royal Society for the Protection of Birds
 Scottish Natural Heritage
 Scottish Wildlife Trust

..... but other groups and individuals can also help.

Priority heath and bog species, habitats and sites

Priority Species	Priority Habitats	Important Sites
Birds Black grouse Curlew Grasshopper warbler Hen harrier Merlin Short-eared owl Snipe Twite Reptiles Adder Common lizard Slow worm Invertebrates Green hairstreak Large heath Plants Round-leaved sundew Liverwort (<i>Lepidozia pearsonii</i>).	Heath Lowland raised and intermediate bog	Barleyside Black Loch Moss SSSI and SAC Darnrig Moss SSSI Howeirig Muir SSSI Newcraig Moss Easter Greenrig Grangeneuk Garbethill Muir Salterhill Moss Shippytrouty

Water and Wetland Action Plan

Water and wetland habitats include:

- rivers and streams
- natural and man-made pools and lochs,
- reservoirs
- canals
- ditches and drainage channels,
- fens, marshes, flushes and swamps.

The Falkirk area includes over 580km of running water. These rivers, burns and ditches are home to lots of wildlife. They also form valuable wildlife corridors, linking other fragmented habitats.

The Falkirk Council area has many ponds, pools, lochs, and reservoirs. These support numerous aquatic species as well as providing feeding and roosting sites for other animals.

Two canals cross the Falkirk area, the Forth & Clyde Canal and the Union Canal. Canals are valuable wildlife areas. They also bring a little bit of countryside into the heart of built up and industrial areas.

Fens, marshes, swamps and flushes are important wetland habitats. They often occur in or next to other habitats such as bogs, marshy grassland, wet heath, or even woodland. They are vital for plants and animals that are especially adapted to wet conditions.

Water and wetlands are vulnerable to human activities because of their relatively small size. They receive most of their water from the land around them, so are sensitive to surrounding land use. Although pollution is a major factor in the health of wetlands, other factors like channel engineering and invasive species also have an impact.

What we have already done

Over the last ten years, many projects have helped to protect and improve our water and wetland wildlife. These include:

- Communities Along The Carron Association projects on the River Carron.
- Surveys for water voles at several key sites.
- Surveys for aquatic invertebrates (including mud snails).
- Pond creation and enhancement for Great crested newts.
- Installation of a fish pass and fish counter at Fankerton Weir.
- Work to enhance the upper reaches of the River Avon.
- Installation of dipper boxes on the Bonny Water.
- Habitat enhancement and management at Carron Dams Site of Special Scientific Interest and Local Nature Reserve.
- Riverfly Identification workshops
- Work to control invasive, non-native species along our rivers.

What we need to do next

1	Carry out a 'health check' survey of the River Carron, identifying further conservation and enhancement projects for the river.
2	Develop a project to engage local people in mapping, surveying creating, enhancing and looking after ponds for wildlife.
3	Enhance the Culloch Burn at the Rumlie, Slamannan.
4	Deliver environmental enhancements as part of the Grangemouth flood prevention scheme.
5	Undertake the Upper Avon Enhancement Project to enhance the upper reaches of the River Avon – aiming to improve its current 'bad' classification.
6	Protect and monitor known great crested newt sites.
7	Identify sites for pond creation and enhancement to link existing great crested newt sites. Create at least one new pond.
8	Enhance the Carron Lade, creating areas of open water.
9	Continue habitat management and community engagement at

	Carron Dams Local Nature Reserve.
10	Deliver a Mud Snail Project (focused on the known site in the Falkirk area) to protect the site, create suitable habitat nearby, breed & release mud snails, and raise awareness of the species.
11	Survey areas of suitable water vole habitat close to known or suspected water vole sites. Assess the need for habitat enhancement and mink control where water voles are found.
12	Continue the 'Fish in the Classroom' project.
13	Create and maintain a sand martin bank at Avonglen Quarry and encourage maintenance of the nest sites at Avondale.
14	<ul style="list-style-type: none"> Ensure the creation of new riparian parkland in association with development at Banknock South, Gilston & Cauldhame Farm.
15	<ul style="list-style-type: none"> Encourage river restoration and opportunities to open up culverted watercourses through the Development Management process.
16	<ul style="list-style-type: none"> Promote well designed SUDs features in new developments to benefit wildlife.

Note: actions relating to invasive non-native species that affect water and wetland sites are included in the Invasive, non-native species action plan.

What we should do if we get a chance

As well as the above projects, it would be beneficial to do the following projects if resources become available.

1	Riparian tree planting project (identify opportunities for riparian tree planting and implement tree planting projects).
2	Explore natural flood management opportunities.
3	Identify any particularly poor quality burns (especially within the urban area) and develop enhancement projects.
4	Develop a project to de-channelise the Culloch Burn through Slamannan, delivering channel enhancement and natural flood management benefits.

5	Do a de-culverting project, should an appropriate opportunity arise. Use this as a demonstration site to promote other local de-culverting projects.
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Who can help?

The following groups are likely to be important in getting these projects done:

Angling Clubs	Buglife
Communities Along The Carron Association	Falkirk Council
Central Scotland Green Network Trust	Froglife
Falkirk Conservation Volunteers Group	Scottish Canals
River Avon Federation	Scottish Natural Heritage
River Forth Fisheries Trust	Scottish Wildlife Trust
Slamannan Anglers Protective Association	Housebuilders
Scottish Environment Protection Agency	

..... but other groups and individuals can also help.

Priority water and wetland species, habitats and sites

Priority Species	Priority Habitats	Important Sites
Mammals Otter Water vole	Fen, marsh and swamp	Carron Dams SSSI
	Standing open water	Black Loch
Birds Dipper Kingfisher Reed bunting Sand martin Sedge warbler Teal Water rail	Canals	Loch Ellrig
	Rivers and streams	St Helen's Loch
		Forth & Clyde Canal
		Union Canal
		River Carron
Fish & amphibians Common frog		River Avon

Common toad Great crested newt Palmate newt Smooth newt Atlantic salmon Brook lamprey European eel River lamprey Sea/brown trout Invertebrates Mud snail (<i>omphiscola glabra</i>) Plants Bennett's pondweed Grass of Parnassus Ivy-leaved water crowfoot Pillwort Ragged robin Tufted loosestrife		Castlerankine Burn Avon Burn Bonny Water Little Denny Burn Red Burn Bonny Burn
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Woodland Action Plan

Within the Falkirk area there are over 1100 hectares of broad-leaved woodland. Over 800 hectares of this is semi-natural, in other words the sort of woodland that naturally occurs within Scotland. Much of this semi-natural woodland is over 150 years old.

This area has around 1500 hectares of conifer plantation, planted mainly for timber production. Other areas of woodland, often more recently planted, include farm woods, amenity woodlands, community woodlands, policy woodlands associated with large estates, and shelter belts or landscaping. Areas of scrub also provide valuable wildlife habitat.

Woodland is important for many of our plants and animals. The mature trees, dead wood and woodland floor are home to hundreds of different invertebrates, as well as more familiar woodland plants, birds and mammals. We tend to associate most woodland wildlife with broadleaved woods. However, conifer woods can also support many species, particularly if they are managed with wildlife in mind. In fact some species, like the red squirrel, particularly favour conifer woods.

The amount of broadleaved and conifer woodland in the Falkirk area has remained relatively stable over recent years. There remains a need to protect our ancient and semi-natural woodlands. There are also opportunities to improve the value of our woodlands for wildlife. This can be achieved by appropriate management and enhancement, and by connecting woodlands to create habitat networks. The Forestry and Woodland Strategy for this area includes a target for delivering 850 hectares of new woodland between 2015 and 2055.

What we have already done

Over the last ten years, many projects have helped to protect and improve our woodland wildlife. These include:

- New woodland creation.

- Management of Scottish Wildlife Trust woodland reserves at Carron Glen and Wallacebank Woods.
- Use of woods by schools as outdoor classrooms.
- A Phase I survey and Integrated Habitat Network study
- Enhancement of Polmont woods and other woodland Wildlife Sites.
- Enhancement of Larbert Hospital wood and its use as an outdoor classroom.
- Production of a Forestry and Woodland Strategy
- Appointment of an officer to look at management of the Council's woodlands.
- Designation of several additional woodland Wildlife Sites.

What we need to do next

1	Enhance existing woodlands to improve their value for wildlife – focusing on council owned woodlands, community woodlands and Wildlife Sites.
2	A pine marten project – surveying and monitoring populations, engaging with landowners and providing suitable habitat and den areas.
3	Provide guidance to owners of woodland Wildlife Sites and Sites of Importance for Nature Conservation, about enhancing woodlands for wildlife.
4	Produce a long term plan for the Council's woodland estate, ensuring that the programme of management and woodland expansion includes measures to benefit wildlife.
5	Plant native bluebells at a minimum of 10 suitable woodland locations (ensuring that no Spanish or hybrid bluebells are also present).
6	Survey or resurvey known or possible small pearl-bordered fritillary sites.
7	Use the integrated habitat network study to identify key areas for woodland management and expansion.

What we should do if we get a chance

As well as the above projects, it would be beneficial to do the following projects if resources become available.

1	Veteran trees project: Identification of our most valued veteran trees. Followed by wildlife surveys of the trees and planting of 'veteran trees of the future' nearby.
2	Try to identify the historical location(s) of <i>plagiochilia spinulosa</i> and hay-scented buckler fern and survey to see if they are still present.
3	Carry out bat box schemes at at least 5 suitable sites (including provision of materials and support for community groups to make and erect boxes).

Who can help?

The following groups are likely to be important in getting these projects done:

Butterfly Conservation
 Callendar Estates
 Central Scotland Green Network Trust
 Forestry Commission Scotland
 Falkirk Community Trust
 Falkirk Council
 Landowners
 Scottish Natural Heritage
 Scottish Wildlife Trust

..... but other groups and individuals can also help.

Priority woodland species, habitats and sites

Priority Species	Priority Habitats	Important Sites
Mammals Badger Brown long-eared bat Pine Marten Soprano pipistrelle Birds Bullfinch Cuckoo Green woodpecker Redpoll Song thrush Spotted flycatcher Tree pipit Wood warbler Woodcock Invertebrates Small pearl-bordered fritillary Plants Wych elm Hay-scented buckler fern Bluebell <i>Plagiochilia spinulosa</i> (liverwort)	Broadleaved and mixed woodland Lowland wood pastures and parkland	Carron Glen SSSI Avon Gorge SSSI 20 Wildlife Sites 11 Sites of Importance for Nature Conservation

Urban Action Plan

The urban area is where people and nature meet most often. A surprising variety of plants and animals have adapted to urban life. Many different habitats can also survive in urban areas and some actually need disturbed, post-industrial sites.

About 16% of the Falkirk Council area is buildings and gardens. As well as small remnants of semi-natural habitat like woodlands, the built landscape has some uniquely urban habitats. These include man-made structures, parks, churchyards and cemeteries, gardens, allotments, and waste ground.

Urban habitats are especially valuable where they form a network of open areas or wildlife corridors. These networks allow animals and plant seeds to move from site to site. Rivers and streams and their banks are especially important urban wildlife corridors.

Urban wildlife refuges can be particularly important for plants and animals whose natural countryside habitat is being lost or damaged. Some plants and animals are perfectly adapted to urban habitats. The helleborine orchids at Almond Bing depend on the old spoil heaps, a remnant of industrial activity.

Urban areas offer great opportunities for people to experience and enjoy wildlife. This can have significant emotional and physical health benefits. A recent study in Scotland suggested that urban parks and greenspaces provide us with health benefits worth around £40.5 million.

People have an enormous impact on our urban environment. This impact does not have to be negative; we are in an ideal position to improve our gardens, parks and other urban areas to benefit wildlife.

What we have already done

Over the last ten years, many projects have helped to protect and improve our urban wildlife. These include:

- Making 'Pollinator Parks' with new meadows and other planting.
- Managing our unique helleborine orchid population.
- Managing Local Nature Reserves at Bonnyfield, Carron Dams and Kinneil Foreshore.
- Publishing Biodiversity and Development Supplementary Planning Guidance.
- Protecting our locally designated Wildlife Sites and Sites of Importance for Nature Conservation.
- Protecting and improving our most important brownfield sites.
- Creating two green roofs in the Grangemouth area.
- Planting nectar-rich flowers on some roundabouts.
- Identifying semi-natural areas in the Open Space Strategy.
- Creating wildlife gardens and orchards in schools.

What we need to do next

1	Help schools to enhance their orchards and growing spaces for wildlife.
2	Promote wildlife enhancements at community growing sites.
3	Assess wildlife enhancement opportunities at council managed cemeteries and graveyards – implement a wildlife project at at least one site.
4	Continue to manage and enhance all brownfield Wildlife Sites and Garibaldi Bing.
5	Create and maintain a sand martin bank at Avonglen Quarry and encourage maintenance of the nest sites at Avondale.
6	Develop a project to promote wildlife gardening (making links to community growing, school gardens and existing wildlife gardening campaigns).
7	Monitor the helleborine orchids at Almond Bing and undertake management if required.

8	Create new 'Pollinator Parks' and 'John Muir Pollinator Way' sites, aiming to do at least two sites per year.
9	Continue to support the local management groups for the 3 Local Nature Reserves and promote enhancement projects at each site.
10	Promote appropriate management of urban Wildlife Sites and Sites of Importance for Nature Conservation. Ensure all council owned sites are under appropriate management.
11	Provide appropriate training to planners and other council staff as required
12	<ul style="list-style-type: none"> Create a new semi natural area in Zetland Park and provide new semi natural parkland in Whitecross to meet deficiencies identified within the Open Space Strategy.
13	<ul style="list-style-type: none"> Promote high quality design and maintenance of openspace secured through development, to benefit wildlife. Including maximising native plant diversity in new planting schemes.
14	<ul style="list-style-type: none"> Renew and update relevant Local Development Plan policies and supplementary guidance to protect and benefit wildlife.
15	<ul style="list-style-type: none"> Prepare supplementary guidance on Green Infrastructure, promoting careful design and location to benefit wildlife.

Note: actions in several other action plans are also relevant to the urban area e.g. de-culverting water courses or pond projects.

What we should do if we get a chance

As well as the above projects, it would be beneficial to do the following projects if resources become available.

1	Develop a House sparrow nest box project
2	Do a pilot project to manage road verges, roundabouts etc. to benefit wildlife.
3	Improve greenspace in housing association and council housing areas to benefit wildlife.
4	Provide a section in Council building maintenance manuals covering wildlife opportunities and protection.

5	Assess the potential for green roofs on council buildings as buildings come up for maintenance review.
6	Develop a Rain Gardens project.
7	Do surveys for swifts in known or suspected nesting areas and promote public reporting of sightings.
8	Promote work on golf courses to benefit wildlife.
9	Do bat box schemes at at least 5 suitable sites (including provision of materials and support for community groups to make and erect boxes).

Note: aspirational action on wildlife road verges in the Farmland and Grassland action plan is also relevant to the urban area.

Who can help?

The following groups are likely to be important in getting these projects done:

Buglife	Central Scotland Green Network Trust
Jupiter Urban Wildlife Centre	Falkirk Conservation Volunteers Group
Falkirk Council	Forth Environment Link
LNR management groups	Plantlife Scotland
Scottish Wildlife Trust	The Conservation Volunteers Scotland

..... but other groups and individuals can also help.

Priority urban species, habitats and sites

Priority Species	Priority Habitats	Important Sites
Mammals Brown long-eared bat Soprano pipistrelle bat Hedgehog	Gardens	Almond Bing
	Urban greenspace	Bonnyfield Nature Park
	Urban wildlife corridors	Bridgeness shipbreakers
Birds Bullfinch Green woodpecker House sparrow	Open mosaic habitat on previously developed ground (including	Carron Dams Local Nature Reserve

Kestrel Sand martin Song thrush Starling Swallow Swift Amphibians Common frog Common toad Invertebrates Common blue butterfly Plants Bluebell Dune helleborine Field scabious Harebell Ox-eye daisy Wych elm Young's helleborine	bings). (Also known as Brownfield habitat)	Jupiter urban wildlife centre
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Bean Goose Action Plan

Conservation of the local bean goose flock is being actively progressed by a Bean Goose Action Group. This group covers the Falkirk and North Lanarkshire Biodiversity Action Plan areas. The group has produced and is implementing a species action plan for bean geese. The full action plan is currently available to download at www.northlanarkshire.gov.uk. The following is a brief summary.

The Slamannan Plateau lies just east of Cumbernauld, in the headwaters of the River Avon. The area includes two small lochs and their surrounding peatlands and associated areas of rough and improved grassland. These habitats support over-wintering roosting and feeding Taiga bean geese (*Anser fabalis fabalis*).

Bean geese over-winter on the Slamannan Plateau between late September and late February, with peak flock counts ranging between 214 and 267 birds over the last 5 years. The Slamannan Plateau bean goose flock now represents over half of the over-wintering bean goose population within Britain. It is therefore of national and international importance.

What we have already done

Over the last ten years, considerable work has been done to protect our wintering bean geese. This includes:

- The Bean Goose Action Group, founded in the early 1990's, co-ordinates action to conserve the wintering flock of bean geese on the Slamannan Plateau.
- Designation of the Slamannan Plateau SSSI and SPA to protect the bean geese.
- Voluntary bean goose fieldworkers monitor the wintering bean goose flock annually.
- SNH has developed and promoted a Natural Care Scheme to encourage management of parts of the bean goose study area to

benefit the bean goose flock. The management scheme is now under review.

- 18 geese have been fitted with GPS tracking devices and a further 22 have been ringed.
- A bean goose newsletter has been produced
- The bean goose website has been developed and holds a lot of information about the geese.
- The Local Development Plan, Supplementary Guidance and Planning applications are assessed for their potential impact on the bean goose flock.

What we need to do next

The full Bean Goose Action Plan includes many actions and can be viewed on the North Lanarkshire Council website. The main forthcoming actions include:

1	Continue the annual monitoring of the bean goose flock, including roost counts.
2	Continue the project to track the local and migratory movement of individual geese via GPS tagging.
3	Protect the bean goose flock from damaging development through the planning process.
4	Ensure that provision and promotion of countryside access does not cause disturbance to the bean goose flock.
5	Take opportunities to enhance bean goose habitat as part of raised bog restoration projects taking place on the Slamannan plateau.
6	Review the Bean Goose management scheme and promote a revised or new scheme as soon as possible.
7	Finalise a research and monitoring plan to prioritise research and monitoring needs and opportunities.
8	Highlight the work of the Bean Goose Action Group to similar groups and statutory nature conservation agencies within the Bean Goose range.
9	Develop contacts with universities, research units and other

	organisations/individuals with an interest in bean geese.
10	Produce a bean goose newsletter to promote the work of the group and raise awareness of the flock.
11	Develop an education programme with local primary schools.
12	Maintain, develop and manage the bean goose website.

..... but other groups and individuals can also help.

What we should do if we get a chance

As well as the above projects, it would be beneficial to do the following projects if resources become available.

1	Influence forthcoming agri-environment schemes to try to ensure that they deliver beneficial outcomes for the bean goose flock and support landowners with fields used by the bean geese.
2	Secure funding for a research trip to the Bean Goose breeding grounds by one or more of the monitoring officer(s).

Who can help?

The following groups are likely to be important in getting these projects done:

Bean Goose Action Group
 Falkirk Council
 Forestry Commission
 Landowners
 North Lanarkshire Council
 Royal Society of the Protection of Birds
 Scotland's Rural College
 Scottish Natural Heritage
 Volunteers
 Wildfowl and Wetlands Trust

Connecting people and wildlife

We want everyone to respect, enjoy and help look after our local wildlife. This will only happen if people understand how their lives are linked to wildlife and are encouraged to take action to conserve it.

Getting out and about to enjoy and look after local wildlife can have really positive benefits for those people who get involved. Many studies demonstrate the links between access to greenspace or outdoor activities and people's physical and mental wellbeing.

Education and awareness raising is fundamental to successful long term conservation of our local wildlife. This plan aims to increase awareness and understanding of our wildlife. It will encourage people to participate in wildlife conservation. It will also provide opportunities and support to help local groups and individuals to get involved.

What we have already done

Over the last ten years, many projects have helped to raise awareness and understanding of wildlife. Others have encouraged and supported people to get involved in wildlife conservation. These include:

- Organised wildlife walks, talks and activities
- Nature trails leaflet and other publications promoting the outdoors
- A regular 'Life' newsletter
- Wildlife recording events and training
- Schools projects such as the 'Where have you Bean Geese?' education programme.
- Art and interpretation projects, including creation of metal entrance features at Carron Dams.
- Ranger service events and activities
- Various campaigns and education projects from a range of organisations working locally
- Fish in the Classroom projects
- The work of the Jupiter Urban Wildlife Centre in Grangemouth

- Schools orchards and wildlife gardens
 - Specialist training sessions, for example for the Council's Development Services staff.
 - Webpages and facebook pages such as Fakirkexplored.

What we need to do next

1	Hold a Biodiversity Partnership event annually.
2	Help schools to enhance their orchards and growing spaces for wildlife.
3	Maps & Apps project – use interactive mapping, social media and apps to help people discover local wildlife and wild places and to get involved with biological recording and volunteering.
4	Continue the 'Fish in the classroom' programme
5	Develop the Wildlife Camera Trap project to enable more groups to get involved in camera trapping in additional areas.
6	Encourage biological recording and citizen science – promote one public recording initiative per year, with appropriate training and publicity. (Linked to other projects such as garden wildlife, ponds, swifts, bluebells etc.) .
7	Wildlife gardening promotion (with links to community growing)
8	Produce the 'Life' Newsletter annually
9	Support the Falkirk Wildlife Volunteer Group to provide volunteering opportunities and help deliver wildlife projects.
10	Pollinator patch project – to encourage people to plant for pollinators.
11	Continue the Buglife volunteer group.
12	Use the Falkirkexplored Facebook page to promote local wildlife and opportunities to get involved.
13	Provide training and awareness raising on wildlife issues to Council members and staff as required.
14	Promote relevant environmental education resources to schools and other local groups (e.g. the RSPB's Forth estuary resource

	boxes).
15	Develop an online volunteering hub to help people find local opportunities for environmental volunteering.

The Conservation Volunteers (Scotland)
The Wildlife Information Centre

..... but other groups and individuals can also help.

What we should do if we get a chance

As well as the above projects, it would be beneficial to do the following projects if resources become available.

1	Promote outdoor/wild play and discovery, signposting a number of key wild play sites or opportunities and holding several wild play/discovery events. (Potentially focused along the John Muir Way.)
2	Develop a network of Outdoor Learning Sites around the Council area.
3	'Summer of...' project: Promoting a different habitat or group of species each summer.

Who can help?

The following groups are likely to be important in getting these projects done:

Angling clubs
Buglife
Communities Along The Carron Association
Central Scotland Green Network Trust
Falkirk Council
Falkirk Conservation Volunteers Group
Froglife
John Muir Trust
River Forth Fisheries Trust
Royal Society for the Protection of Birds
Scottish Wildlife Trust

Invasive Non-native Species Action Plan

Non-native species are those which would not naturally occur in this country. They have been introduced here, either accidentally or on purpose. There are many non-native species in the UK, but only a small proportion are invasive. An invasive animal or plant has the ability to spread, causing damage to the environment, the economy, our health or the way we live. Invasive non-native species are estimated to cost Britain over £1.7 billion a year.

There are at least 18 invasive non-native species known or expected to occur in this area. Invasive non-native species which are currently causing particular problems locally include:

- Japanese knotweed
- Giant Hogweed
- Himalayan Balsam
- Rhododendron
- Sea Buckthorn
- Mink

Others may spread to the area or become more of a problem in the future.

What we have already done

Over the last ten years, many projects have helped to combat the impact of invasive, non-native species on our local wildlife. These include:

- Treating Japanese knotweed and giant hogweed along our river systems and on council owned ground.
- Establishing the Falkirk Invasive Species Forum to coordinate treatment of invasive, non-native species and undertake education, training and awareness raising.
- A project to control mink on the River Avon.
- Himalayan balsam removal by volunteers at several sites.

- A leaflet to help people identify Japanese knotweed.
- Rhododendron control at several sites.
- Sea buckthorn control at Kinneil Foreshore.

What we need to do next

1	Continue Japanese Knotweed (and giant hogweed) control programmes on the river systems.
2	Treat Japanese Knotweed and Giant Hogweed on Council owned land.
3	Continue control of sea buckthorn at Bo'ness.
4	Encourage the treatment of Japanese knotweed and giant hogweed on privately owned land.
5	Assess the scale of Himalayan balsam and Rhododendron Ponticum growth in Wildlife sites and SINC's (focusing initially on council owned sites). Identify sites where control of these species would be feasible.
6	Continue mink monitoring and control on the River Avon.
7	Provide and update information about invasive non-native species on the Council website.
8	Identify the most likely new invasive non-native species that might spread to this area. Highlight these to those people best placed to spot and report their presence quickly.
9	Promote national awareness campaigns such as 'plant wise' and 'check, clean, dry'.
10	Encourage reporting of invasive non-native species by volunteer path wardens and other volunteer groups.
11	Promote the control of invasive non-native species which currently occur in relatively few locations but which have a high risk of becoming widespread and more costly to control in the future.
12	Do a pilot project to control Himalayan Balsam on one tributary or small burn.

What we should do if we get a chance

As well as the above projects, it would be beneficial to do the following projects if resources become available.

1	Contact other relevant landowners (Scottish Water, Network Rail, Amey etc...) to encourage control of invasive non-native species.
2	Undertake control of Himalayan Balsam at several sites.
3	Undertake control of Rhododendron Ponticum at several sites.
4	Gradually replace the Sea Buckthorn along the foreshore at Bo'ness with more suitable species.

Who can help?

The following groups are likely to be important in getting these projects done:

Communities Along The Carron Association
Falkirk Community Trust
Falkirk Council
Falkirk Invasive Species Forum
Friends of Kinneil (Kinneil Foreshore Management Group)
Larbert and Stenhousemuir Angling Club
River Avon Federation
River Forth Fisheries Trust
Slamannan Angling and Protective Association

..... but other groups and individuals can also help.

Project summary tables

		Project	Target habitat(s)	Target species	Potential delivery partners*
Estuary Action Plan	1	Agree and implement a long term management plan for Kinneil Lagoons.	Saline lagoons	Estuarine birds	Falkirk Council, RSPB, SNH
	2	Ensure restoration of Kinneil Landfill includes wildlife benefits.	Estuary	Estuarine birds	Falkirk Council, RSPB, Buglife
	3	Undertake further green network enhancement & management around the harbour area at Bo'ness and Grangepans (linking to Bridgeness and Kinneil Foreshore).	Estuary, mudflats	Estuarine birds	Falkirk Council, Friends of Kinneil (foreshore group)
	4	Deliver environmental enhancements as part of the Grangemouth flood prevention scheme, potentially including compensatory habitat for SPA species.	Estuary, saltmarsh, mudflats	Estuarine birds	Falkirk Council, SEPA
	5	Produce and implement a management plan for Bothkennar Pools Site of Special Scientific Interest.	Saline lagoons	Estuarine birds	Falkirk Council, RSPB, SNH
	6	Do at least one beach clean / litter pick per year.	Estuary		
	7	Deliver appropriate management and enhancement of the island and shoreline at Kinneil Foreshore Local Nature Reserve.	Estuary	Estuarine birds	Friends of Kinneil (foreshore group), Falkirk Council
	8	Monitor the use of the tern rafts at Bothkennar, doing maintenance as necessary and assessing the need for additional rafts if the original ones are used.		Common tern (and other estuarine birds)	Falkirk Council, RSPB, TCV
	9	Take opportunities to raise awareness of the Firth of Forth Special Protection Area amongst local communities, landowners and businesses; highlighting its positive benefits as well as the protection it has.	Estuary, saline lagoon, saltmarsh, mudflat	Estuarine birds, fish and mammals	SNH, Falkirk Council, RSPB
	10	Promote responsible recreation and dog walking along the foreshore, to minimise disturbance to the SPA bird species.		Estuarine birds	Falkirk Council
	11	Ensure bird data gathered for the Grangemouth Flood Protection Scheme is made available for use by others.	Estuary, Saltmarsh, Mudflats, Saline lagoons	Estuarine birds	Falkirk Council
	12	Support the development and implementation of the Inner Forth Futures Project.	Estuary, Saltmarsh, Mudflats, Saline lagoons	All estuarine species	RSPB, Falkirk Council, CSGNT, Buglife, SNH.

		Project	Target habitat(s)	Target species	Potential delivery partners*
Farmland and Grassland Action Plan	1	Continue the Barn owl nest box project – relocating unused boxes and doing habitat enhancement at box sites.		Barn owl	Falkirk Conservation Volunteers Group
	2	Review Falkirk Council's open-space maintenance regimes. Work with Falkirk Council to establish a range of grass cutting options (including some of increased benefit to wildlife) - supported by appropriate machinery, training and awareness raising.	Neutral grassland (meadow), urban greenspace		Falkirk Council
	3	Do appropriate grassland management at all council owned Sites of Importance for Nature Conservation and Wildlife Sites.	Neutral grassland (meadow), lowland acidic grassland		Falkirk Council
	4	Continue the Falkirk pollinator project (creating or enhancing several pollinator parks, John Muir pollinator way sites, or other sites for pollinators annually).	Neutral grassland (meadow)	Pollinating insects	Buglife Central Scotland Green network Trust, Falkirk Council
	5	Promote the creation of pollinator habitat through awareness raising and training activities associated with the pollinator project.		Pollinating insects	Buglife, Falkirk Council, CSGNT
	6	Tree sparrow project – work to restore the number of tree sparrows using the Bo'mains site, including nest box cleaning and habitat improvement.		Tree sparrows	Falkirk Conservation Volunteers Group, SWT
	7	Kestrel nest box project - erect kestrel nest boxes alongside existing roost boxes and monitor their use.		Kestrel	Falkirk Conservation Volunteers Group
	8	Management and monitoring of the butterfly orchid site and meadow at Muiravonside Country Park.	Neutral grassland, meadow	Butterfly orchid	Falkirk Community Trust
	9	A hedgerow project – establishing species-rich native hedges where they can provide habitat corridors between existing sites of value for wildlife.	Boundary features (species-rich hedgerow)		
	10	Continue the enhancement of Policy Bing, Lionthorn to deliver benefits for wildlife and local people.	Neutral grassland (meadow), urban greenspace	Pollinating insects, kestrel, bats, passerine birds, oxeye daisy.	Falkirk Council, CSGNT, Buglife

		Project	Target habitat(s)	Target species	Potential delivery partners*
Heath and Bog Action Plan	1	Falkirk Bog Restoration Project – implement practical restoration on at least 10 sites.	Raised bogs	All bog species	Falkirk Bog Restoration Project Partnership members, Buglife, Forestry Commission
	2	Encourage or put in place appropriate management of Wildlife Sites and SINC's that support heath habitat.	Lowland heath	All heath species	Falkirk Council
	3	Provide advice to landowners of heath and bog sites (covering both habitat and species management).	Lowland heath, bog	All heath & bog species	Falkirk Council, Buglife, Froglife, Butterfly Conservation
	4	Undertake a Large Heath butterfly survey at suitable sites.		Large heath butterfly	Butterfly Conservation, TWIC, Buglife, Falkirk Council
	5	Quantify current peat use by Falkirk Council and, if necessary, work to stop the purchase of peat or products made/grown using peat.	Raised bog		Falkirk Council
	6	Ensure the protection of peat habitats through the planning process.	Raised bog		Falkirk Council
	7	Survey or resurvey known or possible small pearl-bordered fritillary sites.		Small pearl-bordered fritillary	Butterfly Conservation, TWIC, Buglife, Falkirk Council

		Project	Target habitat(s)	Target species	Potential delivery partners*
Water and Wetland Action Plan	1	Do a 'health check' survey of the River Carron, identifying further conservation and enhancement projects for the river.	Rivers & streams	All river species	Communities Along the Carron, River Forth Fisheries Trust, Falkirk Council, Angling club
	2	Develop a project to engage local people in mapping, surveying creating, enhancing and looking after ponds for wildlife.	Standing open water (ponds)	Amphibians	Falkirk Council, Froglife
	3	Enhance the Culloch Burn at the Rumlie, Slamannan.	Rivers and streams	Salmon, sea trout, eel, lamprey	CSGNT, Falkirk Council, River Forth Fisheries Trust
	4	Deliver environmental enhancements as part of the Grangemouth flood prevention scheme.	Rivers and streams		Falkirk Council
	5	Undertake the Upper Avon Enhancement Project to enhance the upper reaches of the River Avon – aiming to improve its current 'bad' classification.	Rivers and streams	Salmon, sea trout, eel, lamprey	Forth Rivers Trust, River Avon Federation, Slamannan Angling &

					Protective Association , SEPA
6	Protect and monitor known great crested newt sites.			Great crested newt	Falkirk Council, Falkirk Community Trust, Falkirk Conservation Volunteers Group, Froglife, Echoes Ecology
7	Identify sites for pond creation and enhancement to link existing great crested newt sites. Create at least one new pond.	Standing open water (ponds)		Great crested newt, amphibians	Falkirk Council
8	Enhance the Carron Lade, creating areas of open water.	Standing open water, urban wildlife corridors			Falkirk Council, CATCA
9	Continue habitat management and community engagement at Carron Dams Local Nature Reserve.	Fen, marsh and swamp, standing open water, brownfield habitat			Carron Dams Management Group, SWT, Falkirk Council, SNH
10	Deliver a Mud Snail Project (focused on the known site in the Falkirk area) to protect the site, create suitable habitat nearby, breed & release mud snails, and raise awareness of the species.			Mud snail	Buglife Landowner
11	Survey areas of suitable water vole habitat close to known or suspected water vole sites. Assess the need for habitat enhancement and mink control where water voles are found.			Water vole	Falkirk Council, River Avon Federation, SAPA
12	Continue the 'Fish in the Classroom' project	Rivers and streams		Salmon, sea trout	River Forth Fisheries Trust, SAPA, River Avon Federation, CATCA
13	Create and maintain a sand martin bank at Avonglen Quarry and encourage maintenance of the nest sites at Avondale.			Sand martin	Falkirk Council
14	<ul style="list-style-type: none"> Ensure the creation of new riparian parkland in association with development at Banknock South, Gilston & Cauldhame Farm. 	Rivers and streams, urban greenspace			Falkirk Council, house builders
15	<ul style="list-style-type: none"> Encourage river restoration and opportunities to open up culverted watercourses through the Development Management process. 	Rivers and streams			Falkirk Council
16	<ul style="list-style-type: none"> Promote well designed SUDs features in new developments to 	Rivers and		Aquatic	Falkirk Council, SEPA

		benefit wildlife.	streams	invertebrates, amphibians and plants	
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		Project	Target habitat(s)	Target species	Potential delivery partners*
Woodland Action Plan	1	Enhance existing woodlands to improve their value for wildlife – focusing on council owned woodlands, community woodlands and Wildlife Sites.	Broadleaved and mixed woodland	All woodland species	Falkirk Council, CSGNT, Community woodland groups, Plantlife
	2	A pine marten project – surveying and monitoring populations, engaging with landowners and providing suitable habitat and den areas.		Pine marten	Falkirk Council, SWT, landowners, camera trapping volunteers
	3	Provide guidance to owners of woodland Wildlife Sites and Sites of Importance for Nature Conservation, about enhancing woodlands for wildlife.	Broadleaved and mixed woodland	All woodland species	Falkirk Council, CSGNT
	4	Produce a long term plan for the Council's woodland estate, ensuring that the programme of management and woodland expansion includes measures to benefit wildlife.	Broadleaved and mixed woodland	All woodland species	Falkirk Council, CSGNT, Forestry Commission
	5	Plant native bluebells at a minimum of 10 suitable woodland locations (ensuring that no Spanish or hybrid bluebells are also present).		Bluebell	Falkirk Council, community woodland groups, CSGNT
	6	Survey or resurvey known or possible small pearl-bordered fritillary sites.		Small pearl-bordered fritillary	Butterfly conservation, TWIC, Falkirk Council, CSGNT
	7	Use the integrated habitat network study to identify key areas for woodland management and expansion.	Broadleaved and mixed woodland		Falkirk Council, CSGNT, Forestry Commission

		Project	Target habitat(s)	Target species	Potential delivery partners*
Urban Action Plan	1	Help schools to enhance their orchards and growing spaces for wildlife.	Urban greenspace, gardens		Falkirk Council, Forth Environment Link, CSGNT
	2	Promote wildlife enhancements at community growing sites.	Urban greenspace, gardens		Falkirk Council, Forth Environment Link, CSGNT
	3	Assess wildlife enhancement opportunities at council managed cemeteries and graveyards – implement a wildlife project at at least one site.	Urban greenspace		Falkirk Council
	4	Continue to manage and enhance all brownfield Wildlife Sites and Garibaldi Bing.	Open mosaic habitat on previously developed land		Buglife, Falkirk Council
	5	Create and maintain a sand martin bank at Avonglen Quarry and encourage maintenance of the nest sites at Avondale.		Sand martin	Falkirk Council
	6	Develop a project to promote wildlife gardening (making links to community growing, school gardens and existing wildlife gardening campaigns).	Gardens, urban greenspace		Jupiter Centre (SWT), Forth Environment Link, Falkirk Council, CSGNT
	7	Monitor the helleborine orchids at Almond Bing and undertake management if required.		Helleborine orchids	Falkirk Council, Plantlife
	8	Create new 'Pollinator Parks' and 'John Muir Pollinator Way' sites, aiming to do at least two sites per year.	Urban greenspace, meadow	Pollinating insects	Falkirk Council, Buglife, CSGNT
	9	Continue to support the local management groups for the 3 Local Nature Reserves and promote enhancement projects at each site.	Urban greenspace		Falkirk Council
	10	Promote appropriate management of urban Wildlife Sites and Sites of Importance for Nature Conservation. Ensure all council owned sites are under appropriate management.	Urban greenspace, urban wildlife corridors		Falkirk Council
	11	Provide appropriate training to planners and other council staff as required	All		Falkirk Council
	12	Create a new semi natural area in Zetland Park and provide new semi natural parkland in Whitecross to meet deficiencies identified within the Open Space Strategy.	Urban greenspace		Falkirk Council, Friends of Zetland Park, Froglife
	13	Promote high quality design and maintenance of openspace secured through development, to benefit wildlife. Including maximising native plant	Urban greenspace		Falkirk Council, Plantlife Scotland

		diversity in new planting schemes.			
	14	Renew and update relevant Local Development Plan policies and supplementary guidance to protect and benefit wildlife.	All habitats	All species	Falkirk Council
	15	Prepare supplementary guidance on Green Infrastructure, promoting careful design and location to benefit wildlife.			Falkirk Council

		Project	Target habitat(s)	Target species	Potential delivery partners*
Bean Goose Action Plan	1	Continue the annual monitoring of the bean goose flock, including roost counts.		Bean Goose	Bean Goose Action Group
	2	Continue the project to track the local and migratory movement of individual geese via GPS tagging.		Bean Goose	Bean Goose Action Group
	3	Protect the bean goose flock from damaging development through the planning process.		Bean Goose	Bean Goose Action Group
	4	Ensure that provision and promotion of countryside access does not cause disturbance to the bean goose flock.		Bean Goose	Bean Goose Action Group
	5	Take opportunities to enhance bean goose habitat as part of raised bog restoration projects taking place on the Slamannan plateau.		Bean Goose	Bean Goose Action Group
	6	Review the Bean Goose management scheme and promote a revised or new scheme as soon as possible.		Bean Goose	Bean Goose Action Group
	7	Produce a research and monitoring plan to prioritise research and monitoring needs and opportunities.		Bean Goose	Bean Goose Action Group
	8	Highlight the work of the Bean Goose Action Group to similar groups and statutory nature conservation agencies within the Bean Goose range.		Bean Goose	Bean Goose Action Group
	9	Develop contacts with universities, research units and other organisations/individuals with an interest in bean geese.		Bean Goose	Bean Goose Action Group
	10	Produce a bean goose newsletter to promote the work of the group and raise awareness of the flock.		Bean Goose	Bean Goose Action Group
	11	Develop an education programme with local primary schools.		Bean Goose	Bean Goose Action Group
	12	Maintain, develop and manage the bean goose website.		Bean Goose	Bean Goose Action Group

		Project	Target habitat(s)	Target species	Potential delivery partners*
Connecting People & Wildlife Action Plan	1	Hold a Biodiversity Partnership event annually.			Falkirk Council
	2	Help schools to enhance their orchards and growing spaces for wildlife.	Urban greenspace, gardens		Falkirk Council, Forth Environment Link, CSGNT
	3	Maps & Apps project – use interactive mapping, social media and apps to help people discover local wildlife and wild places and to get involved with biological recording and volunteering.			Falkirk Council
	4	Continue the ‘Fish in the classroom’ programme	Rivers and streams	Salmon, sea trout, lamprey, eel	River Forth Fisheries Trust, SAPA, River Avon Federation, CATCA
	5	Develop the Wildlife Camera Trap project to enable more groups to get involved in camera trapping in additional areas.		All	Falkirk Council, camera trapping volunteers, TWIC
	6	Encourage biological recording and citizen science – promote one public recording initiative per year, with appropriate training and publicity. (Linked to other projects such as garden wildlife, ponds, swifts, bluebells etc.) .		All	TWIC, Falkirk Council
	7	Wildlife gardening promotion (with links to community growing)	Gardens		Jupiter centre (SWT, Falkirk Council, Forth Environment Link, CSGNT
	8	Produce the ‘Life’ Newsletter annually			Falkirk Council
	9	Support the Falkirk Wildlife Volunteer Group to provide volunteering opportunities and help deliver wildlife projects.		All	
	10	Pollinator patch project – to encourage people to plant for pollinators.		Pollinating insects	Buglife, Falkirk Council, CSGNT, Jupiter centre (SWT)
	11	Continue the Buglife volunteer group.			Buglife
	12	Use the Falkirkexplored Facebook page to promote local wildlife and opportunities to get involved.			Falkirk Council
	13	Provide training and awareness raising on wildlife issues to Council members and staff as required.			Falkirk Council
	14	Promote relevant environmental education resources to schools and other local groups (e.g. the RSPB’s Forth estuary resource boxes).	All habitats	All species	Falkirk Council, RSPB, CSGNT,
	15	Develop an online volunteering hub to help people find local opportunities for environmental volunteering.			Falkirk Council,

		Project	Target habitat(s)	Target species	Potential delivery partners*
Invasive Non-native Species Action Plan	1	Continue Japanese Knotweed (and giant hogweed) control programmes on the river systems.	Rivers and streams	Invasive species	River Forth Fisheries Trust, River Avon Federation, CATCA, Falkirk Council, Angling clubs
	2	Treat Japanese Knotweed and Giant Hogweed on Council owned land.		Invasive species	Falkirk Council
	3	Continue control of sea buckthorn at Bo'ness.	Neutral grassland (meadow), estuary		Falkirk Council, Friends of Kinneil (foreshore group)
	4	Encourage the treatment of Japanese knotweed and giant hogweed on privately owned land.		Invasive species	Falkirk Invasive Species Forum members
	5	Assess the scale of Himalayan balsam and Rhododendron Ponticum growth in Wildlife sites and SINCs (focusing initially on council owned sites). Identify sites where control of these species would be feasible.		Invasive species	Falkirk Council, Falkirk Invasive Species Forum members
	6	Continue mink monitoring and control on the River Avon.		Mink	River Avon Federation, Slamannan Angling and Protective Association, River Forth Fisheries Trust
	7	Provide and update information about invasive non-native species on the Council website.		Invasive species	Falkirk Council
	8	Identify the most likely new invasive non-native species that might spread to this area. Highlight these to those people best placed to spot and report their presence quickly.		Invasive species	Falkirk Invasive Species Forum
	9	Promote national awareness campaigns such as 'plant wise' and 'check, clean, dry'.		Invasive species	Falkirk Invasive Species Forum
	10	Encourage reporting of invasive non-native species by volunteer path wardens and other volunteer groups.		Invasive species	Falkirk Invasive Species Forum
	11	Promote the control of invasive non-native species which currently occur in relatively few locations but which have a high risk of becoming widespread and more costly to control in the future.		Invasive species	Falkirk invasive species forum
	12	Do a pilot project to control Himalayan Balsam on one tributary or small		Invasive	Falkirk invasive species

		burn.		species	forum
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* This section gives an indication of the organisation(s) likely to be involved in delivering each action. However it will be added to or altered during consultation and as the projects develop.

Aspirational project summary tables

		Project	Target habitat(s)	Target species	Potential delivery partners*
Estuary Action Plan	1	Promote biological recording at important estuary sites.	Estuary, mudflats, saline lagoons, saltmarsh		
	2	Monitor invasive species in estuarine habitats and take action to control them.	Estuary, mudflats, saline lagoons, saltmarsh		
	3	Promote monitoring of nurdles (and other plastics) along the shoreline, with associated awareness raising campaigns and litter picks.	Estuary, mudflats, saltmarsh		
	4	Reduce the use of disposable/one-use plastics within Falkirk Council and other partner organisations, to help combat marine pollution by plastics.	Estuary		

		Project	Target habitat(s)	Target species	Potential delivery partners*
Farmland & Grassland Action Plan	1	Farm ponds & wetlands project –creating a network of farmland ponds and wetlands.	Ponds (standing water)	Amphibians	
	2	A pilot project to safeguard and enhance wildlife road verges, including provision of advice on road verge management to benefit wildlife.	Neutral Grassland, lowland acidic grassland, boundary features		Falkirk Council, Plantlife Scotland
	3	Monitor, influence and promote agri-environment schemes where possible.	Grassland, heath, bog, boundary features, standing water, fen, marsh and swamp, woodland		
	4	Identify previously recorded Whorled caraway, Annual knawel, Purple ramping-fumitory and Moonwort sites and survey to see if the plants are still present.		Whorled caraway, Annual knawel, Purple ramping fumitory, Moonwort	Plantlife Scotland

	5	Promote work on golf courses to benefit wildlife.	Grassland, boundary features, woodland, standing water, fen, marsh and swamp.		
	6	Review the condition of non-council owned grassland SINCs and Wildlife Sites and promote beneficial management where possible.	Neutral grassland, Acidic lowland grassland.		

		Project	Target habitat(s)	Target species	Potential delivery partners*
Heath & Bog Action Plan	1	Monitor the use of Letham moss and Gardrum Moss to identify opportunities for restoration and enhancement if possible.	Raised bog		
	2	Do reptile surveys at appropriate bog and heath sites, and identify any actions needed to protect or benefit reptiles.		Reptiles (adder, slow worm and lizard)	
	3	Explore potential for enhancement at Dunmore Moss by trying to make contact with the landowner.	Raised bog		
	4	Extend the action to cease peat use to other partner organisations, as appropriate.	Raised bog		
	5	Establish the historical location(s) of <i>Lepidozia pearsonii</i> and survey to determine if it is still present.		Lepidozia pearsonii	Plantlife Scotland

		Project	Target habitat(s)	Target species	Potential delivery partners*
Water & wetlands Action Plan	1	Riparian tree planting project (identify opportunities for riparian tree planting and implement tree planting projects).	Rivers & streams, woodland		
	2	Explore natural flood management opportunities.	Rivers and streams, woodland		
	3	Identify any particularly poor quality burns (especially within the urban area) and develop enhancement projects.	Rivers and streams		
	4	Develop a project to de-channelise the Culloch Burn through Slamannan, delivering channel enhancement and natural flood management benefits.	Rivers and streams	Salmon, sea trout	
	5	Do a de-culverting project, should an appropriate opportunity arise. Use this as a demonstration site to promote other local de-culverting projects.	Rivers and streams	All river and stream species	

		Project	Target habitat(s)	Target species	Potential delivery partners*
Woodland Action Plan	1	Veteran trees project: Identification of our most valued veteran trees. Followed by wildlife surveys of the trees and planting of 'veteran trees of the future' nearby.	Parkland, woodland		
	2	Try to identify the historical location(s) of <i>plagiochilia spinulosa</i> and hayscented buckler fern and survey to see if it they are still present.		Plagiochila spinulosa, hayscented buckler fern	Plantlife Scotland
	3	Do bat box schemes at at least 5 suitable sites (including provision of materials and support for community groups to make and erect boxes).		Bats	

		Project	Target habitat(s)	Target species	Potential delivery partners*
Urban Action Plan	1	Develop a House sparrow nest box project		House sparrow	
	2	Do a pilot project to manage road verges, roundabouts etc. to benefit wildlife.	Neutral Grassland, lowland acidic grassland, boundary features	Pollinating insects	Plantlife Scotland
	3	Improve greenspace in housing association and council housing areas to benefit wildlife.	Urban greenspace		
	4	Provide a section in Council building maintenance manuals covering wildlife opportunities and protection.	Urban greenspace		
	5	Assess the potential for green roofs on council buildings as buildings come up for maintenance review.	Urban greenspace, grassland, Open mosaic habitat on previously developed land		
	6	Develop a Rain Gardens project.	Urban greenspace		CSGNT
	7	Do surveys for swifts in known or suspected nesting areas and promote public reporting of sightings.		Swifts	
	8	Promote work on golf courses to benefit wildlife.	Grassland, boundary features, woodland, standing water, fen, marsh and swamp.		
	9	Do bat box schemes at at least 5 suitable sites (including provision of materials and support for community groups to make and erect boxes).		Bats	

		Project	Target habitat(s)	Target species	Potential delivery partners*
Bean Goose Plan	1	Influence forthcoming agri-environment schemes to try to ensure that they deliver beneficial outcomes for the bean goose flock and support landowners with fields used by the bean geese.		Bean geese	
	2	Secure funding for a research trip to the Bean Goose breeding grounds by one or more of the monitoring officer(s).		Bean geese	

		Project	Target habitat(s)	Target species	Potential delivery partners*
People & Wildlife Plan	1	Promote outdoor/wild play and discovery, signposting a number of key wild play sites or opportunities and holding several wild play/discovery events. (Potentially focused along the John Muir Way.)			
	2	Develop a network of Outdoor Learning Sites around the Council area.			
	3	'Summer of...' project: Promoting a different habitat or group of species each summer.			

		Project	Target habitat(s)	Target species	Potential delivery partners*
Invasive Non-native Species Plan	1	Contact other relevant landowners (Scottish Water, Network Rail, Amey etc...) to encourage control of invasive non-native species.		Invasive species	
	2	Undertake control of Himalayan Balsam at several sites.		Invasive species	
	3	Undertake control of Rhododendron Ponticum at several sites.		Invasive species	
	4	Gradually replace the Sea Buckthorn along the foreshore at Bo'ness with more suitable species.	Neutral grassland, meadow, estuary		

* This section will give an indication of the organisation(s) likely to be involved in delivering each action. It will be added to during consultation and as specific projects develop.

Priority habitat list

Habitat	Habitat Plan	UK priority habitats included
Estuary	Estuary	
Mudflats		Intertidal mudflats
Saline Lagoons		Saline lagoons
Saltmarsh		Coastal saltmarsh
Arable	Farmland and Grassland	Arable Field Margins
Boundary Features		Hedgerows
Lowland, dry, acidic grassland		Lowland Dry Acid Grassland
Neutral Grassland		Coastal and Floodplain Grazing Marsh
Heath	Heath and Bog	Lowland Heathland
		Upland Heathland
Lowland raised and intermediate bogs		Lowland Raised Bog
Canals	Inland water and wetland	
Fen, marsh and swamp		Lowland Fens
		Reedbeds
		Upland Flushes, Fens and Swamps
Rivers and Streams		Rivers
Standing open water		Eutrophic Standing Waters
		Ponds
Open mosaic habitat on previously developed land (including Bings)	Urban	Open Mosaic Habitats on Previously Developed Land
Gardens		
Urban Greenspace		
Urban wildlife corridors		
Broadleaved and mixed woodland	Woodland	Lowland Mixed Deciduous Woodland
		Upland Mixed Ashwoods
		Upland Oakwood
		Wet Woodland
Wood pasture and parkland		Wood-Pasture & Parkland

Priority species list

This list shows the local priority species for the Falkirk area and the main Habitat Plan(s) they are associated with.

Common name	Habitat Plan(s)	Species status*
Mammals		
Badger	Woodland	S
Brown hare	Farmland & grassland	UK S
Brown long-eared bat	Woodland / Urban	UK S
European otter	Inland water & wetland	UK S
Hedgehog	Urban / Woodland	UK
Pine Marten	Woodland	UK S
Soprano Pipistrelle bat	Woodland / Urban	UK S
Water vole	Inland water & wetlands	UK S
Birds		
Barn owl	Farmland & grassland	S
Bean goose	Farmland & grassland	S
Black grouse	Heath & bog	UK S
Black-tailed godwit	Estuary	UK S
Bullfinch	Woodland	UK S
Common tern	Estuary	S
Cuckoo	Woodland	UK
Curlew	Farmland & grassland	UK S
Dipper	Inland water & wetland	
Dunlin	Estuary	S
Golden Plover	Estuary	S
Grasshopper warbler	Farmland & grassland / Heath & bog	UK
Great crested grebe	Estuary	
Green woodpecker	Woodland	
Grey partridge	Farmland & grassland	UK S
Greylag goose	Estuary	
Hen harrier	Heath & bog	S
House Sparrow	Urban	UK
Kestrel	Urban / Farmland & grassland	S
Kingfisher	Inland water & wetland	S
Knot	Estuary	

Lapwing	Farmland & grassland	UK	S
Lesser redpoll	Woodland	UK	
Linnet	Farmland & grassland	UK	S
Merlin	Heath & bog		S
Pink-footed goose	Estuary		
Pintail	Estuary		
Red-breasted merganser	Estuary		
Redshank	Estuary		
Reed bunting	Inland water & wetland	UK	S
Sand martin	Urban / Inland water & wetland		
Sedge warbler	Inland water & wetland		
Shelduck	Estuary		
Short-eared owl	Heath & bog		S
Skylark	Farmland & grassland	UK	S
Snipe	Farmland & grassland / Heath & bog		
Song thrush	Urban / Woodland	UK	S
Spotted flycatcher	Woodland	UK	S
Starling	Urban / Woodland	UK	
Swallow	Farmland & grassland		
Swift	Urban		S
Teal	Estuary		
Tree pipit	Woodland	UK	
Tree sparrow	Farmland & grassland	UK	
Twite	Heath & bog	UK	
Water rail	Inland water & wetland		
Wood warbler	Woodland	UK	S
Woodcock	Woodland		S
Yellowhammer	Farmland & grassland	UK	
Amphibians, reptiles and fish			
Common frog	Inland water & wetland		
Common toad	Inland water & wetland	UK	
Great crested newt	Inland water & wetland	UK	S
Palmate newt	Inland water & wetland		
Smooth newt	Inland water & wetland		
Adder	Heath & bog	UK	
Common Lizard	Heath & bog	UK	
Slow worm	Heath & bog	UK	

Atlantic salmon	Inland water & wetland	UK	S	
Brook lamprey	Inland water & wetland		S	
European Eel	Inland water & wetland	UK		
River lamprey	Inland water & wetland	UK	S	
Sea/Brown trout	Inland water & wetland	UK		
Sparling (smelt)	Estuary	UK	S	
Twaite shad	Estuary	UK	S	
Invertebrates				
Small pearl-bordered fritillary	Woodland	UK		
Green hairstreak butterfly	Heath & bog			
Large heath butterfly	Heath & bog	UK		
A Mud snail	Inland water & wetland	UK	S	
Common blue butterfly	Farmland & grassland			
Swordgrass moth	Farmland & grassland	UK	S	
Flowering Plants				
Annual Knawel	Farmland & grassland	UK	S	
Bennett's pondweed	Inland water & wetland			
Bluebell	Woodland		S	
Dune helleborine	Urban			
Field scabious	Farmland & grassland			I
Grass of Parnassus	Inland water & wetland			
Greater butterfly orchid	Farmland & grassland		S	
Harebell	Farmland & grassland		S	
Ivy-leaved water crowfoot	Inland water & wetland			
Lesser Butterfly Orchid	Farmland & grassland	UK	S	
Ox-eye daisy	Urban / Farmland & grassland			I
Purple rampion	Farmland & grassland	UK	S	
fumitory				
Ragged robin	Inland water & wetland			I
Round-leaved	Heath & bog			I
Sundew				

Smooth cats-ear	Farmland & grassland	S
Tufted loosestrife	Inland water & wetland	
Whorled caraway	Farmland & grassland	
Wych elm	Woodland	
Young's helleborine	Urban	
Ferns and lower plants		
Hay scented buckler fern	Woodland	S
A liverwort (<i>Plagiochilia spinulosa</i>)	Woodland	
Moonwort	Farmland & grassland	
Pillwort	Inland water & wetland	
A liverwort (<i>Lepidozia pearsonii</i>)	Heath & bog	

***Species status key**

- UK - UKBAP priority species
- S - Species on the Scottish Biodiversity List
- I - Indicator species (Used to help indicate the presence and/or ecological health of a specific priority habitat)