

BIODIVERSITY ACTION PLAN FINAL REPORT

2008-2011



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Foreword



Hello and welcome to our report on the National Park Biodiversity Action Plan.

The Biodiversity Action Plan was introduced in 2008 to protect and enhance the diverse habitats and species that contribute to making the National Park so special.

In this report you will find an update on each of the 133 biodiversity projects as laid out in the action plan, along with a summary of the main achievements for each project. I hope you will agree that excellent progress has been achieved.

The successful delivery of the various biodiversity projects is the result of the ongoing enthusiastic participation from a wide range of our partners including Forestry Commission Scotland, Scottish Natural Heritage, local communities, private landowners as well as environmental organisations such as RSPB Scotland, National Trust for Scotland and Woodland Trust Scotland.

In the next Biodiversity Action Plan, due to be published in 2013, we will show how this effort from all our partners continues to benefit the diverse habitats and species of the National Park. Our ambition is that by 2030 the biodiversity gains of Loch Lomond & The Trossachs National Park will be obvious for everyone to see and enjoy.

Fiona Logan
Chief Executive

Acknowledgements

The National Park Biodiversity Action Plan 2008 – 2011 was delivered by the collective efforts of many organisations and individuals, particularly those listed below.

- Argyll Fisheries Trust
- Botanical Society of the British Isles (BSBI)
- Butterfly Conservation Scotland
- Central Scotland Black Grouse & Capercaillie Study Group
- Cowal Red Squirrel Group
- Forestry Commission Scotland (FCS)
- Forth District Salmon Fishery Board
- Friends of Loch Lomond and The Trossachs
- Group for Recycling in Argyll & Bute (GRAB) Trust
- Loch Lomond Fisheries Trust (LLFT)
- Luss Estates
- Marine Conservation Society (MCS)
- National Trust for Scotland (NTS)
- Plantlife
- Royal Scottish Forestry Society
- Royal Society for the Protection of Birds (RSPB)
- Royal Zoological Society of Scotland
- Scottish Agricultural College (SAC)
- Scottish Environment Protection Agency (SEPA)
- Scottish Government SGRPID Offices
- Scottish Native Woods
- Scottish Natural Heritage (SNH)
- Scottish Water
- Scottish Wildlife Trust
- Strathclyde, Central Scotland and Tayside Police Forces
- The Scottish Forestry Alliance
- Tay District Salmon Fishery Board
- University of Glasgow (SCENE)
- Woodland Trust Scotland

Introduction

Loch Lomond & The Trossachs National Park Biodiversity Action Plan 2008 - 2011 was developed to conserve and enhance the habitats and species that contribute to the National Park's special qualities; to help meet the first statutory aim of National Parks; and to deliver within the National Park the aspirations as set out in the Scottish Biodiversity Strategy.

This report sets out the achievements during this period (2008 – 2011) and reflects on lessons learned and future challenges. The National Park Biodiversity Action Plan (NPBAP) 2008-2011 set out to contribute to a number of other strategies and plans relevant to the biodiversity of the National Park. The principal ones were:

National Park Plan 2007-2012

State of the Park Report 2005

UK Biodiversity Action Plan

Scottish Biodiversity Strategy

Scottish Natural Heritage Species Action Framework

Scottish Forestry Strategy

Local Biodiversity Action Plans for Argyll and Bute, Stirling and Tayside

Loch Lomond & The Trossachs Local Woodland and Forestry Framework

Forestry Commission Scotland Cowal & Trossachs Forest District Nature Conservation Strategy

Scotland Rural Development Programme (SRDP) Regional Priorities



The NPBAP aimed to build on a range of previous work in the National Park. In particular, it took its starting point from the Local Biodiversity Action Plans (LBAPs) for Argyll and Bute, Stirling and Tayside areas that were produced and agreed by a wide range of partners in the period before the establishment of the Park and it sought to complement but not replace those documents. One of the main purposes of the NPBAP was to improve the co-ordination and delivery of actions identified in the LBAPs within the National Park area. Since the review of these LBAPs in 2010, the National Park area has become an LBAP area in its own right, with the neighbouring LBAP boundaries changing to reflect that.

The NPBAP was produced by a small working group of representatives from a range of government agencies, local authorities, non-government organisations (NGOs) and land owner representative groups and underwent a public consultation exercise before formal adoption by the National Park Authority in December 2008. It was officially launched in March 2009.

The National Park Authority has led on management of the NPBAP 2008 – 2011 programme, however, the successful delivery of the biodiversity projects during this period was the result of the enthusiastic participation and partnership working of a wide range of partners listed on the acknowledgements page. . As most of the National Park is privately owned, the partnership work with landowners in particular helped to deliver valuable contributions to biodiversity management. For example, the National Park Authority, RSPB Scotland and Scottish Wildlife Trust worked closely with land managers to gain financial support through Scotland Rural Development Programme (SRDP) to help the conservation of red squirrels, black grouse and waders in the National Park.



Monitoring and reporting on the NPBAP

The 2008 - 2011 plan included programmes on habitats and species alongside other programmes on Climate Change and the National Park Authority's Scottish Biodiversity Duty.

This final report covers the period up to the end of 2011. Progress on projects which were being delivered under each programme was monitored by the NPBAP working group annually, with a mid-term report published in 2009/2010 showing the progress made in the first two years.

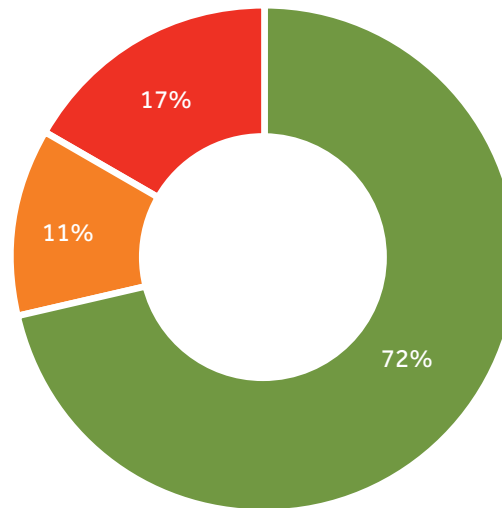
The first section of this report gives a summary of the main achievements under each programme. Figure 1 & 2 shows a summary of the overall progress made on the projects within each programme with more detail on each project being given in the following section.

When the NPBAP was produced, some projects were included as 'unfunded proposals' under each programme with the aim that, as opportunities arose and funding was secured, these projects could be taken forward. A number of these projects were realised during the last three years. The projects that were from the 'unfunded' list are indicated with an asterisk (*) in the summary report tables.

Some of the projects in the NPBAP 2008 – 2011 deliver over a longer term period than the plan (for example creating and managing The Great Trossachs Forest). Projects whose timescales extended beyond the initial three-year plan are indicated with a (#) symbol in the summary report tables.

For each project, an update from the relevant partner leading on the project has been included in the summary report tables and a traffic light indicating overall progress is shown.

Figure 1: Overall progress






- Green: project was either completed or progressed on schedule,
- Orange: project was progressed but was considered to be behind schedule, and
- Red: project was not progressed

As well as having provided an update on projects, the working group have also taken the time to review the NPBAP process during 2008 - 2011. The main points which arose from the working group discussion on 'lessons learned' are included in this report with the aim that the next edition of the NPBAP can adapt and improve the management of the NPBAP process.

This report was written by Gwenda Diack, Ecologist for Loch Lomond & The Trossachs National Park Authority with contributions from the working group and partners.

Figure 2: Progress on projects within each Programme

Programme	Projects completed or Progressed on target 	Projects progressed but Behind Target 	Projects stopped or Not Progressed 
Climate Change	8	1	1
Biodiversity Duty	16	0	3
Biodiversity Audit	2	4	0
Lochs, Rivers and Ponds	8	1	1
Coastal Marine	3	2	2
Farmland	2	0	2
Woodland and Forest	8	3	0
Moorland and Mountains	0	1	4
Built Environment	8	0	2
Red Squirrel	10	0	0
Water vole	3	0	0
Black Grouse	4	0	1
Capercaillie	6	1	0
Powan and Loch Lomond River Lamprey	3	0	0
Fresh Water Pearl Mussell	1	0	1
Invasive Species Audit	1	1	1
Invasive Species Action	6	0	4
Management of the NPBAP Process	6	1	1
Totals	95	15	23
Total number of projects	133		

From a total of 28 unfunded projects, 21 were progressed throughout the duration of the plan.

Key Achievements

Programme 1 - Climate Change

Integrated Habitat Network (IHN) Model (CC2)

The National Park Authority worked with the Central Scotland Green Network partners to produce a digital IHN model which shows habitat networks for woodlands, wetlands and grasslands in the National Park. This can be used to help in the planning of land management proposals and the impacts that these would have at either increasing connectivity between patches of habitats or increasing fragmentation of those habitats. Increasing habitat connectivity would make our biodiversity more robust in the face of climate change as it would allow species to respond to a changing climate through dispersal to habitat areas with more favourable conditions. The model is now available for public use on the SNH website.

Climate Change Policies (CC4)

The National Park Authority integrated Climate Change policies into the new Local Development Plan, which was adopted in 2011, and the new National Park Partnership Plan, which was adopted in 2012. FCS produced a Climate Change Action Plan for 2009 – 2011 and a new Trossachs and Cowal Strategic Plan in 2011. These policies strengthen the commitment of both agencies to take account of climate change impacts in relation to forestry and land use decisions, in particular protecting areas of deep peat and seeking suitable areas for forest expansion.



School Phenology (CC10)

A new project was started in autumn 2009 aimed at encouraging primary school pupils in and around the National Park to look more closely at the changes in nature during autumn and spring, a study known as phenology. This project aims at improving understanding and raising awareness of the effects of climate change in the National Park. The project links in with the established Woodland Trust "Nature's Calendar" project that encourages the public to record the signs of the onset of autumn and spring.



Green transport (CC7)

During 2008 – 2011, businesses and transport operators worked with the National Park Authority to foster green transport options for travelling around the national park. A 4 B's project which brought together and promoted local cycling routes, numerous walks and cruise itineraries with a scheduled bus service (with bike trailer) ran for a year in 08/09 but was unfortunately not commercially viable once the subsidy period finished. Other promotion of other public transport options were made available on the website, in particular the new water bus service on Loch Lomond and the Demand Responsive Transport covering rural parts of the National Park where commercial or conventional bus operators are unable to provide bus services. In relation to climate change, the carbon emissions from cars and vehicles is one of the main factors so there are obvious benefits to the environment from reducing the numbers of cars on the road through greater use of public transport and green transport options.



Programme 2 – Biodiversity Duty

Overview

The Scottish Biodiversity Duty in the Nature Conservation (Scotland) Act 2004 gives all public bodies the duty to further the conservation of biodiversity. The NPBAP set out the key ways in which the National Park Authority would take forward this duty. As the duty is consistent with the statutory aims of National Parks in Scotland (in particular the first aim), a large number of projects were taken forward in this particular programme. Highlights are shown below.

Lobbying (SBD1)

The National Park Authority and Forestry Commission Scotland lobbied the Scottish Government over SRDP Rural Priorities, for example to increase the funding rates available for Rhododendron control. There was also successful lobbying for inclusion of a significant area of the National Forest Estate in Cowal as a national stronghold for Red Squirrels.

Our Park Scheme and Green Businesses (SBD13)

The Friends of Loch Lomond & The Trossachs' (FOLLATT) 'Our Park' scheme was established. The scheme gives visitors opportunities to make voluntary donations which are directed into wildlife, conservation and access projects in the National Park. The NPA's own business toolkit has also been produced and is now available free of charge to help businesses promote themselves as being in the National Park while emphasising the link they have to the natural resources of the area. Since its initial launch, the business toolkit has been further improved and over 150 businesses have signed up.



Biodiversity and Planning (SBD3)

Biodiversity policies were included in the new Local Development Plan 2011 and a planning guidance leaflet produced covering biodiversity and developments. More extensive supplementary planning guidance on renewable energy schemes was also progressed and is due to be completed in 2013. This seeks to provide developers with best practise advice that already exists and to offer additional local advice for these schemes. The National Park Authority also benefited from biodiversity advice from their in-house ecologist on development applications and environmental impact assessments.

Recreation Management (SBD5)

The National Park Ranger Service's patrolling of key sites over the summer months each year helped to raise the awareness of visitors to the species and habitats in the National Park and encourage responsible recreation. The Ranger Service worked on particular campaigns including "Respect the Park" the "Caper Hotel" campaign, Operation Ironworks (a joint project with local police forces and FCS), the "Don't be a Tosser" anti-litter project and the "Bridget Jones's Diary" project. Extra resources were found with financial assistance from SNH to employ ranger staff during the 11/12 summer on the Loch Lomond islands to help reduce pressure on the Capercaillie and native woodland. Camping byelaws for East Loch Lomondside were implemented in 2011 and have had a number of positive effects, addressing some of the misuse and habitat impacts along this loch shore.





Land Management (SBD11)

The Natural Heritage Grant Scheme (NHGS) continued throughout the three years and helped to fund a number of projects. One in particular is the early work (scrapes and sluices) on the Glen Dochart Waders project, a project where the NPA land management advisors worked with five landowners in Glen Dochart to support them to develop a landscape scale project to manage wet grasslands for wading birds. The advisors assisted the landowners to apply for SRDP grant aid and the NHGS was able to fund aspects of the project which were not eligible for SRDP funding. Other landscape scale projects which were led by the land management advisors included the Callander Black Grouse project and the Hedgerow project.



Promoting Biodiversity (SBD15)

The International Year of Biodiversity 2010 (IYB2010) was a key promotional message in 2010 with the NPA joining up with other SEARS partners to promote biodiversity at the Royal Highland Show and working jointly with FCS on biodiversity events throughout the year. To promote NPBAP projects, each year several articles were featured in "The Park" magazine and the ranger service included several different biodiversity themed events in their public engagement programme. Wild Park, a key biodiversity partnership event was organised during 2011 and was held in March 2012 with over 600 people attending. The Natural Heritage Grant Scheme also supported The Friends of Loch Lomond & The Trossachs (FOLLATT) who received a grant in 09/10 to develop a web-based Wildlife Diary (www.wildlomond.co.uk) which went live in 2010.



Volunteer Development (SBD10)

In 2010, the NPA launched a volunteer ranger initiative alongside the practical conservation volunteer programme which had been running for several years. The initiative was hugely successful, with over 350 people signed up to receive the volunteer newsletter and over 140 volunteers having participated in volunteer tasks. Many of these tasks, such as The Trossachs Water Vole Reintroduction project (with FCS), The Saving Scotland's Red Squirrels Project (with SWT), dolphin porpoise and whale monitoring on the sea lochs, black grouse surveys, Wetland Bird Surveys and butterfly/moth monitoring activities all benefited from the input of NP Volunteer time. Many of the projects relied upon this volunteer time, for example volunteers contributed 825 hours of survey time to the water vole project to monitor the distribution of the released water voles. Additionally, surveys of red and grey squirrel distribution would have been much reduced without volunteer input.

Programme 3 – Biodiversity Audit

Habitat Audit (BA2)

A Biodiversity Habitat Audit project was carried out under an NPA and SNH-funded contract and a report published on the SNH research publications website. This audit focused on the habitat information that is available for the Loch Lomond & The Trossachs National Park and brought together the NVC and Phase 1 survey information that currently exists. The habitat audit was completed in 2010.

Species Audit (BA2)

The species audit was progressed in 2011 under a second contract with completion expected in 2013. We have also identified organisations and individuals who have UKBAP priority species datasets and who are prepared to share that data. A longer term project in the future will be to help those organisations to mobilise their data onto the National Biodiversity Network (NBN) Gateway.

Programme 4 – Lochs, Rivers and Ponds

River Basin Management Plans (LRP3)

Four River Basin Management Plans were produced in 2010 by SEPA in partnership with a range of stakeholders, including the National Park Authority. Plans for the Clyde, Tay, Forth, and Argyll and Lochaber catchments cover the Park area and contain information about the classifications of water bodies therein, future management objectives and actions that can be taken to improve their overall classifications to meet the requirement for all water bodies to achieve good ecological condition by 2015. The Area Advisory Groups (AAGs) work to facilitate actions being taken forward by partners and stakeholders.

RAFTS Biosecurity Plans and Fishery Management Plans (LRP6)

Draft Biosecurity Plans and Fishery Management Plans were produced by Fisheries Trusts for the Lomond, Tay and Forth catchments and Argyll. The biosecurity plans were produced by each Fisheries Trust using a standardised RAFTS template. Moving forward, stakeholder engagement and consultation on these draft plans will be required in order to implement some of the ambitious targets within each plan.



Loch Lomond Monitoring Recreational Impacts (LRP4)

A project was completed to develop a methodology for monitoring and evaluating the impacts of recreational activity on the Loch Lomond islands and Endrick Marshes, which are European-designated areas for conservation. NPA rangers and SNH have incorporated this methodology into their ongoing work. A 'Limits of Acceptable Change' contract began in 10/11 and future implementation of this project in 2012/2013 and beyond will allow us to link into the other monitoring and evaluation on Loch Lomond.



Monitoring Climate Change in Freshwater (LRP9)

The University of Glasgow continued to contribute to the European Change Network programme by collecting long-term data on macrophyte abundance and community structure at sites in Loch Lomond.

Great Crested Newt Survey (LRP8)

The Ranger Service received training in surveying for Great Crested Newts and surveyed all the sites where there were historical records for this species. Additional sites identified through the Scotland GCN 2010 Survey were also surveyed. This work was completed in 2010 and unfortunately no positive records for this species were found.

Programme 5 - Coastal Marine

Whales, Dolphins and Porpoises Survey (CE5)

Not much is known about which or how many whales, dolphins and porpoises (mammals which are collectively called 'cetaceans') visit or dwell in the Firth of Clyde, which includes Loch Long, Loch Goil and Holy Loch, the sea lochs that form the National Park's coastline in Argyll. During 2010 and 2011, observations and sightings of cetaceans were recorded from vantage points on land and boats, including the Clyde ferries between Dunoon and Greenock. National Park rangers undertook some of the surveys and supported a network of local volunteers to collect many additional records. All records were submitted to the SeaWatch Foundation to contribute to their research into cetaceans.



Cowal Marine Event (CE1)

A Marine Event was held in Cowal during Summer 2009 with the National Park Ranger Service working in partnership with a range of organisations and local schools on the lead up to the event. The Marine Conservation Society "Cool Seas" education programme was a great feature of this Marine Week, along with the "Adopt-a-Beach" scheme.



Programme 6 – Farmland

Glen Dochart Waders Project (F1)

In Glen Dochart, the National Park Authority and RSPB have worked with land managers to see what actions can be taken collectively to benefit farmland waders such as redshank, lapwing, oystercatchers, curlew and snipe. In the first two



years, national park staff supported land managers to apply for Scotland Rural Development Programme (SRDP) funding to take forward practical management and they also carried out two years of baseline bird survey. The SRDP funded work will help aid future land management to benefit these species and this work began in 2011/12. The NPA Natural Heritage Grant Scheme also helped to fund practical management such as sluices and scrapes, which was not eligible for SRDP funding.

Hedgerows Project (F2)

A project to map extent and condition of hedgerows in a pilot area around Gartmore began in 2010. National Park staff worked with local landowners to identify opportunities to promote improved management and restoration of hedges. Following on from the field survey work, hedgerow improvements at four locations were funded through the Natural Heritage Grant Scheme in 2011/2012.

Programme 7 – Woodland and Forest

The Great Trossachs Forest (WF1)

The Great Trossachs Forest (TGTF) is one of the most significant native woodland regeneration projects to take place in the UK in a generation. Officially launched in 2009, the project area covers 16,650 hectares (roughly the size of the City of Glasgow) stretching from Loch Lomond in the west to Callander in the east and is the legacy project of the Scottish Forest Alliance (SFA). The SFA comprises BP, Forestry Commission Scotland, RSPB Scotland and the Woodland Trust Scotland.

The vision for TGTF is that it will restore, protect and enhance native habitats including moorland, wetlands, grasslands and montane scrub that will bring significant benefits to biodiversity and provide sufficient habitat for species to adapt to climate change. In the period 2008 - 2011, 600 hectares of new native woodland has been created and *Rhododendron ponticum* treated in the Loch Katrine area. Black grouse numbers and lek sites have increased across all three partner sites and the woodman's friend, the Pearl Bordered Fritillary Butterfly, was identified at Loch Katrine for the first time in 25 years. A £1m grant from the Heritage Lottery Fund was approved to help improve the access and interpretation of the area, produce an education resource and enable different audiences to engage with the forest.



Plantations on Ancient Woodland Sites (PAWS) Restoration (WF3)

An assessment of the ecological potential for restoration of all 4,367 ha of PAWS sites in the national forest estate in the National Park was completed by the FCS and high priority sites were further assessed to determine restoration methods. This information will be used in the Forest Design Planning process.



Grazing Management of Woodlands (WF10)

FCS introduced 100 cattle in the Loch Katrine area as a grazing management tool. These were deployed across the catchment to help improve the ecological quality and diversity of the established native woodlands. Deer levels were assessed in this area during 2011 and a feral goat count was also carried out at Inversnaid and Loch Katrine. A deer management forum for the Loch Lomond Islands was established and produced a deer management plan.



Bat Boxes (WF11)

FCS maintained around 200 bat boxes in forests throughout the Loch Ard, Loch Achray and Loch Katrine areas and 50 bat boxes in Cowal. The work included monitoring the boxes for the past 2 years, recording species, numbers, sex and age of bats found. All bats found in the Trossachs area using these boxes were also given a unique identifying ring to help investigate aspects of bat ecology in this area.

Owl Nest Box Survey (WF8)

FCS undertook annual nest box monitoring and bird ringing of young birds for approximately 150 barn owl boxes and 300 tawny owl boxes in FCS woodlands within the National Park.

Forest Plans and Strategies (WF6)

A Trossachs and Cowal Strategic Plan was produced by FCS and set out the policy framework for forests within the National Park. The proposal to produce an updated Local Woodland and Forestry Framework was replaced by an Indicative Forest Strategy to be developed in future.

Programme 8 – Moorland & Mountains

Overview

By the end of 2011, the projects within the moorland and mountains programme were all either behind schedule or were stopped for different reasons. For the next edition of the NPBAP, the working group will need to re-examine the priorities for action on these habitats.



Programme 9 – Built Environment

Biodiversity and Development (BE5)

A Planning Advice Leaflet on Biodiversity and Developments was produced and made available on the NPA website. The NPA ecologist also advised the planning officers on where biodiversity could be safeguarded as part of development proposals.

Otters and Roads (BE1)

Analysis of the pattern of road mortalities between 1982 and 2008 within the National Park showed that around 90% of records were from A roads and that that deaths occurred most frequently within a short distance of a water body. A survey of road bridge design and on the A82 in 2007 revealed a number of bridges and culverts as being unsuitable for the safe passage of otters, particularly during high river flow. Since the report has been produced, Scotland Transerv has installed road mitigation measures for otters during widening and parapet replacement works on Stuckendroin Bridge.



Barn Owl Boxes and Farms (BE2)

From spring 2010 the National Park Ranger Service assisted a local volunteer Mike Steward with the maintenance and inspection of 38 Barn owl boxes (funded through the NHGS) on farms throughout the National Park, complementing the woodland owl nest box survey. All Barn owl chicks and adults found in these boxes were ringed and the data recorded. 2010 was a particularly good year for barn owl numbers as the field vole population, the main food source for Barn owls, was also very high.

Programme 10 – Red Squirrel

Saving Scotland's Red Squirrels (RS10)



The valued work of the National Park Red Squirrel Working Group has been built upon considerably over period 2008 - 2011 through the Saving Scotland's Red Squirrels Project (SSRS). This partnership is led by the Scottish Wildlife

Trust who are working with the NPA, SNH, FCS, Cowal Red Squirrel Group, NPA volunteers and 18 different landowners throughout the National Park including Luss Estates, the De Vere Group at Cameron House and Loch Lomond Golf Club.

The Saving Scotland's Red Squirrels partnership project is a strategic national attempt to secure the future of red squirrels in Scotland, by preventing the further spread of grey squirrels, which have been identified as the main threat to the red squirrel population, and by promoting the enhancement of woodland habitats to favour red squirrels over greys. In the National Park, Project Officer Lewis Pate encouraged land owners to take on grey squirrel control work and expanded on the public education and squirrel survey initiatives. The grey squirrel control was targeted at key places to prevent their further spread into Argyll via Arrochar, and into the Highlands from the Aberfoyle, Callander and Loch Earn areas.

Programme 11 – Water Vole

Trossachs Water Vole Reintroduction Project (WV3)

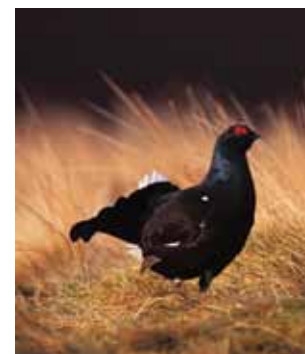


Water voles are seriously threatened throughout Britain, mainly due to habitat loss and predation by American mink. They have been absent from most of the National Park since the early 1990s. The Trossachs water vole reintroduction project

aimed to bring back a healthy population to vole-friendly watercourses where suitable riparian habitat had been restored in Loch Ard Forest. It was the first water vole reintroduction to take place in Scotland. In 2008 and 2009 nearly 800 water voles were released. Careful monitoring of the release sites and the surrounding areas was carried out each year by the Water Vole project officer, National Park and FCS staff and volunteers. Positive signs were found of water voles at all the release sites and, in 2011, evidence was found that the voles had started to colonise new areas of suitable habitat up to 2 kilometres away. Alongside this work, mink monitoring was carried out as water vole colonies are very quickly destroyed by American mink. A network of more than 50 mink rafts was established inside and beyond the project area and checked each fortnight for mink tracks. Targeted trapping was carried out where mink were detected. The steering group (consisting of FCS, RZSS, NPA and SNH) for the project are now examining a second phase of the project in adjacent areas.

Programme 12 – Black Grouse

Habitat Enhancement for Black Grouse (BG2)



RSPB and NPA land management advisors worked with local landowners to support SRDP applications to undertake land management that will benefit black grouse. The National Park Black Grouse Habitat Enhancement Project offered detailed advice to land managers to

identify practical conservation measures in key areas within a 8,000 hectare area from Callander to Loch Earn where there has been a significant decline in black grouse numbers. In the habitat enhancement project area, six SRDP applications were successful and contracts were signed in 2011. The National Park's Natural Heritage Grant Scheme in 09/10 funded a range of black grouse conservation measures, as well as two workshops run by the RSPB that focused on the management of forestry and farming to benefit black grouse.

National Park Black Grouse Surveys (BG1)

The NPA, RSPB and the Central Scotland Black Grouse and Capercaillie Study Group (CSBG & CSG) worked together to collate annual lek counts as part of a long term monitoring of this species. Work was also undertaken to develop a planned approach to assess the whole of the National Park for black grouse over the next three years by undertaking searches of suitable habitat. This will assist with monitoring the overall health of black grouse populations, a UK BAP priority species.

Programme 13 – Capercaillie

Overview

The NPBAP partners worked hard over the programme period to try and help the few remaining capercaillie that live on the Loch Lomond islands. The continuing drop in numbers of this particular species has been of great concern to the National Park Authority, RSPB, SNH and Luss Estates. In 2010, measures to improve the habitat quality for the birds, along with publicity to promote responsible recreational use of the islands were all put in place. Despite these efforts, the number of birds recorded is now at a critical level.

Monitoring Capercaillie (CP2)

Searches for signs of capercaillie were undertaken in March 2009, 2010, 2011 and 2012 to indicate the presence of birds. East Loch Lomond was also checked for signs in 2012. A brood count to monitor productivity was carried out on the islands in July 2009 then discontinued due to small sample sizes. A system of recording casual sightings was also established.

Do Not Disturb - Caper Hotel Campaign (CP3)

The Ranger Service carried out visitor management patrols, advising visitors on how to avoid disturbance to capercaillie and impacts on the woodland habitat and promoting the 'Do Not Disturb - Caper Hotel' awareness campaign. This campaign started in 10/11 and extra resources were obtained from SNH to employ extra seasonal ranger staff on the islands in 11/12. Statutory signage under the Nature Conservation Act was erected on the islands in 2010. The campaign and visitor surveys continued in 2012.

Habitat Enhancement & Predator Control (CP5)

Habitat management for capercaillie was carried out on the islands. This included bracken control, Rhododendron ponticum removal and blaeberry brushcutting to increase new growth. Alongside this, predator control of mink and grey squirrels was carried out on the islands in 2011 and 2012.

Do not disturb.

If you are visiting the Loch Lomond islands between April and July, please respect the privacy of the rare capercaillie that live there.

When visiting Inchlonaig, Inchcruin, Inchmoan, Inchconnachan and Inchtavannach, we request that you follow a few simple guidelines that will make a big difference. **Please...**

- Keep noise levels down**
- Avoid taking dogs to the islands**
- Keep to the shore, don't wander through the islands**

For more information visit
www.rspb.org.uk | www.snh.gov.uk
www.lochlomond-trossachs.org

Programme 14 – Powan and Loch Lomond River Lamprey



Project Powan (PRL1)

The five year programme on the conservation status of pout concluded in 2012. The project has resulted in a significant development of our ecological and management base knowledge on the status of the two native populations and two refuge populations of pout in the National Park. It has resulted in the translocation of pout to two additional conservation refuge sites.

Powan in the Classroom (PRL3)



In 2009 and 2010, five primary schools in the National Park carried out a practical project on pout under the instruction of the Loch Lomond Fisheries Trust (LLFT) and funded through the National Park's Natural Heritage Grant Scheme. Local children reared the fish over two months, by incubating pout eggs in small classroom hatcheries. Each week, staff from the Trust and National Park rangers visited the schools, delivering a teaching programme about the ecology of the fish and the aquatic environment of Loch Lomond. In the spring, some of the pupils released over 200 young fish into Loch Lomond at Ross Bay and a further 200 at Cameron House.

Lamprey (PRL2)

A three year programme to assess the numbers and distribution of three species of lamprey of high conservation value within the National Park began in 2011. The distribution of the unique freshwater-feeding river lamprey known only from Loch Lomond in the UK is being assessed and the genetic status of potentially discrete populations determined in this study.



Programme 15 Fresh Water Pearl Mussels



Overview

A survey was completed on the potential for river systems in the National Park to support this priority species. It is hoped to trial reintroductions to rivers which could host them in the future.

Programme 16 – Invasive Species Audit



Overview

The full audit of invasive non-native animals has been postponed, however some information has been gathered on particular non-native species as part of other projects.

Mink

The presence of mink has been gathered through the water vole and the capercaillie projects. Over 60 mink monitoring rafts are in place in the Trossachs and on the Loch Lomond Islands. See programmes 11 and 13 for more information.

Grey Squirrels

The SSRS project aimed at protecting our native red squirrel involves a collaborative effort at monitoring for the presence of grey squirrels along the national strategic line which separates red squirrel only areas from areas which support both red and grey squirrels. Grey squirrel control forms part of this project. See programme 10 for more information.



Invasive Non-Native Plant Species (INNS)

A large audit of INNS plants has been postponed, however smaller surveys have been carried out on Loch Lomond, Glen Dochart and Loch Ard for riparian invasives and skunk cabbage and on FCS land for piri piri. The fishery trusts have also identified the main INNS present on each of the catchments in their Biosecurity Plans, however further survey would be needed to show the exact location and extent of the INNS in those areas. Promoting awareness of other INNS such as the marine Japanese Wireweed has been carried out with articles in The Park magazine calling for sightings to be submitted.

Programme 17 – Invasive Species Action

Rhododendron Control (ISP1)



The Rhododendron Control Officer was appointed by FCS with the support of SNH, NPA and Argyll & Bute Council. The remit for this officer was to promote control work of Rhododendron ponticum which threaten native woodlands at priority locations. The project

delivered much liaison with landowners and forestry contractors but has achieved relatively limited success in terms of control work due to limited attractiveness of the Rural Development Contracts to landowners, despite securing increases in payment levels. FCS have continued to invest in a Rhododendron Control Officer, however, due to the increase in the number of Phytopthera outbreaks (where Rhododendron is a carrier of the disease which is more commonly known as Sudden Oak Death), the officer's time is largely taken up dealing with those cases rather than promoting uptake of SRDP.

Skunk Cabbage Trial Control

A small trial of skunk cabbage control was undertaken on Loch Ard to test the effectiveness of digging up skunk cabbage versus herbicide treatment which was applied as a weed wipe rather than spraying. Both methods appear to be effective however digging up the plants is laborious in comparison with herbicide treatment.

Mink Control (ISP8)

Complementing the mink survey work, FCS operated a network of mink control as part of Trossachs water vole re-introduction project and the NPA undertook mink control for the capercaillie programme on the Loch Lomond islands.

Grey Squirrel Control (ISP9)

Grey squirrel control is in place in key areas to create a buffer between red squirrel only areas and areas which have both red and grey squirrels. Trapping was carried out by the SSRS project officer, NP ranger service, FCS and landowners such as Luss Estates who have signed up to the project either through SRDP or through the trap loan scheme (see previous).

Glen Dochart Riparian Plant INNS Control (ISP6)

A project to survey and control riparian INNS (Giant Hogweed, Japanese Knotweed, Himalayan Balsam and Skunk Cabbage) was started in the Glen Dochart area in 2011. This project has involved surveying for these species along the catchment, contacting all the land owners who have these INNS on their land, seeking permission from SEPA to undertake herbicide control in those areas, training volunteers on herbicide control and undertaking systematic control at the correct time of year under the supervision of an NPA land management advisor. The project began in 2011 and will continue over the next few years as follow up treatment will be required for some of the species.

Programme 18 – The Plan Process

NPBAP Working Group

The working group met on average three times a year, with the exception of 2011 where it only met twice, the autumn meeting being cancelled due to other urgent work commitments. The role of the working group has been to monitor and report on progress being made on their individual projects and to steer the overall NPBAP process. The members of the working group consist of the NPA, FCS, RSPB, SNH, SEPA, LLFT, Scottish Land and Estates, neighbouring LBAP officers and SWT.

NPBAP Forum

Two larger NPBAP events were held over the three years where a larger number of stakeholders and organisations were invited to host a stall or display to raise awareness of their conservation activities in the National Park. The first forum event was held in March 2009 where the NPBAP publication was launched. The second event was Wild Park, which was held in March 2012. Both events were very successful at attracting both organisations and individuals. Around 600 people attended the Wild Park event.

Reporting and Monitoring Progress

An annual report for 2009/2010 was published on the NPA website and progress in 2010/2011 was monitored and draft tables produced. This final report shows overall progress across the three years.

Work Programme Tables






- Programme 1 – Climate Change
- Programme 2 – Biodiversity Duty
- Programme 3 – Biodiversity Audit
- Programme 4 – Lochs, Rivers and Ponds
- Programme 5 – Coastal Marine
- Programme 6 – Farmland
- Programme 7 – Woodland and Forests
- Programme 8 – Mountains and Moorlands
- Programme 9 – Built Environment
- Programme 10 – Red Squirrel
- Programme 11 – Water Vole
- Programme 12 – Black Grouse
- Programme 13 – Capercaillie
- Programme 14 – Powan and Loch Lomond River Lamprey
- Programme 15 – Fresh Water Pearl Mussels
- Programme 16 – Invasive Species Audit
- Programme 17 – Invasive Species Action
- Programme 18 – NPBAP Management

- Green: project was either completed or progressed on schedule,
- Orange: project was progressed but was considered to be behind schedule, and
- Red: project was not progressed

Unfunded Projects (*)

Projects whose timescales extended beyond the initial three-year plan (#)

Table 1 Climate Change Work Programme

Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
CC 1	Climate change impact predictions on the National Park	Review current information on the predicted ecological effects of climate change on Scotland and how it may impact on the National Park. This will be a part of a wider review of climate change effects on the Park.	Land Management Advisors have received training on current information on farming and the impacts of climate change. Advisors also attended a Scottish Government consultation workshop on the Climate Change Adaptation Framework.	Lisa Duggan, NPA	NPA	
CC 2	Integrated habitat network	Develop an Integrated Habitat Network (IHN) Model for the National Park.	Phase 1 and 2 are now complete. Phase 1 looked at existing networks based on a simple presence/absence for trees, woodlands and wetlands. Phase 2 looked at a section of woodland in greater detail to look at the effects of age of stands, composition of woodland on network connectivity. A workshop was held in February 2011 to train staff in using the model. The IHN model for the NP is now publicly available on the SNH website and the NP GIS team also hold a copy of the database. Some improvements are required to the model as it currently does not show all the riparian woodlands.	Lisa Duggan, NPA	NPA, FCS, SNH	
CC 3	Local Forestry and Woodland Framework- Biodiversity and Climate Change	(This output reflects changes to policy in 2009)FCS - To produce a Indicative Forest Strategy for the National Park area which integrates FCS Climate Change Policies. NPA - To produce a Land Use Strategy which builds on the IFS and which uses the IHN model to assess potential enhancement of the woodland networks.	FCS have produced a Climate Change Action Plan 2009 - 2011 in relation to forestry landuse policies and developed new guidance 'Right Tree in the Right Place' which suggests that the best practice may be to produce an indicative forest strategy rather than update the Local Woodland Forestry Framework. FCS did not progress with the production of an Indicative Forest Strategy in 10/11 but did produce a Trossachs and Cowal Strategic Plan. Following Scottish Government's advice on Land Use Strategies, the NPA decided to integrate land use policies into the National Park Partnership Plan. The National Park Partnership Plan has now been adopted.	Russell Lamont, FCS & Iona Hyde, NPA	NPA, FCS, SNH	
CC 4	Local Plan- Biodiversity and Climate Change	Incorporate the IHN into policies in the Local Plan. Draw up Local Plan policies that: <ul style="list-style-type: none"> • protect carbon storing habitats from development that damages their storage capacity • protect water bodies, flood plains and coastal areas from development that damages their ability to respond to changing flow regimes and sea levels • actively encourage energy efficiency and renewable energy generation that does not damage the special qualities of the National Park. Promote energy efficiency in new housing developments. 	Relevant policies have been included in the Local Plan, which was adopted in December 2011.	Stuart Mearns, NPA	NPA	
CC 5	Agriculture and Carbon emissions	Provide two training events for the agricultural sector on management of carbon emissions.	Training events were held in 2008/2009.	Lisa Duggan, NPA	A & B, LBAP Partnership & Agriculture Forum	






Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
Initially Unfunded Proposals						
CC 6 *	Floodplain management	Habitat restoration projects on floodplains to maximise their potential to slow down storm flood flows.	The Glen Dochart Waders Project has benefits for floodplain management. Glen Dochart baseline survey was completed, a contract to install sluices and create scrapes to enhance the habitat for waders was carried out and three farm managers were successful in securing SRDP funding to carry out future work.	Linda Winskill, NPA	NPA, RSPB, Landowners	
CC 7 *	Visitor Footprint	Better public transport provision combined with a robust footpath and cycle network to reducing the total carbon footprint of visitors to the National Park.	Promoting transport by bus, boat, bikes and boats, the 4B's project commenced in 2008/2009 but no longer operates as it was not economic for the operator once subsidy period finished. The NPA continued to work with the transport authorities to improve public transport in the Park area, however, in the present economic climate new subsidised services are unlikely. A new waterbus service on Loch Lomond and Demand Responsive Transport in the Stirling Council area of the Park was developed. The NP cycle leaflet was republished giving detail of more cycling opportunities in and through the Park.	Nigel Brooks, NPA	NPA, Businesses, Local Authorities	
CC 8 *	Awareness	Raise awareness of residents and visitors of the local impacts of climate change on biodiversity as a part of the NPA's Climate Change Awareness Raising Strategy.	This remained an unfunded proposal. The project was not progressed.		NPA	
CC 9 *	Forestry and carbon management	Further develop existing forestry trends for enhancement of existing native woodlands, expansion and greater connectivity of woodlands and more use of broadleaves to create ecosystems that are more robust in the face of change and that give carbon sequestration benefits. Further promote local markets for native timbers and appropriate wood-fuels to create economic incentives for woodland management and to reduce carbon emissions from transportation.	Opportunities such as the new acquisition at Shannochill, near Aberfoyle, has expanded the native woodland in the area, as has the work at Loch Katrine. At Loch Katrine and through the developing the Forest Habitat Network structure, native woodland is being expanded and will create connectivity between existing remnants.	Russell Lamont, FCS	FCS	
CC 10 *	Climate change monitoring	Develop and record simple ecological markers - eg appearance of new southern species or reduction in arctic alpine plants that can be detected in other work and noted as local indicators of climate change.	A schools phenology project was started in 2010 by NPA Rangers. They have supported pupils studying a range of indicators such as leaf burst, etc. with activities in autumn and spring on an annual basis. 18 primary schools from across the Park have participated to date. Other long term datasets such as ECN buoy data, SCENE moth trap, SEPA flow regimes, and salmon recruitment could be explored in the future for climate change monitoring, however no other projects have been developed.	Alison Cush, NPA	NPA, University of Glasgow, Schools	

Table 2 NPA Biodiversity Duty Work Programme





Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
SBD 1 #	Resources	The Park Authority and partners to advocate at the highest level for the resources needed to deliver the highest level of biodiversity management for this special area, and to seek broader involvement by new partners.	The NPA and FCS lobbied the Scottish Government over SRDP Rural Priorities, for example to increase the funding levels for rhododendron control. There was successful lobbying for inclusion of a significant area of the National Forest Estate in Cowal as a national stronghold for red squirrels.	Grant Moir, NPA	NPA	
SBD 2 #	Advocacy	The Park Authority board to actively lobby for national strategy documents from forestry to transport, to fully reflect the importance and role of the National Park in delivering a Greener Scotland and have full regard and contribute to the biodiversity objectives of the National Park Plan: <ul style="list-style-type: none"> • Influence priorities and geography of the Scottish Rural Development Programme regions to align with National Park objectives including effective biodiversity delivery for priority species and habitats. • Advocate the development of Scottish Forestry Strategy standards for the National Park that exceed those in force for other areas. • Advocate Park Authority membership of the marine regional board, retention of planning powers out to three nautical miles and consideration of marine protected areas in the sea lochs and coastline of the National Park. • Raise concerns about practicalities of wildlife legislation. 	Advocacy has been taken forward by the National Park Authority on a range of issues relevant to the Biodiversity agenda. This includes providing consultation responses on the Wildlife and Natural Environment Bill, The Land Use Strategy, Speak Up for Rural Scotland and many others. The NPA has also worked closely with the Scottish Government and many others on the development of the new SRDP and has been working closely with Transport Scotland on the planned A82 upgrades at Pulpit Rock and Crainlarich. The National Park Partnership Plan has been adopted following public consultation and provides the policy context for biodiversity within the National Park, as well as, specific biodiversity related actions.	Grant Moir, NPA	NPA	
SBD 3	Planning authority function	Develop Local Plan policies to protect designated sites and UK BAP priority habitats and species and those in the NPBAP, including: <ul style="list-style-type: none"> • riparian corridors, loch shores and flood plains • ancient woodlands, long established semi-natural woodlands and hedgerows • blanket bog and raised bog • legally protected species and designated sites • marine habitats. Develop Local Plan policies, supplementary planning guidance or design guidance to promote: <ul style="list-style-type: none"> • using sustainability check-lists • incorporating wildlife features in development design • using native species in landscaping schemes and management plans • preventing use of invasive species in landscaping schemes. 	The 2010 - 2015 Local Plan was adopted in December 2011 and includes biodiversity policies. Some progress in reviewing and planning future supplementary planning guidance and checklists was progressed in 10/11, in particular supplementary planning guidance on renewables which is due to be completed in 2013. The Biodiversity Audit project included the production of biodiversity priority species and legally protected species checklist for the NP area.	Stuart Mearns, NPA	NPA	
SBD 4	National Park Biodiversity Action Plan	Lead on the production of the NPBAP and facilitate and coordinate its delivery, monitoring and reporting.	The NPBAP working group met bi-annually, a 2009/2010 Annual Report (approximately half way through the plan period 2008 - 2011) was produced, monitoring was carried out annually with this final report being produced to cover the period up to the end of 2011. A forum event co-ordinated by the NPA was held in March 2012. This event was well attended with over 600 visitors attending and 16 partners hosting information stalls, guided walks and trips to project areas.	Gwenda Diack, NPA	NPA	

Table 2 NPA Biodiversity Duty Work Programme (Continued)











Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
SBD 5	Recreation management	<p>Implement the Loch Lomond Byelaws regulating recreation and navigation. Review Byelaw performance and undertake research into issues for 2010 review.</p> <ul style="list-style-type: none"> Review the Byelaws in 2010 Manage existing access sites and infrastructure and develop new paths in ways that safeguard and enhance biodiversity. Promote responsible behaviour in the natural environment through the Scottish Outdoor Access Code. Implement Inchcailloch Visitor Management Plan. 	<p>The Byelaws are being implemented and the Loch Lomond Byelaw review is underway. Rangers and Access Officers have been promoting the Scottish Outdoor Access Code, with a considerable effort devoted to patrolling sites over the summer months each year by NP Rangers.</p> <p>Visitor Management initiatives have included the "Respect the Park" campaign, "Operation Ironworks" (working jointly with local police forces), as well as the "Don't be a Tosser" anti-litter project and the "Bridget Jones Diary project".</p> <p>Camping Byelaws for East Loch Lomondside were progressed in 2010/2011 and implemented in 2011/2012. Additional resources were secured to employ ranger staff during the 2011/2012 summer season on the Loch Lomond islands to help reduce pressure on the capercaillie and native woodland.</p>	Bridget Jones, NPA	NPA	
SBD 6	National Park Local Woodland and Forestry Framework	<p>Develop revised Local Woodland and Forestry Framework by 2009 and implement it to promote:</p> <ul style="list-style-type: none"> Expansion in extent and quality of native woodlands Improved functional connectivity between woodland patches Improved age structure design and species composition of timber-producing woodlands to maximise their biodiversity value Restoration of missing and under-represented woodland types such as sub-montane scrub, wet woodlands and wood pasture. 	<p>This output has been revised. There is no longer an intention to produce a LWFF but instead FCS have produced the Cowal & Trossachs Strategic plan. This document highlights various strategies to achieve the outcomes of the LWFF.</p> <p>Through the Forest Design Plan process FCS have looked for opportunities to improve functional connectivity between woodland patches, improving the age structure and species composition of the forest for animal species benefit. FCS still have work to undertake to improve sub-montane scrub, though more gradual transitions to upper woodland edges have been promoted where opportunities arose.</p>	Russell Lamont, FCS	FCS	
SBD 7 #	Environmental Management Strategy (EMS)	<p>Implement the existing EMS to ensure the authority manages its own property and operations with due attention to biodiversity and other environmental considerations, with SEPA as facilities managers for Carrochan.</p> <ul style="list-style-type: none"> Review the EMS Review management of Park Authority properties for biodiversity benefits. 	<p>Some measures have been taken forward (eg SUDS pond and wildflower seed sowing at Carrochan, the NPA HQ).</p> <p>An EMS workshop was held in December 2009 to examine the potential for increasing biodiversity on NPA sites and a biodiversity management plan produced by SEPA for the Carrochan grounds.</p> <p>A review of the NPA maintenance contractor bill of quantities took account of biodiversity management objectives and was completed in January 2010.</p> <p>Bat surveys were carried out on all buildings and trees which required maintenance works carried out over the winter of 10/11.</p>	Jim Williamson, NPA	NPA	
SBD 8 #	Ranger Service wildlife management, survey and monitoring programme	<p>Continue the survey and monitoring programme to:</p> <ul style="list-style-type: none"> Help implement the NPBAP Contribute to Park Authority property management Contribute to national recording schemes Help safeguard protected species from recreational disturbance and persecution through Police partnerships, such as Operation Ironworks. 	<p>A ranger service biodiversity working group monitored the survey programme during 2010 and 2011 and a report setting out the targets and progress made was produced.</p> <p>The ranger service continues to contribute to national recording schemes such as the BTO WeBs counts and to projects such as the water vole reintroduction project, Saving Scotland's Red Squirrel project and black grouse conservation work.</p> <p>The ranger service patrols help to safeguard protected species through a visible presence at visitor hotspots and is targeted to help certain protected species eg. on the Loch Lomond islands to help protect the Capercaillie and resting ospreys.</p>	Gwenda Diack, NPA	NPA	

Table 2 NPA Biodiversity Duty Work Programme (Continued)

Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
SBD 9 #	Events programme	Incorporate events with a biodiversity theme in annual events programme.	<p>2010 International Year of Biodiversity was celebrated and promoted through the ranger service events and was the main theme for events alongside Scotland.</p> <p>The NPA joined up with other SEARS partners to promote biodiversity at the Royal Highland Show and worked jointly with FCS on biodiversity events throughout the year.</p> <p>Alongside smaller biodiversity events, a large biodiversity event 'Wild Park' was held in March 2012 at the FCS David Marshall Lodge.</p>	Sheila Winstone, NPA	NPA	
SBD 10 #	Volunteer Development Programme	<p>Promote biodiversity as a specific opportunity for volunteer involvement.</p> <p>Work with partners to engage people in biodiversity and give them an opportunity to contribute to the outcomes.</p> <p>Continue existing work such as red and grey squirrel and black grouse surveys where land managers, community groups and other volunteers already participate.</p>	<p>The Trossachs Water Vole Reintroduction project (with FCS), The Saving Scotland's Red Squirrels Project (with SWT), dolphin porpoise and whale monitoring on the sea lochs, black grouse surveys, Wetland bird surveys and butterfly/moth monitoring activities have all benefited from the input of NP Volunteer time.</p> <p>Many of the projects rely upon this volunteer time, for example volunteers contributed 410 hours of survey time to the water vole project to establish the distribution of the released water voles and surveys of red and grey squirrel distribution would be greatly reduced without volunteer input.</p>	Zoe MacGregor	NPA	
SBD 11 #	Natural Heritage Grant Scheme	Fund biodiversity projects.	The Natural Heritage Grant Scheme helped to fund a number of projects, in particular the early works (scrapes and sluices) on the Glen Dochart Waders project.	Lisa Duggan, NPA	NPA	
SBD 12 #	Community Futures	Make an inventory of environmental projects in completed Community Action Plans 2008-2011 to target thinking and resources and identify potential collaborative projects. Offer biodiversity presentations to community area networks. Assist communities wishing to undertake projects with biodiversity aspects.	<p>The NPA approved a proposal to the National Park Community Partnership to significantly increase its independent role in providing support services to community organisations in the Park, as well as delivering projects.</p> <p>The NPA provided the Partnership with funding of £35,000 to accommodate and deliver this transition. The remaining role for the NPA has been to provide advice to communities wishing to undertake projects with biodiversity aspects for example invasive species control work.</p>	Hannah Robinson, NPA	NPA	
SBD 13 #	Sustainable Tourism Charter	Implement sustainable tourism charter document "A Framework and Action Plan for Sustainable Tourism".	<p>The Friends of Loch Lomond & The Trossachs "Our Park" scheme is in operation and has been expanded to cover the whole of the National Park. The scheme gives visitors to the area an opportunity to make voluntary donations through businesses who are signed up, the donations are directed into vital wildlife, conservation and access projects in the area.</p> <p>Implementation of the Europarc Charter is an ongoing process, business involvement with the park continues and the business toolkit is now available to help businesses promote themselves as being in the National Park while emphasising the link they have to the natural resources of the area. The business toolkit is free of charge and uptake continues to grow now with over 150 business signed up.</p>	Nigel Brooks, NPA	NPA & FoLLT	
SBD 14 #	Learning Development Framework	<p>Expand "learning outside the classroom" projects beyond existing Eco-Schools and Grounds for Learning work into the wider National Park, using the Loch Lomond National Nature Reserve as a larger venue for learning.</p> <p>Target groups where barriers exist to participation using the John Muir Award scheme where appropriate.</p> <p>Develop information packs and other educational resources covering biodiversity.</p>	<p>The Ranger Service have delivered Outdoor Learning programmes and inputted to Grounds For Learning, Ecoschools and John Muir Award projects. Teaching resources for Inchcailloch and East Loch Lomond are being developed and a CPD teacher training programme is being offered to raise awareness of these resources and support available for using National Nature Reserves as an Outdoor Classroom.</p> <p>The project to refurbish the National Park Visitor Centre at Balmaha to enhance the educational and visitor experience was developed during 2011/2012 and the centre was re-opened in Easter 2012.</p>	Alison Cush, NPA	NPA	

Projects whose timescales extended beyond the initial three-year plan (#)

Table 2 NPA Biodiversity Duty Work Programme (Continued)












Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
SBD 15 #	Communications and Marketing Plan	Identify and promote key biodiversity messages to build up relationship with large national organisations and raise National Park awareness.	International Year of Biodiversity 2010 was targeted as a key biodiversity message for events and publications in 2010. In terms of promoting NPBAP projects, several articles were featured in The Park magazine. The NPA website biodiversity pages were updated to include links to NPBAP partner organisations. Wild Park was a key biodiversity partnership event organised during 2011 and held in March 2012.	Sheila Winstone, NPA	NPA	
SBD 16	Land Management Framework	Develop a Land Management Framework to provide a vision for the future of land management in the National Park and a guide to the allocation of resources to support land managers in achieving National Park and wider rural development objectives. This will build on the Local Woodland & Forestry Framework, the Land Futures pilot, and the Natural Heritage Grant Scheme.	Not actioned - this has now been superseded by the National Park Partnership Plan 2012 - 2017.	Lisa Duggan, NPA	NPA	
SBD 17 *	Biodiversity constraints checking system	Comprehensive IT-based biodiversity constraints mapping available to Planning Officers, developers and the public, through the E-planning initiative, possibly in collaboration with Local Authorities.	A business case and development plan for establishing a Biological Data Hub covering the National Park and Stirling Council areas was produced in February 2010, however, the project was shelved thereafter as the main partners were unable to commit funding beyond 2010/2011 due to the public sector budget cuts due in subsequent years. The NPA have been progressing with the development of desktop GIS/ IT capability for staff so that the GIS information currently held can be better utilised. This desktop capability will include streamed data from the NBN Gateway. This project will be completed in 2012. A Biological Habitat Data Audit was also completed in 2010/2011, funded through the NPA and SNH. The resulting audit created a GIS biodiversity layer of information accessible through the internal GIS services used by the NPA/ SNH staff and SNH will soon have this available through their public website.	Gwenda Diack, NPA	NPA, SNH, Stirling Council	
SBD 18 *	Expanded Natural Heritage Grants Scheme	Enlarge and extend the scope of the Natural Heritage Grant Scheme to complement the Scotland Rural Development Programme.	The Natural Heritage Grant Scheme continued throughout the first NPBAP period but has been greatly reduced in size due to funding constraints.	Lisa Duggan, NPA	NPA	
SBD 19 *	National Park Wildlife Diary	Develop a web-based diary linked to ranger events and tourism businesses, to highlight an opportunity to view 'seasonal' wildlife for every week of the year. It will identify the best places and best wildlife to see in different seasons.	The Friends of Loch Lomond and the Trossachs received a grant in 2009/2010 to develop a web-based wildlife diary. It has been up and running since the summer of 2010. The NPA have linked this website and the biodiversity pages on the NPA site.	Sheila Winstone, NPA	NPA, FoLLT	

TABLE 3: Biodiversity Audit Work Programme

Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
BA 1	Prioritised audit work	Collate and review existing records for marsh clubmoss, Scottish dock and lesser butterfly orchid.	Scottish dock records were compiled. A review (including site survey of old record sites) of marsh clubmoss and Scottish dock records has been completed by a student as part of her dissertation during 2009/2010. Marsh clubmoss sites have been surveyed every few years by the Royal Botanic Garden volunteers to monitor any expansion or retraction of the plant's coverage. No review of lesser butterfly orchid was carried out.	Gwenda Diack, NPA	NPA	
BA 2 #	Baseline Audit	Produce the biodiversity audit. This will include the following steps: <ul style="list-style-type: none"> • Collate existing habitat survey information for the National Park. Resolve conflicts between overlapping data sets. • Identify which ones give the best available current information. Identify gaps in survey coverage and estimate the habitats present from other sources such as Land Cover Scotland 1988 and aerial photographs. • Collate existing species survey information for the National Park. Identify gaps in species survey information. Produce best estimates and maps of habitat extent. Produce best estimates and maps of species distribution. 	A Biodiversity Habitat Audit project was carried out under an NPA and SNH-funded contract and a report published (downloadable on the SNH research publications website). This audit focused on the habitat information that is available for the Loch Lomond & The Trossachs National Park. The habitat audit was completed in 2010. The species audit has been progressed in 2011 under a second contract with completion expected in 2013. We have also identified organisations and individuals who have UKBAP priority species datasets and who are prepared to share that data. A longer term project will be to help those organisations to mobilise their data onto the NBN.	Gwenda Diack, NPA	NPA	
BA 3	Biodiversity list	Produce a summary check-list of the habitats and species in the audit, listing the legal and conservation status of each one.	This project formed part of the biodiversity audit project being carried out by LUC, this aspect was completed in March 2010.	Gwenda Diack, NPA	NPA	
BA 4	Identification of ideal targets	Undertake discussions with national lead partners to estimate the Park's "fair share" of Scottish and UK BAP targets. Inventory work already underway for each habitat and species in the audit and which targets are already on track to be met. Develop achievable targets and timescales for selected habitats and species and highlight priorities for future reviews of the habitats and species enhancement programme.	SNH led on a contract being undertaken by the Macaulay Land Use Institute to rank in order of importance for each LBAP area the UKBAP priority species and habitats. This project was completed in 2010/2011 with the results received for the National Park area in April 2011. Further work will be required to identify local actions that can be taken forward within the second edition NPBP on these priorities.	Gwenda Diack, NPA	NPA	
BA 5 *	Species survey and monitoring Network	Develop a forum of local ecologists including BSBI, SWT, BTCV and other local expert groups to help identify gaps in species survey coverage, ensure all local records are available and to promote co-ordinated recording work.	The Biodiversity Data Hub business case and development plan project which was completed in 2009/2010 was an initial stage of developing a vehicle for carrying out the aims of this project to improve sharing and use of biological data. A workshop run by Stirling Council with the NPA and other partners was held to identify key actions that could be taken forward at the local level for the National Park and Stirling Council areas. As part of the species audit, individuals and organisations with species survey information have been contacted and in the next NPBP period it is hoped that recorders can mobilise this data onto the NBN. A local forum has not yet been developed to promote co-ordinated recording work. Discussions on joint working with neighbouring authorities are on-going to look for solutions.	Gwenda Diack, NPA	NPA, Local Recorders	
BA 6 *	Biodiversity data management	Fully resourced biodiversity information management systems in place covering the National Park and adjacent local authorities, providing biodiversity data management, record verification, and analysis and information, and promoting active survey and recording work programmes.	See above		NPA, SNH, Stirling Council	

Unfunded Projects (*) Projects whose timescales extended beyond the initial three-year plan (#)

Table 4: Lochs, Rivers and Ponds Work Programme




Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
LRP 1 #	Ecological monitoring and research of aquatic taxa	Monitoring of phosphorus, nitrogen, macrophytes, macroinvertebrates, zooplankton, phytoplankton, diatoms, chlorophyll.	<p>Powan conservation status – a five year programme of work is now in its fifth year. The project has resulted in a significant development of our ecological and management base knowledge on the status of the two native populations and two refuge populations of powan in the National Park. It has resulted in the translocation of powan to two additional conservation refuge sites.</p> <p>In conjunction with the Loch Lomond Fishery Trust, a pilot educational scheme "Powan in the Classroom" has been run in local primary schools.</p> <p>A three year programme of work began in 2011 to assess the numbers and distribution of three species of lamprey of high conservation value within the National Park. The distribution of the unique freshwater-feeding river lamprey known only from Lomond in the UK is being assessed and the genetic status of potentially discreet populations determined in this study.</p> <p>The base ecology and genetics work will form the basis of a conservation strategy for this high conservation value group in the NP.</p> <p>A study is underway into the occurrence of <i>Bathynella natans</i> in the National Park. This freshwater crustacean may be the rarest freshwater invertebrate in Scotland, it has only been recorded once previously here. Its current status is unknown. This project which began in Dec 2009 is attempting to establish its current status in the Loch Lomond catchment.</p>	Colin Adams, SCENE	SCENE, LLFT	
LRP 2 #	Control of point-source pollution and input of nutrients to Loch Lomond	Phosphate-free 'Do a Little, Save the Loch' campaign. Boat users' best practice campaign. Loch boating surveys and boat registration scheme. Surveys of nutrient inputs at informal sites. Evaluation of water quality at current and future recreational levels.	<p>The boating surveys and registration scheme is still operating. Joint awareness campaigns on the General Binding Rules, including pollution sources has been linked to water activity.</p> <p>Information has been included within the Mainsheet 2010 and raised as an action within the Clyde RBMP Plan. Diffuse Pollution training was made available for ranger staff.</p> <p>A 'Limits of Acceptable Change' thresholds research contract was completed in 2010/2011 and will be implemented as a management plan over 2012/2013.</p>	Charlotte Wallace, NPA	NPA	
LRP 3	River Basin Management Planning	Produce four River Catchment Management Plans by 2009. Convene two meetings a year of the Loch Lomond Catchment Management Plan Working Group.	<p>Four Area Management Plans have been developed by SEPA in partnership with a range of stakeholders, including the NPA. Plans for the Clyde, Tay, Forth, and Argyll and Lochaber catchments cover the Park area. Final plans were released after public consultation in 2010.</p> <p>The Plans contain information about the classifications of water bodies in the catchments, future management objectives and actions that can be taken to improve their overall classifications to meet the requirement for all water bodies to meet good ecological condition by 2015.</p> <p>The Area Advisory Groups (AAGs) have replaced the LLCMPWG. The NPA sit on all Area groups, and also make the links to the Diffuse Pollution Management Advisory Group, and work on flood risk. We work to facilitate actions being taken forwards with partners and stakeholders.</p>	Charlotte Wallace, NPA	NPA	

Table 4: Lochs, Rivers and Ponds Work Programme (continued)








Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
LRP 4	Sympathetic recreation on Loch Lomond	Develop and implement research programme to gather information for the 2010 Byelaws Review.	A project has been completed to develop a methodology for monitoring and evaluating the impacts of recreational activity on the Loch Lomond islands and Endrick marshes. NPA Rangers and SNH staff have incorporated this methodology into their ongoing work. A 'Limits of Acceptable Change' contract began in 2010/2011. The implementation of this project over 2012/2013 will allow us to develop our monitoring fully, and importantly link into other monitoring and evaluation on Loch Lomond.	Alan Bell, NPA	NPA	
LRP5#	Control acidification of surface waters	Complete conversion of plantations along the Duchray corridor to native broadleaved woodland.	Woodland restructuring of the Rivery Duchray corridor is continuing.	Russell Lamont, FCS	FCS	
LRP6	Fishery Management Plans	Production of fishery management plans for all four river catchments in the National Park.	Draft Biosecurity Plans and Fishery Management Plans were produced for the Lomond, Tay and Forth catchments and Argyll. These plans were produced by each Fisheries Trust using a standardised approach. Stakeholder engagement and consultation on these draft plans will be required in order to implement some of the ambitious targets within each plan.	Gwenda Diack, NPA	Fishery Trusts	
LRP7	Fish and Habitat Surveys	Baseline survey for all fish species and for 17 rivers (13 within the National Park) in south Argyll and Management recommendations for restoring fish populations. Fish and habitat surveys round the Lomond Catchment.	Salmon genetic study part of a National programme funded by Scottish gov is now completed. Loch Lomond shows some of the best population sub structuring in Scotland. The Smolt trapping programme is well established using a rotary trap funded by the NPA and has run on the Endrick since 2008. This links with a major ongoing study being developed by LLFT (part funded by SNH and LLAIA) to establish natural carrying capacity for salmon in the Endrick.	Andy Burrows, LLFT	LLFT	
LRP 8 Part 1	Conservation of native species	Loch Lomond submerged plant community mapping survey undertaken.	SEPA has progressed sampling of the submerged plant community as part of Water Body Characterisation for the Water Framework Directive. It has also been looked at as part of the ecological monitoring research being carried out under project CP4. A comprehensive macrophyte survey of the Loch has yet to be funded.	Louise Bond, SEPA	NPA	
LRP 8 Part 2	Conservation of native species	Great crested newt survey completed.	The Ranger Service received training in surveying for great crested newts and surveyed all historical record sites for where this species has been reported, as well as some sites identified through the Scotland GCN 2010 Survey. This work was completed in 2010 and unfortunately no positive records for this species were found.	Gwenda Diack, NPA	NPA	
LRP9	Monitor climate change in freshwater	Loch Lomond macroinvertebrates and macrophytes study completed. Environment Change Network (ECN) monitoring buoy operated.	The University of Glasgow continues to contribute to the European Change Network programme by collecting long-term data on macrophyte abundance and community structure at sites in Loch Lomond.	Colin Adams, SCENE	SCENE	
LRP 10	Salmon Genetics Project	3 year project to study genetics of salmon on river systems.	This was a new project proposed by LLFT at an NPBP working group meeting during 2009/2010, however, the project detail and outputs and outcomes were not defined further during the 1st edition NPBP period.	Gwenda Diack, NPA	LLFT	

Table 5: Coastal Marine








Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
CE 1 #	Coastal litter management	Adopt-a-Beach scheme expanded to cover four schools and four beaches. Bag it and Bin it Campaign promoted.	The marine event held in Cowal during summer 2009 included Adopt-a-Beach scheme. The Adopt-a-Beach continues with NPA ranger service support.	Jim Downie, NPA	NPA	
CE 2	Sea search survey	Review existing survey coverage and plan a programme of further surveys.	No action was taken on this project during the NPBP period 2008 - 2011.	Gwenda Diack, NPA	NPA	
CE 3	Marine biodiversity leaflet	Produce and publish leaflet.	A draft leaflet was produced in 2011 and is due to be completed in 2013.	Gwenda Diack, NPA	NPA	
CE 4	Marine awareness event	Bi-annual marine conservation awareness events and annual coastal rock pool programme.	The marine event held in Cowal during summer 2009 with partners working with local schools during the week & open event at the weekend. The event was not held in 2011.	Jim Downie, NPA	NPA	
CE 5 *	Whale, dolphin and porpoise recording	Whale, dolphin and porpoise recording scheme established to properly document the regular sightings of these animals in the sea lochs and upper Clyde.	The NPA ranger service have led on the community recording scheme with land based surveys taking place in 2009/2010 and 2010/2011. Volunteers trained in recording will continue to submit records.	Gwenda Diack, NPA	NPA, Local Community Volunteers	
CE 6 *	Cool Seas education programme	Marine Conservation Society "Cool Seas" education programme expanded to cover all schools in the National Park.	The marine event held in Cowal during summer 2009 with the "Cool Seas" team as partners, working with local schools on the lead up to the event.	Jim Downie, NPA	NPA	
CE 7 *	WeBs surveys	Develop programme of WeBs counts to survey wading birds on mudflats at the Holy Loch and Arrochar.	This remained an unresourced project proposal that was not taken forward during the NPBP period 2008 - 2011.	Gwenda Diack, NPA	NPA & BTO	

Table 6: Farmland Work Programme





Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
F 1	Glen Dochart wet grassland project	Breeding waders surveys carried out on all participating land holdings, management plans written for each and funding for implementation pursued. Surveys will be repeated in 2011.	Planning undertaken during 2008/2009 and survey work/liaison with land managers commenced in 2009/2010. Three SRDP proposals for habitat improvement measures for wading birds received approval in 2010/2011 - NHGS funded sluices and scrapes in 2010/2011. Monitoring first year since NHGS funded habitat management improvements were carried in 2011 and SRDP proposals commenced in 2011/2012.	Linda Winskill, NPA	NPA	
F 2	Hedgerows and boundary features mapping and evaluation	Map extent of hedgerows, dykes and other boundary features in the National Park. Evaluate condition and distribution; identify opportunities and priority locations to promote for improved management and restoration.	Project started in 2010/2011 with NP staff. Initial desk based study in winter 2010, based on best practice from other areas, followed by field survey work and follow up with hedgerow improvements at four locations, funded through the NHGS in 2011/2012.	Sheila Henderson, NPA	NPA	
F 3 #	Priority grassland habitats mapping and evaluation.	Undertake survey and assessment of priority grasslands to determine condition and potential areas for restoration. Identify interested land owners and provide management and funding advice for the highest priority sites.	This was a project proposal that was not taken forward during the NPBP period 2008 - 2011. The IHN model, however, was developed to cover grassland habitats.	Gwenda Diack, NPA	NPA	
F 4 *	Park-wide wet grasslands project	Build on FW1 to have wet grassland projects in place on the floors of all the major straths to benefit farmland waders and riparian habitats and act as flood storage areas. Removal of strath floor plantation blocks that disrupt key wader sites.	This remained an unresourced project proposal that was not taken forward during the NPBP period 2008 - 2011.	Gwenda Diack, NPA	NPA, RSPB	

Table 7: Woodland and Forest Work Programme











Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
WF 1 #	The Great Trossachs Forest	Create approx 4,400 ha of new native woodland over three land holdings through a combination of planting and natural regeneration. Halt the spread of Rhododendron in Loch Katrine catchment and Glen Finglas. Increase numbers of black grouse by 10%.	Approximately 600ha of new native woodland has been created at Loch Katrine over the last few years. Previously treated rhododendron has been resprayed across the Loch Katrine area. Black grouse numbers increased significantly	Sue Morris, The Great Trossachs Forest Alliance	FCS	
WF 2	National Park Paws Survey	Assessment of the ecological potential for restoration of all 4,367 ha of PAWS sites in the national forest estate in the Park.	This project has been completed.	Katy Freeman, FCS	FCS	
WF 3 #	PAWS restoration project	Develop programme and implement targets for restoration of national forest estate ancient woodland in the Park.	All PAWS within the forest District have been assessed and prioritised for restoration. High priority sites have been further assessed to determine restoration methods. This information will be used in the FDP process.	Katy Freeman, FCS	FCS	
WF 4 #	East Loch Lomond native woodland conversion	Continue to expand area of native woodland on East Loch Lomond, by 30 ha in this plan period.	There has been no further replanting of native woodland during the period of the NPBAP first edition.	Russell Lamont, FCS	FCS, RSPB	
WF 5	Forest Habitat Network model	Produce Forest Habitat Network model for the National Park.	The Integrated Habitat Network model developed by Forest Research has been delivered for the CSGN and the National Park area.	Lisa Duggan, NPA	NPA, FCS	
WF 6	National Park Local Woodland and Forestry Framework	Produce a revised, agreed National Park Local Woodland and Forestry Framework.	FCS have produced new guidance 'Right Tree in the Right Place' which suggests that the best practice may be to produce an indicative forest strategy rather than update the LWFF. FCS did not progress with the production of an IFS but did produce a Trossachs and Cowal Strategic Plan and, following Scottish Government's advice on Land Use Strategies, the NPA decided to integrate land use policies into the National Park Partnership Plan. The policy framework is therefore in place. Broad design principles are planned for 2013.	Russell Lamont, FCS	NPA, FCS	
WF 7 #	Pearl-bordered fritillary survey	Undertake butterfly survey and mapping programme at 12 sites for this woodland edge species.	A NHGS project to survey for PBF at Loch Katrine (to help inform grazing management) was taken forward in 2010/2011. Unfortunately weather hampered the survey season and only one new record for PBF resulted.	Gwenda Diack, NPA	FCS	
WF 8 # *	Owl nest box monitoring	Undertake annual nest box monitoring of approx 150 barn owl boxes and 300 tawny owl boxes in FCS woodlands in the Park.	This project has achieved all its targets annually.	Katy Freeman, FCS	FCS	
WF 9 *	Old fence removal	Develop a programme to remove redundant deer fences where they prevent graded transitions between habitat types or there is a risk of bird strikes.	Old fences have been removed where budgets allow. Any new fences are marked to prevent bird strikes.	Katy Freeman, FCS	FCS	
WF 10	Woodland grazing	New cattle or pig grazing schemes in pilot woodlands to improve the ecological quality and diversity of established native woodlands, to add to existing projects at The Great Trossachs Forest and the Hill Sheep and Native Woodland project at SAC Kirkton and Auchtertyre Farms.	FCS introduced 100 cattle in the Loch Katrine area, these have been deployed across the catchment and are helping with the establishment of Native Woodlands. Deer levels were assessed in this area during 2011.	Katy Freeman, FCS	FCS	

Table 7: Woodland and Forest Work Programme (continued)


Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
WF 11	Bat boxes	FCS have around 200 bat boxes up in Forest Habitat Networks throughout Loch Ard, Achray and Katrine Forest areas. FCS have been monitoring these boxes for the past 2 years, this includes recording species, numbers, sex and age of bats found. All bats are also given a unique ring. It is hoped that by ringing the bats found using these boxes, we can learn more about bats in this area, including: To find out how far bats travel, territory size and if they return to same roost sites each year. To get a better idea of mortality rates. To gather information on distribution and status of different bat species within the area. (Currently FCS have some records of Pipistrellus pipistrellus, Pipistrellus pygmeus, Myotis nattereri, Myotis daubentonii, Plecotus auritus). In addition to this, FCS have around 50 bat boxes on FCS sites in Cowal, these are also monitored annually although bats in Cowal are not ringed.	The project objectives were all achieved during the NPBAP period 2008 - 20011	Katy Freeman, FCS	FCS	

Table 8: Moorland and Mountains Work Programme






Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
MM 1 #	Sub-montane scrub restoration	Review six to eight FCS forest design plans a year and conservation body management plans to identify suitable locations for scrub restoration. Obtain best-practice advice from national group. Undertake planting on identified locations as a part of restocking programmes.	This has not been progressed. Opportunities will be explored at Loch Katrine.	Russell Lamont, FCS	FCS	
MM 2 #	Effects of livestock grazing abandonment on breeding birds	Identify three suitable sites. Obtain resources for project. Undertake study on sites in the National Park as part of a national research project	This project will now not happen. Study sites for a similar project have been identified elsewhere outside the NP, which have had monitoring done in the past. RSPB recommended that following the study a report be published and sent to RPID so as to inform the next cap review. Recommended that a demonstration site for hefted sheep grazing be looked into to show the ecological impacts from abandonment.	Yvonne Boles, RSPB	RSPB	
MM 3 #	Golden eagle viewing project.	Establish a golden eagle viewing opportunity using a TV camera link to a nest site at Ardgartan, operate with partners and review annually.	There has been little progress on this project over the period of the NPBAP 2008-2011, however other remote cctv public viewing opportunities have been developed at the David Marshall Lodge for other bird species.	Gwenda Diack, NPA	FCS	
MM 4 #	Mountain ringlet butterfly survey	Undertake mountain ringlet survey programme over three years for eight sites.	Two NHGS project proposals were received for delivery in 2010/2011 but not progressed. The NPA ranger service were unable to progress surveys for this priority species. Recommendation that sites are surveyed through a contract if this project is carried forward to the second edition NPBAP.	Gwenda Diack, NPA	NPA	
MM 5 *	Blanket bog restoration	Assess the condition of all non-designated blanket bogs and evaluate their carbon storage capabilities. Promote management such as drain blocking and modification of grazing regimes where these are having an adverse effect on the peat.	Grip blocking to help conserve blanket bog was grant aided on blanket bog area at NTS Ben Lomond through NHGS (to favour black grouse) in 2008/2009 - no further action during the plan period.	Lisa Duggan, NPA	NPA	

Table 9: Built Environment Work Programme









Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
BE 1	Otter survey	Sightings and road kill records. Investigation of road bridges and culverts at otter hotspots.	Analysis of the pattern of road mortalities between 1982 and 2008 within the National Park has indicated that around 90% of records are from A roads, with deaths occurring most frequently within a short distance of a water body. A survey of road bridge design and on A82 in 2007 revealed a number of bridges and culverts unsuitable for the safe passage of otters, particularly during high river flow. Road mitigation measures for otters were installed by Scotland Transerv during the Stuckindroin Bridge widening works and otters considered carefully in other road improvement schemes. Otters found dead by NP staff and members of the public have been routinely sent for post mortem at the Faculty of Veterinary Sciences at the University of Glasgow. Tissue samples are preserved for possible future toxicology analysis. Recent genotyping from otter RTAs indicate that there is a relatively high level of genetic heterogeneity within the LLTNP otter population. Otter spotting records sent to the NPA are collated and the data stored.	Dominic McCafferty, University of Glasgow	University of Glasgow	
BE 2	Barn owl nest boxes	38 Barn owl boxes have been installed with the NP boundary some on trees some in farm buildings.	From spring 2010 two members of the NP Ranger Service have been assisting a local volunteer in the maintenance and inspection of the contents of all the barn owl boxes that were installed under a Natural Heritage Grant Scheme 38. Data that is recorded includes boxes used, by what species, number of chicks, male, female. All barn owl chicks and adults that are found in these boxes are ringed. 2010 was a particularly good year for barn owl numbers as the field vole population the main food source for barn owls was also very high. Unfortunately field vole numbers plummeted in 2011 and 2012. This is a naturally occurring phenomenon in vole populations. However the already depleted numbers fell even further due to the harsh winter. This resulted in lower number of chicks reared in 2012. In total from the 38 boxes 11 barn owl chicks were ringed.	Steven Kenney, NPA	NPA	
BE 3	Bat boxes	Develop bat box project.	FCS have a bat box project for their forest land. No other project within the built environment has been developed, however, the NPA have monitored their buildings for bat roosts.	Gwenda Diack, NPA	NPA	
BE 4	Open space audit	Final audit complete.	This was completed in 2007. This has formed the basis for the open space identified in the National Park Adopted Local Plan 2010-2015. The NPA is on the Stirling Council Open Space Strategy Steering group.	Stuart Mearns, NPA	NPA	
BE 5	Design Guidance	Suite of design guidance produced.	A Planning Advice Leaflet on Biodiversity and Developments has been produced and is available on the National Park website.	Stuart Mearns, NPA	NPA	
BE 6	Development contributions	Establish a system for seeking biodiversity contributions from developers of relevant significant developments.	Policy DCON1 Developer Contributions in the Local Plan has the Authorities' planning position set out. Biodiversity is included as a potential contribution.	Stuart Mearns, NPA	NPA	
BE 7 *	Community wildlife sites	Use open space audit to identify and assess potential new community wildlife sites and possible Local Nature Reserves.	No action was taken on this project during the NPBP period 2008 - 2011	Stuart Mearns, NPA	NPA	
BE 8 *	School grounds	Develop a comprehensive school grounds programme using the Natural Heritage Grant Scheme.	Argyll & Bute Council carried out two campaigns in 2008/2009 which sought to identify what schools were doing in their grounds for biodiversity. Reports on the findings are available from the NPA. Sustainable school grounds projects delivered by Rangers on an ongoing basis, supported through volunteer projects. However the NHGS has not taken this forward and this aspect of the project has been changed.	Marina Curran Culthart, Argyll & Bute Council; Alison Cush, NPA	NPA	

Table 9: Built Environment Work Programme (continued)



Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
BE 9 *	Homes for wildlife	Building design- green roofs and homes for wildlife as standard elements.	A new advice leaflet on biodiversity and development was prepared and published on the website. One leaflet for both developers and householders on biodiversity issues.	Stuart Mearns, NPA	NPA	
BE 10 *	Marina reed beds	Establish 'buffer' reed bed areas round marinas to trap and absorb minor accidental fuel spills.	This was an unresourced project proposal that was not taken forward during the NPBAP period 2008 - 2011. This is not highlighted as a resourced project for 2012/13.	Charlotte Wallace, NPA	NPA, SEPA	

Table 10: Red Squirrel Work Programme








Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
RS 1 #	Red squirrel awareness raising	One new website, one upgraded website, one CCTV viewing facility, three major events a year, twelve community or school group talks a year, six media articles a year.	There has been a huge amount achieved over the last few years including education and awareness being carried out by the Red Squirrel Group in Cowal (who hold local events and have a website), school groups and events undertaken by National Park rangers working in partnership with the Forestry Commission Scotland staff, the exhibition and CCTV at the David Marshall Lodge and articles in APhairc/The Park. Lewis Pate who was appointed as the Red Squirrel Project Officer for the SSRS project in February 2010 increased publicity and awareness about the red squirrel conservation in the National Park and the SSRS now has a dedicated squirrel reporting page on their website actively promoted to public. Land managers and estates in and around the National Park are aware of this work and over 18 estates are actively engaged in controlling grey squirrels.	Gwenda Diack, NPA	NP Squirrel Group	
RS 2 #	Red squirrel surveys of Scottish Priority Woodlands	Surveys in two Priority Woodlands to confirm red squirrel presence and estimate abundance.	Achieved.	Lewis Pate (SSRS/SWT)	FCS	
RS 3 #	Red and grey squirrel distribution surveys	Fourteen walking transects and 19 x feeder box transects in red/grey interface areas. Compile records of public sightings and produce annual map of results. SWT PO increasing feeder box monitoring by and collating all FC, NP and individual monitoring data.	All data has been returned to SWT data officer for recording. Feeder box transects and walking transects being increased using NP and SWT volunteers. 36 2k x 2k tetrad squares now exist with feeder boxes or walking transects. 15 of these are now supported with camera tracks.	Lewis Pate (SSRS/SWT)	NPA, SWT	
RS 4	Survey method comparison	Comparison of 12 cone feeding and two walking transect surveys in Strathyre.	Achieved. Cone feeding surveys are now discontinued.	Lewis Pate (SSRS/SWT)	NP Squirrel Group	
RS 5	Pine marten predation survey	Collection of pine marten scats and analysis of red and grey squirrels in pine marten diet.	A study was published in 2008 which found no evidence of squirrels in the diet of pine martens within the NP. The diet of pine martens (<i>Martes martes</i>) with reference to squirrel predation in Loch Lomond & The Trossachs National Park, Scotland. The Glasgow Naturalist (2008) Volume 25, Part 1, 75- 82.	Gwenda Diack, NPA		
RS 6 #	Cowal buffer zone management	Two walking transects, feeder box survey and trapping and grey squirrel control programme to limit spread of greys west of Arrochar.	Trapping underway from November 2010 onwards with active support from landowning estates.	Lewis Pate (SSRS/SWT)	NPA, SWT	
RS 7	Rope bridge usage study	MSc thesis on the use and efficacy of squirrel rope bridges over main roads.	Thesis completed and received with NP ranger service assistance in 2008/2009.	Jim Downie, NPA		

Table 10: Red Squirrel Work Programme (continued)




Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
RS 8 #	Squirrel diseases survey	Collect and supply dead squirrels to national analysis programme for squirrel pox and other pathogens.	Post mortems have been carried out on carcasses. None have been found with the pox virus within the National Park. 11 10k squares sampled with 10 greys from each square. All results negative for SQPV.	Lewis Pate (SSRS/SWT)	NPA, SWT	
RS 9 #	Habitat management programme	Update eight FCS Forest Design Plans a year to incorporate red squirrel habitat improvements.	All FDP reviews include an assessment of squirrel habitats and areas of good habitat are retained wherever possible, the age structure of the FDP's are also examined to ensure a proportion of mature stands are retained. Opportunities for expanding red squirrel habitat are also identified.	Russell Lamont, FCS	FCS	
RS 10 New project	SSRS project	Project Officer for Argyll & Trossachs appointed as part of SSRS project to take forward project work plan.	Lewis Pate was appointed as the Red Squirrel Project Officer for the SSRS project in February 2010 covering the National Park, Stirling and Argyll area.	Lewis Pate (SSRS/SWT)	SWT	

Table 11: Water vole Work Programme




Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
WV 1	Water vole survey	Complete survey programme. Encourage casual records. Compile database of records.	Survey completed, maps received in 2009.	Gwenda Diack, NPA	FCS	
WV 2 #	Water vole habitat management	Review six to eight Forest Design Plans each year for scope to restructure riparian zones and undertake Wetland habitat creation.	All FDP reviews include an assessment of wetland habitats and identify opportunities for restoration and expansion of water vole habitat.	Katy Freeman, FCS	FCS	
WV 3 #	Water vole reintroduction	Water vole release programme in one location. Monitoring of habitat quality and management. Targeted mink control.	Project has been very successful. A Steering group has been formed, NP ranger service and volunteers have assisted with surveys. A Project officer has been appointed(employed by the FCS). The water voles have been released and surveys to monitor dispersal are on-going. Targeted mink control has been extended to East Loch Lomondside, towards Callander and the area south of the Queen Elizabeth Forest Park around Gartmore and the Endrick. There are now over 55 mink monitoring rafts in place.	Katy Freeman, FCS	FCS	

Table 12: Black Grouse Work Programme



Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
BG 1 #	Co-ordinated annual lek counts	Hold annual meetings to co-ordinate survey areas in the Park. Devise a two or three year rolling programme of surveys and searches to cover entire Park with available surveyors. Undertake annual surveys in accordance with the survey schedule. Collate results and produce summary report.	Annual lek counts achieved through partnership work with RSPB, CSBG and CSG. Achieved a planned approach to assess the whole of the National Park for black grouse over the next three years and to put in place a rolling programme of monitoring of known lek sites.	Yvonne Boles, RSPB	CSBG, CSG, RSPB & NPA	
BG 2 #	Habitat enhancement	Implement the high priority actions from the nine key lek management appraisals produced by FWAG for SNH, NPA and RSPB. Develop management recommendations for other key lek sites that are identified. Progress recommendations in the six FCS black grouse reports through Forest Design Plans.	RSPB and NP Land Management Advisors have worked with local landowners to support SRDP applications. The NPA have supported six SRDP applications for black grouse action in the Callander area, which have been committed to in 2011.	Scott Nisbet, NPA	RSPB, NPA	

Table 12: Black Grouse Work Programme (continued)




Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
BG 3	Advisory work	Hold two workshops in 2008 for land owners and managers. Provide advice on potential RDC applications.	Workshops completed in 2008/2009. Advice given on the SRDP applications above.	Scott Nisbet, NPA		
BG 4	Range expansion project	Map the locations of all known leks inside and within ten km of the National Park boundary. Undertake a desk analysis of the suitability of habitat in the intervening areas and identify potential areas for range expansion work.	A programme of searches of areas with suitable habitat for black grouse was planned with some of these areas being searched in 2011, others scheduled for 2012 and beyond.	Yvonne Boles, RSPB	NPA	
BG 5 *	Further Habitat enhancement	Implement habitat management recommendations in additional lek sites.	No action was taken on this project during the NPBAP period 2008 - 2011.	Scott Nisbet, NPA	NPA, Landowners	

Table 13: Capercaillie Work Programme








Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
CP 1	National Park Capercaillie Working Group	Agree need for group. Agree group membership. Meet on an annual basis.	Working group set up and meeting held in winter 2010/2011 focusing on the management required and agreed an approach for 2011/2012.	Alan Bell, NPA	RSPB	
CP 2 #	Capercaillie monitoring and survey	Annual counts on all Loch Lomond SPA islands. Survey annually for leks on the mainland where there are regular sightings and follow up on sightings in other areas. Establish capercaillie sightings records database. Promote submission of records of casual sightings.	LEK counts to monitor bird numbers carried out annually. East Loch Lomond also checked for lek signs in 2012. A brood count to monitor productivity was carried out in the SPA in July 2009 then discontinued due to small sample sizes. A system of recording casual sightings has also been established.	Yvonne Boles, RSPB	RSPB	
CP 3 #	Promoting responsible access on the SPA islands	Provide annual briefings to staff in key organisations on disturbance to capercaillie and the law. Undertake appropriate enforcement. Provide information on responsible access to people who may land on the islands about the risk of disturbance to capercaillie.	The ranger service worked on particular campaigns on the islands including , Caper Hotel campaign. Extra resources were found with financial assistance from SNH to employ NP ranger staff during the 2011/2012 summer on the Loch Lomond islands to help reduce pressure on the Capercaillie and native woodland.	Alan Bell, NPA	NPA	
CP 4	Impacts of visitor recreation on capercaillie on the Loch Lomond islands.	Undertake research project.	The recreation impacts monitoring study which was completed (listed under LRP4) has highlighted the vulnerability of capercaillie on the islands to recreational disturbance. A programme of improved visitor management was put in place in 2010/2011 and was strengthened in 2011/2012.	Alan Bell, NPA	NPA	
CP 5 #	Habitat management	Insert capercaillie habitat management into four to six Forest Design Plans each year as they come up for review. Undertake clearance of bracken, rhododendron ponticum, scrub and drain blocking at one capercaillie SPA	Habitat management for Capercaillie was carried out on the islands, this included bracken control and blaeberry brushcutting to increase new growth.	Alan Bell, NPA	FCS	
CP 6 *	Predator survey and control	Undertake detailed study into crows as likely predators of capercaillie eggs on the Loch Lomond islands and implement suitable control work e.g. Larson traps and humane killing.	Mink and grey squirrel control began on the Loch Lomond islands and continued throughout 2011. Planning was undertaken for crow survey work but a programme of crow control was not implemented.	Alan Bell, NPA	NPA, Luss Estates, SNH	
CP 7 *	Range expansion project	Creation of suitable accessible habitat from Strathyre to Loch Tay and Strathearn to allow the capercaillie population to move through the whole area.	Forest restructuring is continuing and will provide a range of habitats across this geographical area.	Russell Lamont, FCS	FCS	

Table 14: Powan and Loch Lomond River Lamprey Work Programme




Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
PRL 1	The effective population size of the Loch Lomond powan population	Estimates of the population size of powan in Loch Lomond.	Completed in 2008/2009	Colin Adams, SCENE	SCENE	
PRL 2	The effective population size of the Loch Lomond dwarf river lamprey population	Estimates of the population size of dwarf lamprey.	PhD started in 2009/2010. Early indications suggest that numbers of freshwater feeding lamprey in the Endrick water have remained stable, or increased slightly, over the last 25 years. Relationship of the small form to typically anadromous river lamprey also returning to the Endrick water are unclear at present.	Colin Adams, SCENE	SCENE	
PRL3 New (08/09)	Powan Educational Project	Work with Drymen and Buchanan Primary to grow on powan fry from eggs in the class room and release into their home river.	Project started in 2008/2009 and continued throughout the remaining years of the NPBP period.	Andy Burrows, LLFT	LLFT	

Table 15: Fresh Water Pearl Mussel Work Programme






Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
FPM 1	Survey of deep waters in the Teith and Forth catchments	Report on existing populations in the Teith and Forth catchments.	No action was taken on this project during the NPBP period 2008 - 2011 due to financial constraints.	Paul Roberts, SNH	SNH	
FPM 2	Survey of potential reintroduction sites	Report on the potential suitability of three rivers in the Park.	Survey commissioned and completed.	Paul Roberts, SNH	SNH	

Table 16: Invasive Species Audit Work Programme

Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
ISA 1	Invasive Animals Audit	Commission Invasive Animals Audit, covering Sika deer, American mink, Canada goose, ruffe, New Zealand flatworm and others. It will include the following steps: Collate existing survey information on invasive animals for the National Park. Assess risks of likely adverse impacts including responses to climate change, scope for and constraints to effective management and priorities for management.	The full audit was postponed until 2012/2013, however, some information on particular species was collected. For example, mink species presence as part of the watervole project.	Gwenda Diack, NPA	NPA	
ISA 2	Invasive Plants Audit Part 2	Commission the Invasive Plants Audit Part 2. This will build on the existing audit to cover himalayan balsam, North American skunk cabbage, piri piri, few-flowered leek, giant hogweed, white butterburr, pampas grass and others reported in the Park. It will include the following steps; collate existing survey information on invasive plants for the National Park; assess risks of likely adverse impacts including responses to climate change, scope for constraints to effective management and priorities for management.	A large audit of INNS plants has been postponed, however smaller surveys have been carried out on Loch Lomond and Loch Ard for riparian invasives and skunk cabbage and on FCS land for piri piri.	Gwenda Diack, NPA	NPA	
ISA 3	Wireweed survey	Undertake a survey of coastline sites for the invasive sea weed wireweed Sargassum muticum and disseminate identification cards for the species.	Awareness raised in the last issue of The Park with a request for records to be submitted to SNH.	Gwenda Diack, NPA		

Unfunded Projects (*) Projects whose timescales extended beyond the initial three-year plan (#)

TABLE 17: Invasive Species Action Work Programme



















Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
ISP 1 #	Rhododendron ponticum control programme	Appoint project officer. Promote control work at priority locations with funding through Rural Development Contract applications, and grant schemes. Investigate further funding options including LIFE+.	The project officer supported by FCS, SNH, NPA and Argyll & Bute Council continued in post. The project delivered extensive liaison with landowners and forestry contractors but has achieved relatively limited success with control work due to limited attractiveness of RDCs to landowners, despite securing increases in payment levels.	Alan Bell, NPA	NPA	
ISP 2	Endrick catchment invasive plants project	Arrange grant contract with CASET for upper Endrick and Blane, to complement SNH control work in Loch Lomond National Nature Reserve.	Treatment of invasive plants was carried out in 2010/2011. Insufficient information was provided to demonstrate successful application so the project was not repeated in subsequent years.	Lisa Duggan, NPA		
ISP 3	Flora guardian project	Benmore site management. Investigate scope for expansion of programme.	This project has been stopped due to rhododendron control work removing cover across the transects.	Jim Downie, NPA	NPA	
ISP 4 #	Invasive fish monitoring	Invasive fish survey programme developed for Water Framework Directive assessment.	No action was taken on this project during the NPBP period 2008 - 2011.	Charlotte Wallace, NPA	SEPA	
ISP 5	Invasive species practitioners network	Establish a network of interested agencies to exchange information, problems and solutions and to coordinate control work.	Network established, but no regular meetings held. Discussions held between NPA, Loch Lomond Fisheries Trust and Forth Fisheries Trust on RAFTS-funded biosecurity plans for river systems.	Gwenda Diack, NPA	NPA	
ISP 6 #	Japanese knotweed control programme	Develop and implement programmes to survey and eradicate Japanese knotweed from known locations in the National Park.	Liaison with communities and initial surveys has commenced with a planned approach to control and eradication developed for a control project starting in 2011/2012 in the Glen Dochart area.	Gwenda Diack, NPA	NPA	
ISP 7 # *	Early intervention protocol	Develop policies and procedures for prevention and treatment of new invasives.	Draft Biosecurity plans produced by the Fishery Trusts	Gwenda Diack, NPA	NPA, Fishery Trusts	
ISP 8 *	Mink control	A mink control programme in place in selected river catchments.	FCS have a network of mink rafts in place as part of water vole re-introduction project in the Keltie/Duchray catchment and NPA are running rafts for the capercaillie programme on the Loch Lomond islands	Gwenda Diack, NPA	NPA, FCS	
ISP 9 * See also red squirrel plan	Grey squirrel control	Grey Squirrel control programme in place and dedicated control officers in all locations identified in the SSRS project area.	Grey squirrel control programme in place in key areas including, SWT Project Officer trapping, NP ranger service trapping on Loch Lomond islands and wider participation being encouraged. FCS assisting with some trapping and SRDP assistance being offered to interested landowners.	Lewis Pate (SSRS/SWT)	NPA, Private Estates, SWT	
ISP 10 *	Prevention of Gyrodactylus salaris	Gyrodactylus salaris awareness programme developed for anglers, canoeists and other water users.	Article about Gyrodactylus salaris was included in Main Sheet and ref included in the reprinted 'Fishing in the National Park' leaflet.	Alan Bell, NPA	NPA	

Table 18: The Plan Process

Project Ref.	Project Title	Key outputs and outcomes	Key Achievements/Progress Update	Update provided by	Partners	Status
M 1	NPBAP Working Group	Establish revised working group of the partners & chair group. The NPBAP Working Group will be responsible for: undertaking further development of work programmes; ensuring progress with the three-year costed work programmes; reporting on progress with biodiversity actions annually using the BARS system; Revising and rolling forward the three-year work programmes.	The working group met on average three times a year. The role of the working group has been to monitor and report on progress being made on their individual projects and to steer the overall NPBAP process. The members of the working group consist of the NPA, FCS, RSPB, SNH, SEPA, LLFT, Scottish Land and Estates, neighbouring LBAP officers and SWT.	Gwenda Diack, NPA	NPA	
M 2	NPBAP Chair	Report to: Land Use Initiative Group (LUIG) – quarterly meetings National Park Board Strategy Group.	Reporting cycle was on target, however the Land Use Initiative Group was disbanded in 2010.	Gwenda Diack, NPA	NPA	
M 3		Establishing a Biodiversity Forum with a wider group of stakeholders and an open membership convened annually.	Two larger NPBAP events were held over the three years where a larger number of stakeholders and organisations were invited to host a stall or display to raise awareness of their conservation activities in the National Park. The first forum event was held in March 2009 where the NPBAP publication was launched. The second event was Wild Park which was held in March 2012. Both events were very successful at attracting both organisations and individuals.	Gwenda Diack, NPA	NPA	
M 4		Project Planning: Firm, quantified targets/projects will be confirmed through the working group.	Planning new projects has been included in the working group meeting cycle.	Gwenda Diack, NPA	NPA	
M 5		A progress report of work done on each project will be produced annually, presented to LUIG and the Biodiversity Forum and posted on the National Park Authority's website.	An annual report for 2009/2010 was published on the NPA website and progress in 2010/2011 was monitored and draft tables produced. This final report shows overall progress across the three years.	Gwenda Diack, NPA	NPA	
M 6		Biodiversity outcomes will also be reported on the national BARS database by the lead partner for each project.	No action was taken on this project during the NPBAP period 2008 - 2011.	Gwenda Diack, NPA	NPA	
M 7		Information at an appropriate level will also feed into the monitoring and reporting systems for the National Park Partnership Plan 2007-2012. This will include a review of the Biodiversity Indicators detailed in Section 8 of the NPBAP.	Information was fed into the reporting system for the National Park Partnership Plan at the appropriate time.	Gwenda Diack, NPA	NPA	
M 8		The NPBAP will be updated and rolled forward annually as a part of the corporate planning cycle.	The NPBAP 2008-2011 was updated annually, however, the proposal going forward is to produce a 2nd edition in 2012.	Gwenda Diack, NPA	NPA	

Next Steps For The National Park Biodiversity Action Plan

Conserving the natural heritage and special qualities of the National Park remains as important as ever. It is a key goal within the National Park Partnership Plan and is central to this National Park achieving its purpose. The vision for the NPBAP set out within the first edition (see below) still holds. Updating the targets and goals within the plan keeps the next edition of the NPBAP current and relevant to all, while reviewing the process helps us to improve our delivery and management of the NPBAP into the future.



The Vision for 2030

The National Park is widely recognised as a leading area in the conservation and enhancement of its habitats and species and for community, visitor and volunteer involvement in conservation action and delivery. The biodiversity gains in the National Park are obvious for everyone to see and enjoy.

Lessons Learned

The Working group met in 2012 to review the first NPBAP Process 2008-2011. The discussion focused on the strengths and weaknesses of the NPBAP and approach that they wished to see adopted for the second edition. The conclusions of this review are as follows:

Strengths

The plan was felt to be a great example of a concise, effective biodiversity action plan with a good project orientated approach.

It achieved good partner engagement and that while it focused on funded projects, it also showed ambition by including some aspirational projects where the funding had not yet been secured.

The overall priorities were clear and the NPBAP served to focus delivery on these priorities.

The Wild Park 2012 event which brought together organisations delivering on a wide range of projects showed that at a local level there was still a huge commitment to deliver on biodiversity issues in the National Park.

Weaknesses

The availability of staff resources was a constraint and that there was limited time available to attend meetings.

There was a gap of around a year in the reporting and monitoring of biodiversity projects due to the Park Authority and partners other work commitments.

There was a recognition that some projects which involved private landowners were more difficult to deliver due to constraints such as availability of resources, timescales and capacity to commit given competing business priorities.

While having unfunded projects within the NPBAP showed ambition, there was a risk that it could create unrealistic expectations and disappointments if this resulted in too many projects not being delivered.

The Next Edition

Proposals for the next edition of the NPBAP included:

The lifespan of the plan is proposed as 2014-2020, to tie in with the '2020 Challenge for Scotland's Biodiversity' and the UN 'Aichi targets', with specific projects for the first 3 years and aspirations for the remaining years.

The projects and overall direction of the next edition should seek to align with the approach and direction presented by the '2020 Challenge for Scotland's Biodiversity'

In 2012/2013, partnership input to define and propose projects for the next edition would be sought through individual email communications and a limited number of key stakeholder meetings on particular topics.

Streamlined working group meetings and using other methods of communication (such as email) were seen as essential at reducing everyone's time commitment while still maintaining partnership engagement.

In 2013, there would be public consultation on the next edition, with the aim to have a final second edition by the end of 2013.

The plan will include a section on projects undertaken within the period from the end of the 1st edition (Dec 2011) to the launch of the 2nd edition (December 2013).

A mid-term review of the plan is proposed in 2017 at which time specific projects for the remaining projects will be known and included.

Looking Forward

Our next edition of the NPBAP will take account of any changes of approach which are being encouraged at a national level, such as those outlined in the '2020 Challenge for Scotland's Biodiversity'. It will reaffirm our vision for biodiversity within the National Park (see opposite). It will focus on meeting our biodiversity commitments so that the natural heritage within the National Park can be conserved and enhanced. It will also make it better able to meet future environmental challenges and will contribute to the Scottish Government's strategic objectives for sustainable economic growth.

There should continue to be a project orientated approach, including some projects which are aspirational alongside those which have firm commitments or funding secured.

Projects should be shown geographically (using GIS mapping tools) as well as listed.

Projects which target landowner engagement should be included and there should be a greater partnership engagement with landowners on a project basis.

The plan will include a section on Geodiversity.

An Invasive Non Native Species Strategy and associated projects will be included.

There should be a focus on a few large catchment/ landscape scale projects alongside smaller habitat and species projects.

There should be a celebratory event and accompanying publicity when launching the next edition in order to raise awareness of the NPBAP and its projects.

Funding remains one of the main constraints to biodiversity projects being delivered. The National Park Authority and the other agencies will need to work together to ensure close alignment of priorities to maximise the effectiveness of conservation effort in the Park and to bring together the necessary resources to sustain and expand the programme of work.



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