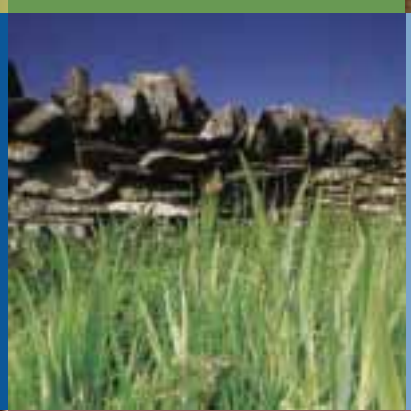
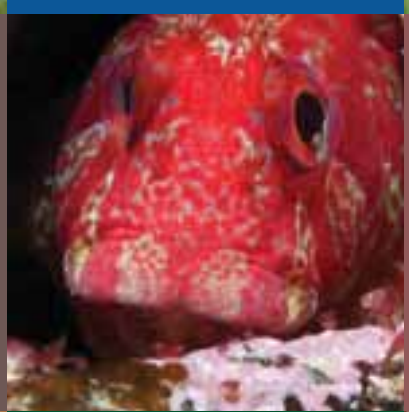
Delivering the Goods

How Scotland's Environmental Charities are Implementing the Scottish Biodiversity Strategy




Left: RSPB Images
Right: Julie Stoneman/Butterfly Conservation

Delivering the Goods

How Scotland's Environmental Charities are Implementing the Scottish Biodiversity Strategy

This report was written by John Mayhew for Scottish Environment LINK's Biodiversity Task Force, which currently comprises the following 15 organisations:

Bat Conservation Trust
Buglife - the Invertebrate Conservation Trust
Bumblebee Conservation Trust
Butterfly Conservation Scotland
John Muir Trust (JMT)
Marine Conservation Society
Mountaineering Council of Scotland
National Trust for Scotland (NTS)
Plantlife Scotland
RSPB Scotland
Scottish Allotments and Gardens Society
Scottish Native Woods
Scottish Raptor Studies Groups
Scottish Wildlife Trust (SWT)
Woodland Trust Scotland

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Summary

Scotland's environmental charities are **delivering the goods** for Scotland's biodiversity

The organisations that provided the case studies for this report manage between them approximately **2.6%** of the land area of Scotland, and represent approximately **8.4%** of Scotland's population

Over **6,000 volunteers** contribute over **37,000 days every year** to these organisations' work

Scotland's environmental charities are strongly committed to supporting the **2010 target** to halt the loss of biodiversity, and are striving to help to meet it

The collective value of their activity is helping to deliver a **large proportion** of the Scottish Biodiversity Strategy (SBS)

Recent projects by Scotland's environmental charities have delivered a combined investment of nearly **£2.3m** in Scotland's biodiversity

They plan future projects to deliver a further combined investment of at least **£5.0m**

These projects support **all five** SBS objectives

Scotland's environmental charities will continue to play a **key role** in delivering effective conservation on the ground, involving local people and communities, as part of the new integrated biodiversity delivery mechanisms underpinning SBS.

They provide **excellent value for money**, by levering matching funding from a wide range of public and charitable sources and by involving many volunteers

The grant programme operated by Scottish Natural Heritage (SNH) is a **key funding source** for most biodiversity projects, so there is widespread concern over the potential impact on biodiversity work of SNH's recent cut in funding

There is also **concern** over the likely decrease in Heritage Lottery funding available for biodiversity work

Given **fair investment**, Scotland's environmental charities can continue delivering the goods for Scotland's biodiversity

Introduction

This report aims to demonstrate how Scotland's environmental charities are playing a key role in the delivery of the Scottish Biodiversity Strategy. At its core is a set of case studies of successful projects carried out by the charities over the last three years or so and of projects they plan to carry out over the next five years or so.

This report was commissioned by Scottish Environment LINK, the collective voice of Scotland's environment movement. LINK is a member-led network of over thirty organisations both large and small, with a combined membership of over 500,000 people, equivalent to about 10% of Scotland's population. LINK member bodies own or manage over 200,000 hectares of land, equivalent to about 2.6% of the total land area of Scotland. LINK strives to be a dynamic network that helps members to achieve their own aims and their collective goals by sharing knowledge, building consensus on key concerns and taking action together. LINK's vision is to secure, through the collective efforts of its members and by inspiring others, the sustainable development of Scotland where all aspects of the country's environment are valued to enhance the quality of life for all. Link's collective work depends upon the active participation of its member organisations in the network's campaigns and subject-specific Task Forces; the idea for this report came from the Biodiversity Task Force. Further information about LINK can be found on its website[1].

Why Biodiversity is Important

Biodiversity (short for biological diversity) refers to the web of life in all its forms, from genetic diversity through species and habitats to whole ecosystems. For a relatively small country, Scotland's biodiversity is particularly rich and diverse. It includes iconic animals such as otter, red deer and red squirrel, trees such as juniper and Scots pine and birds such as capercaillie, corncrake, gannet, golden eagle and osprey. It also includes habitats and landscapes for which Scotland is famous throughout the world, including heather moorland, the Hebridean machair, rivers and lochs, the arctic-alpine plateaux of the Cairngorm Mountains, the oak forests of the West coast and the Caledonian pinewoods. Scotland's seas are particularly rich in biodiversity, including habitats such as sea lochs and cold-water corals and species including dolphins and whales. With the loss of natural habitats in the wider countryside, wildlife areas within towns and cities have become crucial to the survival of many increasingly rare species. For example, some urban brownfield sites support as many rare and endangered insects as do some ancient woodlands.

We all depend on biodiversity for our existence – it provides essential 'ecological services' such as clean water, food production, crop pollination by insects, healthy soil and flood defences. Healthy and robust habitats and species are one of the most important ways we can ensure that Scotland can stand up to climate change. Biodiversity also enhances our quality of life – in both urban greenspace and the open countryside it provides places to enjoy, to relax in, to take healthy exercise in and to learn from. Biodiversity is the foundation of much of Scotland's culture and economy. It is the basis of our tourism industry, particularly the growing 'green tourism' sector, and of our whisky, game fishing and sea fishing industries. In short, biodiversity is an essential public good, one that the organisations behind this report are committed to delivering.

The Biodiversity Process

By its very nature biodiversity is complex, and people across the world have evolved complex mechanisms for measuring its health and promoting its conservation. At the 1992 Rio Earth Summit leaders of 150 governments, including the UK, agreed the Convention on Biological Diversity[2] which recognises that biodiversity is about more than plants, animals and their ecosystems – it is about people and our need for food security, medicines, fresh air and water, shelter, and a clean and healthy environment in which to live. In April 2002, the Parties to the Convention committed themselves "to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth". This commitment is known as the 2010 Biodiversity Target; the European Union (EU) has agreed an even stronger target, ie to stop the decline by 2010.

1 http://www.scotlink.org
2 http://www.cbd.int

Introduction

The UK Government's response to the CBD was the UK Biodiversity Action Plan (UKBAP)[3], published in 1995. This describes the UK's biological resources and commits the UK to a detailed plan for their protection. It originally comprised 391 Species Action Plans (SAPs), 45 Habitat Action Plans (HAPs), each with targeted actions and Lead Partners, and 162 Local Biodiversity Action Plans (LBAPs). A reporting round takes place every three years; the results of the 2005 reporting round were published in 2006.[4] The UKBAP is widely regarded as a significant step forward in biodiversity conservation in the UK, partly due to its helpful co-ordinating mechanisms and LBAP process, and particularly in relation to less charismatic species such as invertebrates. The list of priority species and habitats under the UKBAP was revised in 2007 and now includes 65 priority habitats, 64 of which occur in Scotland and 1,149 priority species, 606 of which occur in Scotland.

The Scottish Biodiversity Strategy

In Scotland the Nature Conservation (Scotland) Act 2004[5] gave every public body a duty to further the conservation of biodiversity, and committed Scottish Ministers to prepare a Scottish Biodiversity Strategy (SBS) and to report regularly to the Scottish Parliament on its implementation. The first SBS was published in 2004[6] with the following five objectives:

Objective 1 Species and Habitats: To halt the loss of biodiversity and continue to reverse previous losses through targeted action for species and habitats

Objective 2 People: To increase awareness, understanding and enjoyment of biodiversity, and engage many more people in conservation and enhancement

Objective 3 Landscapes and Ecosystems: To restore and enhance biodiversity in all our urban, rural and marine environments through better planning, design and practice

Objective 4 Integration and Co-ordination: To develop an effective management framework that ensures biodiversity is taken into account in all decision making

Objective 5 Knowledge: To ensure that the best new and existing knowledge on biodiversity is available to all policy makers and practitioners

The SBS was produced in partnership with the Scottish Biodiversity Forum (SBF), a broad partnership of many different organisations and bodies across Scotland actively engaged in biodiversity conservation. The SBF is open to anyone, from individuals to large public bodies, from charities to businesses, from national government to LBAP partnerships. Since 2005 the SBF has been steered by the smaller Scottish Biodiversity Committee (SBC), which oversees the implementation of the SBS, evaluates the success of implementing the Strategy and reports at least annually to the SBF. The SBC also provides a mechanism for discussion and liaison with the UK biodiversity process.

The SBS is delivered through a programme of three-yearly Implementation Plans, which identify the priority actions required to implement the Strategy. The first set of Implementation Plans covered 2005-2007, and consultation has recently (March 2008) been completed on the draft set of Implementation Plans for 2008-2010. A Biodiversity Implementation Team, based at SNH, assists with the implementation of the Strategy on behalf of the SBF.

The Current State of Play

Between 2004 and 2007, the Scottish Government funded a Biodiversity Action Grant scheme to deliver action towards the five SBS objectives. This small pot of funding supported a wide range of projects and has been crucial to match-funding local and national biodiversity projects across Scotland. This funding stream has now been closed, leaving an important gap in funding sources for direct conservation action for biodiversity and for implementing the SBS objectives.

In November 2007 the Scottish Government met one of the commitments in the SBS by publishing a set of indicators[7]. These indicators are aimed at monitoring the effectiveness with which biodiversity policy objectives are being achieved, and in particular at

3 http://www.ukbap.org.uk
4 http://www.ukbap.org.uk/library/Reporting2005/UKBAPReport05.pdf
5 http://www.opsi.gov.uk/legislation/scotland/acts2004/asp_20040006_en_1
6 p://www.scotland.gov.uk/Publications/2004/05/19366/37239
7 http://www.scotland.gov.uk/Publications/2007/11/09155020/0

Introduction

progress towards the objectives in the SBS. The report presented 17 indicators describing the state of Scotland's biodiversity, plus 5 indicators describing the engagement of people with its protection and enhancement. The key principles used to select the indicators were use of the best existing data and relevance to comparable indicators used by the UK and Europe. Across the 22 indicators, 5 showed improvement, 3 showed deterioration, and 5 showed no change, fluctuation or divergent component trends. No existing data was available for 9 of the proposed indicators, so baseline data for a new measure was presented instead.

The three indicators showing deterioration were seabird populations, plant diversity and the effect of invasive non-native species such as *Rhododendron ponticum*, giant hogweed and Japanese knotweed. It is important to note that 'no change' is not necessarily a positive indicator, as it can actually mean 'no change to the existing unfavourable condition'.

In the Scottish Budget Spending Review announced in November 2007[8] SNH's budget was cut by about 1.5% for the following year, and a total of only 4.6% increase is planned over the four years to 2011; this works out at an average of about 1.6% per annum, likely to be less than inflation. The SNH grant programme is a key funding source for most biodiversity projects, so there is widespread concern amongst Scotland's environmental charities over the potential impact on biodiversity work of this cut in funding. This concern is heightened by the likely imminent reduction in funding for biodiversity projects from other principal sources such as the Heritage Lottery Fund or the Aggregates Levy.

In December 2007 the Scottish Government published its first three-year progress report[9] on the delivery of action to conserve biodiversity through the SBS and its first set of implementation plans 2005-2007. This report records the progress made by a wide variety of organisations working in partnership, including many of Scotland's environmental charities. It also highlights how public bodies have been implementing their biodiversity duty under the 2004 Act.

In January 2008 the Environment Minister presented this first SBS progress report to the Scottish Parliament, and a full Parliamentary debate on the subject took place.[11]

Scotland's Environmental Charities and Biodiversity

Environmental charities play a key role in biodiversity conservation in Scotland. For some it forms their principal or only focus (eg Butterfly Conservation, Plantlife or SWT); for others it forms one out of a wider range of objectives (eg JMT or NTS). Some charities undertake policy advocacy or research, some carry out practical management of nature reserves, others take part in landscape-scale partnership initiatives; some are involved in all of these aspects. Many of Scotland's biodiversity conservation charities co-operate with each other through Scottish Environment LINK. Those organisations represented on LINK's Biodiversity Task Force recently agreed a set of Ecosystem Principles which underpin their work. These stress the importance of intensifying action to conserve the full range of terrestrial and marine biodiversity across the full range of geographical scales, particularly in response to climate change. Most of Scotland's biodiversity conservation charities are involved in the SBF, and two of them (RSPB Scotland and SWT) are represented on the SBC.

8 http://www.scotland.gov.uk/Publications/2007/11/13092240/0
9 http://www.scotland.gov.uk/Publications/2007/11/13092240/0
10 http://www.scottish.parliament.uk/business/officialReports/meetingsParliament/or-08/sor0124-02.htm#Col5511

Case Studies
Recent Projects

The following five projects have recently been completed (or substantially completed) by Scotland's environmental charities. These are just a few examples of recent projects – no more than the tip of the iceberg – but they clearly demonstrate the breadth and extent of the positive biodiversity work recently undertaken in Scotland. Some have focussed on a particular priority species (eg corncrake or twinflower) or groups of species (eg butterflies and moths), others on restoring whole habitats (eg montane willow scrub) or on community involvement in biodiversity conservation (eg community woodlands in Cumbernauld).

Summary information on funding sources is provided, in order to indicate the approximate total investment value of these projects[11]. Taken together, they have delivered a combined investment value of nearly £2.3m in Scotland's biodiversity.

11 NB all figures have been rounded to the nearest £1,000

Butterfly Conservation Scotland

Butterflies and Moths Mean Business
Butterfly Conservation Scotland (BCS)

Butterfly Conservation is Europe's largest insect conservation body; it trains volunteers, carries out research and surveys, acquires nature reserves, advises landowners, lobbies policy-makers and promotes the conservation of native butterflies and moths and their habitats.

Nicholas Picozzi/Butterfly Conservation

Background

- There has been insufficient recording to date of key butterfly and moth species, coupled with low awareness of the importance of these species by local organisations

Project Aims

- Raise the profile of butterflies and moths in two areas: the Cairngorms and Lomond and Rural Stirling
- Increase butterfly and moth survey work
- Promote local butterfly and moth sites to tourist providers and to visitors to the two areas

Project Timescale	2005 - 2008	
Main SBS Objective Supported	Objective 2	People
Other SBS Objectives Supported	Objective 1	Species and Habitats

SBS/UKBAP Integration

- Overall, BC's work is very much geared to UKBAP/SBS objectives
- BC has a Priority Action Plan regarding implementing relevant parts of the UKBAP
- BCS has drawn up three regional action plans for Scotland in line with UKBAP priorities

Project Summary

- Appoint a Project Officer, covering both the Cairngorms and Lomond and Rural Stirling
- Arrange free training workshops for local volunteers and for people working in the tourism industry (eg B&B owners or ecotourism operators), to learn about local butterflies and moths and their sites, including how to identify them in gardens and countryside, and how to carry out surveys and monitoring of key species
- Produce two colour identification guides - Butterflies of the Cairngorms and Butterflies of Lomond and Rural Stirling
- Develop 'Butterfly Trails', where local people and visitors can learn about butterflies and moths, working in partnership with landowners and countryside staff
- Provide ongoing advice and support to volunteers from Project Officer

Nicholas Picozzi/Butterfly Conservation

Successes and Achievements

- Nearly 50 workshops or other training events held, attended by over 550 local people, countryside staff and tourism operators
- A great increase in butterfly and moth records (possibly two or three times the previous level of recording)
- Two very popular, free identification guides published
- Butterfly trails established at Glen Livet and Rothiemurchus, and a butterfly garden established at the Highland Wildlife Park

Issues and Challenges

- No significant issues – this was a successful project with strong support from funders, local biodiversity partnerships and local people

Funding	£
European Community LEADER programmes	**58,000**
Butterfly Conservation (including contribution in kind from volunteer input)	**51,000**
Scottish Natural Heritage	**46,000**
Cairngorms National Park Authority	**27,000**
Stirling Council	**3,000**
Total investment value	**185,000**

Notes

- The original project was for 16 months, covering both National Parks; it was extended for another two years in the Cairngorms

Further Information **http://www.butterfly-conservation.org**

Montane Willow Scrub Restoration at Ben Lawers

The National Trust for Scotland (NTS)

NTS is the conservation charity that protects and promotes Scotland's natural and cultural heritage for present and future generations to enjoy.

Richard Luxmoore / National Trust for Scotland

Background

- Montane willow scrub is a nationally rare habitat
- Woolly willow, *Salix lanata*, (the rarest willow species in Scotland) is now restricted to only fourteen alpine sites in Scotland
- Nine of these sites have very few plants, are vulnerable to grazing and are in danger of losing these last remnants
- In some populations there are insufficient numbers of male and female plants to ensure pollination and seed development, so augmentation and re-introduction are necessary to enable populations to increase

Project Aims

- Restore rare montane willow scrub habitat, including tall herbs (flowering plants) at Ben Lawers National Nature Reserve in Perthshire/Stirlingshire
- Increase and disseminate knowledge about how this habitat functions
- Act as a demonstration project for other sites and land managers

Project Timescale	1987 – present
Main SBS Objective Supported	Objective 3 Landscapes and Ecosystems
Other SBS Objectives Supported	Objective 1 Species and Habitats Objective 4 Integration and Co-ordination

SBS/UKBAP Integration

- The commitment by NTS to implement and contribute to the SBS is embedded in its Concordat with SNH and in its Countryside Management Strategy
- Woolly willow is a Priority Species with a Species Action Plan under the UKBAP
- NTS is Lead Partner for woolly willow and co-ordinates the woolly willow BAP steering group
- Part of this work has been carried out as part of the Action Plan for woolly willow under the SNH Species Action Framework

Project Summary

- Establish experimental fenced exclosures at Ben Lawers National Nature Reserve to allow vegetation to recover from heavy grazing (principally by sheep and red deer)
- Collect seed from nearest known populations of woolly willow
- Establish tree nursery to grow seed for planting on NTS and nearby sites
- Plant out five species of montane willow, including woolly willow, and other species, including juniper, *Juniperus communis*
- Involve volunteers in nursery management and planting
- Reintroduce woolly willow to two sites where it had become functionally extinct

Successes and Achievements

- Two formerly extinct populations of woolly willow re-established
- Over 175,000 plants, including about 100 woolly willow, grown from seed and planted out on habitat restoration sites

Issues and Challenges

- Such a long-term project requires long-term commitment and funding by all partners; full habitat restoration may require ongoing work until at least 2050
- Fences are necessary to exclude grazing, yet these intrude into the open landscape and impede access
- There have been problems with woolly willow, including disappointing success with their survival after planting compared with other species

Funding

- It is difficult to assess the total costs related to this project, as it is an integral part of the ongoing overall management of the nature reserve
- Between 1987 and 1998 at least £26,000 was spent on exclosure fencing, maintenance and initial planting; funders for this work included Esso, Perth and Kinross Council, the former Nature Conservancy Council and NTS
- The main phase of work took place between 1998 and 2001 as the Tarmachan Habitat Restoration and Improvement Project (THRIP) at a cost of £338,000, funded by the Millennium Forest for Scotland Trust, the European Union, Scottish Natural Heritage and NTS
- The main costs since 2001 relate to employing a permanent Ranger to work virtually full time on this project, at a cost of at least £15,000 pa, funded by NTS and SNH
- A reasonable estimate of the total expenditure to date would therefore be at least:

	£
1987 - 1998	**26,000**
THRIP 1998 - 2001	**338,000**
2001 - present	**105,000**
Total investment value	**185,000**

Notes

- The woolly willow populations at Ben Lawers and Meall nan Tarmachan had each been reduced to single plants, too far apart to allow pollination, so both populations were effectively extinct
- This is a partnership project between NTS, SNH, the Royal Botanic Garden Edinburgh and a number of private landowners
- Similar work is under way at NTS property Grey Mare's Tail Nature Reserve in Dumfries-shire, relating to downy willow, *Salix lapponum*
- Part of the woolly willow Action Plan under the SNH Species Action Framework aims to establish populations of 250 plants at each of 16 sites, including two populations at Ben Lawers and Meall nan Tarmachan

Further Information

http://www.nts.org.uk/Property/94

http://www.ukbap.org.uk/UKPlans.aspx?ID=556

http://www.rbge.org.uk/science/genetics-and-conservation/Conservation-and-Ecology/Scottish-Plants-Project

Mardon, D.K. 2007. *Conserving montane scrub - an uphill challenge.* Conservation Land Management 5 (2): 4-7

Woodland Management for Twinflower Conservation
Plantlife Scotland

Plantlife, the wild plant conservation charity, champions the conservation of plants and fungi in the wild. Its vision is of a world that values wild plants – now and for the future.

Plantlife

Background

- Twinflower, *Linnaea borealis*, grows in pinewoods and pine plantations in Scotland, with its stronghold in Speyside
- Caledonian pinewoods are listed on Annex 1 of the EU Habitats Directive
- Key threats to twinflower and associated pinewood herb species are: fragmented populations too far apart for pollination to occur; inappropriate timber management operations; habitat loss associated with changing land management practices and climate change

Project Aims

- Conserve threatened twinflower populations
- Develop practical advice for woodland managers, based on sound scientific research, on appropriate management techniques for promoting the establishment and spread of twinflower
- Involve volunteers at their local twinflower sites

Project Timescale	2007 – 2017	
Main SBS Objective Supported	Objective 1	Species and Habitats
Other SBS Objectives Supported	Objective 2	People
	Objective 5	Knowledge

SBS/UKBAP Integration

- Plantlife's Strategic Business Plan (2007 – 2011) includes the UKBAP as a mechanism to deliver action for plant conservation priorities on the ground
- Plantlife Scotland is supported by a three-year grant from SNH (2005 – 2008) to implement the SBS for plants and fungi
- Twinflower is a UKBAP Priority Species, for which Plantlife is the Lead Partner, and is on the Scottish Biodiversity List

Project Summary

- Use research evidence of historical woodland management techniques at a key twinflower site to design management trials
- Test historic timber management techniques as potential mechanisms to encourage the spread of twinflower at five sites across Scotland
- Use results of ongoing trials which started in 2000 to identify appropriate light levels and growing conditions for twinflower establishment
- Use contractors and volunteers to monitor research plots for 10 years to assess impacts of the work


Plantlife

Successes and Achievements

- Appropriate conditions for twinflower expansion successfully created through use of historical management techniques
- Effective, practical advice available to forest managers on conserving twinflower in working woodlands

Issues and Challenges

- Practical work delayed by unusual weather conditions
- Long-term monitoring programme uncertain due to lack of ongoing funding

Funding	£
Plantlife	**5,300**
SNH	**4,700**
Total investment value *(NB this excludes costs of 10-year monitoring programme)*	**10,000**

Notes

- Also supports Habitat Action Plan for pinewood

Further Information

http://www.plantlife.org.uk

http://www.ukbap.org.uk/UKPlans.aspx?ID=413

Saving the Scottish Corncrake
RSPB Scotland

RSPB Scotland is part of the RSPB, the UK charity that speaks out for birds and wildlife, tackling the problems that threaten our environment.

RSPB Images

Background

- Corncrake, *Crex crex,* is a migratory bird that arrives in Scotland from mid-April and leaves from mid-August
- It is a type of rail, related to moorhen and coot; it eats insects and seeds
- Corncrakes are secretive birds, spending most of their time hidden in tall vegetation
- Their presence is most easily located by the male's rasping call, which can be heard both day and night
- UK corncrake populations are now mostly confined to the Scottish islands
- Corncrakes require improved or semi-improved grassland, where grass is harvested as a hay or silage crop for winter feed for livestock

Project Aims

- Reverse the decline in the Scottish population of corncrake
- Increase the numbers of corncrake in Scotland in line with UKBAP targets
- Increase the range of corncrake in Scotland

Project Timescale 1992 – present

Main SBS Objective Supported Objective 1 Species and Habitats

Other SBS Objectives Supported Objective 2 People

SBS/UKBAP Integration

- Corncrake is a high priority species for the RSPB
- Corncrake is an Annex 1 priority species under the EU Birds Directive, a Schedule 1 protected species under the Wildlife and Countryside Act 1981 and a priority species under the UKBAP
- The RSPB is the Lead Partner for the UK Corncrake Species Action Plan under the UKBAP

Project Summary

- Carry out research to identify reasons for decline in corncrake population and to establish species requirements – eg vegetation cover and diet
- Use this research to develop management prescriptions to reduce further losses – eg early vegetation cover, delayed hay or silage cut, corncrake-friendly mowing methods
- Trial these measures on RSPB Scotland reserves, eg on Coll
- Carry out annual survey of calling males
- Undertake theoretical modelling of techniques which could promote species recovery and correlate these to survey results
- Establish Corncrake Initiative to pay farmers and crofters with corncrakes calling on their land in the core corncrake range (largely the Inner and Outer Hebrides) to carry out appropriate management
- Carry out policy advocacy work calling for the establishment of Special Protection Areas for corncrake under the EU Birds Directive
- Ensure that corncrake management prescriptions are integrated into mainstream agri-environment schemes


Jamie Boyle, RSPB Scotland

Successes and Achievements

- Population decline successfully reversed, and numbers increased from a low of 446 calling males in the core areas (which hold over 90% of the UK total) to over 1,200 at present
- BAP group successful at involving relevant government departments and agencies as well as non-government organisations and, critically, farmers and crofters

Issues and Challenges

- Survival of corncrake depends on maintenance of traditional agricultural systems in the Scottish islands, particularly cattle
- This is influenced by socio-economic change in the islands, currently leading to people leaving crofting and some crofts being abandoned
- Expanding the range to recolonise former strongholds is proving more challenging than increasing numbers within the existing range

Funding

- The overall amount of funding put into this project is difficult to estimate, as it forms such a mainstream part of RSPB Scotland's activities
- Expenditure is very considerable, including that on staff time, surveys, management agreements, purchase and management of reserves, advisory work and policy advocacy
- A rough estimate would be that RSPB has spent between £100,000 and £300,000 per annum over 15 years, ie a total investment value of between £1.5m and £4.5m

Notes

- A full national survey is carried out every 6 years
- Corncrake management techniques have potential to help other species, eg great yellow bumblebee, *Bombus distinguendus*
- Corncrake options under the forthcoming Rural Development Contracts have been developed in partnership with the BAP group and farmers and crofters and, with appropriate advisory input, will help to further secure the Scottish population and range

Further Information

http://www.rspb.org.uk/wildlife/birdguide/name/c/corncrake/index.asp

http://www.ukbap.org.uk/UKPlans.aspx?ID=244

O'Brien, M., Green, R.E. and Wilson, J. 2006. *Partial Recovery of the population of corncrakes Crex crex in Britain 1993-2004*. Bird Study 53, 213-224.

Cumbernauld Community Woodlands Project
Scottish Wildlife Trust (SWT)

SWT is the largest conservation organisation working exclusively on all aspects of wildlife conservation in Scotland.

Scottish Wildlife Trust

Background

- In 1995 SWT took over ownership and management of four woodland wildlife reserves from the former Cumbernauld Development Corporation
- These woodland reserves in the heart of Cumbernauld, Scotland's fifth largest town, are valuable and well-used local greenspaces, but suffer common urban woodland problems including litter, fly-tipping, antisocial behaviour and unauthorised motorbike use

Project Aims

- Encourage community participation in the improvement and management of seven urban woodland wildlife reserves, mainly in Cumbernauld

Project Timescale	2005 - 2008	
Main SBS Objective Supported	Objective 2	People
Other SBS Objectives Supported	Objective 3	Landscapes and Ecosystems

SBS/UKBAP Integration

- One of SWT's ten strategic objectives is "to champion implementation of the Scottish Biodiversity Strategy and encourage others to deliver their obligations under the Scottish biodiversity duty"
- The ancient semi-natural woodlands managed by SWT in Cumbernauld host four UKBAP Priority Species, including pipistrelle bat and water vole, and three SBS List species, including badger and kingfisher

Project Summary

- Undertake community consultations to find out what local people would like to see happening in the reserves
- Develop projects that improve the reserves and meet local aspirations, including obtaining the necessary external funding
- Run awareness-raising events to let people know the woodlands exist and to encourage them to visit
- Run educational events to encourage use of the woodlands as an educational resource by people of all ages
- Organise practical volunteer work days to give people a chance to be directly involved in managing the reserves
- Promote responsible access to the reserves
- Provide training and assistance to local volunteers in organising community events, raising funds and delivering projects on the ground
- Ensure regular communication through local press, posters, newsletters and email updates


Scottish Wildlife Trust

Successes and Achievements

- 48 awareness-raising events attracted 2,400 people
- 30 practical events generated 350 volunteer work days
- 28 educational events involved 1,060 participants, including from four local primary schools
- 'Friends of Cumbernauld Glen' community group established and supported
- Scotland's first urban mountain bike trail developed, working with local mountain bikers and generating £120,000 of additional external funding

Issues and Challenges

- Community engagement is a long-term process – ongoing support is required to help local volunteer groups become self-sustaining and so ensure that the valuable work undertaken by the project survives the end of the three-year funding package
- Regular and continued communication is essential to ensure positive community relations
- Establishing reserve management groups for each of the sites proved too ambitious
- Project funding is easier to secure than core funding
- Funding for biodiversity work is currently hard to find

Funding

	£
Forestry Commission Scotland, through the Woods In and Around Towns initiative	**90,000**
SWT, through its Cumbernauld endowment fund	**30,000**
Total investment value over 3 years	**120,000**

Notes

- This project also helped local community groups to lever extra funding for additional projects which arose out of the main initiative

Further Information

http://www.swt.org.uk

http://www.friendsofcumbernauldglen.btik.com

Avery, R. 2008. *Community Woodland Officer Final Report.* Scottish Wildlife Trust.

Case Studies
Future Projects

The following nine projects have either been started recently by Scotland's environmental charities, or else are planned to take place in the near future subject to the availability of funding. As with the recent projects summarised above, these are merely examples of the type of work currently being started or planned, in order to demonstrate environmental charities' strong commitment to future biodiversity work. Even more ambitious plans to support the SBS and the UKBAP are afoot, extending to a yet wider range of subject matter than those already completed. Several tackle entire landscapes or ecosystems (eg lowland peatlands or machair), and there is an increasing emphasis on involving people in biodiversity conservation (eg Moths Count or Growing Up with Trees in Fife). Details are also given of a major project involving joint action by many of Scotland's environmental charities, the LINK Marine Campaign.

Each case study contains similar information to that provided for the recent projects above, and summary information on funding sources is once again given where possible, in an attempt to estimate the likely total investment value of these projects . Taken together, if they all go ahead, they stand to deliver a combined investment of at least £5.0m in Scotland's biodiversity.

RSPB Images

Moths Count
Butterfly Conservation Scotland (BCS)

Butterfly Conservation is Europe's largest insect conservation body; it trains volunteers, carries out research and surveys, acquires nature reserves, advises landowners, lobbies policy-makers and promotes the conservation of native butterflies and moths and their habitats.

Julie Stoneman/Butterfly Conservation

Background

- Data related to moths is widely dispersed between record centres, other organisations and individual records
- Moth data has never been brought together in a systematic way

Project Aims

- Encourage interest in moths throughout the UK
- Establish a national recording scheme to improve knowledge about and conservation of the 900+ species of larger moths ('macro-moths')
- Produce the first atlas of macro-moth distribution
- Stimulate and support moth recording

Project Timescale	2007 - 2011	
Main SBS Objective Supported	Objective 5	Knowledge
Other SBS Objectives Supported	Objective 4	Integration and Co-ordination

SBS/UKBAP Integration

- Overall, BC's work is very much geared to UKBAP/SBS objectives
- BC has a Priority Action Plan regarding implementing relevant parts of the UKBAP
- BCS has drawn up three regional action plans for Scotland in line with UKBAP priorities
- The atlas will help to identify areas supporting UKBAP species and the data will reveal population trends


Julie Stoneman/Butterfly Conservation

Project Summary

- Develop expertise by organising a programme of training events for new moth recorders and by supporting existing moth recorders and moth groups
- Encourage greater appreciation for moths among a new, wider audience, including people who have not previously participated in wildlife recording, including by running public events with other charities to introduce new people to moths
- Establish and develop the National Moth Recording Scheme, leading to a comprehensive, accurate and accessible database and atlas of the UK's larger moths
- Contribute to moth conservation by making the data available for action at the local, regional, national and international levels by members of the public, charities and conservation agencies
- Develop a simple online moth survey, 'Garden Moths Count', aimed at the wider public and focussing on easy to identify moths and caterpillars found in gardens

Issues and Challenges

- The size and complexity of the task to be undertaken

Funding	£
Heritage Lottery Fund	**800,000**
Other Funders	**375,000**
Butterfly Conservation (contribution in kind from volunteer input)	**325,000**
Total investment value	**1,500,000**

Notes

- This is a UK-wide partnership project with many partners including SNH, NTS and RSPB

Further Information
http://www.mothscount.org

Wild Land Biodiversity Project
The John Muir Trust (JMT)

The John Muir Trust is the leading UK charity dedicated to the protection of wild land for both nature and people.

John Muir Trust

Background

- JMT owns eight wild land estates in Scotland, covering over 24,000 hectares in total
- JMT works in partnership with community landowners at Knoydart, North Harris, Galson and Assynt, and is part of the Nevis Partnership
- The impact of grazing animals is a factor affecting the condition of all JMT land
- JMT now has the stalking rights for all its properties, enabling a concentrated effort to be made to manage red deer in harmony with biodiversity objectives

Project Aims

- Achieve significant long-term positive impacts upon priority UKBAP species and habitats, initially on land managed by JMT and in the longer term on land influenced by JMT
- Enable species and habitats to adapt to environmental conditions resulting from climate change
- Make findings and research available for the interest of members, landowners, land managers and other interested parties
- Influence and achieve improvements in relation to existing policies for the conservation of species and habitats of UK and local importance
- Increase public appreciation of wild land and its fauna and flora and raise awareness of the pressures affecting it
- Grow the JMT membership as active guardians of wild land and its wildlife for future generations

Project Timescale Initially 2007 - 2009, but with possible extension to 2011

Main SBS Objective Supported Objective 1 Species and Habitats

Other SBS Objectives Supported Objective 3 Landscapes and Ecosystems

SBS/UKBAP Integration

- The JMT land covered by the project includes ten different types of priority habitats, including extensive areas of upland heathland and blanket bog
- Eight priority bird species and four priority vascular plant species are present on JMT land, including skylark, song thrush, corncrake, black grouse and juniper


John Muir Trust

Project Summary

- Carry out baseline surveys of habitats and species
- Set up transects to monitor tree seedling growth
- Reduce grazing pressure by managing numbers of red deer, linked to the condition of vegetation; grazing reduction should allow recovery of vegetation, particularly growth of tree seedlings suppressed by continual grazing
- Continue to monitor vegetation condition and wildlife populations
- Employ three Wildland Conservers/Rangers, covering all JMT properties, to carry out targeted deer management alongside habitat and species monitoring, with the help of volunteers
- Employ Biodiversity Officer to co-ordinate information, maintain a database of species records, catalogue habitat and survey data and analyse vegetation data

Successes and Achievements

- Three Wildland Conservers/Rangers recruited and training initiated
- Monitoring systems and monitoring handbook set up and baseline data collected across the properties
- Wildland Conservers/Rangers have been liasing with local stalkers, landowners and agency staff to establish a clear understanding of deer numbers and their movements in relation to JMT properties and neighbouring land
- Deer counts carried out, deer management plans drawn up and deer cull completed for Year 1

Issues and Challenges

- Given that this was a new project and approach for JMT, pulling together accurate work programmes for the staff involved has been complex
- Most of the work in the first year has involved setting up systems and baselines, so time is needed to assess the success of the systems established and data collected to help focus the project as it matures
- Further funding needs to be found to secure the long-term future of this project, to ensure that any environmental benefits gained are not lost

Funding	£
Charitable Trusts	**558,000**
SNH	**120,000**
Total investment value	**678,000**

Notes

- This project supports JMT's overall purpose, to conserve and protect wild places with their indigenous animals, plants and soils for the benefit of present and future generations

Further Information

http://www.jmt.org/wildland-project.asp

Seabirds on the Edge

the National Trust for Scotland (NTS)

NTS is the conservation charity that protects and promotes Scotland's natural and cultural heritage for present and future generations to enjoy.

Richard Luxmoore / National Trust for Scotland

Background

- Scotland has 45% of the seabirds in the entire EU
- Almost 20% of these seabirds breed on NTS properties
- Most seabird research has taken place on the east coast, yet 60% of Scotland's seabirds are in the west
- The Joint Nature Conservation Committee (JNCC) has carried out seabird colony monitoring, but the only long-term research into seabird food supply has been carried out by the Centre for Ecology and Hydrology on the Isle of May
- There are clear differences between the North Sea and west coast ecosystems
- For example guillemots' main food is sandeels in the east, but young herrings and sprats are more common in the west
- Good and bad seabird breeding seasons do not necessarily correspond between the east and west coasts

Project Aims

- Establish a major new monitoring programme for the important seabird populations on the west coast of Scotland, as indicators of change in the marine ecosystem
- Establish links between colony size, breeding success and food supply

Project Timescale	2008 - 2013
Main SBS Objective Supported	Objective 3 Landscapes and Ecosystems
Other SBS Objectives Supported	Objective 1 Species and Habitats Objective 5 Knowledge

SBS/UKBAP Integration

- The commitment by NTS to implement and contribute to the SBS is embedded in its Concordat with SNH and in its Countryside Management Strategy
- Many of the seabird colonies are Special Protection Areas under the EU Birds Directive including those on the NTS properties of Canna, Mingulay and St Kilda


Richard Luxmoore / National Trust for Scotland

Project Summary

- Establish major new monitoring programme for the seabird colonies on St Kilda and Mingulay, linked to information on seabird food supply
- Employ member of staff, initially based on St Kilda but extending to cover Mingulay once this is feasible
- Carry out joint research with others, eg Glasgow University for Great Skua *Catharacta skua* and Leach's Petrel *Oceanodroma leucorhoa*
- Improve accommodation on Mingulay to enable staff presence
- Improve accommodation on St Kilda for visiting researchers

Issues and Challenges

- Few seabird colonies are easy to access from land-based vantage points, Mingulay being an important exception
- Seabird monitoring is therefore expensive, as it often involves purchasing and maintaining boats and employing experienced crew
- Seabird populations are falling, so there are fewer smaller colonies which makes monitoring more difficult
- Lack of funding for seabird work, which tends to fall between the two stools of terrestrial and marine funding
- One of the main potential funding streams, the EU LIFE programme, only funds limited forms of conservation work

Funding

- The total investment value of this project is likely to be in the region of £500,000
- However, the level of funding sought will partly depend upon whether an application can be made to the EU LIFE programme, tailored to its funding criteria
- Funding support for this project is being negotiated with SNH
- Other potential funding sources include charitable Trusts and NTS funds established by individual donors to support countryside work

Notes

- NTS has thoroughly investigated where it could make the most effective contribution to seabird research, resulting in this project's focus on the west coast

Further Information
http://www.ntsseabirds.org.uk

Important Plant Areas (IPAs) in Scotland

Plantlife Scotland

Plantlife, the wild plant conservation charity, champions the conservation of plants and fungi in the wild. Its vision is of a world that values wild plants – now and for the future.

S Cooper / Plantlife

Background

- IPAs are sites which are internationally important for plants (including flowering plants, lichens, mosses, liverworts and algae)
- Sites qualify as IPAs if they meet one or more of the following three criteria: presence of internationally important species; high species diversity; presence of internationally important habitats
- Over 150 IPAs have been identified in the UK, of which 42 are found in Scotland
- Over 70% of identified IPAs in Scotland are affected by habitat fragmentation and over 90% by invasive non-native species, for example the internationally important Atlantic woodlands of the West Coast IPA are threatened by the spread of *Rhododendron ponticum*

Project Aims

- Promote plant conservation on a landscape scale by mapping the 42 Scottish IPAs (see Notes below) so they can be used as a tool by land managers, agencies, planners and other partners to guide work on the ground

Project Timescale	2008 – 2010, subject to funding
Main SBS Objective Supported	Objective 3 Landscapes and Ecosystems
Other SBS Objectives Supported	Objective 1 Species and Habitats
	Objective 4 Integration and Co-ordination
	Objective 5 Knowledge

SBS/UKBAP Integration

- Plantlife's work is not solely driven by the UKBAP and SBS, but frequently supports their delivery
- Identifying and managing IPAs meets Target 5 of the Global Strategy for Plant Conservation


Plantlife

Project Summary

- Identify core site of each IPA, containing its key qualifying features
- Where appropriate, identify protective buffer zone of up to 1km around core site
- Where appropriate, identify opportunity zone where environmental conditions, given suitable management, could allow the qualifying plants or habitats to expand
- Complete detailed maps of core sites, buffer zones and opportunity zones
- Complete database entries for each site
- Develop management frameworks for key priority habitats, identifying key threats and actions required
- Record all IPA information onto a standard geographic information system to allow it to be integrated into local authority and public agency systems

Issues and Challenges

- Finding suitable long term funding sources

Funding

- Funding has yet to be sourced
- However, the total investment value is likely to be in the region of £120,000, excluding staff and overhead costs

Notes

- The list of over 150 UK IPAs was launched in 2007 as a dot map; the challenge is now to turn these dots into more detailed maps which can be of practical use for planning and managing the sites
- Small IPAs often correlate to existing designated sites (eg SSSIs), so mapping is relatively straightforward; many larger IPAs cannot be so precisely mapped and require diffuse boundaries containing buffer or opportunity zones
- The IPA project demonstrates Plantlife's work expanding beyond a focus on plants to their habitats and to whole ecosystems
- Funding availability will dictate project timetable

Further Information
http://www.plantlife.org.uk

Action to Safeguard Machair Habitats and Species
RSPB Scotland

RSPB Scotland is part of the RSPB, the UK harity that speaks out for birds and wildlife, tackling the problems that threaten our environment.

RSPB Images

Background

- Machair is a distinctive grassland formation, only found in Scotland and Ireland, where alkaline sand with a high shell content (often 80% or 90%) is blown by the prevailing winds from beaches and mobile sand dunes onto low-lying coastal plains
- The term is also used more broadly to describe the whole sequence of habitats from the beach through the dune pasture to where sand encroaches on acidic peaty soils further inland
- Almost half of the Scottish machair occurs in the Outer Hebrides, with the best and most extensive in the Uists, Barra and Tiree
- Scotland has 70% of the world's machair, Ireland the other 30%
- Machair is maintained by extensive cattle and sheep grazing regimes and, in some areas, low-intensity rotational cropping systems using locally developed crop varieties
- This traditional agriculture sustains a rich variety of dune plants, arable weed species, insects and birds, some of which are now largely restricted to these areas
- 70% of the area of the Special Areas of Conservation (SACs) designated for machair is in unfavourable and declining condition, particularly the arable machairs of North and South Uist; machair bird and invertebrate populations remain vulnerable

Project Aims

- Develop sustainable agriculture support systems that will allow machair biodiversity to thrive alongside future socio-economic changes in the islands
- Tackle associated biological problems, including helping to develop sustainable solutions to the impacts on agricultural systems of rising geese populations and invasive non-native species
- Deliver the policies contained in the EU Natura 2000 programme derived from the EU Birds and Habitats Directives
- Develop a bid for EU LIFE+ funding to protect and enhance the unique machair agricultural systems and habitat of the Scottish islands and the species that depend upon it

Project Timescale	2008 - 2013	
Main SBS Objective Supported	Objective 1	Species and Habitats
Other SBS Objectives Supported	Objective 2	People
	Objective 3	Landscapes and Ecosystems
	Objective 5	Knowledge

SBS/UKBAP Integration

- Machair is a priority habitat under the UKBAP
- RSPB is the Lead BAP Partner for associated species like the corncrake *Crex crex* and the great yellow bumblebee *Bombus distinguendus*
- There is a Scottish Habitat Action Plan for machair, for which SNH is the Lead Partner


RSPB Images

Project Summary

- Employ member of staff to carry out scoping exercise to identify gaps in funding support for machair management
- Submit funding bids in partnership with local communities, relevant government agencies and government departments
- Develop innovative demonstration techniques for targeted practical conservation measures which support both conservation and socio-economic objectives
- Underpin practical measures with a monitoring and advisory programme
- Gather information and carry out research into machair habitats
- In the longer term, advocate the inclusion of effective management measures into mainstream agri-environment programmes

Issues and Challenges

- The principal threats to the conservation status of machair habitats and species relate to changes to traditional crofting and farming systems, driven partly by socio-economic factors
- There are additional pressures from the impacts of geese on agriculture and from invasive, non-native species such as hedgehogs
- Coastal erosion and rising sea levels
- EU LIFE+ funding must complement other EU funding streams, ie it cannot duplicate management measures supported by the Scottish Rural Development Plan
- EU LIFE+ funding must be targeted towards the Natura site network

Funding

- Funding applications have yet to be submitted
- The intention is to apply for 50% funding from the EU LIFE+ Nature programme and 50% from alternative sources
- Total investment value likely to be over £800,000

Notes

- Machair is an Annex 1 habitat of the EU Habitats Directive, and 30% of the UK's machair is designated as SAC under that Directive
- Machair supports large breeding bird populations, so a network of Special Protection Areas (SPAs) under the EU Birds Directive has been established to protect waders, corncrakes, geese and terns
- Machair holds one of the few remaining Scottish populations of corn bunting *Miliaria calandra* and supports rare invertebrate populations
- 160 potential stakeholders for this work have been identified

Further Information

http://www.rspb.org.uk/ourwork/conservation/biodiversity/habitats/index.asp
http://www.ukbap.org.uk/UKPlans.aspx?ID=30
http://www.jncc.gov.uk/ProtectedSites/SACselection/habitat.asp?FeatureIntCode=H21A0
http://www.snh.org.uk/publications/on-line/livinglandscapes/machair

Marine Bill Campaign
Scottish Environment LINK

Scottish Environment LINK (LINK) is the collective voice of Scotland's environment movement. LINK's vision is to secure, through the collective efforts of its members and by inspiring others, the sustainable development of Scotland where all aspects of the country's environment are valued to enhance the quality of life for all.

Calum Duncan

Background

- Scotland's marine environment is in crisis
- Industrial-scale exploitation over two centuries has damaged the marine web of life so that it can no longer replenish itself or support livelihoods
- Scotland's seas are in urgent need of legislation that will protect our marine environment and its resources, now and in the future
- A Scottish Marine Bill is a unique opportunity to stop the deterioration of Scottish seas
- The members of LINK's Marine Task Force work together to share expertise and to develop advocacy strategies to promote a sustainable marine environment

Project Aims

- Ensure that the Marine Bill will be effective and have the environment at its heart, by campaigning for it to include:
- Proper protection for Scotland's marine wildlife
- An effective new planning system for Scotland's seas
- A marine management organisation to take charge of planning, licensing and enforcement at sea
- Clear targets to measure the recovery of our seas

Project Timescale	2007 - 2009, with possible extension if necessary
Main SBS Objective Supported	Objective 3 Landscapes and Ecosystems
Other SBS Objectives Supported	Objective 1 Species and Habitats
	Objective 2 People
	Objective 4 Integration and Co-ordination

SBS/UKBAP Integration

- A wide range of species and habitats feature on the Scottish Biodiversity List or UKBAP list
- These include species such as dolphins, turtles, sharks and whales, and habitats such as cold-water coral reefs, saline lagoons and maerl beds

Project Summary

- Employ a Marine Research and Policy Officer and a Marine Bill Campaigns Officer for a two-year period
- Promote the campaign's aims through a dedicated website incorporating a short campaign film and on-line actions, supported by leaflets, displays, events, partnerships and site visits
- Publicise the issues involved in the national and local internet, press, radio and television media
- Arrange meetings with politicians and officials to promote the campaign's aims
- Attend political party conferences to publicise the campaign
- Publish technical reports and briefing material to support the four main policy asks
- Respond to relevant government consultation documents


Richard Luxmoore/NTS

Successes and Achievements

- Produced a short film 'Save our Seas' to illustrate the key issues, which can be viewed on the website and shown at all relevant events and meetings
- Published 'Finding NIMAs – the case for Nationally Important Marine Areas'
- Made a major contribution to The Scotsman's high-profile marine campaign, suggesting stories and providing facts, figures, quotes and suitable contacts
- Raised the profile of marine issues at political party conferences and public events
- Gained representation on the Scottish Government's Sustainable Seas Task Force, which is to bring forward plans for the Scottish Marine Bill
- Held meetings with Scottish Government Ministers and officials
- Held successful, well-attended events at the Scottish Parliament, including a briefing event held prior to a Parliamentary debate
- Supported the Arran-based COAST initiative which is proposing the UK's first community marine conservation area
- Responded to draft UK Marine Bill

Funding

	£
Esmée Fairbairn Foundation	**93,000**
Tubney Charitable Trust	**93,000**
Total investment value	**186,000**

Issues and Challenges

- The election of a minority SNP Scottish Government in May 2007 changed the political landscape across the UK
- This has required an emphasis on an ecosystem approach to managing the UK's seas rather than one defined by administrative boundaries
- The majority of the Scottish Parliament believes that Scotland should have responsibility out to 200 nautical miles as part of the Scottish zone for marine spatial planning
- LINK recognises that there is a conservation case for devolving nature conservation beyond 12 nautical miles, to align with fisheries management arrangements
- However, it does not currently agree that Scotland should lead on marine spatial planning between 12 and 200 nautical miles
- LINK is addressing this issue by working closely with its counterparts across the UK to advocate a joint-planning approach by the UK Government and the devolved administrations, based on the regional seas identified by the JNCC

Notes

- LINK considers it vital that the Scottish Government works closely with the UK Government to ensure that the Scottish Marine Bill complements the UK Marine Bill
- LINK is therefore working together with its counterparts in England, Wales and Northern Ireland to promote new effective marine legislation for all UK seas

Further Information

http://www.savescottishseas.org
http://www.scotlink.org/LINK_action/work_areas.php#marine

Growing Up with Trees in Fife
Scottish Native Woods

Scottish Native Woods is dedicated to the restoration and expansion of Scotland's native woodlands; it champions the cause of native woodlands in Scotland and helps with the practical difficulties of managing and restoring native woodlands. The vision of Scottish Native Woods is of healthy, thriving native woodlands valued for their unique contribution to Scotland's people, culture, economy and natural environment.

Scottish Native Woods

Background

- Previous work by Scottish Native Woods in Fife and discussions with relevant stakeholder groups highlighted the need for a dedicated member of staff to co-ordinate existing initiatives related to environmental education and native woodlands

Project Aims

- Involve young people and families in Fife in their natural environment through outdoor activities and fun learning
- Raise awareness amongst local communities and schools of the role of native woodlands, threats to them and the importance of protecting them
- Involve local community groups and young people in the stewardship of their local woodlands
- Demonstrate the importance and value of native woodlands to people's everyday lives
- Demonstrate an approach which in the longer term could be rolled out to other areas of Scotland

Project Timescale	2008 - 2011	
Main SBS Objective Supported	Objective 2	People
Other SBS Objectives Supported	Objective 1	Species and Habitats

SBS/UKBAP Integration

- All the work of Scottish Native Woods is driven by biodiversity conservation
- It has a particular focus on native woodlands and people, ie SBS objectives 1 and 2


Scottish Native Woods

Project Summary

- Appoint Community and Education Officer based in Fife
- Develop tree nurseries at 20 primary schools and involve Primary 4, 5 and 6 pupils in learning about the life cycle of trees and wood by collecting and sowing tree seed, caring for the seedlings and planting them out in native woodlands
- Enhance school grounds with tree nurseries and mini-woods where practicable
- Offer opportunities for all age groups and abilities to be involved in practical conservation work in local native woodlands
- Organise and lead woodland walks and events for all ages and abilities
- Encourage regular visits to woodlands for adults, thereby reducing stress levels and developing a sense of well-being
- Engage communities in identifying woodland flora and fauna and in learning about historical and modern uses of plants, fungi and timber
- Encourage volunteers to help with signage and interpretation of native woodland sites
- Enable people to learn new skills that may improve their social life or work life
- Provide training in conservation skills that may open up career opportunities
- Develop volunteering strategy
- Build capacity so that Fife Council can continue this work after the project ends

Successes and Achievements

- Early days yet, but successful projects so far include gradual restoration of National Forest Estate's Balgownie Wood in West Fife and tree-planting at Townhill in Dunfermline

Issues and Challenges

- Potential for greater support from Fife Council and Forestry Commission – although they support the project, they are not providing funding
- Much of this work should really be mainstreamed as a part of local education authority practice

Funding	£
Charitable Trusts	**50,000**
Heritage Lottery Fund	**36,000**
Scottish Natural Heritage	**22,000**
Total investment value	**108,000**

Notes

- Fife was selected for this project due to the combination of its population density and the availability of native woodland work sites

Further Information
http://www.scottishnativewoods.org.uk

Scottish Lowland Peatland Project
Scottish Wildlife Trust (SWT)

SWT is the largest conservation organisation working exclusively on all aspects of wildlife conservation in Scotland.

Scottish Wildlife Trust

Background

- The term 'lowland peatlands' comprises lowland fens and lowland raised bogs
- Scotland has internationally significant peatland areas
- Raised bogs develop in waterlogged areas where slowly decomposing dead plants accumulate as peat
- The surfaces of raised bogs rise above the surrounding landscape and receive all of their water and nutrients from rainfall, whereas fens also receive water which has passed through soil or rocks and so may have higher nutrient levels than bogs
- They support a diverse range of important habitats and species, including carnivorous sundew plants, lizards and butterflies
- They also deliver a range of public goods including carbon storage, climate regulation, water storage, filtration and flood alleviation

Project Aims

- Enhance the condition and protection of non-designated lowland raised bogs and fens in Scotland
- Develop and demonstrate new whole-site approaches to peatland restoration
- Establish a baseline inventory of Scottish fens and update the existing lowland raised bog inventory
- Disseminate updated management and restoration guidance for lowland raised bogs and fens
- Improve public access and awareness and local community involvement with peatlands
- Increase carbon storage on lowland peatlands to contribute towards climate change mitigation

Project Timescale	2008 - 2012	
Main SBS Objective Supported	Objective 3	Landscapes and Ecosystems
Other SBS Objectives Supported	Objective 1	Species and Habitats
	Objective 5	Knowledge

SBS/UKBAP Integration

- One of SWT's ten strategic objectives is "to champion implementation of the Scottish Biodiversity Strategy and encourage others to deliver their obligations under the Scottish biodiversity duty"
- A Habitat Action Plan within the UKBAP framework has been compiled for wetlands, including lowland raised bogs and fens
- Several species associated with these habitats are UKBAP priority species, including large heath butterfly, otter and water vole


Scottish Wildlife Trust

Project Summary

- Produce an inventory of Scottish fens
- Resurvey and carry out ecological assessment of 50 Scottish lowland raised bogs
- Designate 75 new Local Nature Conservation Sites
- Provide management advice to owners of 180 lowland peatland sites
- Carry out practical improvement work on 60 lowland peatland sites
- Generate 100,000 tonnes of additional carbon storage over 20 years
- Establish five new community-led environmental groups
- Involve 500 people in training and volunteering programmes
- Hold national conference on status and management of lowland peatlands

Issues and Challenges

- Relative lack of funding sources for non-designated sites
- Reliance on willingness of land owners and managers
- Helping owners to access funding from Scottish Rural Development Programme
- Need to manage entire hydrological unit
- Quantifying the carbon storage benefits which result from re-wetting peatlands

Funding	£
Charitable Trusts	**667,000**
Heritage Lottery Fund	**471,000**
Natural Environment Research Council	**40,000**
Total investment value over four years	**1,178,000**

Notes

- Carbon in plant material is locked up in peatlands; restoring damaged peatland by re-wetting it can reduce its net carbon emissions and so help to mitigate climate change
- Raised bogs can be found in the Central Belt, between Edinburgh, Stirling and Glasgow, on the Grampian Plain to the north of Aberdeen and along the Solway coast in Dumfries and Galloway
- Over the last 300 years, Scotland's peatlands have been extensively destroyed by human activities, predominantly drainage for conversion to forestry or agriculture
- There were originally over 850 raised bogs in Scotland, covering an area of approximately 27,000 hectares
- Many of these sites have now been destroyed or damaged, with the majority of the best remaining sites in the Forth Valley near Stirling and along the Solway coast
- Of the original area, only 2,300 hectares (8%) remains in intact condition
- Raised bogs continue to be threatened by peat extraction for horticulture, by drainage, burning and fertiliser application to improve them for agriculture, by open-cast coalmining and by a lack of positive conservation management
- This will be a partnership project with University of Dundee and International Mire Conservation Group

Further Information **http://www.swt.org.uk**
http://www.snh.org.uk/scottish/settings/peatland.asp
http://www.ukbap.org.uk/UKPlans.aspx?ID=20

Woodland Pasture at Glen Finglas

Woodland Trust Scotland

The Woodland Trust is the UK's leading woodland conservation charity. It has four main aims:

- no further loss of ancient woodland
- restoring and improving woodland biodiversity
- increasing new native woodland
- increasing people's understanding and enjoyment of woodland.

Woodland Trust Scotland

Background

- The Glen Finglas estate lies about five miles west of Callander, in the Loch Lomond and the Trossachs National Park
- At over 4,000 hectares, it is the largest site owned by the Woodland Trust
- The Trust acquired the estate in 1996, with the help of the Heritage Lottery Fund
- Woodland pasture is a type of open woodland which often has as much grassland or heathland as it does trees
- Glen Finglas retains good remnants of ancient woodland pasture, created over centuries of natural grazing by wild animals and extensive pastoral systems, combined with wood harvesting, primarily for fuel on a local scale
- This has created a woodland pasture habitat with a high number of very old trees of high conservation value
- However, since about 1800 upland farming in this area became increasingly dominated by large-scale commercial sheep farming, reducing the extent and biodiversity of the remaining woodland pasture

Project Aims

- Create natural woodland regeneration in the historic woodland pasture at Glen Finglas, as part of work at a landscape scale to create a dynamic mosaic of open ground woodland, scattered trees and scrub

Project Timescale	2006 - 2016 and beyond
Main SBS Objective Supported	Objective 3 Landscapes and Ecosystems
Other SBS Objectives Supported	Objective 1 Species and Habitats

SBS/UKBAP Integration

- Lowland wood-pasture and parkland is a Priority Habitat under the UKBAP
- So are other habitats found on the estate, including blanket bog, purple moor grass and rush pastures and various native woodland types


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Project Summary

- Maximise the biodiversity of the estate, predominantly through natural regeneration and mainly by managing grazing
- Reduce sheep grazing in favour of Luing cattle and deer, with the cattle remaining outdoors all year round to provide favourable conditions for woodland pasture regeneration and expansion in Glen Finglas
- Expand or establish woodland in the two neighbouring glens to the east, including by planting where necessary, to provide buffer zones and to establish habitat networks so that species can move more easily in response to climate change
- Encourage cattle to roam freely over the three glens on the estate
- Work to promote woodland restoration with neighbours, including Forestry Commission Scotland and private owners

Issues and Challenges

- Long-term projects such as this require long-term funding
- The decision to overwinter cattle on the hill required advice and support from the Scottish Society for the Prevention of Cruelty to Animals, to confirm that this did not raise animal welfare issues

Funding

- It is difficult to assess costs related to this project, as it is an integral part of the ongoing overall management of the estate
- The main costs relate to employing full-time staff to manage the livestock, which would be necessary whichever agricultural system was used
- It is hoped that costs can be minimised, given that the estate is still run partly as an agricultural business with support from the Scottish Rural Development Programme, but also substantially subsidised by WTS funds to achieve the Trust's objectives of nature conservation and public recreation

Notes

- Grazing by cattle and deer is preferred to that by sheep, as they provide greater biodiversity benefits by roaming more widely over the landscape and breaking up vegetation mats, producing better conditions for natural regeneration
- Deer also browse a wider range of forage over a larger area than sheep, and therefore help to maintain the structural diversity of the vegetation across the whole landscape
- This project has been carried out in line with the Woodland Trust's established landscape-scale principles, which involve managing its own sites as part of the wider landscape
- The Woodland Trust Scotland is a member of the Scottish Forest Alliance, which unites BP, Forestry Commission Scotland, RSBP Scotland and the Woodland Trust Scotland together in partnership working at a landscape-scale across the Trossachs.

Further Information

http://www.wt-woods.org.uk/GlenFinglas
http://www.glen-finglas.info
http://www.scottishforestalliance.org.uk

Scotland's Environmental Charities
Table of Key Statistics

The table below sets out for information the key statistics about the organisations which provided case studies for this report.

ORGANISATION	LAND MANAGED IN SCOTLAND (HECTARES)	MEMBERS IN SCOTLAND	VOLUNTEERS	VOLUNTEER DAYS PER ANNUM	TURNOVER (£ MILLION)
Butterfly Conservation Scotland	180	650	500	3,500	0.1
John Muir Trust	24,000	9,500	150	700	1.3
The National Trust for Scotland	75,800	297,000	3,200	17,980	41.0
Plantlife Scotland	3,370	700	230	197	1.7
RSPB Scotland	67,000	77,000	1,600	11,650	9.1
Scottish Native Woods	6,900	n/a[1]	80	800	0.3
Scottish Wildlife Trust	20,100	30,500	700	n/a[2]	3.7
Woodland Trust Scotland	8,600	10,000	80	1,500	2.8[3]
TOTALS	**205,950 or 2.6% of Scotland's land area[4]**	**425,350 or 8.4% of Scotland's population[5]**	**6,540**	**36,327**	**60.0**

1 Not a membership organisation
2 Information not currently recorded
3 Estimated at 10% of UK turnover - separate figures for Scotland not available
4 205,950 hectares ÷ Scotland's land area of 7,877,200 hectares = 2.6%
5 425,350 ÷ Scotland's population of 5,062,000 = 8.4%

Conclusions

1 These charities are positive about the prospects for delivering the SBS and UKBAP over the forthcoming years. They see their role as to deliver the goods on the ground in a positive way, to co-operate with each other and with other sectors to support the process, yet also, in a constructive way, to challenge and criticise where necessary. Scotland's environmental charities would welcome the continued support of government and its agencies over the forthcoming years, so that they can continue delivering the goods for Scotland's magnificent landscapes and wildlife.

2 A common theme reported by the organisations behind this report is the difficulty in raising core, as opposed to project, funding. Funding bodies tend in general to be more keen on supporting projects and 'new' work, whereas much biodiversity-related work inherently requires consistent long-term efforts over many years. Also, funding for basic scientific research and monitoring tends to be harder to find than that for more practical projects.

3 The case studies and statistics presented above clearly show how Scotland's environmental charities are playing a key part in delivering all five objectives of the Scottish Biodiversity Strategy, often as Lead Partners for habitat or species action plans. The organisations that provided case studies for this report manage between them approximately 2.6% of the land area of Scotland and represent approximately 8.4% of Scotland's population. They have already invested £2.3 million just through the projects outlined here and plan to deliver future combined investments of £5 million over the next 10 years through the projects outlined here, if they go ahead.

4 The current structure for implementing biodiversity policy is overly complex, although the action plans, targets, working groups and meetings are a consequence of dealing with ecological complexity and trying to co-ordinate work by many organisations. Habitats and species do not respect political boundaries, so co-ordination across the UK is essential, particularly for cross-border species and habitats; this is a key role for the JNCC. The agri-environment schemes which will be implemented through the new Scottish Rural Development Plan will play a key part in delivering biodiversity projects on the ground, so it is hoped that the Plan will have sufficient funding to achieve all of its objectives.

5 Scotland's environmental charities work with a wide range of people who volunteer their time to conserve Scotland's biodiversity. On an annual basis, the eight charities in this report work with 7,000 volunteers across Scotland, who give over 36,000 days of their time, more than 100 full time equivalent posts. This commitment to Scotland's biodiversity is a valuable resource, involves local people and communities and delivers conservation on the ground.

Woodland Trust Scotland

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