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# Highland LBAP Review

## Skye and Lochalsh Implementation Plan 2006-2009

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2006-2009**

**SKYE AND LOCHALSH IMPLEMENTATION PLAN 2006 - 2009**

**Table of Contents**

SKYE AND LOCHALSH IMPLEMENTATION PLAN 2006 - 2009 .....	ii
1. INTRODUCTION .....	1
1.1 <i>Local Biodiversity Group</i> .....	1
1.2 <i>Habitats and Species Priorities</i> .....	2
2. SKYE & LOCHALSH IMPLEMENTATION PLANS AND PROJECTS .....	3
2.1 <i>Japanese Knotweed Control</i> .....	3
2.2 <i>Skye and Lochalsh Butterfly Survey</i> .....	5
2.3 <i>Bats and Bird Boxes Associated with Buildings</i> .....	6
2.4 <i>Reducing Mammal Casualties on Roads</i> .....	8
2.5 <i>Implementation Plan Budget (estimates)</i> .....	11
2.6 <i>Other Project Suggestions</i> .....	11
2.7 <i>General Issues Raised by the Group</i> .....	11
3. SUMMARY .....	11

# 1. INTRODUCTION

This Implementation Plan represents the next step in biodiversity action planning in Skye and Lochalsh and should be read in conjunction with The Skye and Lochalsh Biodiversity Action Plan (2003) (S and L BAP). It has been drawn up by the Skye and Lochalsh Environment Forum and EnviroCentre.

Like the S and L BAP, the Implementation Plan forms part of a suite of local area BAPs and associated Implementation Plans that have been produced for the Highland Council area by local biodiversity groups. It is anticipated that the Highland Biodiversity Partnership will be responsible for working on the strategic and cross-boundary issues identified in each of the area BAPs, and each local biodiversity group is represented on the Partnership. A Highland Biodiversity Action Plan is also underway, to draw out the main issues from the local area BAPs and provide a work schedule for the Highland Biodiversity Partnership.

It is therefore envisaged that the Highland LBAP Implementation Plans will be the main tool for local biodiversity groups, funding bodies, other partners, community groups and individuals to make progress on biodiversity issues at a local level.

## 1.1 *Local Biodiversity Group*

The Skye and Lochalsh Environment Forum (the Forum) is a body of interested individuals representing a number of public sector agencies, NGOs, businesses and community interests that have arisen in response to the writing of the original area BAP. The Forum has in mind the formation of a constitution.

### **Membership is as follows:**

Iain Turnbull, (Chairman)	National Trust for Scotland
David Ashford (Secretary)	Independent
Jane Barker	
Jyrana Batters	
Stephen Bungard	BSBI Recorder
Jed Carter	
Roger Cottis	Scottish Wildlife Trust, Skye Members' Centre
Hugh Davies	Eilean Ban Trust
Rob Forest	
S Franks	
Douglas Halliday	John Muir Trust
Claire Hannah	
Alison Hutchins	SEPA
Gwyn Jones	SAC
Sarah Kay	HC Rangers
Donald Kennedy	
Kenneth Knott	FCS
Chrisanne MacDonald	SLCVO

Catriona Maclean	HC
Alison MacLennan	RSPB
David MacVicar	SEERAD
Chris Marsh	FCS, Inverness District
Angus McHattie	
Bob McMillan	
Margaret McVicar	Eilean Ban Trust
James Merryweather	Independent
Robert Muir	
Brian Neath	South West Ross Field Club
Kate Nellist	
Tom Palmer	
Colin Parsons	Fernaig Community Woodland
John Phillips	HC Rangers
Daisy Reeves	Initiative at the Edge
Geoff Robson	
Becky Shaw	
Allan Sillence	
Uilleam Smith	Crofters Commission
Barbara Soutar	NTS
Bruce Taylor	FCS, Inverness District
Mike Taylor	
Alex Turner	SNH
Chris Tyler	SNH
Nicole Wallace	HC
Peter Watson	SEPA
Jonathan Willet	HC Biodiversity Officer
Grace Yoxon	Isle of Skye Field Centre
Pat Mucklow	South West Ross Field Club

## **1.2 Habitats and Species Priorities**

The Forum has not undertaken a formal process to identify specific individual priorities in terms of habitats or species for the area. However, through their recent delivery of biodiversity projects they have focused on issues that have benefits for particular groups. For example, a previous project in this implementation plan focused on barn owls and bats that live in buildings. Another provided new nest sites for black-throated divers. A new project focuses on larger mammals, such as otter, badger and deer that tend to be disproportionately affected by collisions with vehicles.

The Forum has an existing list of projects that was drawn up during the process of identifying projects for the Highland Biodiversity Project in 2004. This list, augmented with other project ideas arising from the review of the area BAP, was discussed at an initial meeting of the Forum. Through a process of refinement, the following projects were considered deliverable within the time frame of the project (the next 3 years).

## 2. SKYE & LOCHALSH IMPLEMENTATION PLANS AND PROJECTS

The following four projects were discussed and agreed by the Forum at their meeting on 25 July 2006. A list of other potential projects and some general issues raised by the Forum are set out at the end after the project plans.

### 2.1 *Japanese Knotweed Control*

There are a number of non-native invasive plant species in Skye and Lochalsh but *Rhododendron ponticum* and Japanese knotweed *Fallopia japonica* are the most destructive. Japanese knotweed lends itself best to a locally managed control programme. Such a control programme was started in Broadford through the Highland Biodiversity Project. This project will continue that work and initiate programmes in other key areas where the plant is considered a serious issue.

**Project aim:** To significantly weaken key populations of Japanese knotweed in Broadford, Kyle of Lochalsh and Armadale.

**Project objectives:**

- To identify key sites for Japanese knotweed at and between Kyle of Lochalsh and Armadale;
- To start an eradication programme of spraying on up to 20 key sites;
- To establish an aftercare programme, using volunteers, to continue the control of these populations;
- To print a basic awareness raising leaflet about the ecology of Japanese knotweed and best practise control methods; and
- To distribute leaflets.

**Project lead:** National Trust for Scotland, Barbara Soutar and Balmacara Estate.

**Project partners:** Broadford Environmental Group, RSPB, FCS and Sleat Community Trust Environment Group.

**Project implementation and outputs:**

Japanese knotweed is a difficult plant to kill, due to its highly efficient storage roots, and at present the expectation is that it will take up to six years of persistent control to kill large populations. Spraying with chemicals is the only effective means of eradication. Pulling the growing stems can significantly reduce vigour but has not been known to actually kill the plant. During this project better information will be collected on the number, location and size of knotweed sites focussing on Kyle of Lochalsh, Armadale and Broadford. Sites alongside paths, bridleways and roads will be prioritised as these are the areas from which the plant spreads vegetatively very effectively. Control will be achieved through a spray of the plant at full height in year 1, followed by spraying of the reduced populations in years 2 and 3. Thereafter, the remaining knotweed populations will be monitored and additional control arranged as necessary where possible.

**Actions:**

- Clarify key site selection factors (e.g. THC roads team only tackle sites where the neighbouring land owner also undertakes work);
- To make THC and Scottish Water Solutions aware of their statutory obligations to prevent the spread of Japanese knotweed;
- Hold promotional event;
- Survey defined areas and identify key sites (up to 20) for control, taking account of selection criteria, assess and plan control measures;
- Print Japanese knotweed leaflet and distribute to site owners and more widely through NFUS, SCF, SCC, etc;
- Organise and implement phased control programme, including any agreements with owners/site managers;
- Identify certified volunteers or contractors to undertake spraying, fulfilling all necessary health and safety and environmental standards requirements; and
- Organise monitoring volunteers for post project work and agreed control measures.

**Resources needed:**

- Project co-ordinator;
- Leaflet (1,000);
- Volunteers to find and record sites;
- Volunteers/contractors to undertake control (with necessary certificates);
- Maps 1:10,000 for recording sites;
- Control trainers (with appropriate certificates etc);
- Spraying kit;
- Spray; and
- Miscellaneous equipment – gloves etc.

**Proposed timetable:**

Plan control programme - spring 2007. Implement control stage 1 - summer 2007 and control stage 2 - autumn 2007. Produce leaflet and control stage 3 - winter 2007 and spot treat on sites – spring 2008. Monitor all sites, implement repeat control stage 1 – summer 2008, control stage 2 – late summer, control stage 3 at sites – winter 2008. Monitoring of sites – summer 2009 and spot treatment as required – late summer 2009.

**Links to UK BAP and Scottish BAP List:**

The project has no direct link to a specific UK BAP or Scottish BAP List species. However, the various sites where Japanese knotweed is spreading are likely to contain both UK BAP and Scottish BAP species, which should benefit from any knotweed removal or control.

**Indicative costs:**

The following costs have been estimated:

Task	Effort/Materials	Cash
Co-ordinator	Survey, liaison, leaflet admin, 20 days @£100	£2,000
Leaflet	Text and photos	£100

	Design and print – A4 (folded in 3)	£1,500
Site survey	Promotional event: venue and refreshments (up to 20 participants)	£100
	Trainer 1 day	£100
	Volunteers expenses (travel) 600 miles @35p	£210
Site control	Spray (Glyphosate for x m <sup>2</sup> )	£200
	Contractor @ £130 + VAT per day for 10 days	£1,550
	<b>Total</b>	<b>£5,760</b>

## 2.2 *Skye and Lochalsh Butterfly Survey*

An area of native broadleaf woodland in Lochalsh has been identified as of particular importance for butterflies, supporting an impressive list of important species, and is now a Highland Council Local Wildlife Site. This information has highlighted the lack of survey effort for butterflies and moths generally across Lochalsh and Skye. This project is to begin to remedy this situation for butterflies.

**Project aim:** To improve knowledge, and local recording, of butterfly distribution in Skye and Lochalsh.

### **Project objectives:**

- To identify priority habitats for UK BAP butterflies through desk assessment.
- To produce a local information sheet for Skye and Lochalsh butterflies
- To encourage local recording of butterflies.
- To stimulate more detailed survey to generate management advice.

**Project lead:** HC Rangers, John Phillips.

**Project partners:** HC Ranger, Sarah Kay, SWT Skye Members Centre, NTS Balmacara, SNH, Butterfly Conservation Trust (TBC).

### **Project implementation and outputs:**

Butterfly identification workshops, as previously delivered in Highland by the Butterfly Conservation Trust will be run in Lochalsh and Isle of Skye in order to recruit volunteers to undertake initial presence/absence surveys of key habitats within the area. To aid the survey and general awareness of this interest, a leaflet will be produced to complement the Butterfly Conservation Trust leaflet 'Butterflies of the Cairngorms' and focus on species of local importance.

#### Actions:

- Organise two workshops with Butterfly Conservation Trust or local Lepidopterists;
- Produce leaflet;
- Identify suitable habitat areas and potential local surveyors;
- Co-ordinate recording through two summers;
- Report back to surveyors and more widely; and
- Depending on results discuss potential for more detailed survey of key areas with professionals.

**Resources needed:**

- Co-ordinator;
- Leaflet;
- Trainer;
- Adverts for workshops;
- Venues for workshops; and
- Butterfly nets.

**Outputs:**

- A Skye and Lochalsh leaflet on locally important butterflies;
- A list of sites of importance for butterflies;
- Records of butterflies provided to key bodies;
- A group of local butterfly recorders, and wider awareness of butterflies; and
- Regular reporting of sightings and site assessments.

**Proposed timetable:**

Two identification workshops and identification of candidate woodland summer 2007. Volunteer surveys summer 2007 and 2008. Leaflet production in time for workshops early summer 2007. Reporting back to recorders and partners in winter 2007 and 2008. Overall report and discussion with agencies and NGOs spring 2009.

**Links to UK BAP and Scottish BAP List:**

Skye and Lochalsh contains a large number of UK BAP and Scottish BAP listed Lepidoptera. This project should directly lead to new information on the occurrence and status of many of these nationally important species.

**Indicative costs:**

The following costs have been estimated:

<b>Task</b>	<b>Effort/Materials</b>	<b>Cash</b>
Co-ordinator	6 days @ £100	£600
Workshops	Venue x 2 for 10 volunteers each	£200
	Trainer	£1,000
	Leaflet design images and printing (500)	£1,500
Survey	Volunteer expenses 400 miles @ 35p	£140
	Butterfly nets and incidentals	£60
	Reports 2 days @ £100	£200
	<b>Total</b>	<b>£3,700</b>

### **2.3 Bats and Bird Boxes Associated with Buildings**

There is a growing awareness that several species of bats and birds are in decline in Skye and Lochalsh. One of the main contributing factors is a reduction in the availability of suitable roost/nest sites for bats and birds. Demand for housing at present is high and this trend is set to

continue with the proposed new Local Plans for Skye and Lochalsh. Build quality for both new and refurbished properties has improved considerably and as a consequence there is a reduction in the opportunities for bats and birds to find suitable breeding and roosting sites. Species to benefit would include pipistrelle and brown long-eared bats and for birds, house sparrow, house martin, swallow and barn owl.

The focus of this project is to consult with architects and planners regarding technical specifications and advise the general public using a leaflet based on the need for conservation measures to incorporate breeding and roost sites in buildings.

There can be conflict when bats find their way into the human living areas of homes or businesses. Therefore, it is proposed to collate and potentially develop designs of bat boxes to be incorporated within the structure of the building, which will preclude bats from entering living spaces whilst providing a secure roost.

**Project aim:** To encourage architects and planners to incorporate bat roost sites and bird boxes in new and refurbished buildings in Skye and Lochalsh.

**Project objectives:**

- To raise awareness among architects and planners of the need to incorporate bat and bird boxes in both new and refurbished buildings; and
- To increase public awareness and participation in conserving bats and birds.

**Project lead:** Roger Cottis, Secretary to Skye SWT Members' Centre

**Project partners:** RSPB, Skye and Lochalsh Environmental Forum. Sleat Community Trust's Environmental Group (TBC), Architects, Dualchas Building Design (TBC)

**Project implementation and outputs:**

This project will bring together existing information about bat and bird box designs that can be incorporated into buildings. Subsequently, appropriate technical specifications will be disseminated to architects and planners for implementation into building design locally. A more easily digestible leaflet aimed at how the general public can contribute will be necessary to raise awareness of the project and encourage the reporting of properties which might benefit from the proposals.

**Actions:**

- To provide a technical report collating bat and bird box designs for buildings;
- To produce 100 copies of this report for circulation to local architects and housing planners;
- To produce 5,000 copies of a coloured leaflet (A4 folded into 3) distilled from the above report, and appropriately illustrated, publicising the issues and the need for bat and bird box conservation measures;
- Distribution of leaflets through Highland Council offices, architects offices, local shows/ groups/ Post Offices/ Community notice boards/ petrol stations, giving a wide coverage around the area; and
- Create a database for collation of records received from the public.

**Resources:**

- Knowledge of (a) bat and bird behaviour, (b) different mitigation methods available, and (c) site assessment methods for mitigation requirements;
- Information about the impact of building design and renovation on bat and bird populations from a reduction in roost and nest sites;
- Technical report;
- Colour leaflet;
- Report of records received; and
- Project co-ordination.

**Proposed timetable:**

Collate and pull together the report, in consultation with architects and planning interests - spring/summer 2007. Produce and distribute report, and develop leaflet - autumn 2007. Distribute leaflet – early spring 2008. Collect and collate records – summer 2008/2009.

**Links to UK BAP and Scottish BAP List:**

Skye and Lochalsh contains a large number of UK BAP and Scottish BAP listed bats. This project should directly lead to new nesting and roosting sites for many of these nationally important species.

**Indicative costs:**

The following costs have been estimated:

<b>Task</b>	<b>Effort/Materials</b>	<b>Cash</b>
Report production	Collate information and re-present for Skye and Lochalsh 3 days @ £150	£450
	Printing 20 A4 B & W pages (100 copies)	£750
Leaflet	Writing and picture copyright 2 days @ £250	£500
	Design and print (5,000)	£500
	<b>Total</b>	<b>£2,200</b>

**2.4 Reducing Mammal Casualties on Roads**

At present there is a general lack of awareness of, and information on, the impact of road casualties on mammal populations. This is a broad subject area with a number of different elements and it is considered by some as a local (and national) problem relating to the following species: otter, badger, pine marten, red, roe, sika and fallow deer, red squirrel and small mammals.

The issue of road traffic accidents with mammals is obviously an important human safety issue too. However, the focus of this project is to specifically target mitigation measures where road lines cut across traditional wildlife routes through the countryside, using experience in Skye and Lochalsh to illustrate the issue and propose solutions.

On Skye, there have been mitigation measures associated with existing roads and new road developments for otters. These have varied in their nature and have been of limited success

because of truncated lines of command that resulted in information from survey reports not being implemented during the planning/construction process.

It is believed that the majority of road mitigation measures are not properly implemented and therefore require expensive remedial work. Each new road project requires the skills and expertise of a mammalogist for the design of effective mitigation measures and to advise on the development, construction and maintenance of fences and underpasses, or other mechanisms intended to discourage mammals from crossing roads.

**Project aim:** To reduce the number of mammal road casualties in Skye and Lochalsh.

**Project objectives:**

- To raise awareness among politicians and decision makers of the level of mammal road casualties and good practice in the siting and installation of mitigation measures that can be used to prevent them; and
- To increase public awareness and reporting of incidents.

This project will provide the background to make the case to public agencies for greater consideration of this issue in new road developments and existing accident 'hot spots'.

**Project lead:** Roger Cottis - Secretary to Skye SWT Members' Centre.

**Project partners:** SNH, Sleat Community Trust's Environmental Group and Skye and Lochalsh Environmental Forum.

**Project implementation and outputs:**

This project will bring together existing information about mitigation measures from local and national sources. Subsequently, these will be analysed with a view to using the data to make a case for the authorities of the need for appropriately qualified environmental clerks of work when carrying out works on roads. An essential part of the project will be to involve those bodies/companies commissioning and implementing road re-alignment or new road projects.

The information gathered and its analysis, primarily based on evidence from Skye and Lochalsh, will be produced in a technical report prepared for policy and decision makers. This will be launched at an event for politicians and agency staff in Kyle of Lochalsh. A more easily digestible leaflet aimed at the general public will be necessary to raise awareness of the project and encourage the reporting of incidents.

**Actions:**

- To provide a technical report collating evidence of mammal death on roads, assessing good and bad practice in the use of mitigation measures and making recommendation for appropriate procedures for all road projects, new works and existing accident 'hot spots';
- To produce 100 copies of this report for circulation to key policy and decision makers in the Scottish Executive, THC, and other public agencies;

- To produce 5,000 copies of a coloured leaflet (A4 folded into 3) distilled from the above report, and appropriately illustrated, publicising the issues and the need for reporting of mammal incidents on roads with contact details and reply slip;
- Launch report in Skye and Lochalsh at a press conference in the Lochalsh Hotel at Kyle with invited audience and key people – MSP, SNH, Local Councillors, members of Community Councils and Trusts and the media generally;
- Distribution of leaflets through local shows/groups/Post Offices/Community notice boards/petrol stations, etc very widely around the area;
- Create a database for collation of records received from the public; and
- Workshop with local politicians and agencies on the importance of well thought out and constructed mitigation measures.

Resources:

- Project co-ordination;
- Knowledge of mammal behaviour, of different mitigation methods available, of site assessment methods for mitigation requirements;
- Information about the impact on mammal populations of road deaths;
- Access to good images of both mammals, good practise in mitigation measures;
- Technical report;
- Colour leaflet; and
- Report of records received.

**Projected timetable:**

Undertake research and writing of technical report spring/summer 2007. Publish autumn/winter 2007. Launch early 2008 followed by distribution of leaflets through 2008. Collation of records and report, summer 2009. Workshop with politicians and agency staff, autumn 2009.

**Links to UK BAP and Scottish BAP List:**

Skye and Lochalsh contains important populations of UK BAP and Scottish BAP listed species e.g. otters. This project could directly lead to reductions in preventable mortality of these nationally important species.

**Indicative costs:**

The following costs have been estimated:

Task	Effort/Materials	Cash
Co-ordination	Organisation/co-ordination 4 days @£100	£400
Technical report	Research and writing 10 days @ £250	£2,500
	Printing 40 A4 pages (100 copies)	£1,500
Leaflet	Writing and picture copyright	£500
	Design and print (5,000)	£500
Database	Set up	£300
	Data input	£200
	12 month report of collated incidents	£400
Launch workshop	Venue hire and refreshments	£250

	Materials	£100
	Report of outcomes	£500
	<b>Total</b>	<b>£7,150</b>

## **2.5 Implementation Plan Budget (estimates)**

Japanese knotweed control	£5,760
Lochalsh and South Skye Butterfly Survey	£3,700
Bird and Bat accommodation in buildings	£2,200
Reducing Mammal Casualties on Roads	£7,150
<b>Total</b>	<b>£18,810</b>

## **2.6 Other Project Suggestions**

Other project suggestions raised by the Forum include:

- Skye and Lochalsh Crofting Township Biodiversity Demonstration Project;
- Invasive Rhododendron Awareness;
- Carr Brae butterfly conservation management project;
- Biodiversity management of road verges; and
- Combating Wildlife crime, particularly harassment of cetaceans, wildlife issues relating to Muirburn, collection of valuable wild plants (such as water lily).

## **2.7 General Issues Raised by the Group**

General issues raised by the Forum include:

- Need for a part-time LBAP Coordinator;
- Fully functioning Local Biological Record Centre;
- Funding for local projects; and
- Awareness of and potential for coordination of action across different area biodiversity groups, partners, organisations and communities.

## **3. SUMMARY**

The Skye and Lochalsh Environment Forum have proposed, worked up and developed four local area projects for implementation: (i) Japanese knotweed control, (ii) Lochalsh and South Skye Butterfly Survey, (iii) Birds and bat boxes associated with buildings, and (iv) Reducing mammal casualties on roads. Depending upon how these are implemented, all four costed projects should deliver a range of benefits to UK and Scottish BAP targets.