



BIODIVERSITY

THE VARIETY OF LIFE

Highland Biodiversity Forum Saturday 7th March 2009 Great Glen House, Inverness

Background

The Highland Council area holds at least 42% of the high priority species listed in the UK Biodiversity Action Plan (BAP), which makes Highland the most important place in the UK for threatened, rare and declining biodiversity.

The Highland Biodiversity Partnership was set up to provide guidance and support to an existing network of local biodiversity groups, and to make progress on the key strategic biodiversity issues in the Highlands. The Partnership meets twice a year to discuss biodiversity matters in Highland. It holds an annual Event in early Spring to listen to views from, and report progress to, a wider group of stakeholders and local enthusiasts, the Highland Biodiversity Forum. The Highland Biodiversity Forum is open to anyone with an interest in biodiversity in Highland to join.

Summary

The 2009 Highland Biodiversity Forum Event was held at Great Glen House, Inverness, from 10.00am – 4.00pm on Saturday 7th March 2009. It was chaired by Councillor Audrey Sinclair, the elected Independent Councillor for Highland Council Ward 06: Wester Ross, Strathpeffer and Lochalsh. 40 participants attended from a range of organisations and local groups.

The purpose of the day was to provide an opportunity for all those involved and interested in Highland's biodiversity to find out about local projects, to summarise progress made on delivering the Highland Biodiversity Action Plan, and to canvass views on what issues the Partnership ought to focus on over the next three years.

Feedback indicated that all the participants (100%) found the presentations and workshops sessions very or quite useful. Many noted the importance of this opportunity to network with other local groups, share ideas and experiences, and find out about that is happening on the ground. Over half of participants said that they intended to take action on the issues raised during the day.

General comments on the day include:

- "...good to hear of interesting and inspiring projects taking place in other areas."
- "...lots of new ideas for local group and opportunity to learn from others experience."
- "In general it was a really useful and enjoyable day".

Next Steps

The discussion session started to canvass views on what issues the Highland Biodiversity Partnership ought to focus on over the next three years. However, the session had to be cut short as several of the local presentations overran. A form will be circulated with this Report to seek further comments and views, and the feedback will be collated and presented to the Partnership at its next meeting on 10 June. This will be used to guide the future work of the Partnership and form the basis of the next Highland Biodiversity Action Plan (2009-12).

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1.0 Welcome and Introduction

The Event was introduced and chaired by Councillor Audrey Sinclair, on behalf of the Highland Biodiversity Partnership, who welcomed everyone to the fifth annual Highland Biodiversity Forum.

Cllr Sinclair noted that the Highland Biodiversity Partnership is made up of 30 representatives from local groups and key organisations, and aims to support local groups and make progress on the Highland Biodiversity Action Plan. It is now three years since the Action Plan was launched, and the Partnership is reviewing what has been achieved to date, and canvassing views on where it should focus its efforts in the next few years.

An updated copy of the Highland Biodiversity Partnership Agreement was included in all delegates' packs. Cllr Sinclair launched the new Agreement, which sets out the aims and operating principles that the 30 Members have signed up to for the next three years. She said that she was looking forward to working with fellow Councillors and Officials to ensure that Highland Council plays a key role in delivering the aims of the Partnership.

2.0 Local Biodiversity Group Presentations

The morning and early afternoon sessions comprised ten update presentations from the Local Biodiversity Groups on projects they have been working on over the last year. The Speakers' Biographies are at Appendix 3.

2.1 Biodiversity Work in the Cairngorms

Stephen Corcoran, Cairngorms LBAP Management Group

Cairngorms Biodiversity Grant Scheme: Stephen reported that the Cairngorms Biodiversity Grant Scheme had been running for 4 years, and that 10 projects totalling £36,500 had been funded during 2008. A wide range of projects have received funding to date, including:

- school wildlife gardens (Grantown & Crathie)
- a new nature club (Braemar)
- 3 research/survey projects (lichens, bees and fungi)
- Forest Schools Education (Grantown & Aviemore)
- aspen conference
- swift nest boxes (Mar Lodge)
- village wildflower meadow (Kingussie)

Unfortunately the assessment and claim process had become overly complicated because of the reporting requirements associated with LEADER funding, which discouraged some applicants. As a result, the LBAP Management Group is revising the scheme to make it simpler and easier to get involved.

Priority Species Projects: He then summarised the other biodiversity projects that are currently underway in the Cairngorms:

- **Waders:** Badenoch & Strathspey is the most important mainland site in UK for breeding farmland waders. This was a partnership project to provide specialist wader plans and submit applications to the SRDP Rural Priorities for wader management for over 50 farms.
- **Black Grouse:** Development of a black grouse framework to provide an ecological basis for the targeting of management for the species within the Park. Joint GWCT/FCS/SNH/ CNPA telemetry work on black grouse and habitat use in Cairngorms woodlands.
- **Rare Plants:** A project targeting Cairngorms rare plants such as twinflower being developed in conjunction with SNH's Species Action Framework programme – although funding package is still to be finalised.
- **Wildcat Project:** This is a partnership project with CNPA, SNH, Tooth & Claw, FCS and RZSS and Scottish Gamekeepers Society now established with a Project Manager primarily funded by SNH. Tackling issues such as disease, hybridisation, feral cats and genetic/population research.

- **Water vole:** This project has now expanding to cover the whole of NE Scotland and the Cairngorms. Mink are now effectively absent from many upper catchments and some lower ones. There are some signs of water vole recovering.
- **Dragonflies:** Two new leaflets are in print, a Cairngorms and a Highland “Guide to damselflies & dragonflies”. Coordinating of the National Dragonfly Atlas – volunteers wanted for recording 10 km squares across Scotland
- **Aspen:** Highly successful aspen conference in October, 100 enthusiasts attended over 2 days. The key outcome was the need for lots of local origin aspen trees. Highland Aspen Group’s (HAG) nursery continues to produce a small amount of aspen trees from root cuttings but not enough to satisfy demand. HAG’s tree nursery is now developing a seed orchard with LEADER, FCS & CNPA funding. Scottish Native Woods developing a web-based interactive mapping tool for the public to record aspen.

Priority Habitat Projects: Work is underway to develop a **Cairngorms Wetland Vision**, which aims to identify areas for potential wetland restoration and creation. SEPA have agreed to use the Park area as a pilot area for the first phase of their national inventory of wetlands, as part of their commitment to deliver the National Park Plan. There is a workshop of major stakeholders in May to take forward the vision.

Planning Gain for Biodiversity: There is a policy being developed for the new Cairngorms Local Plan, which will require developers to mitigate against damage to biodiversity. This will be through on-site mitigation and off-site compensation or, if these are not possible, a contribution to an environmental fund.

Cairngorms Local Record Centre: The North East Scotland Biological Recording Centre (NESBReC) recently took on the role of providing a central biological recording system for the National Park to:

- provide a focal point for the collation of all biological records
- promote recording and submission of new data
- manage, update and verify all biological records
- transfer all CNP biological records to the National Biodiversity Network

Questions and Discussion

Q – Scottish Native Woods are developing a web-based interactive mapping tool for the public to record aspen - when will this be available?

A – Getting the technology together has been an issue, but hoping to have it available by the end of the year, covering the whole of Scotland.

Q – Local planning will ask developers to pay into compensation fund – Wind farm developers also pay compensation funds – should a % of that money go into environmental and conservation projects?

A – Good point, but most wind farms are outside of the CNP area – so can avoid this issue.

Q – Is it OK to allow bad things to happen as long as given compensation? Who/ How do you place a value on habitat for compensation?

A – Don’t want bad things to happen and planning works to protect sites, but where it is unavoidable, it is best that developers contribute to CNP funds. CNP is developing a matrix for compensation eg £250 per house for a small development.

Q – These compensation funds will be applied as part of the planning consent, but shouldn’t mitigation be done before the planning stage?

A – “ Less important” sites aren’t covered by the major protection legislation - but are of local importance – so mitigation has most value at these types of sites that have no legal protection.

2.2 Biodiversity Work in Caithness

Ken Butler, Caithness Biodiversity Group

Caithness Biodiversity Projects: Ken began by summarising the current projects being undertaken by members of the Caithness Biodiversity Group:

- **School Biodiversity Competition:** Several primary schools are involved in an annual biodiversity competition. Last year's competition was to record wildlife in the school grounds. This year, 350 children have drawn pictures of local wildlife and the best 20 will be featured on a Caithness biodiversity tea towel.
- **School Marine Project:** This project brought together schoolchildren and two local artists to decorate an internal wall in the Seadrift Visitor Centre with a marine biodiversity theme using recycled materials.
- **Wildflower Habitat Enhancements:** Three species of wild plants (Oyster Plant, Kidney Vetch and Scottish Primrose) are being grown from locally collected seed to improve known populations in their established habitats. The project volunteers have had mixed success in germinating and growing on, but are learning from it.
- **Water Vole Monitoring:** Volunteers have been trained, and the major survey is now done and reported. Now 7 volunteers are monitoring 8 sites annually.
- **Community Wildlife Boxes:** Several wildlife box-building events have been held, with volunteers gathering to make boxes. Some offenders have also done their community service at this, and most of the boxes have now been put in a suitable habitat.
- **Moth Trapping and Monitoring:** Volunteers have been trained in moth recording, and sets of moth trapping kit have been purchased and put out to them. Records are starting to come in and a local Vice County Recorder has been appointed. The records go to "Moth Count".

Important Biodiversity Places: He then gave a presentation on the Important Biodiversity Places project. The purpose of this project is to identify places that Caithness people think are important for biodiversity – and to prepare the information so that it can be widely known and used.

- **Phase 1: Collect data from the community:** A form was designed. Two open meetings were organised for people to pop in and tell us their opinions. One open session at another gathering. Local experts also approached.
- **Phase 2: Organise the data:** Highland Council and SNH consulted about what their GIS systems need as input. Mappoint purchased for our own use. Data converted to Excel files compatible with all the systems. Data entered for 175 sites.
- **Phase 3: Balance up the data:** Locals (such as Rangers) can see some gaps and lack of balance, so another round of data creation to make it more complete.
- **Phase 4: Design Output:** Look at the best ways of presenting the data for various prospective users. Test the outputs on users. Prepare a presentation to the public and key organisations. Prepare for internet use of data.
- **Phase 5: Compare to SNH sites:** People will compare this work to the SNH protected sites such as SSSI's, so we need to do that and understand any differences (hopefully next year).
- **Phase 6: Carry on for Ever!** This is just a baseline set of sites. It can be added to or modified as we learn more about the county. The data set is date classed so that it can be updated.

The key thing is that we now have a list of the places in the county that we think are important. The Importance Classes are defined as follows:

1. International or high national
2. SSSI or higher protected site
3. Highly valued within Highland
4. Valued by local experts
5. Valued by the community

Questions and Discussion

Q – Where were the consultation meetings held?

A – In the 2 main towns, had planned third for Dunbeath village, but felt that they had already contributed. Overall had very good response.

Q – Would you think of extending the project to be interactive with sites?

A – Once we actually have the list we can look at whether the sites are being well looked after and need improvement.

Q – Are landowners involved?

A – Not a lot at this stage – still gathering information, but will need to look in future whether landowners are happy with the sites being identified.

Q – How well known is the project in the local community – will landowners be annoyed at not being consulted before being published?

A – This is an issue about how the data is launched, the group are aware of this and need to consider further.

Comments: If landowners are made aware of the sites it may actually encourage them to manage it better. Land owners are generally fairly amenable in Caithness – good area to role off the project.

Q – Has the project mostly been done by volunteers?

A – All volunteers, attending meeting, interviewing people and imputing data.

Q – How have you tackled identifying landowners?

A – Used to use “Who Owns Scotland” but not as reliable now – local SNH office can usually help.

Q – Are there any habitats that get less coverage than others?

A – Caithness is not well surveyed - working with what is currently known and taking forward as best we can.

2.3 Wildlife Counts: Inverness & Nairn Community Green Space Wildlife Survey Stephen Wiseman, Alba Interpretation

Background: Stephen has been contracted by Highland Council on behalf of the Inverness & Nairn Biodiversity Group to run this project. Like many of the projects highlighted at the Forum, it is one of 24 being undertaken in Highland with assistance from the Highland Biodiversity Partnership. It is funded by the Heritage Lottery Fund, Highland Council, Scottish Natural Heritage, Highlands & Islands Enterprise and RSPB Scotland.

Project Objectives:

- Encourage more biological recording in Highland by enthusing and training more local recorders (of all ages)
- To create links between local recorders and existing local and national biological recording groups (continuity)
- To analyse the project and suggest opportunities for continuity (completed in Oct 09)

Areas covered by the project are Inverness West, Nairn and Ardersier, Merkinch and Dundreggan – local publicity being used. A preference form has been developed asking people what topics they would be interested in and what times would be best for them to participate. A talk will be given in each area (March), followed by introductory outdoor workshops will be held in each area (April – July), covering 3 or 4 of the key topics: Water life, Seashore, Woodlands, Bats and Birds, Plants and Pollinators.

The key to training will be making it fun, but areas covered will be:

- Field guides and using keys
- Introduction of specific survey methodology

- Current issues in wildlife conservation
- Access and H&S
- How to record and where and how to submit records
- Equipment, clothing, tools of the trade

Master classes will then take place (July, August, Sept), focusing on the detailed issues identified. Stephen noted that he hoped that the project would make connections and links that would encourage participants to continue to be involved in conservation after the project ends.

Questions and Discussion

Q – Could fish be added to the topics list?

A – Introduction workshops will mention this and could become a master class.

Q – Have you tried youth cafes for participants? Eg Nairn

A – Aiming at adults, but under 18's welcome with a guardian.

Q – Is this the first time something like this has happened in Scotland?

A – No – but learnt a lot from the other projects.

Q – How did you choose the 4 sites?

A – Divided geographically and areas where active groups already or rangers wanting to develop biological recording. Initial network to work from and then cast net wider.

2.4 Lochaber Butterfly & Other Species Survey

Alastair Stewart, Highland Council Rangers
& Lochaber Biodiversity Group

Invasive Species Work: Alastair said that Donald Kennedy had reported on the “Lever and Mulch” method of Rhododendron control that is being trialled in Lochaber at the 2008 conference. The Lochaber Biodiversity Group has also been mapping native species (working with the John Muir Trust) and removing invasive species.

Lochaber Species Survey Work: Communities Project for Highland Biodiversity funds have been used to purchase a moth trap and telescope for moth and bird recording. Butterflies and Moths were already part of the Rangers guided walks programme and with another key member of staff via the Nevis Partnership, this had been extended. Alastair noted that numbers of local volunteers were low, but that they were working to get more people involved in the progress. The Glen Nevis Visitor Centre attracts approximately one hundred thousand visitors per year; therefore there is great potential to raise the awareness of visitors to highland biodiversity.

Butterflies & Moths: There have been successful butterfly recording projects in the past, including postcards for identification and recording the location spotted. Based on this, a postcard image of the peacock butterfly was produced and sent out to children via schools and via visitor centres etc. There was a good return rate, and the project will be continuing with the Small Tortoiseshell this year. A Highland Butterfly Guide leaflet was also produced to raise awareness and boost recording. Alastair has received funding for training days in moth recording.

Local Nature Reserve: The Biodiversity Group is working with local communities to identify possible sites for a Local Nature Reserve in Lochaber.

Geodiversity: The Council Rangers have joined up with the Lochaber Geopark for 2 weeks of events including guided walks and minibus tours leaving from Fort William (allowing holiday visitors to get involved).

Questions and Discussion

Q – Hotel brochures often have details of paid-for activities such as shooting and fishing – what about including wildlife events in these publications?

A – The Rangers currently produce an annual brochure of activities which is distributed to hotels – maybe an issue of improving distribution. Also working with Geopark on publications etc so should improve publicity/ raise awareness.

Q – What is the date of the Geological/Biological weeks?

A – European Geopark Week 31 May to 6th of June 09 and Lochaber Geopark Week 26 July to 1 Aug 09.

2.5 Japanese Knotweed Control in Skye & Lochalsh

Barbara Soutar, National Trust for Scotland

& Skye & Lochalsh Environment Forum

Update: Barbara gave an update on the project, which aimed to identify key locations from which to eradicate the knotweed in an effort to halt its spread in Kyle of Lochalsh and Skye. 2008 was the first full year of work on the project. It started with meetings with community groups and crofters, countryside events and articles in local newspapers and journals. Survey work started in May 2008 – there are currently 126 sites on the database for South Skye and Lochalsh and this is expected to increase to over 170.

A collaborative control group was set up involving the National Trust for Scotland, Forestry Commission, Scotland Transerve, Highland Council and local individuals and landowners. Currently, it is not clear how many of the 126 sites have been controlled, but we will be able to see the effects by mid-May this year. It is hoped that raising awareness and starting control on site will enable the local community to carry on after the project is complete.

In 2009, the group has the ability to carry out more control and offer training and there is still a lot of survey work to do. No co-ordination funding was available this year, and there have been challenges associated with running the project without a project officer.

Questions and Discussion

Q – What technique have you been using for control?

A – Using a mixture of techniques including injection and spraying with Roundup which works well and is the least harmful (last year had a supply of Roundup donated).

Q – Was there a strategy for the control?

A – Problem encountered was finding out who owned the sites – easy to find sites, but needed to get permission to spray them. So control was mostly based on where we were able to do it – also issues of geographical and physical access – so mainly opportunistic.

Q – What are the success rates?

A – With injection, the first year impact is that it looks ill, then the top height growth for the following growing season is 1m which is good for spraying- so hope to control with spraying in the second year. Cutting is unlikely to ever kill the plant, as it keep returning, especially if the cutting stops.

Q – How to you deal with the waste?

A – Tend to pile off site and burn.

Q – Has there been any pattern of distribution?

A – Have only found one village community in S&L where it is not present. Main sites are roads, gardens, wasteland, watercourses and croftland.

Q – Is there going to be an ongoing programme on controlled sites?

A – Working to eradicate and provide value for money. After the project closes, some sites will be controlled by Transerve, HC, NTS and FCS. Raising awareness has improved control in gardens, some areas will be controlled by volunteers, but some will slip through the net.

Q – Recently at a conference heard about a bug from Japan that will kill the plant – could this be introduced here?

A – The bug has been trialled and is likely to be licensed for English test sites – but side effect issues - could be risky.

Q – Is this included in SRDP funding?

A – Yes – one of three species identified for control – offering £160/hectare of infestation, but it would not be possible to control it totally for that amount of money.

2.6 Skye & Lochalsh Mink Update

Roger Cottis, Skye & Lochalsh Environment Forum

Identifying & Trapping Mink in Skye & Lochalsh: Roger gave a presentation on identifying mink to protect our native species – he noted that in targeting mink, we would be targeting our native species as well.

American mink *Neovison vison* was introduced to the UK for fur farming, and established in England and Wales from 1929. Farms were subsequently introduced to Scotland 1938. We know of escapees breeding in the wild from at least 1956 and they probably arrived on Skye from Argyll in the 1980s.

Mating takes place from late February to early March, with the young born from late April to early May. 4 to 6 young (kits) remain with female until late summer or early autumn, when they disperse.

Native species such as pine martin, otter and polecat can all be confused with mink. Mink have a white chin spot (which sometimes runs down the belly). They are smaller than pine marten or otter, and can vary widely in colour.

Skye and Lochalsh does not have enough designated important sites to attract funds to control mink. However, they are creating problems for water vole (Lochalsh), terns, gulls and ground-nesting birds as a result.

Feb/March is a good time for trapping. Traps need to be checked every 24hrs (under Wildlife and Countryside Act). Be aware that pine marten and infant otters can get caught in mink traps. The Group held a useful instruction day on trapping on 21st February.

It is important to record information on trapping and control – particularly:

- Who – that's you
- What – mink, pine marten, otter or other
- Where – the trap location
- When – the date

Questions and Discussion

Q – What happened to the pelts?

A – Some projects in other areas are analysing pelts – but most crofters bury them.

Q – Are they wholly nocturnal?

A – No – operate at all times.

2.7 Easter Ross Grey Partridge Project

Gillian McKnight, Scottish Agricultural College
& Ross & Cromarty (East) Biodiversity Group

Grey Partridge: Gillian said that grey partridge is a UK Biodiversity Action Plan priority species. Current factors causing loss or decline of the population include loss of nest sites / farm intensification, reduced partridge food through the use of pesticides & herbicides (esp for chicks), loss of winter stubble feeding, vulnerability of nests to predators in farmland with poor / suitable cover and nest destruction caused by early mowing and other farm operations.

The UK Grey Partridge Species Action Plan has the following objectives and targets: Halt the decline by 2005....; Ensure the population is above 150,000 pairs by 2010; Maintain the current range of this species; and Enhance the current geographical range of this species, where biologically feasible. The Lead Partner is the Game & Wildlife Conservation Trust.

Easter Ross Project: The Easter Ross peninsula was chosen for the project as it has a suitable habitat of open, mixed arable land, the grey partridge seemed to be quite widespread, there were enthusiastic farmers (some in cornflower project area), adjacent farms (some in agri-environment schemes) and the Highland Monitor Farm at Fearn allows for group publicity.

The Easter Ross Grey Partridge Group was established in February 2007, and meet twice each year in February and October 2007/8 to discuss grey partridge life cycle, ecology & habitat requirements, suitable habitat management – field margins, set-aside, cropping, predation, to encourage counting in Spring & Autumn and to get input from the Game & Wildlife Conservation Trust, Scottish Agricultural College and RSPB. The purpose of the Group is to:

- Protect & enhance the Easter Ross grey partridge population;
- Improve knowledge of local grey partridge distribution;
- Raise awareness of habitat needs;
- Encourage positive management (SRDP); and
- Provide advice & input from Game & Wildlife Conservation Trust, SAC & RSPB.

Grey partridge need cover & nesting habitat, as well as arable weeds and beneficial insects for chick survival and adult over-winter / spring survival. The Group discussed options for cost effective cover and nesting habitat and collaborative management, and took part in counting and recording partridge on their land. Gillian has created a database and mapped partridge distribution with these records.

Funding for the Group has now ended, but it is hoped that they will continue to work together. Future activities could include looking at predator control, seeking funding / sponsors and new ideas for winter crops that benefit wildlife.

Questions and Discussion

Q – Is there competition with the red-legged partridge?

A – GWCT says that there is no evidence that they compete.

Q – Impact of Hedgerow removal (especially around Fearn)?

A – This should not be removed without prior consent – should be planting hedgerows.

Q – At what point will predator control not be necessary?

A – Predator control has a very rapid response and can increase population quickly – but they can survive without predator control – the Feb/March breeding season is critical.

Q – Is shooting pressure an issue?

A – Most of these farmers do not shoot anymore and don't want the birds shot. It will be OK once there is a surplus, but it is not an objective for farmers.

2.8 West Sutherland Eel Project

Chris Daphne, West Sutherland Fisheries Trust
& Sutherland Partnership Biodiversity Group

European Eel: Chris said that the European eel is a UK priority species, and is thought to be the most “at risk” vertebrate, with stocks in decline by as much as 99% on 1970’s numbers. There are a number of possible reasons for the decline in population including over exploitation, climate change, parasites and pollution (toxins- flame retardants) and obstructions to migration.

The eel is a keystone species and acts as both predator and prey; it is an important food source. They have a long and complex lifecycle - Highland eels can stay in the waters for up to 70 years before going out to sea again. Due to the lack of data and the current status of eels within Europe, management plans are required in order to protect and conserve stocks. For such plans to be drawn up and implemented, baseline information is needed on current stocks and there are no definitive sampling techniques / methods in place. The need for data is even more relevant within the Highlands of Scotland and in particular the North West due to much slower growth rates, shorter growing seasons and proximity to the Gulf Stream. In addition, Highland eels may form a major gene pool from stocks that migrated before the major decline in the 1970s and 1980s.

Project: The primary aims of the project are to gain an insight into the eel populations within the Geisgeil catchment in order to ascertain spawner escapement and elver recruitment from and to the system. Movements with the system and patterns can be observed. The first year of the project will concentrate on seeing what works best and gathering data on the eel itself (as so little is known) – including physical data such as eye size, head size and jaw width. The project will also gather data from other areas and raise awareness working with local schools and possibly the University of the Highlands & Islands.

Questions and Discussion

Q – How important are eels as a food source?

A – They are a main prey species for otters, herons and other birds as they have a high fat content.

Q – Can you age them/ use X-ray?

A – Would have to kill them – so don’t want to do that.

Comment: Eels can move across land if necessary if trapped by river course changes.

2.9 Sutherland: The Information Gap

Ian Evans, Assynt Field Club
& Sutherland Partnership Biodiversity Group

Sutherland: Ian noted that to his mind, effective action on biodiversity requires answers to four questions: 1. What do we have and what is particularly valuable about it (in a local, regional or wider context)? 2. What is changing and why? 3. What actions can we take to manage the effects of change? 4. How can we involve as many people as possible in this process?

Sutherland is the largest ‘county’ in the Highland area (and indeed the UK) at 6071 sq. km.; the most sparsely populated (13,778 people at the last count); and remote from any of the traditional centres for research into the natural world.

Until recently, Sutherland has had very few resident naturalists, especially ones with interests outside the popular groups such as birds and butterflies. For detailed information on the biodiversity of the county we are therefore often reliant on the expertise of visitors, who tend to be seasonal, concentrate on known ‘hot-spots’ and often take their findings away with them.

We are able to draw, as elsewhere in the Highlands, upon the accumulated knowledge and expertise of the staff of SNH and its predecessors, and of all those whose research they have commissioned over the years. Sutherland has one of the most extensive suites of designated sites in the UK outside of a national park. More recently, organisations such as RSPB and JMT have added to this knowledge. We have also benefited greatly from the activities of two other organizations - Inverness Museum, and Highland Biological Recording Group.

The Sutherland Biodiversity Group was set up in 2002. The Biodiversity Action Plan, produced in October 2003, paints a very good broad picture of the biodiversity of the county. However, it did become apparent, in the course of the Group's discussions, that detailed information about the biodiversity of Sutherland, particularly at the species level, is extremely patchy. There is a good account of the higher plants (i.e. *John Anthony's Flora*), but this was published in 1976 and is now quite out-of-date; and there are others, more recent, on the birds (Stewart Angus, 1983; Alan Vittery, 1997).

Information about most other groups, where it exists, is spread around the libraries and data-bases of a wide variety of organisations, and gathering it together and interpreting it often requires specialised knowledge. It can therefore be quite difficult to access, even in these days of the National Biodiversity Network.

Since publication of the BAP, the Sutherland Biodiversity Group has attempted to address these problems, amongst others, in at least three ways, with funding from a variety of sources, much of it channelled through the Highland Biodiversity Project (and, of course, the Sutherland Partnership).

Sutherland Invertebrate Audit: This was set up through the HBRG [in 2005]. Its aim is to assemble and evaluate the available information relating to some eight groups of land invertebrates. Reports have been completed on spiders, ground beetles and molluscs; work is still in progress on moths, bugs, lacewings, longhorn beetles and ladybirds. We now know that more than 210 species of spider have been recorded from Sutherland, 10 of them Nationally Notable, but that geographical coverage is still very incomplete; for example, the only mountain that seems to have been studied is Ben Hope. Ground beetles are also poorly recorded, especially in East Sutherland, but nearly a third of the recent UK records of a rare mountain-top species, *Nebria nivalis*, are from West Sutherland. Finally, 2/6 Highland sites for the rock snail *Pyramidula rupestris* are on the limestone at Durness (though we are not sure exactly where), the others being on Skye.

Village Wildlife Audits: When the Group came to consider Section 6 of the BAP, on 'Town and Village', we found that no site-specific information existed. Two communities, at Scourie in the west, and Rogart in the east, were encouraged in 2005 to set up groups to look at the wildlife of their neighbourhoods. Their findings were delivered in the form of the books *Wildlife of Scourie* (2006) and *Wildlife of Rogart* (2007), both of which are selling steadily. Up-dates are being published in *Highland Naturalist*: for Scourie in 2008, for Rogart in 2009, hopefully. Prior to these projects, there was, for example, no information at all for most mammals, reptiles and amphibians in the area around Rogart (NC70). We now have two sites for water voles, a priority species, and recent well-localised records of almost all the others that might be expected to occur.

Sutherland Marine Audit: Another apparent information gap related to parts of the BAP covering intertidal and marine organisms. A pilot project (£500) was set up in 2008 to find out what information was available about the habitats and species found on a short stretch of the West Sutherland coast (from Inverkirkaig to Point of Stoer). This stretch was chosen because it had not been the subject of any of the very comprehensive loch surveys carried out in the 1980s and 1990s. The report will be completed shortly. It shows, much as expected, that there is little detailed information in the public domain, but that much may be garnered from the local community and visitors, particularly divers. There is more work to be done there.

The future? We understand that substantial new funding is shortly coming on stream. With some of it, we might perhaps encourage other local communities to look at the biodiversity of their areas,

and to produce accessible accounts of what is known. In Assynt, for example, the Field Club now has access to over 100,000 wildlife records for the parish, many already computerised, and covering a wide range of popular and less popular groups, from fungi, lichens and flowering plants to beetles, moths, and mammals. With the widespread use of digital cameras, there are also increasing numbers of excellent images. The Club is now considering the practicalities of getting some at least of this information on to an **Assynt Wildlife Website**, to make it much more readily available, to encourage further observation and recording and, above all, to promote enjoyment of our incomparable wildlife.

2.10 Wester Ross Environment Network (WREN) Update

Aaron Forsyth, WREN Chairman

(Presented by Janet Bromham)

WREN: In the past year WREN has been going from strength to strength. After a period of uncertainty regarding the future of WREN's parent organisation, the Wester Ross Alliance, and its capacity for continued support; it was deemed appropriate to follow a more self-reliant route and establish an independent organisation and to adopt our own constitution. Consequently we held our first AGM last autumn that was very well attended, reinvigorating the group, as it is the bums-on-seats that are the main measure of support for any organisation.

However, the overall output of the group is entirely dependent on voluntary input and, as is very often the case, the people that are prepared to take a leading role and offer the commitment required are those who are already committed, and often overcommitted, to other organisations. We would like to be more ambitious but are cautious in taking on more projects in our current capacity, as there is a real danger of any voluntary group spreading itself to thin and depleting the valuable energy that makes an organisation successful. On saying that, we are also looking at ways of reaching out in order to generate input from a wider field.

Environmental Fund: We are creating some valuable links with other organisations, one being the Celtic Fringe, a group that represents business and tourism in Wester Ross. They approached us last year with the view to generating revenue from tourism in order to build up an environmental fund to be used to reinvest into the community. A locally generated fund to benefit the local environment is a fantastic example of one possibility of how voluntary groups may be able to achieve sustainability in the long term. After all we know that our main attraction for visitors to Wester Ross is the environment. The Celtic Fringe is just completing a feasibility report, funded by SNH, on the potential of such a scheme in Wester Ross.

Biodiversity Posters: We are delighted to show off our new biodiversity posters that are on display here today for the first time. They are now on offer to be borrowed by interested parties for public display and were designed to give the viewer a snippet of some of the habitats and species present in Wester Ross in the hope that it will inspire them to want to find out more. This is a classic example of an apparently simple project that became more and more complexed as it progressed and what started as six posters ended up as thirteen. Trying to categorise what was included was the most daunting task, because of course we could have ended up with an encyclopaedia had we tried to include everything. The layout was a little easier to define but there was also a considerable amount of proof reading and fine-tuning before going to print. The posters were funded by SNH with a small shortfall of the cost of the folios, to keep and transport them in, covered by Highland Council. Thanks to James Merryweather for producing them.

Biodiversity Yearbook: Our main current project is the publishing of a Wester Ross Biodiversity Yearbook, a month-by-month compilation of anecdotes, information and photographs relating to the environment, largely contributed by the local community. This is posing similar challenges as the posters in defining the format and content, and who we are targeting. Apart from creating awareness, it was originally perceived as a way of raising funds from sales through local outlets, but having sought advice from those who display booklets and leaflets for sale, the reality is that

many of this kind of publication only sell a handful of copies per year. Also given that it was costed out two years ago, we are reviewing the project in order to re-evaluate its outcomes.

As to our commitment to the national agenda regarding priority species and habitats in our area, following our concentration on the committee's identity, we are ready to give this issue our attention at our next meeting.

Finally, I would like to thank all those who have given support to WREN in the past year.

3.0 Wildflower Sources Feasibility Study

David Warnock, Consultant

Introduction: David presented the findings of a Wildflower Sources Feasibility Study, which he had undertaken on behalf of the Highland Biodiversity Partnership.

In 2006, a Review of the 8 Local Biodiversity Action Plans in Highland identified a number of strategic issues and projects to address, including the conclusion that there was a strong demand for local sources of wildflowers from community groups etc. but currently no local supply. A Feasibility Study was commissioned to give an analysis of the various options for providing the required wildflower supply service within Highland; and to assist the Partnership to decide the best way to take the project forward, develop the wildflower nursery as a biodiversity resource, and ensure the viability and sustainability of the nursery as a (if possible) locally-based and managed enterprise.

A summary of the Feasibility Study is attached in Appendix 4.

Questions and Discussion

Q – What areas other than Inverness (Merkinch) were considered for the project?

A – It was felt that the Inverness area had a larger population/ customer base, more development potential and links to more potential projects – however, would stress that this is a suggestion and not the final and only way of taking forward.

Q – Could you use Inverness as the hub with spokes in other areas? Local provenance for seed strain is important.

A – Even with Inverness as the hub, would use/ grow local provenance seeds

Q – What are the existing sources of wildflowers – provenance is not regulated, so although grown locally, seed could be from abroad.

A- Need to produce guidelines on provenance.

Q – How would wild seed sources be collected?

A – No detail of this yet.

Q – Are there any existing local producers used by seed suppliers?

A – Most could only say that seeds came from Scotland – limited time and budget to investigate all sources.

Q – Is the concept of a network of nurseries a goer?

A – Yes – working at a local level with people and organisations.

Comment – I have serious misgivings about relevance of wild flower nurseries to biodiversity! Cosmetic, and diverting scarce resources from 'real' issues?

4.1 Update on Highland Biodiversity Action Plan (2006)

Jonathan Willet, Highland Biodiversity Officer

Jonathan gave an update on the Highland Biodiversity Action Plan by reviewing the issues that were raised in the 2006 Plan and summarising progress made to date on addressing them. This presentation acted as an introduction to the discussion sessions, which were to look at future priorities for the HBAP.

- **Lack of Information – Biological Recording.** Status – Being addressed.
- **Lack of Awareness.** Lots of projects have been carried out at local level – but no way/funds to monitor awareness at local level. Status – Uncertain.
- **Lack of sensitivity in the construction and maintenance of roads and in the selection and management of sites.** Status – Action ongoing, current projects to be completed by autumn 2009. This is being addressed through the production of advice to planners and training events.
- **Lack of reference to, and neglect of, soil biodiversity.** Status – Being addressed, but further actions to be devised?
- **The need for concerted action on marine issues.** Status – Being addressed, further actions to be devised?
- **Area BAP Delivery.** Status – Being addressed, but adequately?
- **Locally Sensitive Initiatives.** Status – Being addressed.
- **Inappropriate Management – Uncontrolled Wild Harvesting.** Status – Some development work undertaken, currently on hold.
- **Pollution, Erosion and Climate Change - Agriculture and Marine Waste.** Status – Action on this need to be at the national level, so it was felt unsuitable for stand alone action at the local level.
- **Invasive Non-native Species – The Spread of Invasive Non-native Species.** Status – Action underway, funding for large projects to be secured.

Suggested New Actions for discussion:

- Once the breaking down of UKBAP targets to local authority areas is completed it should be edited and re-drafted into a non-specialist newsletter and a programme of PR developed.
- Using the Scottish Biodiversity Communication toolkit produce one specific to Highland.
- Planning actions?
- Soils actions?
- Obviously local groups would like more capacity to deliver projects/ action but we cannot secure funding for a dedicated project officer. With no funding available should we still focus effort on this or accept the status quo and focus on other actions?
- The next step for local sources of wildflowers is to develop a business plan for the main nursery and the services it would provide to partner nurseries, find funding for the plan and deliver it. The Merkinch LNR Steering Group has offered to put £3000 towards developing this business plan.
- A suggestion for the creation of an LNR in each of the 10 main population centres in Highland. So far there is one.
- A project looking at the impact of uncontrolled wild harvesting of whelks that would quantify if there has been an impact needs to be undertaken. Ideally this would be a PhD, comparing what is happening here to Ireland and perhaps France.
- Secure funding for key invasive species projects.
- A project that would have multiple benefits and looks very likely to be funded in the Greeninverness area in spring of 2009, is a broad habitat and species survey of this area.

4.2 Discussion: Priorities for 2009-2012

Two discussion sessions were held, to identify priorities for the Highland Biodiversity Forum for 2009-12.

Group 1 (led by Janet Bromham)

- **Lack of info on biological recording**
 - explore data needs
 - look at how others have addressed the issue of communication
 - toolkit for local communities to share/ receive data

- **Lack of Awareness**
 - More info out to increase general awareness
 - Articles in local press etc
 - Promote “less interesting” species
 - Promote in larger places eg supermarkets
 - Encourage visitors to share pictures
 - Target hotels, B&Bs to advertising and promote
 - Web forums

- **Soil Biodiversity**
 - More work into soils
 - New Zealand flat worm

- **Marine Issues**
 - Caithness coastline issue
 - Councils providing report by end of year
 - Rentals being released causing upheaval of beds
 - Lack of information
 - Information being shared re developments and being withheld, should be available if application falls through
 - Clarification on law

- **Invasive Species**
 - Minnow

Group 2 (led by Jonathan Willet)

- **Pentland Firth**
 - renewable energy project
 - conflict looming with marine mammals
 - insufficient information on what effect it will have
 - planning issues and effect of scouring/sediment building
 - good to gather baseline information on marine mammals.
 - important biodiversity area for the future, but not sure if it is the remit of HBF – but will flag up urgent need for research.

- **Aspens**
 - NHFT and CNP doing Aspen projects, good to keep up momentum on this. - Support in principle for ongoing Aspen work on large scale.

- **Data Sharing/ Gathering**
 - better sharing of information from private companies doing environmental studies
 - issue of data locked within businesses
 - transparency and professional standards
 - making connections between people, volunteers and landowners

- strategic issues on data gathering, using a common format for data, legislation to make environmental impact reports available.
- **Better Networking**
- **Habitat Mapping / Lack of Habitat Networks**
 - UK Biodiversity targets will be broken down to the Highland level – once we have these figures we will have clearer targets to address locally
 - A Phase 1 Habitat Survey was undertaken in the early 1980s. It is possible to digitise these paper maps and identify where habitats have changed, and these can be resurveyed bringing the maps up to date. Changes over time could also be analysed.
- **Soil Biodiversity**

5.0 Closing Remarks

Councillor Audrey Sinclair thanked the speakers and participants for attending what had been an interesting and varied day. It was noted that workshop feedback would be included in the Forum Report, and that participants would be given another opportunity to feed in their comments before the next Highland Biodiversity Partnership meeting in June.

6.0 Summary & Conclusions from Feedback

Overall, the event was highly successful – creating an annual opportunity for groups to network, share knowledge and experience. All the participants (100%) found the presentation and updates sessions very or quite useful, while 65% of participants found the workshops very or quite useful. Over half of the participants (55%) said that they would be taking action on the issues raised as a result of the event.

Timekeeping was a major issue for the day (with several of the local group presentations overrunning, there was not enough time for the priorities group discussions at the end of the day). With a very full programme, there was also the issue of “information overload” noted by several of the participants – some said it would have been better to hold the discussion session earlier in the day when feeling fresher.

For 2009, feedback suggests:

- Timings for talks more strictly observed/ less full programme allowing longer presentations;
- Look at holding the discussion session in the morning, or mid morning session instead of the afternoon.

**Rowan Tree Consulting
March 2009**

APPENDIX 1

HIGHLAND BIODIVERSITY FORUM

GREAT GLEN HOUSE, INVERNESS
SATURDAY 7 MARCH 2009

PROGRAMME

- 10.00am **Registration**
Tea / Coffee
- 10.30am **Welcome and Introduction**
Chairperson: Councillor Audrey Sinclair
- 10.45am **Morning Session: Local Biodiversity Work**
- Biodiversity Work in the Cairngorms
Stephen Corcoran, Cairngorms LBAP Management Group
 - Identification of Important Biodiversity Sites in Caithness
Ken Butler, Caithness Biodiversity Group
 - Wildlife Counts: Inverness & Nairn Community Green Space Wildlife Survey
Stephen Wiseman, Alba Interpretation / Inverness & Nairn Biodiversity Group
 - Lochaber Butterfly & Other Species Survey
Alastair Stewart, Highland Council Rangers / Lochaber Biodiversity Group
 - Update on Japanese Knotweed Control in Skye & Lochalsh
Barbara Soutar, National Trust for Scotland / Skye & Lochalsh Environment Group
 - Skye & Lochalsh Mink Update
Roger Cottis, Scottish Wildlife Trust / Skye & Lochalsh Environment Group
- 12.30pm **Lunch**
- 1.30pm **Afternoon Session: Local Biodiversity Work (continued)**
- Easter Ross Grey Partridge Project
Gillian McKnight, Scottish Agricultural College / Ross & Cromarty (East) BG
 - West Sutherland Elver Project
Chris Daphne, West Sutherland Fisheries Trust / Sutherland Partnership BG
 - Sutherland: The Information Gap
Ian Evans, Assynt Field Club / Sutherland Partnership Biodiversity Group
 - Wester Ross Environment Network (WREN) Update
Janet Bromham, Highland Council
- 2.30pm **Wildflower Sources Feasibility Study**
David Warnock, Consultant
- 3.00pm **Update on Highland Biodiversity Action Plan**
Jonathan Willet, Highland Council
- 3.15pm **Discussion: Priorities for 2009-12**
Tea / Coffee
- 4.00pm **Feedback, Conclusions and Closing Remarks**
Councillor Audrey Sinclair

(LBAP: Local Biodiversity Action Plan
BG: Biodiversity Group)

APPENDIX 2

ATTENDEES

Cllr Audrey Sinclair	<i>Chairperson</i>
Janet Bromham*	<i>Highland Biodiversity Officer</i>
Jonathan Willet*	<i>Highland Biodiversity Officer</i>
Tony Mainwood	<i>Butterfly Conservation Scotland - Highland Branch</i>
Stephen Corcoran*	<i>Cairngorms Biodiversity Officer</i>
David Glass	<i>Caithness Biodiversity Group</i>
Ken Butler*	<i>Caithness Biodiversity Group</i>
David Warnock *	<i>Consultant</i>
David Jardine	<i>Forestry Commission Scotland</i>
Murdo Macdonald	<i>Highland Biological Recording Group</i>
David McAllister	<i>Highland Biological Recording Group / Tain & District Field Club</i>
David O'Brien	<i>Highland Biological Recording Group / Scottish Natural Heritage</i>
Fiona Strachan	<i>Highland Birchwoods</i>
Alastair Stewart*	<i>Highland Council Countryside Rangers / Lochaber Biodiversity Group</i>
Ro Scott	<i>Independent</i>
Stephen Wiseman*	<i>Inverness & Nairn Biodiversity Group</i>
Margaret Gill	<i>Inverness Field Club</i>
Stephen Moran	<i>Inverness Field Club</i>
Lorna Anness	<i>Lochaber Biodiversity Group</i>
Kathryn Logan	<i>Moray Firth Partnership</i>
John MacDonald	<i>National Trust for Scotland</i>
Barbara Soutar*	<i>National Trust for Scotland / Skye & Lochalsh Environment Forum</i>
Pat Rae	<i>North Highland Forest Trust</i>
Simon McLaughlin	<i>Royal Society for the Protection of Birds, Forsinard Reserve</i>
Anne Rae	<i>Rural Payments & Inspections Directorate, Highland Area</i>
Rachel Henderson	<i>Scottish & Southern Energy</i>
Gillian McKnight*	<i>Scottish Agricultural College / R&C(E) & I&N Biodiversity Groups</i>
Maria Hauxwell	<i>Scottish Environment Protection Agency</i>
Judi Forsyth	<i>Scottish Environment Protection Agency / SP Biodiversity Group</i>
Christine Welsh	<i>Scottish Natural Heritage / Lochaber Biodiversity Group</i>
Nicola Tallach	<i>Scottish Natural Heritage / Wester Ross Environment Network</i>
Drew McFarlane-Slack MBE	<i>Scottish Rural Property & Business Association</i>
Moray Anderson	<i>Scottish Water Solutions</i>
Mark Foxwell	<i>Scottish Wildlife Trust</i>
David Ashford	<i>Skye & Lochalsh Environment Forum</i>
Roger Cottis*	<i>Skye & Lochalsh Environment Forum</i>
Jryna Batters	<i>Sluggans Woodland Park / Viewfield Garden Collective</i>
Ian Evans*	<i>Sutherland Partnership Biodiversity Group</i>
Cllr Stuart Black	<i>The Highland Council</i>
Cllr George Farlow	<i>The Highland Council</i>
Cllr Graeme M Smith	<i>The Highland Council</i>
George Hamilton	<i>The Highland Council</i>
Julie Douglas	<i>The Highland Council</i>
Chris Daphne*	<i>West Sutherland Fisheries Trust / SP Biodiversity Group</i>
Hazel Bews	<i>Rowan Tree Consulting</i>

Please see key overleaf

Key:

R&C(E): Ross & Cromarty (East)

I&N: Inverness & Nairn

SP: Sutherland Partnership

** Speaker*

APPENDIX 3

SPEAKERS BIOGRAPHIES

Cllr Audrey Sinclair, Chairperson

Dr Audrey Sinclair is the elected Independent Councillor for Highland Council Ward 06: Wester Ross, Strathpeffer and Lochalsh. She is a Member of the Council's Land, Environment and Sustainability Committee, Secretary of the South West Ross Field Club, and a Member of the Skye & Lochalsh Bee Keeping Association, with three hives at present.

Stephen Corcoran, Cairngorms LBAP Management Group

Stephen Corcoran is one of the Cairngorms Biodiversity Officers, and work part-time in a job-share capacity with Justin Prigmore. He has been working on Local Biodiversity Action Plans since 1999, first as an LBAP Officer in Edinburgh then as South Lanarkshire's LBAP Officer. He had a "gap" year from LBAPs and managed an EU LIFE project on native woodland restoration before taking up the Cairngorms LBAP post in 2004. Stephen also undertakes some environmental consultancy work. As a Biodiversity Officer his interests are many given the huge diversity of the area he work in but his passions are in amphibians and Odonata, with a lesser interest (due more to lack of time) in Lepidoptera. As well as spending time wildlife watching, Stephen enjoys the outdoors and time with his family.

Ken Butler, Caithness Biodiversity Group

Ken Butler came up from Lancashire 52 years ago to live in Thurso. He started studying wild flowers at the age of 14 and has been the Botanical Society's Recorder for Caithness for the last 15 years.

Stephen Wiseman, Inverness & Nairn Biodiversity Group

Until last year, Stephen Wiseman worked for the National Trust for Scotland, based in Inverness, and participated in the Highland Biodiversity Partnership and its Sub Groups. Last year, he became a consultant with Alba Interpretation, focusing on environmental interpretation. Stephen has been hired by the Inverness & Nairn Biodiversity Group to help community groups survey the wildlife in their green spaces.

Alastair Stewart, Lochaber Biodiversity Group

Alastair Stewart is the Council's Senior Ranger in Lochaber, and he works with a team of six other Rangers. He is a member of the Lochaber Biodiversity Group, and is currently managing a project to survey butterflies and other animals of their behalf.

Barbara Soutar, Skye & Lochalsh Environment Forum

Barbara Soutar is the Estate Conservation Officer for the National Trust for Scotland at Balmacara Estate in Lochalsh. Her work includes the survey of invertebrates such as dragonflies, butterflies and moths, managing an extensive footpath network and the survey and control of invasive species such as *Rhododendron ponticum*, Himalayan balsam and Japanese knotweed.

Roger Cottis, Skye & Lochalsh Environment Forum

Roger has been recording mammals in Scotland since 1969. He moved to Skye in 1992, and is a Committee Member of the Skye & Lochalsh Environment Forum and Secretary of the Scottish Wildlife Trust Skye Members' Centre. He is a Scottish Natural Heritage Bat worker for Skye and Lochalsh; a Scottish Badgers trustee and local coordinator for the National Badger Survey; and the principal author of the Muirburn Code – Revisions related to the otter *Lutra lutra*. Roger is a Wildlife Consultant working for, amongst others, Highland Council, Scottish Water and the Forestry Commission.

Gillian McKnight, Ross & Cromarty (East) Biodiversity Group

Gillian has worked with SAC as a conservation consultant since 1999. Her day to day work involves agri-environment scheme applications, species and habitat surveys & impact assessments, developing and running training courses as well as local and national projects, including several LBAP projects, working with a wide range of (extremely dedicated and helpful) partner organisations across the Highlands... Previous projects have included Loch Flemington catchment management, Highland Cornflower project (& Arable Weeds seminar) & the Easter Ross Grey Partridge project, which was initiated in 2006.

Chris Daphne, Sutherland Partnership Biodiversity Group

Chris started work for the West Sutherland Fisheries Trust in June of last year, but has worked in this field for the Conon Fishery Board and others for ten years. He studied at Inverness College and with the Institute of Fisheries Management and before that, spent five years in the Navy. He has been a keen fisherman all his life, and is now managing a three year study of eel populations on the Geisgill River system near Badcall, which will involve catching and tagging individuals.

Ian Evans, Sutherland Partnership Biodiversity Group

Ian is a former professional naturalist who reverted to amateur status when he retired to Sutherland 17 years ago. He is a former Chairman of the Assynt Field Club and the Highland Biological Recording Group, and continues to be heavily involved in both. Ian managed a project to produce Village Wildlife Audits for Scourie and Rogart on behalf of the Sutherland Partnership Biodiversity Group, and is now overseeing a Marine Audit trial in part of North West Sutherland.

Janet Bromham, Highland Council

Janet is a farmer's daughter from Watten in Caithness, and has worked for Scottish Natural Heritage, RSPB and the Cairngorms Partnership in the past. She has worked as biodiversity officer for Highland Council since 2002. Her main duties include working with local groups to deliver their local biodiversity action plans, securing and administering funding to biodiversity projects and helping to co-ordinate the Highland Biodiversity Partnership. She works part-time, and covers North Highland.

David Warnock, Consultant

David's earliest memory of biodiversity was guddling around in the 'Greenock Cut' in search of minnows, beetles and other freshwater creatures. He started off his career in the natural world as a Countryside Ranger in Renfrewshire in the late 1970's and was involved in various biological survey work, particularly wildfowl counts, estuary birds, birds in nest boxes and rare species. He also completed a major Phase 1 habitat mapping project for the Renfrewshire Biological Records Centre. At the moment he encourages biodiversity in his garden and enjoys wondering around the hills near his home in Callander. He is particularly interested in the links between a healthy biodiversity and economic and community development.

Jonathan Willet, Highland Council

Jonathan is a Zoologist / Ecologist by training, who is very keen on Odonata. He first came to the Highlands as a fledgling naturalist in 1991 on a university field trip to Speyside. Later he undertook his Master's thesis on the Footpath of Stac Pollaidh, and SNH contacts he made there lead him to volunteering at Beinn Eighe NNR and then two seasons at Aigas Field Centre. After that he worked as a Countryside Ranger and Education Officer until he got the job as Stirling Council's Biodiversity Officer. He has worked as a Biodiversity Officer for nine years, the last three and a half years in a job-share post at Highland Council. Last year Jonathan became the first beardless chairman of the Highland Biological Recording Group. The rest of his work time is spent as a tour guide, guide trainer, ecological consultant and lecturer.

APPENDIX 4

Highland Wildflower Nursery Feasibility Study – (Summary)

1. Background and Context

The Highland Biodiversity Partnership (HBP) was set up in 2005 to provide guidance and support to an existing network of local biodiversity groups, and to make progress on strategic biodiversity issues in the Highlands.

In 2006 the Partnership undertook a review of the eight Local Biodiversity Action Plans in Highland. The Review identified a number of strategic issues and projects to address them including the conclusion that there was a strong demand for local sources of wildflowers from community groups etc. but currently no local supply.

This Feasibility Study, therefore, gives an analysis of the various options for providing the required wildflower supply service within Highland and will assist the HBP Management Sub-Group to:

- decide the best way to take the project forward
- develop the wildflower nursery as a biodiversity resource
- ensure the viability and sustainability of the nursery as a (if possible) locally-based and managed enterprise.

2. Methodology

The work was carried out in five stages. Stage one was a detailed briefing meeting along with familiarisation of existing policies and background research. Stage two comprised an investigation of comparator nurseries and similar business from Highland and other areas of Scotland and the UK. Stage three involved detailed consultations with key (non-business) stakeholders particularly those who might be potential funders and/or customers. Having completed the research and consultation stages an interim report was produced to complete stage four. The development of this final Feasibility Study was the last stage in the process.

3. Investigation of Comparator Nurseries

Comparator attractions across the country, each with at least some similarity to the envisaged Highland Wildflower Nursery, were identified and examined to identify best practice and lessons for the establishment and operation of a Highland nursery.

Most of the nursery operators contacted said demand for wildflowers was either static or rising.

4. Consultation with Key Partners

The key partner questionnaire was sent out to a wide range of organisation representatives with a Highland-wide or Highland sub-area remit. Overall, there was a good response in terms of numbers and quality of returns from key partners. The responses received were mostly positive to some degree.

5. Analysis of Current Situation

From feedback from nurseries throughout Scotland and the few Highland based ones we have spoken with, the use of wildflowers is 'growing'. Not surprisingly, there was more of a need identified around Inverness and the south and east of Highland where greater development is more of a threat to wildflower areas. However, at least some of this negative impact could be limited by the wildflower nursery service with its stock of local provenance plants and seeds. The issue of local provenance has been raised by several people.

A great strength of the existing nurseries and wildflower projects is one which is shared by many small enterprises - namely, the commitment and dedication of those most closely involved. This strength potentially gives these nurseries some business advantage over more commercially-run garden centre type operations.

Most of the key partners and potential customers of a wildflower nursery said that they would or potentially could support the nursery in some way.

6. Business Options Appraisal

Three main courses of action for the establishment of a nursery to provide wildflower stock and seed were examined. A 'managed evolution' approach was the recommended option. This option would see the service provider embark upon a managed programme of development over the next three years.

From discussion with the HBPMG it was made clear that there would only be scope for support at a strategic level mainly to ensure continued links with HBP objectives.

Should a nursery be established then the day-to-day development and management of the enterprise would be via a private business enterprise (new or existing) or a community/voluntary/conservation group or a combination of the two in some form of partnership agreement.

If the Wildflower Nursery Service were to expand and commercialise its activities it could certainly require either to employ, or contract with, paid staff or find some mechanism using existing staff. This is likely to be one full-time equivalent post.

There is a strong case for joining up existing local initiatives into a Highland wide 'consortium' that would then benefit from joint marketing via (say) a central website. There is unlikely to be the critical mass for a large scale, relatively commercial venture apart perhaps in or near Inverness where the greatest potential customer base is located. It is recommended that a fairly cautious approach is taken over the next two to three years, with the emphasis being on raising awareness and boosting interest and demand from as wide a variety of customers as possible. Some sort of Highland wide and/or local fundraising and site improvements will be required. However, the existing model of partnership working and volunteer support will also need additional support over that time period from paid staff.

There would be, in our view, a fairly pressing need for any proposed service to develop a proper Business Plan, regardless of which business model option is pursued to help guide the establishment and at least the first three years of operation.

Many of the findings from this Feasibility Study point to a base in the Inverness area as the best option for establishing the proposed service. A link to the Merkinch LNR should be investigated further. This arrangement would be similar to the Jupiter Urban Wildlife Site and Nursery at Grangemouth. The arrangement would also take the onus from the

HBPMG onto an existing group who have a good track record in 'making things happen'. There are already established links between Merkinch and the HBPMG.

An Inverness base would also make it easier to establish links with a greater number of nurseries, garden centres and other outlets such as Tesco and B and Q. B and Q have a particular interest in wildflowers as part of their 'One Planet Home' initiative.

7. SWOT Analysis

We carried out a SWOT analysis which highlighted some of the key conclusions to emerge from our research. In summary the weaknesses and threats were outweighed by the existing strengths and existing and potential opportunities.

8. Concluding Remarks and the Way Forward

From the very beginning of the study it was agreed that should the project not be viable that this should be highlighted as it was important to ensure that scarce resources were not allocated to a 'non-starter'. Having said that, the other principle during the study was one of positive optimism!

The HBPMG's aspiration to establish a wildflower nursery service to supply local Highland stock, is admirable and appears at this early stage to be feasible. However, we believe it is feasible if done at the correct pace and at the correct (low/medium) level of investment. We think that starting off on a relatively small scale with an Inverness based service linked to other Highland nurseries and projects presents the least risk with most likely chance of long term success. This would also help deal with local provenance issues.

Further work required with rough costs include a fte co-ordinator type post (£30,000/per year), development of Business Plan (£3-5,000), formulation of guidelines and principles of local provenance for Highland (£2,000), development and delivery of training programme (£2-3,000/per year).

In conclusion, we would like to thank the Highland Biodiversity Partnership for commissioning us to undertake this study. We hope our findings will prove valuable to the Partnership. We wish to thank all of our formal consultees, together with those who willingly provided ideas and opinions throughout this project. In particular, we are grateful to Jonathan Willet and the Management Group for their assistance and support.

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APPENDIX 5: EVENT FEEDBACK

Delegates were asked to complete and return feedback forms at the end of the event. Twenty completed forms were returned - representing 50% of all attendees.

Timing

1. Do you think this is a good time of year to hold this event?

	2007 (APRIL)		2008 (MARCH)		2009 (MARCH)	
	Number	%	Number	%	Number	%
YES	19	83%	27	96%	20	100%
NO	3	13%	1	4%	0	0%
D/K	1	4%	0	0%	0	0%
TOTAL	23	100%	28	100%	20	100%

All of the attendees (100%) felt that March was a good time of year to hold the event (this was a more popular date than April which had been supported by 83% on participants in 2007). The only suggestion for another time of year to hold the event was November.

Comments included:

- “A good time to be looking ahead to the “active” season and gives time for the assessment of the previous year to be completed....”

2. Is a Saturday event better than a week-day event?

	2007		2008		2009	
	Number	%	Number	%	Number	%
YES	14	61%	25	89%	15	75%
NO	9	39%	2	7%	4	20%
EITHER	0	0%	1	4%	1	5%
TOTAL	23	100%	28	100%	20	100%

Three-quarters (75%) of participants preferred a Saturday for the event.

3. Do you have any comments on the timing of the day itself?

Comments included:

- “Weekday preferred, however, happy to go with the flow!”
- “Excellent –not too early start nor late a finish, but not enough time for workshop.”
- “Good start time – or possibly start at 10.15am?”
- “Personally time for me as workload increases as we get into spring/summer.”
- “OK, but no earlier due to need to travel from a distance.”
- “Good start - finish times for travel but try to keep to time on agenda.”

Organisation

4. How would you rate the organisation of the event?

	2007		2008		2009	
	Number	%	Number	%	Number	%
Excellent	8	35%	23	82%	16	80%
Good	13	56.5%	5	18%	4	20%
Average	2	8.5%	0	0%	0	0%
Poor	0	0%	0	0%	0	0%
Total	23	101%	28	100%	20	100%

All of the attendees (100%) rated the organisation of the event as excellent or good, with 80% rating the organisation as excellent.

5. Did you feel that you received all the information you needed for the event?

	2007		2008		2009	
	Number	%	Number	%	Number	%
YES	20	87%	27	96%	18	90%
NO	1	4%	1	4%	0	0%
N/R	2	9%	0	0%	2	10%
TOTAL	23	100%	28	100%	20	100%

90% of participants felt they received all the information they needed for the event. All participants were supplied with a map and detailed road location for Great Glen House in advance.

Comments included:

- “Map was not so good. I had thought to walk from the train station but soon realised needed taxi!”
- “Quite liked having the meeting in town centre Town House as close to train station and could get into Inverness town more easily.”

The Presentations

6. How useful did you find the presentations and update sessions?

	2007		2008		2009	
	Number	%	Number	%	Number	%
Very useful	18	78%	21	75%	17	85%
Quite useful	5	22%	7	25%	3	15%
Not useful	0	0%	0	0%	0	0%
Total	23	100%	28	100%	20	100%

As in previous year, all the participants (100%) found the presentation and updates sessions very or quite useful. Many participants rated this as the most interesting and useful part of the day (see comments in section 10 below).

The Discussion Session

7. How useful if you find the discussion session?

	2007		2008		2009	
	Number	%	Number	%	Number	%
Very useful	12	52%	8	29%	6	30%
Quite useful	10	43.5%	17	61%	7	35%
Not useful	1	4.5%	1	4%	2	10%
N/A	0	0%	2	7%	5	25%
Total	23	100%	28	101%	20	100%

Although 65% of participants found the workshops very or quite useful, many participants had had to leave earlier as the sessions were overrunning and were therefore unable to attend (25%). For those we said that the session was not useful, this related to the timing of the session.

- “Over-ran –needs better timekeeping”
- “Too little time!”
- “Need more time - It would have been very useful if we had been able to spend more time on it.”
- “Not very useful as it was all too rushed and at the end of the day, which was basically down to poor control over the speakers’ time allocations during the day. It wasn’t the fault of the speakers. It was because the questions were allowed to drift on for far too long rather than keeping a tight control over things.”

8. Are there any additional points you would like to make?

- “Janet and Jonathan do an amazing amount between them – would some form of communications officer post assist them with “awareness.”
- Not enough time for discussion – but talks very informative.”
- “Try to keep to times given: More for group updates. Isn’t it possible to have abstracts from each speaker? A short proceedings after the event would be helpful.”
- “The discussion session could have usefully have been timetabled earlier in the day with something less demanding with which to finish on.”

The Day Generally

9. What part of the day did you find *most* useful, and why?

- “Presentations and workshops.”
- “All of it! Great.”
- “Presentations and updates.”
- “Updates on the projects.”
- “Talks very informative.”
- “All presentations excellent.”
- “The morning – good to hear of interesting and inspiring projects taking place in other areas.”
- “Lunch chat.”
- “The talks and updates.”
- “Local group updates – lots of useful information.”
- “Lunch as there was plenty of time to meet people and network.”
- “Project updates – lots of new ideas for local group and opportunity to learn from others experience.”

10. What part of the day did you find *least* useful, and why?

- “None not useful.”
- “None.”
- “Workshop/Discussions – too late in the day and not enough time.”
- “Workshops – ran out of time!! Useful having input from others/discussion which we can’t have if we send this by email.”
- “All useful.”

11. Will you or your organisation be taking action on any of the issues raised today?

	2007		2008		2009	
	Number	%	Number	%	Number	%
YES	13	57%	20	71%	11	55%
NO	5	21.5%	4	14%	4	20%
N/R	5	21.5%	3	11%	5	25%
D/K	0	0%	1	4%	0	0%
TOTAL	23	100%	28	100%	20	100%

55% of participants said that they would be taking action on the issues raised. Issues to be addressed included:

- “Input records – use contacts made.”
- “Reporting back to (my group).”
- “No – but may use information to decide upon possible mitigation measures.
- “Working with suggestions at Highland Biodiversity Partnership.”
- “We are shortly to begin recording riparian invasive species during our routine freshwater monitoring work.”
- “Using ideas for projects and contacts built up during day.”

- “Attend to Japanese Knotweed, be more involved and inform on all the flora/fauna issues in Highland.”

12. How can the Highland Biodiversity Forum help and support you further with this issue?

- “Accessibility of records.”
- “Keep going and improving.”
- “Communication on future projects/ activities.”
- “Keep helping with grant work toward core funding and enabling us to have cash for dedicated staff.”
- “Info and communication very useful.”
- “Advice and help, including help funding. Providing a focus for the local group.
- Maintain communication and networking.”

13. Are there any other things that you would like to see from the Highland Biodiversity Forum?

- “Support records – coordinate project funding.”
- “Funding for (my group).”
- “Push for full biological recording centre in the Highlands.”
- “Co-ordination of the GIS databases and their compatibility.”
- “Regular updates on discussions for local groups – newsletter/ minutes on website?”
- “To raise profile to reach all members of Highland and get onboard big companies to pay towards projects. Also hotel “gift box” with biodiversity targets/ projects in local area.”

14. Do you have any general comments/suggestions about the event or any follow-up events that you think are needed?

- “Provide contact details of delegates”.
- “Wood like more time for general chat, networking etc.”
- “Car-sharing?”
- “Send out list of participants in advance, so people can car share lifts
- “Maybe ask those who didn’t attend why/ if it had been a week day would they have come?”
- “Workshops would be good on specific issues – info overload – need more breaks or stricter limit on time for each speaker (although of great quality)
- “Very worthwhile in all.”
- “Current format of the day very good with updates from groups and wider issues. Workshops were good up probably only 1 with choice – recognise more difficult to organise.”
- “Need to keep to time – Manage questions properly – cut off if time runs over. A few questions are useful, more are unhelpful and merely serve to advance some-ones pet hobby horse.”
- “Highland Council Rangers do many local events and are of great value information/learning networks – very valuable.”

Conclusion

Overall, the event was highly successful – creating an annual opportunity for groups to network, share knowledge and experience. All the participants (100%) found the presentation and updates sessions very or quite useful, while 65% of participants found the workshops very or quite useful. Over half of the participants (55%) said that they would be taking action on the issues raised as a result of the event.

Timekeeping was a major issue for the day (with several of the local group presentations overrunning, there was not enough time for the priorities group discussions at the end of the day). With a very full programme, there was also the issue of “information overload” noted by several of

the participants – some said it would have been better to hold the discussion session earlier in the day when feeling fresher.

For 2009, feedback suggests:

- Timings for talks more strictly observed/ less full programme allowing longer presentations;
- Look at holding the discussion session in the morning, or mid morning session instead of the afternoon.

Rowan Tree Consulting
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