Highland Invasive Species Forum.

Highland Council Chambers, Inverness.

10/2/09. 10am to 1pm.

1. Welcome.

Cllr Ian Ross (Chair)	Highland Council
Keith Williams	Ness and Beauly Fisheries Trust
Ian Collier	Forestry Commission Scotland - Dingwall
Liz Poulsom	Forestry Commission Scotland - Oban
Roger Cottis	Consultant
Ian Milne	SEPA
Paul Gallagher	SWT
Rob Raynor	SNH
Simon McKelvey	Conon District Salmon Fishery Board & Trust
Lynn Bryden	Conon District Salmon Fishery Board & Trust
Llinos Davies	Cairngorms Water Vole Conservation Officer
Jenny Sleeman	BTCV - Scotland
Richard Thompson	Forest Enterprise Scotland
Su Cooper	Ranger - Highland Council
Sinclair Coghill	Deer Commission Scotland
Graeme Findlay	Forestry Commission Scotland - Dornoch
Eleanor Garty	Woodland Trust
Barbara Soutar	National Trust for Scotland
Cliff Beck	Highland Birchwoods
Jonathan Willet	Biodiversity Officer – Highland Council

2. Apologies.

Michael Scott	
Kathryn Logan	Moray Firth Partnership
David Glass	Chair Caithness Biodiversity Group
Kenna Chisholm	RSPB
Colin Shedden	BASC
Ch Insp Paul Eddington	Northern Constabulary.
Insp Matthew Reiss	Northern Constabulary.
John Hollingdale	Ch Exec. Community Woodlands Association.
Nick Reiter	Chief Executive, Crofters Commission
Gillian McKnight	SAC
Steve North	SNH
Jennifer McCallum	SGRPID
Janet Ullman	
David Hetherington	Cairngorms National Park Authority
Donald Kennedy	Lochaber Biodiversity Group

3. Minutes.

These were approved.

Actions Points for the last meeting

AP1 All participants to look at the invitee list and send Janet any additions. *Discharged.*
AP2 Janet Bromham to canvass available dates in August for the first Sub Group meeting. *Discharged.*
AP3 Jenny McCallum to investigate Invasive Weed Training for SRDP Case Officers, to spread good practice. *Ongoing. To be discussed this summer at the next Officer training needs meeting.*
AP4 Ian Collier to investigate and circulate a summary of what can be funded under the SRDP once the situation becomes clearer. *Too complex to undertake, but he offers to talk to people if they require information.*
AP5 Janet Bromham to investigate the possibility of RPS coming up to Highland and running a full identification course. *Ongoing. Need to determine if there is demand and what courses are required.*
AP6 Kerry Riddell to explore BTCV apprenticeship on invasive species. *See updates.*

4. Updates.

The North West Highlands Mink Control Project. Rob Raynor, SNH.
In March 2008 SNH purchased 130 mink rafts and 130 cage traps in preparation for a future mink control project in the region. Following this, an informal network of monitoring rafts was established involving mainly ghillies and water bailiffs operating on a voluntary basis through four of the district salmon fishery boards in the region.

In 2009 the project is to be given a formal status through the employment of a Project Officer. The North West Highlands Mink Control Project is a partnership between the Cromarty Firth Fisheries Trust, the Kyle of Sutherland Fisheries Trust, the Ness & Beauly Fisheries Trust, the Wester Ross Fisheries Trust, the Scottish Wildlife Trust, University of Oxford (Wildlife Conservation Research Unit), Forestry Commission Scotland, the University of Aberdeen and Scottish Natural Heritage. The principal objective of this project is to secure Sutherland and Caithness as a mink-free area, thereby protecting its nationally important water vole population, salmonid fisheries, and internationally important assemblages of ground-nesting wetland bird species. The removal of mink from the rest of the project area will provide wider biodiversity benefits in other parts of the North West Highlands.

American mink have been found to be significant predators of a range of species. Consequently, the benefits of the project are likely to extend to the following species potentially at risk from mink predation: water vole, Atlantic salmon, black-throated diver, red-throated diver, greenshank, redshank, lapwing, curlew, oystercatcher and snipe. Several of these bird species form internationally important assemblages in the peat lands of Sutherland and Caithness.

The aims will be achieved through a co-operative community-based project similar to those already underway in the Cairngorms and Aberdeenshire. The project will utilise the expertise and experience of the existing skilled workforce, such as gamekeepers, fishing ghillies and water bailiffs, to deliver maximum conservation benefit.

The project will make extensive use of Game & Wildlife Conservation Trust (G&WCT) mink rafts to detect and trap mink where present and to monitor the presence/absence of mink elsewhere. It is regarded as complementary to the work already underway in North East Scotland.

This project will have the following objectives:

- The primary objective of the Project is to prevent colonisation of the mink-free area in NW and North Highlands, through the establishment of a cohesive network of mink monitoring rafts from Loch Broom to the Dornoch Firth.
- In addition, the project will aim to establish a broader zone of mink monitoring and control extending further south and including the major river catchments of the Conon and Beauly. The objective in this area is to provide up to date spatial information on mink occurrence and to remove any mink detected.

Invasive Species Mapping in the Conon Catchment. Simon McKelvey.
River Corridors are disproportionately important in their role in the spread of Invasive Species. Their Assistant Biologist has been surveying each 250m stretch for Invasive Species using the DAFOR scale (Dominant, Abundant Frequent, Occasional and Rare) for the right and left bank. This data was then put onto a GIS map to undertake strategic control. Control activities will start at the furthest upstream plant and then management activity will work down the watercourse.

Himalayan Balsam has already been tackled by employees of the Fishery Board and BTCV Scotland, 200 people days have cleared it from The Orrin system to Conon Bridge. Over the winter Rhododendron clearance has been taking place on the banks of the Orrin. A large area has been cleared. SEPA habitat Restoration funding has been applied for to carry on this work next year.

SMcK said that he thought river systems should be the focus of conservation effort for Invasive Species due to the rapidity of their spread through these systems.

Barbara Soutar asked if the mapped areas would be resurveyed after the management actions. SMcK said yes.

Roger Cottis asked if any Otter holts had been found during the Rhododendron removal. SMcK answered no.

RC emphasised that any areas of vegetation to be removed should be assessed for Otter holts prior to removal under the European Protected Species legislation.

Ian Ross summarised by saying that opportunities for sharing best practice should be investigated further. RR agreed that SNH could help with this.

5. Update from the sub-group.

- Natural Talent. We were not successful in getting an apprentice based in Highland. This was unfortunate but the post would not have been able to take on the role of coordinator that the suggested projects require. At present there is no further funding for these apprentices but BTCV Scotland is looking to secure further funding, so there may be the opportunity for an apprentice here in the future.
- Data. Agreement was secured from the Highland Biological Recording Group to manage the invasive species database. This will use their existing database and use new data being gathered and also existing data that is held elsewhere. The main output of this project is to have up to date information on the Invasive Species in Highland in one location, where it can be easily supplied and interpreted. Initially we will be contacting the botanical recorders in Highland to access their invasive species data. In the future gathering information from the public will be considered.
- Webpage. A start has been made to collate all the relevant weblinks for particular species onto one webpage on the Highland Biodiversity website. This can be found at http://www.highlandbiodiversity.com/htm/invasive-species/invasive-species.php . This is an ongoing project and any additional links would be very welcome.

6. Presentation on Leaflets (Paper 1).

This activity is one of the "quick wins" identified by the Forum; that of raising awareness. The leaflets are being funded by the Communities Project for Highland Biodiversity (HLF funding with SNH, THC and HIE) plus THC will add to the printing budget to allow more of these information leaflets to be printed. A run of 5,000 is being considered.

So far four leaflets are being developed. A general introduction to Invasive species in Highland, Mink, Rhododendron and Japanese Knotweed. These shall be produced by the end of the 2008/9 financial year.

We have a proposal from the Inverness Rangers to produce Invasive Species demonstration material mink raft, footprints, pictures etc to help with talks etc. This would come to around £700.

7. How the Invasive Species in Highland were identified and prioritised. (Paper 2) plus a Grey Squirrel update.

Ian Collier started his presentation with a quiz; there were 9 pictures and some not very helpful hints. Su Cooper won the quiz with 7 out of 9.

Ian emphasised that this was the first attempt at producing a list and further input to it was encouraged. The species were selected using the knowledge of the sub-group and relevant publications. The determining factors were ecological not socio-economic. Bacteria/ diseases were not considered as they are comprehensively covered by other organisations. Species present in Highland and those that could get here were considered.

Species that are to be added to the list are;

Grey Squirrel – potential colonisers. No records outwith Aberdeen City area/ Deeside.
Grislinia sp. – A New Zealand evergreen shrub that is starting to be a problem at Inverewe.
Feral cat – this may be an issue for the Wildcat in terms of interbreeding but this has yet to be proved to be a current issue in its decline.
Golden or Yellow Coneflower – Genus Rudbeckia. This species is an issue on the Conon.
Gaultheria shallon – This is an evergreen member of the heather family from North America. It is a problem locally in Mull and East Sutherland.
Gunnera – Some plants in a very small area in Knoydart. This illustrates that invasive species can just affect small areas and nipping them in the bud (no pun intended) could save much effort and expense in the long run.

After species were identified further assessment on the practicability of action for those species was made. The combination of risk and practicability of action will determine which species were taken forward to the project development stage.

Marine species were included even though there may be little that can be done at a Highland level to control them.

The ten species that were deemed to be of high priority in Highland were:

Japanese Knotweed
Himalayan Balsam
Giant Hogweed
Rhododendron
Canadian Pondweed
North American Signal Crayfish
New Zealand Pygmyweed (Crassula)
Mink
Grey Squirrel
Ruddy Duck

Of these ten, five were discounted for the following reasons.

Canadian Pondweed – Actions for aquatic plant species, in general, are about containment and raising awareness about their potential for damaging aquatic ecosystems. This can take place as part of a wider aquatic plant action plan.
New Zealand Pygmyweed (Crassula) – as above.
North American Signal Crayfish – There is a national scheme taking place, there is nothing that we locally can add to the actions in this.
Grey Squirrel – The Highland Red Squirrel Group have identified actions and are taking them. Again we support this but the Invasive Species group has no further actions to add.
Ruddy Duck – This is part of a UK control scheme, leading to eradication by 2010.

Therefore the final list of Priority Invasive Species in Highland were:

Japanese Knotweed
Himalayan Balsam
Giant Hogweed
Rhododendron
Mink

Grey Squirrel Control.
IC works with Juliet Robinson, the Highland Red Squirrel Officer. The actions of the Highland Red Squirrel Group and the Highland Red Squirrel Refuge Project meant that the Grey Squirrel dropped off the priority list. Two Grey Squirrels were found in 2008, one in the Milton of Leys are and one near Farr. The Milton Grey disappeared and the Farr one was humanely dispatched. Five false alarm Greys have been identified. One closer inspection they turned out to be greyish Reds.

IC showed a map of Red and Grey Squirrel distribution and the management activities planned in key areas as part of the Saving Scotland's Red Squirrels project that was launched by the deputy Environment Minister today. There is a line that roughly goes from Oban to Aberdeen south of this there will be limited Grey control to stop them crossing the line, a *cordon sanitare* approach. Grey Squirrels north of this line (there are 6 such areas) will be eradicated. This goes for Aberdeen City as well.

Rhododendron Database. Richard Thompson FES.
This database has been created to inform a strategy for the most effective targeting of management of this species on FES land. The key management tool behind it is the targeting of seed sources rather than scattered bushes. There are many columns capturing all sorts of information, coverage of bushes, proximity to other sites etc. And this is linked to a shape file of the area on a GIS system.

Just because somewhere has had Rhododendron control undertaken previously does not mean that it is a priority for future control work in the short term if the site is not defensible against further colonisation or it was a very low priority from a biodiversity/landscape position context.

Using the data on the spreadsheet standard costs for sites will be developed. These will be based on the costs detailed in Better Woodlands for Wales cost calculator and on estimated costs from staff in districts. Once data are provided by forest districts, there will be a centralised exercise to prioritise actions based on rhododendron present, the importance of the site and it's position in the landscape. This ranking of sites will then be discussed with districts and revised where necessary.

In the first instance this data-model will be used within FES, if it is successful then it could be used by external organisations and individuals to inform their management work.

RC asked if there was the possibility for including a column on European Protected Species (EPS). RC said this could be done.

AP1. *JW suggested that as the issue of EPS and invasive plant species control methods had arisen a few times this could be looked at by the sub-group to collate and or develop guidelines for best practice to ensure that the EPS legislation is not breached.*

8. Presentation on Project Summaries.

Rhododendron in Argyll and Bute. Liz Poulsom FCS.
Liz is employed by FCS to coordinate Rhododendron control work on the forests managed by FES. In Argyll and Bute there is 7000 hectares of Rhododendron. The estimated cost of its eradication is £25 million. Each bush produces thousands of seeds many of which germinate. It is a host for Phytophera (sudden oak death) and this is a big issue of the internationally important Oakwoods of Argyll. Strategic control is the only way forward at the moment.

There have been two surveys of different parts of Argyll one by Forest Research (FR) and the other by SAC covering the Loch Lomond and Trossachs National Park. They have surveyed in slightly different ways and the SAC one is at a higher resolution. The FR survey identifies road systems as the major vector for the colonisation of an area. A metapopulation is defined as bushes within 150m of each other.

SRDP funding pays £3500/ha for cut, burn and spray. £850/ha for foliar spray or stem injection. Local research has shown that SRDP covers 22-70% of the actual costs. If a site is steep or otherwise inaccessible then the cost spirals.

AP2. *SP to circulate information on the stem injection technique that has been used in Argyll.*

FR are looking to create a series of demonstration areas illustrating the effect of the various control methods; from small hand tools to mechanical methods.

IC. SRDP will cover 100% of costs on SPAs, SACs and SSSIs or sites that could adversely affect these protected areas.

Lever and Mulch Technique.
This manual technique has been developed in Morven. It involved cutting the branched and then using the cut stumps to lever the root mass out of the ground. The roots are then exposed to the air and the rest of the stump covered by the cut branches to stop any regrowth. This technique is being monitored by FR to determine its costs and the time it takes. The latest report from the project indicates that it is seems to be very successful and cheaper than other control techniques.

LP commented that the major difficulty was that there were only two very experienced practitioners of this technique and there were not a large number of skilled volunteers to back them up. Three training events have been run and another is planned for May.

Project Proposal – To use the model in Argyll and Bute of two officers have employed to coordinate action on the ground. One officer is based within Forestry Commission Scotland (FCS) and deals with Rhododendron within their estate. The other officer works with private landowners to coordinate their work on Rhododendron.

Japanese Knotweed.
BS gave a summary of the project to date see attached paper. In summary the project takes time, needs coordination between landowners/ managers and other organisations. A major part of this project is training local people in spraying techniques to ensure that the control efforts are sustainable and ongoing.

Project Proposal – Employing a coordinator for 2 years to maximise the efficiency of current management activity through liaison and coordination rather than direct management of the species. Training of local volunteers in spraying techniques would also be part of the project.

Himalayan Balsam.
On the Orrin/ Conon system this species has been almost eradicated through work from volunteers and the BTCV Green Gym. See attached report for further information.

Project Proposal - A coordinator would be employed to liaise with groups rather than undertake the control work and would result in a great deal of volunteer time in the field for relatively little expenditure.

Giant Hogweed.
At present in Highland there seems to be less than 10 sites and outside of Auldearn Burn and the Nairn River the infestations seem to be localised at present. Perhaps climatic factors are keeping this species in check or a lack of disturbed ground alongside rivers, we do not know. What is known is that in Central and Southern Scotland there are huge infestations that costs very

large sums to control. With such small pockets of Giant Hogweed, eradication is a real possibility without incurring a great expense.

Project Proposal - A coordinator would be employed to first make the case for Giant Hogweed control to landowners and managers and then to work with them to identify how Giant Hogweed could be controlled on their land either through the SRDP or through the land owner/ managers own funds or staff.

Awareness Raising.
The two actions proposed are already underway, those of producing leaflets on the key invasive species in Highland and creating a portal page of links to key invasive species management information.

Further projects will be identified in due course.

Mapping Invasive Species in Highland.
Project Proposal - This would be a short term contract lasting around 20 days and costing £6000. It would concentrate on identifying and cataloguing existing datasets and digitising the key ones. The digitised data would then be made available to all organisations as a GIS layer. Ideally this would take place every 2 years so that new data could be added and the GIS layer kept up to date.

Once produced the key areas for control could be identified and agreed by the Highland Invasive Species Forum and used in the SRDP process.

Mink.
The North West Highlands Mink Control Project has superceeded the project proposal being developed by the sub-group. We therefore will support this project but concentrate on gaining funding for the other projects detailed above.

9. Discussion.

KW. Biosecurity is a huge issue, especially in aquatic systems where control of an invasive species, once in a system, is nigh on impossible. RAFTS have secured money to produce biosecurity plans; these will be rolled out across Scotland in 2009/10. They are looking for a wide participation in these.

SC. Sika Deer, a import from Japan, and very widespread and even with some estates shooting stags on sight this will only slow the spread of them and their genes through the mainland Red Deer population. Pure Red Deer will now only survive on island refugia.

LP. Dialogue with the SRDP process was very important; a compelling argument needs to be put together for increasing the payments for control of particular invasive species to ensure that they actually cover costs.

BS. Glyphosate costs have doubled over the least year and this needs to be recognised.

IC. SRDP's Woodland Improvement Grant is currently under review and there is also a general SRDP review/

AP3. *IC to circulate information on how to respond to the SRDP reviews currently underway.*

JW. Asked IC if strategic maps of where invasive species control could be targeted would be of use to the SRDP process?

IC. Strategic plans agreed at the local level are admissible in the SRDP and will increase an applications overall score.

RC. Polecats were released around Oban in the early 1980's and there have been a few sightings. 10 years ago they were seen 30/40 miles north of Oban. Any control of Polecat Ferrets should be informed that Polecats may be in south Lochaber.

SC. Mentioned that a consultation on non-native deer species will be launched in April 2009.

PG. Highlighted SEPA's River Basin Management Plans are being consulted on at the moment see

JW. If proved to be successful the Lever and Mulch technique could be of great benefit in both Rhododendron control and providing employment in rural areas. The major hurdle for this technique, once approved, is the lack of contractors skilled in this technique. This is a similar situation to footpath construction in the early 1990's the Ross and Cromarty Footpath Trust and subsequently the Footpath Trust provided training to individuals who became contractors once they had been trained up. There is an element of chicken and egg as the funding for Rhododendron control work needs to be available to encourage new and existing contractors to train in this technique.

BS. Highlighted the issue of not all contractors being trained in current best practice methods, for example herbicide spraying.

JW. Suggested that any contracts let should stipulate that training in the current best practice methods/ techniques are required.

Agreement.
The Forum agreed that biosecurity issues and the securing of funding for the projects discussed at this meeting are of key importance. It also agreed that the sub-group should continue and seek to secure funding to deliver the projects it has detailed.

AP4*. HISF sub-group will continue and seek to deliver the projects that it has proposed.*

The aims of the Highland Invasive Species Group were agreed as follows:

- To bring together the key players and take stock of the situation regarding invasive non-native species in Highland.
- To raise awareness and spread good practice.
- To identify any major gaps and prioritise key areas for future work.
- To work together to secure new resources and funding.

These aims have all started to be addressed and work on them is continuing.

10. DONM.
In 6 to 12 months.

Summary of Action Points.

AP1. *JW suggested that as the issue of EPS and invasive plant species control methods had arisen a few times this could be looked at by the sub-group to collate and or develop guidelines for best practice to ensure that the EPS legislation is not breached.*
AP2. *LP to circulate information on the stem injection technique that has been used in Argyll.*
AP3. *IC to circulate information on how to respond to the SRDP reviews currently underway.*
AP4*. HISF sub-group will continue and seek to deliver the projects that it has proposed.*