

## **THE REVIEW OF NATIONAL NATURE RESERVES: CAIRNGORMS NNR**

### **Summary**

1. This paper reviews the degree to which the existing Cairngorms National Nature Reserve fits with SNH's policy for NNRs and outlines the work that will be required to complete the review process before decisions can be made on the future of the NNR.
2. Following the provision of some background information, this paper is divided into four parts. Part 1 contains a review the potential role of an NNR at the centre of the Cairngorms National Park and a summary of some of the "bigger picture" elements. Part 2 deals with each of the five individual land-ownership units in the existing Reserve, summarising the results of assessment exercises that have been undertaken. Part 3 looks to the future and considers the range of options for new NNR(s) in the Cairngorms massif. Part 4 considers the process for the conclusion of the review of Cairngorms NNR.

### **Board Action**

#### **3. The Board is asked to:**

- a. **note the context of the NNR within the Cairngorms National Park, the previous statements made by SNH about NNRs and National Parks and the views expressed by the Cairngorms NNR Working Group (Part 1);**
- b. **note the assessments for the component parts of the existing NNR and their implications (Part 2 and Annexes A to E);**
- c. **decide if SNH should endeavour to designate a National Nature Reserve in the central Cairngorms massif or, alternatively, rely on the National Park Plan to achieve natural heritage objectives (Part 3);**
- d. **agree the range of options for a new NNR in the central Cairngorms massif and give a broad steer to staff, based on the advantages and disadvantages of the various options (Part 3); and**
- e. **consider the process and timescale for the finalisation of the review (Part 4).**

### **Preparation of paper**

4. This paper was prepared by Murray Ferguson with input from members of the Cairngorms NNR Working Group (including members of North and East Areas Boards and relevant staff) and Peter Rawcliffe. The Annexes were originally

prepared by Ewen Cameron, David Carstairs and John Thompson (Land Agent) with input from Jill Matthews. This paper is sponsored by Jeff Watson.

## Background

5. Cairngorms NNR lies between Strathspey and the glens of the upper River Dee. It was first declared in 1954 in one of the five areas that had been proposed as the first Scottish National Parks. At 16,068 hectares it was then, and still is, the largest NNR in the UK and one of the largest nature reserves in Western Europe. The declaration also marked the first time that the Nature Conservancy had negotiated Nature Reserve Agreements. The Glenfeshie and Glenavon (RSPB) sections were added in 1962 and 1966 respectively. Cairngorms NNR extends to 25,949 hectares (see Map 1 attached).
6. The existing Reserve is owned and managed as part of five separate land-holdings.

<b>Estate</b>	<b>Current Owner</b>	<b>Area (Ha.)</b>	<b>Date of Declaration</b>
Mar Lodge	National Trust for Scotland	7158	1954
Rothiemurchus	Rothiemurchus Estate Trust	5890	1954
Invereshie/Inshriach	Scottish Natural Heritage	3142	1954
Glenfeshie	Mr Flemming Skouboue	7649	1962
Glenavon (RSPB)	Royal Society for the Protection of Birds	2076	1966
<b>Total of above</b>		<b>25,915</b>	
Official area of NNR		25,949	

[Source: Land-ownership unit areas were provided by the Geographic Information Group using information from SNH's GIS. The official area of the NNR is from MIDAS.]

7. The Cairngorms mountains are one of the most important Quaternary sites in Britain for their assemblage of landforms. Many of these are amongst the best examples of their type in Britain, and their total assemblage within the massif provides an incomparable record of Quaternary processes and environments in the Highlands. The Reserve also supports a mixture of woodland, scrub, bogs, heath and grassland communities, most of which are present at a range of altitudes, from lowland to montane and includes the best and most extensive alpine vegetation in Britain. The combined native pinewood remnants comprise the largest remaining example of this habitat in Britain. This wide range of habitats supports an equally wide range of associated species, many of which are rare.
8. The Cairngorms massif is therefore considered to be the most important mountain area for nature conservation within the UK. The area of land covered by the existing NNR is also designated as SSSI, SPA, cSAC, Ramsar site and NSA. It is, in addition, a Grade 1 Nature Conservation Review site, listed on the

Geological Conservation Review and is on the UK list of candidate World Heritage Sites. The variety of landscape, topography and wildlife make the Cairngorms one of the most popular mountain recreation areas in Britain.

9. In reviewing the successes and failures of the NNR it is difficult to disentangle the effect of the designation itself from a number of other factors, including changes in general attitudes to environmental issues, the long-standing reliance on the voluntary principle and the effects of other overlapping designations which cover the same ground. The voluntary Nature Reserve Agreements which have underpinned the NNR over the years had some success in preventing exploitation of the native pinewoods and influencing muirburn, grazing by domestic stock and some sporting activity. The NNR also provided an important context for debates about removal of mountain bothies, provision of visitor facilities, military training and path repairs. Significant progress has been made in each of these areas over the years.
10. However, the failures of the Cairngorms NNR to address some of the key management issues in the area have undoubtedly been highly significant. In particular, the designation proved to be ineffective in tackling the enduring problems associated with excessive deer numbers, notably their impact on valuable natural heritage features. In addition, it was always challenging for the Nature Conservancy Council or SNH to develop a sense of cohesion over the management of the area as, frequently, it was necessary to deal with each of the owners of the individual land-ownership units in isolation. Many commentators have viewed these failures of the designation to fulfil its key purpose as the main driver behind the changes in land ownership that have taken place over the last 15 years, from private sector to voluntary conservation bodies.
11. The Cairngorms NNR was previously considered by the SNH Board along with a number of other sites in February 2000 and was put on the "orange" list.

## **Part 1: The Cairngorms NNR in the context of the Cairngorms National Park**

12. The Cairngorms National Park Authority was established on 25 March 2003 and the Authority will take up its operational powers for the area on 1 September. The National Park has four aims:
  - a. To conserve and enhance the natural and cultural heritage of the area;
  - b. To promote the sustainable use of the natural resources of the area;
  - c. To promote understanding and enjoyment (including enjoyment in the form of recreation) of the special qualities of the area by the public; and
  - d. To promote sustainable economic and social development of the area's communities.
13. The consequences of the creation of a National Park in the Cairngorms for SNH are not entirely clear at this time. There will probably be a period, perhaps lasting

several years, where the new Park Authority becomes established and builds effective working relationships with SNH and other organisations. This period is also likely to be the timescale for the development of the first National Park Plan - the document which will set out the Park Authority's vision for the Cairngorms and how it is to be achieved. In the meantime a policy paper has been agreed by the SNH Board which sets out three broad aims for all SNH's work on National Parks (examples of the associated subsidiary activities which are relevant to NNRs are also listed):

1). Supporting the successful establishment of the National Parks

- e.g. Seeking the highest standards for the management of sites in Parks which are owned and managed by SNH;

2). Promoting the care, enjoyment, understanding and sustainable use of natural heritage interests of National Parks; and

- e.g. Maintaining oversight and support for Natura 2000 and other international and national designations
- e.g. Undertaking targeted research and monitoring of natural heritage and recreational interests to inform park planning and management

3). Championing the concept of National Parks as part of the family of designations which help to conserve and enhance Scotland's natural heritage

- e.g. Promoting the National Parks as part of Scotland's family of protected areas
- e.g. Fostering links between National Parks and other international and national designations in Scotland

(Source: SNH Policy Statement 02/04)

14. In SNH's original advice on National Parks we proposed that many of the existing designations should be retained in a National Park but also that some national designations, "...NSAs and some NNRs in particular...", could effectively be replaced with policies for protecting and managing the special qualities of these areas contained in the National Park Plan (SNH's Advice to Government, 1999, paragraph 3-30).

15. In our advice to Ministers on their National Park proposal for the Cairngorms (SNH, 2001, paragraph 5-61) we said that once the Park Authority had been established and had gained experience in managing the area, consideration should be given to passing publicly-owned land within the Park to the Authority to manage. We said that SNH would investigate whether this would be appropriate for the NNRs we manage ourselves. It should be noted that in Loch Lomond and the Trossachs National Park SNH is already encouraging the Park Authority to act as the managing authority for Inchcailloch, especially for visitor management,

and integrate the management of the Reserve with wider aspects of Park management and the functions of its Ranger Service.

16. In a more recent review of the role of designations in National Parks (National Park Steering Group paper 31-3) it was identified that there were a number of common themes relating to natural heritage designations within National Parks, for example:
  - a. Designated areas within Parks could provide a tool to prioritise effort, from SNH and others, and could assist with guiding development to the most appropriate locations and in addressing visitor management issues. Within the relatively large area that has been designated as the Cairngorms National Park such functions are likely to be especially useful;
  - b. National Park designation could provide new opportunities to manage designated sites, such as NNRs, within their wider ecological and landscape settings.
17. There are many different designations that fall within the boundary of the Cairngorms National Park, including nine NNRs (see Map 2). Most of the discussions that have taken place to date about the fit between these NNRs and SNH's new NNR policy have taken relatively little account of the proposed Cairngorms National Park. Those Reserves that have been through the review process have all four attributes and now fit one or more of the three NNR purposes. However, the scale of Cairngorms NNR, its geographic location at the centre of the Cairngorms massif, and the history of controversy over land use decisions in the area all indicate that the relationship between this NNR and the National Park will be critically examined by others and requires very careful consideration.
18. The reasoning behind our advice to Ministers (1999) about replacement of designations with policies from the National Park Plan came from a perception that National Parks should promote co-ordination of activity across the area and that one way of doing this would be to simplify the existing designation system. However, any zones that are identified through the National Park Plan, although approved by Ministers, would be non-statutory. This factor, combined with the relatively weak land management powers which were finally awarded to the National Park Authorities, indicates that reliance on the National Park Plan to secure the policy objectives of nature reserves may not be such a practical way forward.
19. This issue was discussed by the Cairngorms NNR Working Group in late April 2003 and, although a range of views were expressed, it was concluded that there was a strong case for an NNR which met the requirements of the NNR policy in the centre of the Cairngorms massif. The Group were also aware of the level of public interest there is likely to be in this matter, especially in the early life of the National Park Authority. They were of the view that there should be continued dialogue with the National Park Authority and others on this issue prior to any final decision being taken.

20. The Group also considered that SNH should articulate a vision for an NNR in the Cairngorms massif and what it might achieve for the area. In this respect it is useful to refer to the visionary statements from the Natural Heritage Futures publication on Cairngorms Massif (SNH, 2002), written as if it were the year 2025:

*“...the remote mountain core is managed by minimum intervention, allowing landscapes and ecosystems to develop according to natural processes... management is largely focussed on effective deer control, maintaining populations within the carrying capacity of the natural heritage....enhancing the extent and condition of native woodland, scrub and alpine vegetation.”*

*“....low key recreation management, including the ‘long walk-in’ ... helps to maintain the wild and remote qualities of the Cairngorms. A large near-natural area is beginning to develop in the most remote locations.... The Cairngorms continue to provide a major focus for outdoor recreation and tourism, deriving growing prestige from the reputation of the mountain core as an extensive near-natural area.”*

*“Throughout the mountain core.... woodland development is proceeding by natural regeneration in the absence of fencing, owing to reduced impact of deer grazing and browsing. These woodlands are forming extensive natural transitions to open habitats, which will eventually include the tree line scrub... the combination of shelter and improved nutrition results in large healthy stags.”*

*“The construction of new hill-tracks has ceased and the scars left by many former hill-tracks have been reinstated, including all those which penetrate the mountain core.”*

*“As a consequence of reduced grazing pressure, alpine heaths and mires are in excellent condition, supporting their full range of specialised wildlife, including key species such as ptarmigan, dotterel and snow bunting. Alpine willow scrub and colourful tall herbs and arctic–alpine communities are expanding to fill a high proportion of suitable ground on pockets of richer and wetter soils.”*

*“The wild land qualities of the remote mountain core are maintained by restricting development and by removal or redesign of inappropriate buildings and structures, where these are of no historic or cultural value.”*

*“The freshwater ecosystems....are consequently approaching optimal condition, with high quality water and a wide range of associated wildlife”.*

- 21. The Board is asked to note the context of the NNR within the Cairngorms National Park, the previous statements made by SNH about NNRs and National Parks and the views expressed by the Cairngorms NNR Working Group.**

## Part 2: Assessment of the individual land-ownership units of the existing NNR

22. In order to approach the review of Cairngorms NNR in a rational and consistent manner it was decided that Area staff from East Highland and Grampian should carry out assessments for each of the constituent parts of the existing NNR on a land-ownership basis. The results of these assessments for each of the five land-holdings and the reasoning behind them are contained in Annexes as follows:

Annex A: Mar Lodge

Annex B: Rothiemurchus

Annex C: Invereshie/Inshriach

Annex D: Glenfeshie

Annex E: Glenavon (RSPB)

23. The table below shows a summary of the assessment results:

	Mar Lodge	Rothiemurchus	Invereshie/ Inshriach	Glenfeshie	Glenavon (RSPB)
<b>Attributes:</b>					
National Importance	Y	Y	Y	Y	Y
Primacy of nature	Y	N	Y	N	Y
Continuity of management	Y	N	Y	N	Y
Best practice Management	Y	N	Y	N	Y
<b>Purposes:</b>					
Raising National Awareness of the natural heritage	Y	Y	Y	N	N
Providing specialised management	Y	N	Y	N	Y
Encouraging research and demonstration	Y	N	Y	Y	Y
Utility Score (VFM)	73	68	70	61	60
<b>Overall fit with NNR policy?</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>

24. Before considering the results it is important to note that, although the assessment process of individual land-ownership units has been a useful exercise, the criteria and purposes from the review should be considered in the

context of the NNR as a whole. This issue will require to be addressed as the review progresses.

- 25.** The results of the assessment exercises indicate that only three of the five land-ownership units in the existing Reserve have all four essential attributes, and are considered to be serving one or more of the three purposes for NNRs, as required by the NNR policy. Two of the five sections, Glenfeshie and Rothiemurchus, do not presently fit the NNR policy, largely because they do not currently have all the essential attributes. Substantial modifications are therefore likely to be required to the existing NNR if it is to fit the new policy.
- 26.** The Board are asked to note the assessments for the component parts of the existing NNR and their implications.



### **Part 3: Options for a National Nature Reserve in the Cairngorms Massif**

27. Looking to the future, the first question that requires to be addressed is whether or not, in principle, SNH would wish to see a National Nature Reserve (or perhaps more than one Reserve) within the central Cairngorms massif. The issues in relation to the National Park, including the broadly supportive views of the Cairngorms NNR Working Group for a Reserve, are summarised in Part 1 of this paper. The assessment exercises discussed in Part 2 show that there are at least three individual land-ownership units within the existing NNR which meet the NNR Review criteria.

28. The alternative course of action would be that no NNR was designated in the central Cairngorms Massif and that we relied on the identification of a “core zone” in the anticipated Cairngorms National Park Plan and on other designations (e.g. SSSI and Natura sites) to meet natural heritage objectives.

**29. The Board are asked to decide if SNH should endeavour to designate a National Nature Reserve in the central Cairngorms massif or, alternatively, rely on the National Park Plan to achieve natural heritage objectives.**

30. If it is agreed that part of the Cairngorms massif should be designated as an NNR, a number of options can be envisaged which are in line with SNH’s NNR policy:

Option 1: Declaration of NNRs in the three existing land ownership units which fit the policy (with minor modifications to the boundary, as appropriate) on Mar Lodge and Glenavon (RSPB) to the east (to form one NNR) and Invereshie/Inshriach to the west (to form another NNR). De-declaration of the NNR on Rothiemurchus and Glenfeshie. Overall, this would create two geographically separate NNRs, which would include only parts of the central Cairngorms plateau.

Option 2: As Option 1 above, but with significant modification and expansion of the NNR boundaries to include areas of suitable adjacent ground which fits the NNR policy from the following menu:

- parts of Mar Lodge Estate to the south and east;
- ground managed by RSPB at Glenavon to the north of the existing NNR – there are options to maintain a degree of separation between the Cairngorms NNR and Abernethy NNR or to link them together;
- suitable HIE ground in the Northern Corries; and
- suitable Forest Enterprise ground in Glenavon, Northern Corries and Glenmore Forest

This option, with the inclusion of extensions from the above menu, would form two separate NNRs, one of which could be large (to the east) and one small one (around and to the west of Invereshie/Inshriach).

Option 3: As Option 2 above, but with an attempt to conclude negotiations with Rothiemurchus Estate to secure an agreement which would allow the policy to be met on the higher parts of the estate and at Loch an Eilein so that a link could be formed between Mar Lodge Estate and Invereshie/Inshriach to form one NNR which covers the central part of the Cairngorms Massif. This option would include de-declaration of Glenfeshie.

31. To date there have been only limited discussions with land managers in each of the five land-ownership units in the existing Reserve and with other interested parties. A summary of the initial views of those consulted will be presented at the Board meeting.
32. At this stage it would be premature for the Board to decide on which of the above options would be most appropriate. However, it would be useful for staff in their discussions with land managers and other parties to have an indication of Board members' early views.
- 33. The Board are asked to agree the range of options for a new NNR in the central Cairngorms massif and give a broad steer to staff, based on the advantages and disadvantages of the various options.**

#### **Part 4: The process for conclusion of the Review**

34. Given the sensitivity of the issues surrounding the Cairngorms, the high profile of the existing Reserve, the timing of the creation of the National Park Authority and the fact that the Cairngorms massif is split by two Areas Boards, careful consideration of the process to conclude the review is required.

35. The future of Cairngorms NNR has, to a significant extent, only been considered internally. Discussions about the future of the Reserve have only commenced recently with the five relevant land-owners in the existing Reserve. This cautious approach to the involvement of others was adopted because it was decided that it would be confusing to consult with land managers, communities or other interest groups specifically on the NNR at the time when the National Park was becoming established. In considering this matter, the Cairngorms NNR Working Group agreed that there was a need for continuing dialogue, as the review process progresses, with the staff and Board members of the National Park Authority.

36. Given this situation there are three broad options for the conclusion of the review of Cairngorms NNR

Option 1: To meet the “guillotine” timescale and make a final decision on Cairngorms NNR in September. This option would only allow for very limited consultation with interested parties in the time available and SNH would be making a final decision in the month when the National Park Authority is taking up its operational powers for the first time.

Option 2: To meet the September timescale in relation to the existing NNR (perhaps considering recommendations that it go “red” as a whole or “part red/part green”) and ask the Board to decide that we should then investigate the potential for a new Cairngorms NNR (including components of the existing NNR), setting a timescale for a final decision. This option would allow time for consultation with land-owners and the National Park Authority in relation to the existing NNR before September. Thereafter, further consultation would be required with all interested parties about the new NNR.

Option 3: To take longer to consult more extensively over the review of the Cairngorms NNR (both existing and possible new components) and report back to the Board some time after September 2003 with a comprehensive proposal.

37. SNH staff are of the view that Option 2 would be the most appropriate way forward.

**38. The Board are asked to consider the process and timescale for the finalisation of the review.**

**Scottish Natural Heritage, June 2003**

## **Annex A: Mar Lodge**

### **Background**

1. The Mar Lodge part of the NNR forms part of the Mar Lodge Estate (32,000 hectares), which is owned by the National Trust for Scotland (NTS). At the time of acquisition in 1995, SNH entered into a 25 year Management Agreement with NTS which covers the whole estate.

### **Assessment: Attributes**

#### National importance

2. The Cairngorms have Grade 1 status in the woodland, open water and upland grassland and heaths sections of the Nature Conservation Review and Mar Lodge estate has significant areas of all of these habitats. The Mar Lodge part of the NNR also lies within the Cairngorms SPA and cSAC and contains two of the six lochs which comprise the Cairngorm Lochs Ramsar site. The Mar Lodge part of the existing NNR clearly has this attribute.

#### Primacy of nature

3. The National Trust for Scotland's overriding aim for the estate is "*to manage the land in a sustainable manner, for the benefit of the nation, ensuring the continuing conservation and restoration of its internationally important geology, flora, fauna, wild land quality and archaeological value*". The Mar Lodge part of the existing NNR has this attribute.

#### Continuity of Management

4. Although SNH's current management agreement with NTS expires in 2020, NTS's ownership is considered secure. The Mar Lodge part of the existing NNR has this attribute.

#### Best practice management

5. In the first five years of NTS's ownership there has been broad agreement about management objectives and significant progress with issues such as path management, track removal and forest restructuring. However, there have been some occasions when best practice management has not been pursued as rigorously as it might have been, for example in the control of deer numbers. However, these difficulties are largely due to the radical change which has taken place in the estate's objectives, particularly in deer management, and the challenge for the property managers of bring about change while retaining the support of the skilled and experienced staff, many of whom have been there for some time. The Mar Lodge section has this attribute.

## **Assessment: Purposes**

### Raising national awareness of the natural heritage

6. The natural heritage importance and intrinsic appeal of Mar Lodge as part of the Cairngorms are very well known and NTS's gently welcoming approach to visitors provides access to a key accolade site which is high in the national consciousness. NTS has taken a sensitive and relatively low-key approach to promotion of the property and the Reserve but has shown enthusiasm for conserving the special character of the experience, especially in relation to wild land values. A range of interpretive materials and Ranger Service have been provided and work is currently under way to improve interpretation and facilities at the Linn of Dee, one of the key access points to the area.

### Providing specialised management

7. This is currently one of the main purposes of estate management. The main feature of this is the reduction of the deer population to levels which allow the natural regeneration of native woodland without fencing. Linked to this, NTS also want to demonstrate how sustainable sport shooting of deer can still be achieved with that objective. Other elements of specialised management include landscape restoration through restructuring of forestry plantations and footpath restoration. In all these aims, SNH is a significant funder of the work.

### Encouraging research and demonstration

8. The Mar Lodge part of the existing reserve provides a major locus for a wide range of research, including meteorological, geological, biological and recreational topics. The estate also undertakes management works which are demonstrations of innovative practice for others, for example by providing temporary accommodation for path workers in remote locations.

## **Financial aspects and Utility Score**

9. SNH currently invests some £126,000 per annum in the management of the estate.
10. The Utility Score for the Mar Lodge part of the existing Reserve is 73.

## **Conclusion**

11. In summary, the Mar Lodge part of the existing NNR has all four of the attributes and can be considered as serving all three purposes for NNRs. There are indications that these positive assessments against the criteria and purposes would also apply to a larger area of the estate than is currently designated as NNR.
12. The Cairngorms NNR Working Group agreed with this assessment, that this part of the existing NNR broadly fits with the new NNR policy and made a number of positive suggestions for changes which have been incorporated in the above text.

13. If it is agreed that there should be an NNR in the central Cairngorms massif, the options for future for this part of the NNR are:
- to declare the area of land within the existing Reserve as part of larger NNR, (including the adjacent land at Glenavon, owned by RSPB) with National Trust for Scotland as an approved body; or
  - in addition to the above, to extend coverage of the NNR designation to include a greater area of the Mar Lodge Estate.

## **Annex B: Rothiemurchus**

### **Background**

1. The Rothiemurchus part of the NNR is best known as one of Scotland's largest and most important remnants of Caledonian pine woodland. It is also notable for its bog woodland, its wet and dry heathland, its alpine lochs and for the diverse and specialised range of species associated with these habitats.
2. The Rothiemurchus estate is managed as a single unit but is an amalgam of the lands owned by John P Grant and his son, James Patrick Grant. It was declared as National Nature Reserve in 1954 and has been subject to various forms of management agreements since that time.
3. The agreement currently in force is construed under the provisions of both Section 16 of the National Parks and Access to the Countryside Act 1949 and Section 49A of the Countryside (Scotland) Act 1967. The agreement covers an area considerably larger than the NNR and focuses on visitor management and interpretation issues.
4. The "Rothiemurchus Concordat" was drawn up in the late 1990s between the estate and public sector partners, including SNH, HIE, Forestry Commission Highland Council and the Scottish Executive. It provides a framework for the delivery of the shared vision for the area by setting out the way in which the partners will work together. In practice, there has only been occasional reference to the Concordat in day-to-day dealings with the estate. This reflects the long interval between meetings of the Rothiemurchus Steering Group and, in SNH, a focus on issues pertinent to the delivery of the rolling work programme.

### **Assessment: Attributes**

#### National Importance

5. The Rothiemurchus section has this attribute as a consequence of the designated status of the lands, meeting both SPA and cSAC criteria for a number of qualifying interests.

#### Primacy of nature

6. Prior to the conclusion of the current agreement the estate benefited from a dedicated Nature Reserve Agreement (NRA). This agreement imposed a number of minor constraints on the estate's operations in exchange for a significant level of payment annually. The present agreement imposes no restrictions on the estate and provides for payment only in respect of delivery of an agreed programme of works which are heavily focussed on interpretation and visitor services. The estate has been encouraged by the Rothiemurchus Steering Group, which includes both SNH and Scottish Executive, to look for commercial opportunities compatible with the designated status of the land.

7. The estate currently operates both as a traditional sporting operation and as a provider of both informal and commercial recreational opportunities. Whilst it is fair to say that neither purpose is, in principle, incompatible with NNR status it is clear from engagement with estate managers that the existing designations, including the NNR, are perceived as burdensome. Key issues that require to be addressed by the estate before it could be assessed as holding this attribute would be:
- deer management – to ensure that sporting objectives were compatible with natural heritage objectives;
  - the application of the precautionary principle in the planning and management of commercial opportunities for recreational or promotional events, to ensure that they are compatible with natural heritage interests; and
  - the adoption of strategies for forest management that prioritise natural heritage objectives.
8. The Rothiemurchus estate part of the Reserve does not currently achieve the standards required of this attribute.

#### Continuity of management

9. The land is owned outright by the various estate trusts. The existing NRA has a 30 year term but can be terminated on the expiry of any agreed three year work programme. The agreement provides no additional protective measure in respect of the NNR and any potentially damaging operation would require to be addressed under the standard regulatory mechanisms provided by SSSI legislation. The estate were unwilling to commit to this agreement in the medium to longer term and it is considered that they will be extremely unlikely to do so on the present basis. The Rothiemurchus estate part of the Reserve does not have this attribute.

#### Best practice management

10. The key drivers in respect of land management on the estate are financial and the estate have clear expectations of compensation in respect of any requirement to comply with best practice management for nature conservation which is not completely in line with their commercial objectives. In short, best practice management is not implicit in the estate's approach but can be secured on occasion, following protracted negotiation and/or financial support.
11. The estate's deer management programme has improved very significantly in order to address grazing impact levels in accordance with contractual obligations in respect of Woodland Grant Scheme commitments. They are also very active in encouraging recreational use of the wider holding although it is not possible to disaggregate these initiatives from their commercial operations. Key issues that require to be addressed before it could be assessed as holding this attribute would be :



- a commitment to working in accordance with the spirit of the management agreement, beyond the strict interpretation of contractual terms; and
- a demonstrable standard of adherence to best practice would also be expected for those aspects of estate management which are not funded by SNH but which never-the-less have the potential to impact significantly on the natural heritage.

12. The Rothiemurchus estate part of the Reserve does not have this attribute.

### **Assessment: Purposes**

#### Raising national awareness of the natural heritage

13. The estate is used very extensively by visitors. The estate's figures suggest that there are up to 300,000 visits annually. Whilst it is important to note that a significant number will only be involved in activities which lie outwith the NNR, there is a very high level of recreational use of the NNR holding. This is partly as a consequence of the estate's location at the entrance to the Glenmore corridor, providing one of the key gateways to the Cairngorms massif.
14. Under the terms of the overarching Section 49A management agreement, SNH supports provision of visitor services related to the natural heritage, including a ranger service, interpretation and information provision. Delivery is supported by extensive infrastructure linked to commercial activities but including signage, paths, car-parking and picnic facilities. Access is promoted by a range of publications, providing both off-site and on-site orientation and service provision. There is a programme of guided walks and specific arrangements are made for school groups.
15. The NNR itself has a low profile and there are on-going concerns regarding the estate's lack of acknowledgement or promotion of the natural heritage designations. In summary, the current estate management serves the purpose of raising awareness of the natural heritage.

#### Providing specialised management

16. There are only limited requirements for specialised management of the site for natural heritage purposes, other than control of the deer population. With this exception SNH has generally promoted a policy of non-intervention. More generally the estate lack innovation and have also been reluctant to pursue positive management projects identified as part of the rolling work programme under the overarching agreement unless these result in commercial gain. The estate are currently pursuing compilation of a Forest Plan to look to address the future woodland management operations but have not been receptive to SNH's recommendations which they view as compromising opportunities for commercial management. The positive approach to recreational management is innovative but is heavily dependent on public sector resources and initiative. The estate could not be said to be serving this purpose at present.

### Encouraging research and demonstration

17. The site has been used to collate rainfall data since the 1950's and there is a run of data from established tree transects and exclosures, experiments which fall into the category of monitoring. The estate attracts interest from other research interests but this is largely *ad hoc* and unrelated to the NNR. The estate's engagement with researchers is supported by SNH through the management agreement but securing consent can be tortuous unless the estate itself is interested in the research. It is concluded that the current management of the estate does not meet the purpose of encouraging research and demonstration.

### **Financial aspects and Utility Score**

18. SNH makes no payments specifically in respect of the NNR. The overall annual payment approximately £150K under the management agreement over the estate of which the NNR comprises around 60%.
19. The Utility Score for the Rothiemurchus part of the Cairngorms NNR is 68.

### **Conclusion**

20. In summary, the Rothiemurchus part of the existing NNR meets only the national importance attribute. Current management serves one of the three purposes for NNRs, for encouraging national awareness of the natural heritage.
21. Members of the Cairngorms NNR Working Group expressed a range of views on the future of Rothiemurchus. Some considered that the high profile of the estate and its importance in underpinning tourism in the area would lead to considerable adverse PR for SNH if it were to be de-declared. They advocated a need for a balanced approach between the objectives of the NNR and of estate management. Others felt that it was paramount that standards of the NNR review process as a whole be upheld. Some expressed a view that there was a need to integrate the work undertaken on visitor management and on woodland/deer management on the estate more effectively. Local staff were doubtful that an affective agreement could be negotiated. No conclusion was reached. Members of the Group also made a number of positive suggestions for changes and these have been incorporated in the above text.
22. If it is agreed that there should be an NNR in the central Cairngorms massif, the options for future for this part of the NNR are:
  - to endeavour to secure appropriate management over all land within the existing NNR so that it meets the requirements of the new NNR policy;
  - to endeavour to secure appropriate management over the land on the higher ground so that it meets the requirements of the new NNR policy;  
or
  - de-declare the Rothiemurchus part of the existing NNR.

23. It is considered unlikely that it will be possible to negotiate an equitable Nature Reserve Agreement to secure appropriate management in accordance with the revised NNR criteria.

## **Annex C: Invereshie/Inshriach**

### **Background**

1. The Invereshie holding is managed by SNH as a single unit but is an amalgam of two distinct purchases in 1954 from previously separate, private land holdings. Invereshie was declared in 1954. The Inshriach holding was declared as NNR subject to a management agreement in 1954 before being purchased by SNH in 1972.
2. Invereshie/Inshriach lies is designated as part of the Cairngorms SSSI, SPA, cSAC and Cairngorm Mountains NSA. It is, in addition, NCR (Grade 1), GCR and is on the UK list of candidate World Heritage Sites.
3. On the lower lying ground where the conditions are peaty, wet heath and bog communities thrive. Caledonian Pine Forest dominates which extends to the 640 metre contour - the highest natural pine forest tree line in the UK. Above the forest the ground vegetation is increasingly affected by wind. Interests include stunted dry and wet heaths, sub-alpine/alpine heath and alpine grassland dominated by mountain sedges and lichens. The habitats support a wide range of associated species many of which are rare.
4. The land is owned by SNH and has been managed exclusively for nature conservation since the time of purchase of each of the two component units. Deer management is undertaken by SNH staff and recreational use is facilitated so as to be compatible with the objective of safeguarding the natural heritage. This part of the existing NNR has this attribute.

### **Assessment: Attributes**

#### National importance

5. The Invereshie section has this attribute as a consequence of the designated status of the land meeting both SPA and cSAC criteria for a number of qualifying interests.

#### Primacy of nature

6. The land is owned by SNH and has been managed exclusively for nature conservation since the time of purchase of each of the two component units. Deer management is undertaken by SNH staff and recreational use is facilitated so as to be compatible with the objective of safeguarding the natural heritage. This part of the existing NNR has this attribute.

#### Continuity of management

7. The land is wholly owned by SNH and there are no agricultural or other tenants. This part of the existing NNR has this attribute.

### Best practice management

8. Significant woodland regeneration is evident in the presence of deer, without the use of fencing. There is a continuing commitment to footpath repair and maintenance with a programme of substantial annual upgrading works underway. This part of the existing NNR has this attribute.

### **Assessment: Purposes**

#### Raising national awareness of the natural heritage

9. The site currently accommodates a significant number of recreational visitors who come to enjoy the natural heritage, to climb the four Munros within the boundary and use approximately 20 km of footpaths. One visitor counter indicates that 100 walkers per week on average access the higher areas of the Sgoran Ridge. The site is extensively used by local outdoor centres, primarily for secondary school children.
10. Visitor facilities are currently limited. An old shooting bothy is maintained by SNH as an open shelter and is used by around 3,000 visitors each year. There is a stock of leaflets available and an interpretation board describing the special natural heritage value of the area and SNH's management objectives.
11. Owing to the sensitive nature of some of the natural heritage features the site has not been extensively promoted for use by the general public but there is still significant potential to enhance environmental awareness without compromising the features. The site is actively used for demonstration to specialist audiences and has an identified profile within deer and woodland management managers. The current estate management serves the purpose of raising national awareness of the natural heritage.

#### Providing specialised management

12. The management practice of regenerating pine forest in the presence of deer, without the use of fences, has been practiced at this site for many years. As a consequence the site is increasingly used for demonstration by SNH for this purpose, often in conjunction with Creag Meagaidh. The audience in these cases is normally from specialised groups associated with deer and upland management. The key management practices relate to rigorous deer management which is undertaken using SNH staff, discreet visitor management to avoid damage to more sensitive habitats, including a programme of path repairs. The current estate management serves the purpose of specialised management.

#### Encouraging research and demonstration

13. Invereshie/Inshriach has been used extensively for research purposes for many years. The main areas of study have been the tree lines on Creag Fhiacloch and in the Allt a' Mharcaidh catchment where various projects have been undertaken, including the Surface Water Acidification Programme, the

ECOMONT Project, and the Environmental Change Network monitoring station. Site management currently serves the purpose of encouraging research and demonstration.

### **Financial aspects and Utility Score**

14. The more significant individual cost elements relate to the delivery of deer management at approximately 60 person days per annum plus associated vehicle maintenance costs and equipment costs totalling approximately £4k against an income of around £2.5k. A significant footpath programme of approximately £10k is undertaken annually to provide for upgrade and remedial repairs to the existing network which provides for visitors to access the site and the high ground beyond.
15. The Utility Score for this part of the existing NNR is 70.

### **Conclusions**

16. In summary, the Invereshie/Inshriach part of the existing NNR has all four of the attributes and can be considered as serving all three purposes for NNRs and consequently should be retained as an NNR.
17. The Cairngorms NNR Working Group agreed with this assessment, that this part of the existing NNR broadly fits with the new NNR policy. Changes have also been made to this annex, at the suggestion of Group members, to ensure consistency of approach.
18. If it is agreed that there should be an NNR in the central Cairngorms massif, the options for future for this part of the NNR are:
  - retention of NNR status (either as part of a larger NNR or as a Reserve in its own right) with SNH owning and managing the land
  - retention of NNR status (either as part of a larger NNR or as a Reserve in its own right) with transfer of ownership and/or management to another body

## **Annex D: Glenfeshie**

### **Background**

1. The Glenfeshie Estate was declared as National Nature Reserve in 1962 and has been subject to management agreements of various forms since that time. The current agreement was concluded in 1987 and is for a 25 year term.

### **Assessment: Attributes**

#### National importance

2. Glenfeshie is a steep-sided river valley and floodplain, to the north of which lies the main massif of the Cairngorm range including the Moine Mhor - the highest area of blanket mire in Britain. There are large areas of Mat grass and Stiff sedge communities and excellent examples of lichen-rich heaths occur on the western spurs and ridges above the Glen. These merge into widespread Woolly fringe moss heath which contrasts with the more patchy distribution further east. The schistose rocks of Coire Garblach and those fronting the main glen have a calcicolous montane flora, including a number of rare species. Glenfeshie also includes important remnants of ancient Caledonian pine forests and birch woods with associated juniper.
3. Glenfeshie is a site of the highest importance for fluvial geomorphology. The interest is based upon a braided channel system which is the most dynamic in Scotland . It has a ready source of sediment, a wide floodplain and a system of transitorily occupied channels. The Allt Lorgaidh fan is an important site for the study of alluvial fan development and also allows the dating of terrace sequences.
4. The site is designated as a component of the Cairngorms SSSI, cSAC and SPA. The Glenfeshie part of the Cairngorms NNR has this attribute.

#### Primacy of nature

5. Estate management has, in the past, maintained very high deer numbers in order to meet sporting objectives and the high level of grazing has been to the detriment of the Caledonian pine forest. After a considerable period of negotiation this situation led to the conclusion of an agreement in 2000 under Section 7 of the Deer (Scotland) Act 1996, which operates in parallel with a concluded WGS programme with the Forestry Commission. The S7 Agreement initially set targets based on deer population figures in order to achieve an improvement in habitat condition. However, it is now evolving into a regime which is driven by habitat condition targets which are developed in conjunction with Deer Commission for Scotland and the Forestry Commission. In the last three years there has been some evidence from monitoring results of slow progress towards agreed targets for habitat restoration.
6. In general, the principal objective of estate management is sporting rather than management for conservation. The estate have made it clear that they do not support prioritisation of conservation over sporting objectives. Whilst

the estate have demonstrated some willingness to compromise, it is anticipated that any requirement to undertake further deer control to meet natural heritage objectives would be vigorously resisted. This would require resolution through the Deer Act and/or incentivisation as appropriate. The Glenfeshie part of the Cairngorms NNR does not hold this attribute.

#### Continuity of management

7. The current agreement, under which a lump sum of £60,000 was paid in 1987, expires in 2012. The agreement is now considered to be obsolete in contemporary thinking on natural heritage management. It contains detailed prescriptions on many aspects of estate management but, owing to its incompatibility with the Woodland Grant Scheme, has been largely circumvented on key issues with the agreement of both parties.
8. The estate has had four different owners since the agreement was concluded in 1897. This has complicated the delivery of key objectives as each set of owners and estate managers come to terms with the requirements of managing an estate of such high natural heritage value. In any event, it is considered that this agreement is no longer compatible with current NNR criteria, particularly in respect of the policies on deer and woodland regeneration. In particular, the agreement does not determine culling objectives for natural heritage gain and precludes the estate from undertaking woodland regeneration, which is a matter reserved to SNH's predecessor body using a rolling programme of exclosures. It would be highly unlikely that a more restrictive agreement could be secured without a further substantial additional funding commitment. The Glenfeshie part of Cairngorms NNR does not hold this attribute.

#### Best practice management

9. The policies in the existing management agreement on deer management and woodland regeneration are now no longer compatible with best practice conservation management. The estate have complied fully with the terms of the Section 7 Agreement under the Deer (Scotland) Act 1996 to modify deer management. The overarching deer management plan, in place under the terms of the Woodland Grant Scheme which has been approved over the estate, is also being met. In addition, the estate have slowed their initial, and controversial, plans for a programme of fenced woodland exclosures following a change in ownership. Although there have recently been some encouraging changes in land management practise as a result of the Section 7 Agreement, the estate is widely regarded in conservation and land management circles as having suffered significant deterioration. Despite some recent encouraging signs, the estate could not be considered to be demonstrating best practice in land management on a nature reserve. The Glenfeshie part of Cairngorms NNR does not hold this attribute.



## **Assessment: Purposes**

### Raising national awareness of the natural heritage

10. The Glenfeshie part of the NNR is extensively used by visitors and this is a popular access point for a number of the higher hills. Access is for pedestrians or cyclists only and has been facilitated by the construction of a car park at Achlean, together with associated signage, interpretation and footpaths. The estate are tolerant of the existing levels of access but do not seek active promotion beyond a local community level. There is no interpretation within the estate although the estate factor has worked to develop relationships with particular and select audiences looking at woodland interests. There are also popular routes along the bottom of the glen to the mature pinewoods around Ruigh-aiteachain and via the main estate access at Stronetopper. The site has potential to raise national awareness of the natural heritage but this is largely unexploited and is unlikely to meet with estate management objectives. This element would require to be addressed in order to meet the standards required of this purpose.

### Providing specialised management

11. The key requirement for appropriate land management is a reduction in deer numbers to a level which would enable regeneration of the Caledonian pinewoods. The estate have been willing to undertake such work but only in way that does not conflict with sporting objectives and they have a preference for the use of fences. To date the Glenfeshie part of the NNR has not been managed in a way that would allow this purpose to be met.

### Encouraging research and demonstration

12. This part of the NNR is used extensively for research, particularly on the geomorphology of the dynamic river system, and the juniper scrub and woodland regeneration. A wide range of published papers have been prepared and there is a continuing programme of research on landscape and hydrological systems. Not all of this work is directly related to the management of the NNR but the declared status of the site does facilitate these arrangements. The estate are tolerant of research activity and take an interest in the work undertaken where this is of value to their operations. There is a, however, a degree of fatigue owing to the significant on- going monitoring work which is undertaken in the context of the Section 7 Agreement. The Glenfeshie part of the NNR is being managed to fit this purpose.

## **Financial aspects and Utility Score**

13. The current management agreement was concluded for a lump sum of £60,000 in 1987. There are no recurring annual payments. The agreement

provides a mechanism for contribution to the costs of footpath works to facilitate public access to the high tops and, on average, in recent years approximately £10,000 per annum has been deployed for this purpose. SNH have a substantial on going programme of monitoring associated with the Deer Management Plan requiring some 10 person days per annum. There is, in addition, a significant amount of staff time involved in the Section 7 Agreement but as this relates to the Natura and SSSI interests and would continue irrespective of the outcome of the NNR review it is not considered in this context.

14. The Utility Score for the Glenfeshie part of the existing Cairngorms NNR is 61.

## **Conclusion**

15. In summary, the Glenfeshie part of the Cairngorms NNR has only one of the four attributes and has been managed to fit one of the purposes.
16. As was the case for Rothiemurchus, members of the Cairngorms NNR Working Group had a variety of views on the future of Glenfeshie as part of an NNR. Management of Glenfeshie was noted as being even more commercially oriented than Rothiemurchus. The many changes in land – ownership had proved to be very problematic. Some saw that de-declaration would make little difference to estate management while others considered that course of action to be a lost opportunity. No conclusion was reached. Members of the Group also made a number of positive suggestions for changes to this annex which have been incorporated.
17. If it is agreed that there should be an NNR in the central Cairngorms massif, the options for future for this part of the NNR are:
- to endeavour to secure appropriate management over all land within the existing parts of the NNR so that it meets the requirements of the new NNR policy
  - to endeavour to secure appropriate management over the land on the higher ground so that it meets the requirements of the new NNR policy
  - de-declare the Glenfeshie part of the existing NNR.

## **Annex E: Glenavon (RSPB)**

### **Background**

1. The Glenavon Estate is in the ownership of the RSPB and is managed as a component of their Abernethy Forest Reserve. The RSPB estate is 12,877 hectares, and there are approximately 2076 hectares which are within the existing Cairngorms NNR. The land was purchased by the RSPB in 1985.
2. The Abernethy NNR was previously consolidated as an NNR under the on-going review. It is currently assessed as "light green" requiring consideration of boundaries in order to consolidate as "green" in the short to medium term. Currently the Cairngorms and Abernethy NNR's form two discreet blocks which are separated by a large area of land which is owned solely by the RSPB.
3. The land is distinct from the separate private holding, also known variously as Glenavon or Inchrory Estate owned by Andras Limited situated to the south and east. The altitude of the Glenavon Estate ranges from c670m at the Fords of Avon in the north to 1309m on the summit of Ben Macdui in the south. The northern section of the Estate comprises a large loch with steep valley cliffs at the head of Glen Avon. This upper part of the glen is bounded by three mountains over 1000m. The southern part of the Estate is montane plateau.

### **Assessment: Attributes**

#### National Importance

4. The Estate supports a number of European qualifying habitats including dry heath, wet heath, clear water lochs with aquatic vegetation and poor to moderate nutrient levels, juniper on heaths, acidic scree, plants in crevices on acid rocks, montane willow scrub, high-altitude plant communities associated with areas of water seepage and montane acid grassland. European qualifying species of birds include peregrine falcon, golden eagle and dotterel. This area supports Natura habitats including dry heath, wet heath, extensive acidic scree, alpine and sub-alpine heath and montane acid grassland.
5. This part of the NNR is designated as SSSI and Ramsar and is also cSAC and SPA for a number of qualifying interests as described above. The land to the north, outwith the NNR, although not currently designated, is also considered to meet the national importance qualifying standard. The Glenavon part of the existing Cairngorms NNR has this attribute.

#### Primacy of nature

6. The policies contained within the RSPB management plan are consistent with the achievement of primacy of nature conservation. This is essentially a policy of non-intervention and a lack of promotion of the interest in the site which serves to reduce visitor pressure. The Glenavon part of the existing Cairngorms NNR has this attribute.

#### Continuity of management

7. The Glenavon part of Cairngorms NNR was subject to a 25 year, Section 16 Management Agreement with the previous owners, Major George Seton Wills and David Seton Wills which covered the period from the date of declaration until 1991. The agreement lapsed at that time and has not been re-negotiated.
8. The land in this part of the Cairngorms NNR is now owned by RSPB. A small area within the NNR is subject to an annual skiing lease. There are already generic case precedents for the RSPB as an approved body. The Glenavon part of the existing Cairngorms NNR has this attribute.

#### Best practice management

9. The RSPB are committed to best practice management. Their management plan, which is agreed with SNH, makes clear their objective to safeguard and enhance the internationally important site principally for its scenic geological and biological interest. There is a clear confirmation of desire to achieve and demonstrate best practice. This is reflected by a firmly established track record of demonstration of best practice over a wide range of issues with a particular focus on deer management.

#### **Assessment: Purposes**

##### Raising national awareness of the natural heritage

10. The objective within the RSPB management plan is to safeguard and enhance this internationally important site principally for its scenic, geological and biological interest. A low-key approach is taken to visitor management by not promoting the site to their membership or the general public in order to reduce trampling pressure on fragile habitats. It is SNH's opinion that this aspect of the site management requires revision in order to meet the standards required. There is potential to achieve this subject to a revised approach from RSPB. The Glenavon part of the NNR is not being managed to fit this purpose.

##### Providing specialised management

11. Other than deer control and footpath maintenance on the lower parts of the estate, outwith the existing NNR, land management is directed towards a minimum intervention policy. This is due to the naturalness and wild land qualities of the site and primacy of nature. The Glenavon part of the NNR is not under active management. The Glenavon part of the NNR is being managed to fit this purpose.

##### Encouraging research and demonstration

12. A considerable amount of research and monitoring activity takes place, particularly on the montane section of the estate. This comprises work on visitor monitoring, bird monitoring (including dotterel, snow bunting and purple sandpiper) and survey work on higher and lower plants. Additionally, monitoring of visitors, soils, geomorphology, habitats and birds occurs through the programme associated with the Cairngorm funicular railway development. At lower altitudes, low key monitoring of deer, mountain hares and birds is carried

out by the RSPB. The Glenavon part of the NNR is being managed to fit this purpose.

### **Financial aspects and Utility Score**

13. There are no payments associated with this component of the NNR. The management agreement expired a number of years ago and there is no on-going relationship with SNH in the NNR context.
14. The Utility Score for the Glenavon part of the NNR is 60. This could be substantially improved with a willingness on the part of the owners to make greater use of the demonstration and educational potential of the site.

### **Conclusion**

15. In summary, the Glenavon part of the existing Cairngorms NNR meets all four of the attributes and is being managed to meet two of the three NNR purposes. The ground adjacent to the existing part of the NNR is also worthy of consideration for incorporation within a future Cairngorms NNR.
16. Members of the Cairngorms NNR Working Group agreed that this part of the NNR met the criteria which would allow it to go “green” and that ideally this unit would form part of a larger NNR. Suggestions for changes to this annex have also been incorporated.
17. If it is agreed that there should be an NNR in the central Cairngorms massif, the options for future for this part of the NNR are:
  - to declare the area of land within the existing Reserve as part of larger NNR, (including the adjacent land at Mar Lodge, owned by NTS) with RSPB as an approved body; or
  - in addition to the above, to extend coverage of the NNR designation to include all or part of the land owned by RSPB.