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Committee for the activities of the Council of Europe in the field of biological and landscape diversity (CO-DBP)

Group of specialists - European Diploma for Protected Areas

20-21 January 2003 Room 2, Palais de l'Europe, Strasbourg

Beinn Eighe National Nature Reserve (United Kingdom)

RENEWAL

Expert report by Mr Jan Lundqvist (Sweden)

Document established by the Directorate of Culture and Cultural and Natural Heritage

This document will not be distributed at the meeting. Please bring this copy. Ce document ne sera plus distribué en réunion. Prière de vous munir de cet exemplaire. The European Diploma for Protected Areas was first awarded to the Beinn Eighe National Nature Reserve in 1983 and is now being renewed for the fourth time.

The Secretariat did not accompany the expert on his visit to the park.

Appendix I reproduces Resolution (98) 17 which was adopted when the Diploma was last renewed. In Appendix II the Secretariat presents a draft resolution for possible renewal.

INTRODUCTION

In May 2002 the Secretariat of the Council of Europe asked me to carry out an on-the-spot appraisal of the Beinn Eighe National Nature Reserve in order to consider the renewal of its European Diploma.

BACKGROUND

The European Diploma, Category A¹, was awarded to the Beinn Eighe National Nature Reserve, United Kingdom, in 1983. The present period of validity of the Diploma² is due to expire in 2003.

In accordance with article 5 of the European Diploma regulations, annual reports have been submitted by the Scottish Natural Heritage to the Council of Europe.

The visit

The on-the-spot appraisal took place on 2-4 July 2002. I was assisted by Dr Greg Mudge (Area Manager of West Highland) and Mr David Miller (Reserve Manager), both staff of the Scottish Natural Heritage. We visited the Enclosure 2, the area owned by the National Trust for Scotland, Coille na Glas Leitir (woodland), Visitor Centre, new trails, tree nursery and office. Here I would like to thank David and Greg for helpfulness, effective co-operation and warm assistance.

THE RESERVE

The Beinn Eighe National Nature Reserve covers 4,758 ha of the north-west Scottish Highlands in a sparsely populated region. It was the first National Nature Reserve (NNR) established in the United Kingdom (1951). The main reason for making the area a NNR was to preserve a remnant of native Scots pine wood on the south-west side of Loch Maree (Coille na Glas Leitir).

The massif of Beinn Eighe, with high mountain tops (972 m), ridges and deep open valleys with steep and gentle slopes forms the main part of the reserve, and shows excellent examples of glacial erosion and altitudinal gradation of plant communities. Most of its surface is covered by open heathland, bare rock, scree and wet grassland with scattered bogs and peatland. Of national interest are two variants of dwarf shrub heath and a western variant of moss heath. Woodland is found below 300 m close to Loch Maree and in three isolated gorges. These are the best remaining examples of western pinewood in Britain and contain elements of birchwood, holly (*Ilex aquifolia*), ivy (*Hedera helix*), rowan (*Sorbus aucuparia*) and a little oak (*Quercus petraea*) and juniper (*Juniperus communis*).

At lower levels the major part of the vegetation of the reserve is of secondary type due to tree felling, burning and overgrazing in the past. In suitable sites, ecological planting of Scots pine and broadleaved tree species has been done mostly inside a ring fenced area, where red deer have been eradicated to prevent browsing (1,200 ha). It is thought that red deer grazing and browsing has a considerable impact on most of the important habitats of the Reserve.

Further descriptions of Beinn Eighe NNR are to be found in

- The Council of Europe's European Diploma series no 20 (1983),
- Beinn Eighe. The Mountain Above The Wood (2001),

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¹ Resolution (83) 7 of the Committee of Ministers

² Resolution (97) 17 of the Committee of Ministers

- Beinn Eighe. Britain's First National Nature Reserve (2002),
- Beinn Eighe National Nature Reserve (2002).

STATE OF CONSERVATION

NATURAL ENVIRONMENT

Based on information given during my visit and in the Annual reports for 1997-2001, I can conclude that no major changes have occurred, but those changes that have taken place have been positive since renewal was given in 1998. Natural regeneration of Scots pine (*Pinus sylvestris ssp scotica*), birch (*Betula pubescens*), rowan (*Sorbus aucuparia*) and eared-willow (*Salix aurita*) has significantly improved on both fenced and unfenced areas of Scots pine/bich woodland. This is a result of less browsing by deer, due to a continuous high cull of red deer (*Cervus elaphus*) outside the ring fence and efficiency in eradicating both red deer and roe deer (*Capreolus capreolus*) inside fenced areas since November 1987.

Facilities

The Woodland Trail (1.5 km) and The Mountain Trail (6.5 km) are very well maintained to ensure public enjoyment and safety. The Mountain Trail has been repaired almost every year by volunteers and professional footpath teams, which has been possible due to both external and internal funding. In one years time this major refurbishment will be completed. Three new interpretative panels have been put up in the Trails car park. The number of visitors has been counted by electronic counters at most Reserve access footpaths.

The Beinn Eighe Visitor Centre was reopened this year. It has got a completely new exhibition of modern design and high standard. Large effort has been put into multilingual panels and slideshow, different material to discover by oneself and adapted to children's needs. Last year the Visitor Centre was open from the beginning of April to mid September staffed by two part-time attendants. The number of visitors has decreased from 16,983 in 1996 to 9,741 visitors in 2001. This decrease reflects an overall trend in visitor numbers throughout Scotland.

New "talking trails" have been built this year in two circles outside the Visitor Centre. The closest circle is accessible for visitors with limited mobility. Here poetic question panels have been put up (some written by children) and they are accompanied by instructive answer panels close by. Along the trail large sculptures of wood and stone inspire the fantasy of the visitor. Very skilled artists have been part of this project. A steeper outer circle of the trail passes by a nice viewpoint.

LEGAL AND LAND STATUS

Beinn Eighe NNR was established in 1951 and extended in 1962 and 1973. The Reserve became part of the Gairloch Conservation Unit in 1969, which is working with integrated management of red deer over an area of 35,000 ha.

In 1976 the Reserve was designated as a UNESCO Biosphere Reserve, and is part of the Biosphere Reserve's core area. The Biosphere Reserve concept does not interfere with the European Diploma because objectives are similar and obtained management, information and published research work benefits both the European Diploma and the Biosphere network.

The Reserve lies within the Wester Ross National Scenic Area (1978).

In 1985 Beinn Eighe NNR was given Site of Special Scientific Interest (SSSI) status under the 1981 Wildlife and Countryside Act. A SSSI Management Statement has been set out for the Reserve this year.

Beinn Eighe is candidate Special Area of Conservation (cSAC) under EU legislation³, along with other woodlands around Loch Maree (Natura 2000).

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³ European Union Directive 92/43/EEG on the conservation of natural habitats and habitats of species

No new land has been incorporated since renewal of the Diploma in 1998. Scottish Natural Heritage owns almost 90% of the National Nature Reserve, National Trust for Scotland owns 10% and the Kinlochewe Estate owns 0.02%. Wayleaves exist for power line maintenance.

MANAGEMENT

MANAGEMENT PLAN

The Ten Year Management Plan 1995-2005 holds a very high standard and gives a solid programme for applied management work. It covers in brief the following contents: Conservation status, evaluation of features, ideal management objectives, factors influencing management, rationalisation and identification of 15 operational objectives, a bibliography and four maps.

Compliance with previous recommendations

Important management work has been done during the last five years, and the recommendations given in Resolution (98) 17 on the renewal of the Diploma have been fulfilled with a few less important exceptions. Compare Appendix 1.

- 1. 40,000 trees (eleven species) of local genetic stock have been ecologically planted in mixed groups of Scots pine and broadleaved species inside the 1,200 ha ring fenced area during the last five years. This is slightly less than the last five-year period, due to a shortage of volunteer groups doing the work. A review of the woodland restoration programme has started. Recommendation is fulfilled.
- 2. The indigenous tree seed bank is continuously refilled with locally collected seed from native tree species, which guarantees genetic purity of planted trees on the Reserve. Naturally occurring seedlings of holly, bird cherry and rowan have also been used for planting. Recommendation is fulfilled.
- 3. The eradication of non-local origin Scots pine and exotic conifers in Enclosure 2, the previous Forestry Commission plantation, has now been completed. Recommendation is fulfilled.
- 4. Discussions have been held with the owner of the remaining pinewood in the lochside strip, and a valuation has been obtained. The area is rather small (12.37 ha), under no threat and still protected within the Site of Special Scientific Interest. Recommendation is not fulfilled.
- 5. Control of red deer and roe deer populations is an on-going management activity of highest priority. Both deer counts and tree regeneration surveys indicate that the deer populations have generally been under control both inside and outside the ring fence for the last fifteen years. Recommendation is fulfilled.
- 6. Educational/interpretative facilities has been built on lower ground close to the Visitor Centre. Both "the talking trails" and the Visitor Centre are designed for people with limited mobility. The area used has been previously ploughed and planted, and has limited value for the Reserve. Recommendation is fulfilled
- 7. Existing recreational facilities are maintained at a constant high standard. Recommendation is fulfilled.
- 8. Scottish & Southern Energy's commitment to remove the electricity line through the ancient woodland has been confirmed in writing for 2003. They plan to place a new cable underground along the verges of the road. No changes so far.
- 9. A database is completed which catalogues data held by the Scottish Natural Heritage and is available to everyone within the organisation. The Reserve is still waiting for appropriate software for biological and project recording. Recommendation is fulfilled.
- 10. Excellent books have been produced and recommendation is fulfilled:

- Beinn Eighe. The Mountain Above The Wood. 172 pages. (2001)
- Beinn Eighe. Britain's First National Nature Reserve. 96 pages. (2002)
- Beinn Eighe National Nature Reserve. 33 pages. (2002).
- 11. Financial resources have been sufficient. Recommendation is fulfilled.

Continuous management activities

The most important activities are deer population control, maintenance of fences and trails, seed collection, tree planting, fire and poaching control, continuation of research and information, administration and planning.

The use of a containerised growing system in a polytunnel at the Anancaun tree nursery is a real success. The trees grow three times faster than outside. It has also been possible to reduce labour input in the nursery (no weeding), and the system extends the planting season.

Research

A great number of current and completed research projects are listed in the Annual reports. The bibliography in the management plan contains 243 relevant references. The Anancaun Field Station plays an important role both in attracting scientists and in the co-ordination of recording field data of the ecosystem and species.

Staff and infrastructure

During the last five years there have been no changes to the four permanent Reserve posts or the Administrative Officer post. Throughout the years long term volunteer teams and individuals have provided valuable assistance with a wide range of management and monitoring tasks. For the moment staffing is sufficient.

The Reserve has a very good infrastructure both in equipment and housing.

THREATS

After negotiations Scottish & Southern Energy has agreed to remove the over head cables and replace them with an underground cable along the roadside verges. An alternative to place the cables under water in Loch Maree seems to be too expensive and difficult to keep in repair.

In the long run it is important that alien Scots pine is eradicated also in the neighbourhood of the Reserve. Introduction of foreign species in the surroundings, deer overgrazing, fires, soil erosion along trails and poaching are potential threats, which are kept under good control by the management staff.

EUROPEAN DIPLOMA INFLUENCE

The recommendations of the Council of Europe for the management of the Reserve have been incorporated in the management plan. The international recognition provided by the Diploma has given greater justification in bidding for financial resources to undertake recommended management.

CONCLUSION

The Reserve is in a very good state of conservancy.

The recommendations included in Resolution (98) 17 on the renewal of the Diploma (see Appendix 1) are almost completely fulfilled. In my opinion the state of conservation of Beinn Eighe NNR now is even higher than 1992 and 1997, when I carried out previous on-the-spot appraisals.

I strongly support that the European Diploma for Beinn Eighe NNR (category A) should be renewed for another five years. The following recommendations are proposed:

RECOMMENDATIONS

- 1. That if ecological regeneration of lower-lying, formerly wooded, areas of the reserve requires the planting of indigenous species, it must be carried out using the local genetic stock and in accordance with ecological principals.
- 2. That the native tree/shrub gene bank, as well as the tree nursery, should be maintained so as to guarantee the genetic origins of trees planted in the reserve.
- 3. That, if possible, the 12 ha of private land alongside Loch Maree should be acquired.
- 4. That continued priority goes to effective control of deer species within protective enclosures, while the heavy cull regime elsewhere in the reserve should continue. A monitoring programme to assess the impact of deer species on un-enclosed land is needed, both to establish the effectiveness of the current cull and to plan future cull regimes.
- 5. That development of recreational facilities should be discouraged within the core area of the reserve, but existing facilities should be maintained to the present standard.
- 6. That overhead electric cables should be placed off the Reserve and underground cables be placed along the verges of the main road.
- 7. That there is a need for an efficient data base to record biological information and management action to ease recovery and ability to share information with other parties. Consideration should be given to the development of close links with other appropriate Council of Europe reserves, so that management experience and ideas can be more readily exchanged.

REFERENCES

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Scottish Natural Heritage. 2002. Beinn Eighe. Britain's First National Nature Reserve. 96 pp.

Scottish Natural Heritage. 2002. Beinn Eighe National Nature Reserve. 33 pp.

Appendix I

COUNCIL OF EUROPE COMMITTEE OF MINISTERS

RESOLUTION (98) 17

ON THE RENEWAL OF THE EUROPEAN DIPLOMA AWARDED TO THE BEINN EIGHE NATURE RESERVE (United Kingdom)

(Adopted by the Committee of Ministers on 18 September 1998 at the 641st meeting of the Ministers' Deputies)

The Committee of Ministers, in accordance with Article 15.a of the Statute of the Council of Europe,

Having regard to Resolution (65) 6 instituting the European Diploma;

Having regard to Resolution (83) 7 awarding the European Diploma, Category A, to the Beinn Eighe Nature Reserve;

Having regard to the proposals of the Committee for the Activities of the Council of Europe in the field of Biological and Landscape Diversity (CO-DBP),

Renews until 25 May 2003 the European Diploma awarded to the Beinn Eighe Nature Reserve;

Attaches the following recommendations to the renewal:

- 1. If ecological regeneration of lower-lying, formerly wooded, areas of the reserve requires the planting of indigenous species, this must be carried out using the local genetic stock and in accordance with ecological principals. Fertilisers (phosphates) should only be used once, when trees are planted;
- 2. Maintain the native tree/shrub gene bank as well as the tree nursery so as to guarantee the genetic originality of trees planted in the reserve;
- 3. In the area previously managed by the Forestry Commission, all Scots pine of external origin and non-native conifers should be eradicated in accordance with the silvicultural plan, and the area restocked according to recommendation 1 above;
- 4. If possible, the twelve hectares of private land alongside Loch Maree should be acquired;
- 5. Continued priority should go to effective control of deer species within protective enclosures, while the heavy cull regime elsewhere in the reserve should continue. A monitoring programme to assess the impact of deer species on un-enclosed land is needed, both to establish the effectiveness of the current cull and to plan future cull regimes;
- 6. Any new development of educational/interpretative facilities should be located on the lower ground away from the main features of interest in the reserve. Indeed, such facilities

should be preferably located close to the boundary of the reserve or on un-designated land owned by SNH but not part of the Reserve. Priority should be given to improving access to existing facilities for those with limited mobility;

- 7. Development or recreational facilities should be discouraged within the core area of the reserve, but existing facilities should be maintained to the present standard;
- 8. Any new over head or underground electric cables should be placed outside the reserve, with the immersion of cables underwater;
- 9. There is need for an efficient data base to record biological information and management action to ease recovery and ability to share information with other parties. Consideration should be given to the development of close links with other appropriate Council of Europe reserves, so that management experience and ideas can be more readily exchanged;
- 10. A new Reserve booklet in keeping with Beinn Eighe's status as an internationally important site should be produced;
- 11. The financial resources necessary for the reserve's good management should be allocated.

APPENDIX II

Draft resolution on the renewal of the European Diploma of Protected Areas to the Beinn Eighe National Nature Reserve (United Kingdom)

The Committee of Ministers, under the terms of Article 15.a of the Statute of the Council of Europe,

Having regard to Resolution (65) 6 instituting the European Diploma, as amended by Resolution (98) 29 on the Regulations for the European Diploma pf Protected Areas;

Having regard to Resolution (83) 17 awarding the European Diploma to the Beinn Eighe National Nature Reserve;

Taking into consideration the expert's report presented at the meeting of the Group of Specialists - European Diploma of Protected Areas on 20 and 21 January 2003;

Having regard to the proposals of the Committee for the Activities of the Council of Europe in the Field of Biological and Landscape Diversity (CO-DBP);

Renews the European Diploma to the Beinn Eighe National Nature Reserve until 25 May 2008;

Attaches the following recommendations to the renewal:

- 1. that if ecological regeneration of lower-lying, formerly wooded, areas of the reserve requires the planting of indigenous species, it must be carried out using the local genetic stock and in accordance with ecological principals;
- 2. that the native tree/shrub gene bank, as well as the tree nursery, should be maintained so as to guarantee the genetic origins of trees planted in the reserve;
- 3. that, if possible, the 12 ha of private land alongside Loch Maree should be acquired;
- 4. that continued priority goes to effective control of deer species within protective enclosures, while the heavy cull regime elsewhere in the reserve should continue. A monitoring programme to assess the impact of deer species on un-enclosed land is needed, both to establish the effectiveness of the current cull and to plan future cull regimes;
- 5. that development of recreational facilities should be discouraged within the core area of the reserve, but existing facilities should be maintained to the present standard;
- 6. that overhead electric cables should be placed off the Reserve and underground cables be placed along the verges of the main road;
- 7. that there is a need for an efficient data base to record biological information and management action to ease recovery and ability to share information with other parties. Consideration should be given to the development of close links with other appropriate Council of Europe reserves, so that management experience and ideas can be more readily exchanged.