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**STEERING COMMITTEE FOR THE CONSERVATION AND MANAGEMENT
OF THE ENVIRONMENT AND NATURAL HABITATS**

**Group of experts on protected areas
(PE-S-ZP)**

5-7 February 1992

**Lüneburg Heath Nature Reserve
(Federal Republic of Germany)**

Renewal of European Diploma

Expert's report

by
Dr. A. FROMENT

1. The European Diploma was awarded to the Lüneburg Heath nature reserve in 1967 in category B. The last renewal dates back to 25 June 1987.
2. The Secretariat did not accompany the expert on his visit to the nature reserve.
3. Appendix I contains Resolution (87) 11 adopted at the time of the last renewal; in Appendix II, the Secretariat has presented a draft resolution for the possible renewal of the Diploma in 1992.

1. Introduction

The European Diploma was awarded in 1967 to the Lüneburg Heath nature reserve. As required by the regulations, an on-the-spot appraisal was carried out so as to establish that a fifth renewal of the Diploma, which is due to expire in 1992, was justified.

The on-the-spot appraisal took place on 3 and 4 September 1991. The expert was received at the reserve by Dr E Juttner, General Secretary of the Verein Naturschutzpark (VNP) Association. During his stay, he met Dr Juttner's two forestry assistants, Mr M Lütkepohl and Mr J Töniessen.

The controlling body for nature conservation was represented by Mr H Menneking, and the Lower Saxony Forestry Board by Dr M Hanstein.

Lastly, the Permanent Representative of the Federal Republic of Germany to the Council of Europe, Dr H Henke of the Bundesforschungsanstalt of Bonn, took part in the two-day visit.

The expert had carried out in 1971, for the Council of Europe, the first on-the-spot appraisal for the renewal of the Diploma. This 20-year gap clearly offers an interesting perspective for understanding a certain number of questions concerned with the management of the heath.

2. Questions raised by the Group of experts - Protected areas

The Secretariat asked the expert to examine, in addition to the ordinary tasks, four questions that were discussed during the consideration of the annual reports, viz:

- a. the construction of a magnetic-cushion train;
- b. the extraction of ground water;
- c. the legal status of the reserve;
- d. the use assigned to land previously reserved for military activities.

2.1 Construction of a magnetic-cushion train

The federal ministerial cabinet decided to scrap the project for a high-speed Hamburg-Hanover link in favour of a more easterly line.

2.2 Extraction of ground water

This remains a cause for concern. It is not possible at the moment to establish a link between the extraction of ground water and the drop in the water table, bearing in mind the low rainfall recorded in recent years. Everyone is well aware of the problem, which scientists are monitoring very closely.

One positive aspect of current management in the nature reserve, which deserves to be mentioned, is action taken to revitalise water courses and peat bogs. Retaining the water for longer encourages infiltration; these measures could compensate for the present drop in the water table so offsetting any negative effects caused by the pumping of water from edge of the protected area.

2.3 Legal status of the Nature Reserve

The 1921 statute should be revised. Temporary provisions came into force on 28 July 1990, and are valid until 1993.

A fundamental element in defining a permanent status is the determination of new limits to the nature reserve.

The most important extensions are the area south of the Pietzmoor peat bog and the Wesel valley to the north east of the reserve. The villages of Undeloh, Weser and Sahrendorf are outside the protected area.

2.4 Use assigned to land reserved for military activity

The land used for British army tank manoeuvres is situated in Lüneburg Heath but outside the area awarded the Diploma. The British army plans to give up the use of this land but it is not yet known when.

This prospect may be regarded as extremely positive for the diploma area since first of all, it will mean an end to the disturbances linked to the army's activities (noise, dust, etc.), and secondly, an area of roughly 4000 ha of woodland, marshland and heath will be recovered for nature conservation.

In those places where military activity has ceased de facto, the bare sand is rapidly being colonised by heather on account of the considerable seed stock still present in the soil. These observations are genuinely encouraging for the future reconstitution of vast heath areas from the military zones.

These developments are being monitored very closely, and much consideration is being given to better use and management of the reserve. The land management and development plan (Landschaftspflege und Entwicklungsplan), which is in preparation, will deal explicitly with the future of the military areas.

3. Meeting with the representative of the controlling body

A wide range of questions connected with the present management and particularly with future prospects were covered with the representative of the controlling body.

In addition to the various points outlined above, the disturbing question of prospection for resources in the subsoil was discussed at length.

3.1 Oil and gas prospection

In order to locate boreholes as accurately as possible, the company is conducting seismic prospection surveys. Advances in computer technology mean that three-dimensional models can be realised as long as the seismic test points are sufficiently close together. 50 to 70 points per hectare are needed. An explosive charge is placed at each point at a depth of between 20 and 70m.

For the entire protected area, 15,000 boreholes would be required, with the inevitable damage to the plant cover. In addition, the criss-crossing of large areas where there are no paths would disturb the fauna.

The various parties questioned said they were extremely concerned about this prospection project prior to a possible exploitation of the resources in the subsoil. They urged the Council of Europe to put pressure on the authorities responsible to continue to refuse to grant the prospection licence.

One of the conditions for renewing the European Diploma to the protected area (25 June 1987) was "that all oil or gas working be prohibited within the nature reserve".

3.2 "Lüneburger Heide" project

The VNP association asked in 1989 for federal government credits in the framework of the programme to establish and maintain natural areas and landscapes regarded as worthy of protection and which are of federal representative importance.

The Lüneburg Heath project will cost DM 24 million and covers the period 1991-1998. This credit will be made available if Lower Saxony contributes 15% and the VNP association 10%. Most of this money will be used for buying farmland and woodland (DM 22 million). A development and management plan is also in the pipeline (Landschaftspflege und Entwicklungsplan) and should be completed in late 1993. This will be prepared by a specialised research unit, whose work will be closely followed by the Federal Institute for Nature Conservation and Landscape Ecology in Bonn and by a support committee comprising the various authorities and management bodies interested in the plan.

This programme is of capital importance for the coming period; it will involve the following :

- the extension and rationalisation of the limits of the protected area;
- the purchase of private land in the reserve so that it may be incorporated into the general management;
- the creation of a new overall management plan.

4. Site inspection

4.1 Sellhorn State forest

Roughly 60% of the protected area of Lüneburg Heath (200 km²) is covered by forest, i.e an area of nearly 120km². The majority of the forest areas belong to Lower Saxony (5000 ha) and Klosterforstamt (2500 ha); the rest belongs to the VNP association and a number of individuals.

Land abandoned by the practices of the old agro-pastoral system was reforested in the 19th century essentially with pines and spruce firs. The idea was to plant a first generation of frugal species to improve environmental conditions before planting broad-leaved trees.

Following the storms of 1962 and 1972, a plan to gradually transform the conifer populations was implemented in 1973.

The specific context of these forests situated in the protected area prompted the forest official, Dr H. Hanstein, to devise and gain acceptance for a new ecological management policy for the forests.

The general aim may be described as follows : the protection and natural and diversified development of the forest with special emphasis on spontaneous evolution, the history of the populations, environmental characteristics and the specific characteristics of the flora, fauna and living communities.

The detailed aims of this programme are :

- creation of three forest nature reserves (2 existing ones and one in progress) with a total area of approximately 200 ha;
- conservation of rare forest communities or communities of particular historical interest;
- conservation, management and even re-creation of non-forest biotopes (heaths, dunes, grasslands, wetlands, etc.);
- respect for old or dying trees and other populations;
- taking into consideration natural successions and secondary species of herbaceous and shrub layers;
- discontinuation of exotic species;
- no chemical substances;
- consideration of species and habitat conservation aims when taking forest management measures;
- management of internal forest fringes (within the forest) and external forest fringes (bordering the heath);
- use of local materials to lay and maintain paths;
- judicious management of large animal life;
- continued monitoring of the natural environment.

The visit to the state forest served to highlight these various aspects. It is extremely pleasing to note the ecological dimension of the reserve management, which is remarkable and may be regarded as a model.

4.2 Heath management

Heath management has evolved considerably in recent years. The recurrent problem of the birch tree has been resolved through a fresh management approach. Grazing pressure has been alleviated by reducing the number of flocks of sheep to 7 and the concentration to 1 sheep per hectare (plus lambs in the summer).

Natural seedlings are removed where they are undesirable, but are left in on the forest fringe so as to improve the ecological and landscape quality of the transition zone between the forest and the heath.

Peat-clearance operations (Plaggenhieb) have been carried out successfully; this consists of mechanically removing the water-permeated peat layer that has accumulated throughout the life of the heath. The resulting renewal of the ecosystem allows the heather to grow vigorously and enhances its capacity to resist spontaneous forestation and the spread of grasses.

This peat-clearance used to be very widely practised in heath areas. The return to an old tradition in heath management is therefore also of cultural value.

Since 1985, 40ha have undergone peat-clearance operations. After this experimental phase, an operational phase will be launched with the forthcoming opening of a compost centre in Soltau, which might find it advantageous to use organic matter collected from peat-clearance of the heaths.

4.3 Wetlands

The rehydration of the Pietzmoor and Bockhebermoor peat moors gave spectacular results although vegetation is showing signs of "shock" following the rapid rise in the water level.

The agricultural areas around Pietzmoor are systematically purchased so as to be able to control the water that is in contact with the peat moor and prevent eutrophication. Management of these peripheral areas has become extensive allowing the development of the wetland or peaty areas. Much more satisfactory ecological gradients (rich - poor; dry - wet - aquatic; intensive - extensive - out-of-bounds) have added a new dimension to nature conservation in the protected area.

Water courses, such as the Haverbeeke near Niederhaverbeck, have also been revitalised.

These measures affect both the water courses themselves and the agricultural areas concerned. These areas are purchased and used extensively, which results in a drop in the use of fertilisers and biocides. The natural dynamics of the water course are encouraged, leading to the appearance of meanders and wetlands.

4.4 Information, education and training

The protected area receives around 3 million visitors every year.

An important new factor is the recruitment one year ago by the VNP association of a new collaborator, an assistant to Dr. Juttner and more particularly responsible for various aspects of information.

A number of leaflets have been printed for the public. In addition, various additional walking routes have been proposed and are described at the different "entrances" to the protected area.

The three information centres continue to be very popular and greatly appreciated, as is the "Heath Museum".

It should be noted that the "Council of Europe - Diploma award" logo is nowhere to be seen, either in the information centres or at the "entrances" to the nature reserve as is stipulated in Article 6 of the new rules for the European Diploma.

The reserve's officials are well aware that more must be done to improve information. They would like to be able to use the services of a group of volunteers, a kind of "Heidewacht", during the summer season, so as to provide a greater presence in the reserve.

In our opinion, it is necessary to :

- open a new nature information centre at Wilsede, in the very heart of the protected area;
- increase the number of guided walks with commentary, which give the public extra insight into the protected area.

5. Conclusions

Since the last appraisal in 1985, the following positive developments and changes have been recorded in the situation of the Lüneburg Heath nature reserve :

- the VNP headquarters have moved from Hamburg to Niederhaverbeck, in the very heart of the protected area;
- the VNP has recruited a new collaborator in charge of information and drawing up the management plan for the military zones;
- the VNP has pursued its policy of buying up private land;
- the VNP has reinstated traditional crops as part of a programme of more extensive farming in the protected area through its landscape preservation farm (LandschaftpflegeHof);
- experiments in new heath regeneration techniques have been conducted through the humus-clearance operation;

- wetland (peat bogs and valley floors) rehabilitation measures have been stepped up;
- work has been carried out on the transition zone between forest and heath to improve the ecological and landscape quality;
- exceptional prospects have been opened up by the federal project for :
 - * the purchase of land, to be included in the management of the protected area;
 - * the development of a new management plan.

The protected area undeniably deserves to have its European Diploma in category B renewed. However, this renewal should, in our opinion, be accompanied by the following recommendations so as to help the reserve's officials in their work :

- 1) the "information and education" aspect should be emphasised;
- 2) the regeneration of natural forests, the ecological upgrading of the forest-heath boundary and the improvement of the connection system between biotopes (Biotopverbundsystem) should all be encouraged;
- 3) the federal project "Lüneburger Heide" should be completed as soon as possible, bearing in mind the great potential it opens up for the future of the protected area.

APPENDIX I

COUNCIL OF EUROPE COMMITTEE OF MINISTERS

RESOLUTION (87) 11

ON THE RENEWAL OF THE EUROPEAN DIPLOMA AWARDED TO THE LÜNEBURG HEATH NATURE RESERVE

*(Adopted by the Committee of Ministers on 25 June 1987
at the 409th meeting of the Ministers' Deputies)*

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;

Having regard to Resolution (67) 23 awarding the European Diploma to the Lüneburg Heath Nature Reserve;

Having regard to the proposals of the Steering Committee for the Conservation and Management of the Environment and Natural Habitats (CDPE),

Renews the European Diploma, category B, awarded to the Lüneburg Heath Nature Reserve, until 26 October 1992, subject to the following conditions and recommendations:

Conditions

1. that all oil or gas working be prohibited within the nature reserve;
2. that the effects of water pumping be strictly monitored;
3. that intensive farming be gradually replaced by extensive farming;

Recommendations

1. that the purchase of land by the Lüneburg authorities and the *Verein Naturschutzpark* be further encouraged;
2. that the regeneration of potential natural woodland be encouraged;
3. that the establishment of strict and/or scientific nature reserves be speeded up;
4. that negotiations be conducted with the British authorities for their withdrawal from certain ecologically interesting areas at present used for military purposes in exchange for land of no biological interest where they can continue their exercises.

APPENDIX II

Draft resolution (92)...

ON THE RENEWAL OF THE EUROPEAN DIPLOMA
AWARDED TO THE LÜNEBURG HEATH NATURE RESERVE
(Germany)

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

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

Having regard to Resolution (67) 23 awarding the European Diploma to the Lüneburg Heath Nature Reserve;

Having regard to the proposals of the Steering Committee for the Conservation and Management of the Environment and Natural Habitats (CDPE);

Renews the European Diploma, awarded to the Lüneburg Heath Nature Reserve, in category B, until ... 1997;

Attaches to the renewal the following condition : all oil or gas exploitation continues to be prohibited within the nature reserve;

Attaches to the renewal the following recommendations :

1. the drop in the water table should continue to be closely monitored and an attempt be made to establish a link between this and the extraction of ground water;
2. the utmost be done to complete successfully the federal project "Lüneburger Heide", bearing in mind its great importance for the future of the reserve - acquisition of private land within the reserve to incorporate it into river management drawing up of a new overall management plan;
3. the regeneration of natural forests, the ecological upgrading of the forest-heath boundary and the improvement of the connection system between biotopes should be pursued;
4. the necessary measures should be taken to step up "Information-Education" activities, in particular the opening of a new information centre inside the reserve and the organisation of guided walks;
5. the "Council of Europe - Diploma award" logo be displayed at the main "entrances" to the reserve.