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EUROPEAN COMMITTEE FOR THE CONSERVATION
OF NATURE AND NATURAL RESOURCES

Committee of experts - protected areas

BAYERISCHER WALD NATIONAL PARK
(Federal Republic of Germany)

APPLICATION FOR THE AWARD OF THE EUROPEAN DIPLOMA

Bayer.Staatsministerium für
Ernährung, Landwirtschaft und
Forsten
Durchwahl-Nr 21 82
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1. Type of Protected Area

An application is herewith forwarded for the award of the European Diploma to the National Park Bayerischer Wald.

According to Article 8 of the Bavarian Nature Conservation Law of 27.7.1973, national parks in Bavaria possess the following characteristics: They are landscapes which, because of their well balanced natural ecosystem functioning, their soil structure, their diversity or their beauty are of outstanding importance. Minimum area ca. 10,000 hectares.

They serve for the protection of natural and semi-natural biocoenoses with all native species of flora and fauna and for the research of these biocoenoses.
Furthermore, the national park has an educational function and recreational function, the latter as far as the interests of protection allow. The national park's most important aim is to protect natural and semi-natural biocoenoses. This aim is achieved by a minimum disturbance of natural processes, i.e. by avoiding where possible interference with nature's potential. Other measures in the national park must not detract from this principal aim.

The National Park Bayerischer Wald was established in 1970; it is thus still in its development phase. Nevertheless, already about 6400 hectares have been completely withdrawn from commercial use. And here neither trees nor livestock are exploited. An enlargement of these reserved zones is being planned (see attached plan: Prof. Ammer).

National parks, according to the Bavarian concept, are designed not only to preserve the character of a landscape but also its habitats for native flora and fauna. This can

be most effectively accomplished by refraining from all types of utilization and by the protection of natural developments. Seen in this light, the national park protects not only unspoiled natural phenomena and natural processes, landscapes of special aesthetic value, such as the magnificent mountain range of the Inner Bavarian Forest, but also important examples of geological, geomorphological, hydrographical and biogeographical natural phenomena.

According to the Bavarian nature protection law, research is also one of the functions of the National Park Bayerischer Wald. The aims of this research are geared to the general objective of the national park.

Research serves to:

- To get to know better the natural and semi-natural biocoenoses in the park and their processes as well as their flora and fauna.
- To improve the management of the park.
- The national park serves as a zero site for the research of changes outside the park.
- Research stations in the national park are part of the observation networks which monitor world-wide changes, for instance of climate or air pollution.

Research in the park must not in any way hamper the nature conservation aims.

In accordance with the IUCN recommendations of 1969 and with the Bavarian Nature Conservation Law, which largely follows these recommendations, the National Park Bayerischer Wald also serves to promote the education, edification and recreation of its visitors. The primary aim of this educational function is to convey an intensive experience of nature.

This leads to

- a better knowledge of the park,
- an understanding of the endangerments in general which nature is subjected to,
- and to appropriate changes of attitude which will also serve to protect nature outside the park.

Nor must this educational work, however, militate against the nature conservation function.

Finally, in accordance with international definition and the Bavarian Nature Conservation Law, recreation is part of the national park's objective. It is an important instrument for the political safeguarding of the actual protective function and does much to secure the existence of the park in its surroundings.

Only so called gentle, i.e. not violently active, forms of tourism, which have little influence on the ecology, are permitted in the National Park Bayerischer Wald. This also conforms with the wishes of the visitors. All recreational activities which require technical facilities are excluded.

Because of its special features and because of its objective, laid down in the Bavarian Nature Conservation Law of 27.7. 1973 and consonant with the IUCN recommendation of 1969, the National Park Bayerischer Wald is applying for the European Diploma, Category B.
On 5.7.1982 UNESCO declared the National Park Bayerischer Wald as the only Federal German biosphere reserve to date in Project MAB 8.

2. What is the Justification for Placing the National Park Bayerischer Wald unter Protection?

(Description of the region, importance of the park for the preservation of the beauty of the landscape and its cultural and recreational value)

2.1. Description of the Region

The National Park Bayerischer Wald is situated on the south-western slope of one of the biggest central European wooded mountain ranges. It is about 13,100 hectares in area and lies between 600 m and 1453 m above sea level. The climate of the region is cool and moist. The mean annual temperatures vary between 6° C on the slopes, 5° C in the valleys and 3° C on the high altitudes. Annual rainfall is between ca. 1100 litres/sqm in the valleys up to ca. 1800 litres/sqm on the plateau.
Characteristic of the climatic situation is a deep blanket of snow which lies until late in the year. On about 140 days in the year the snow lies over 50 cm thick.

The basic material for the soil formation in the east is mainly granite and in the west mainly gneiss. The soils can be divided into 3 groups.
Moist soils are typical for the valleys; they range from gley to low moor and high moor. On the slopes more or less thick loamy, mostly brown soils predominate. In the high altitudes the soil cover is relatively thinly spread over compact detritus. A third category of soil types covers the steep slopes and mountain peaks, namely bouldery and rocky soils.

99 % of the national park is afforested. This forest is zoned in typical fashion according to climate. Natural

spruce forests grow in the valleys (Soldanello-Piceetum). These coniferous forests in the valley are conditiond by the moist soils and the very low minimum temperatures in the cold air concentration. The slopes are afforested with very different types of mixed beech forest. Depending on the site, forest communities have developed ranging from rich ash-maple (Aceri-Fraxinetum) to fern-fir-beech (Luzulo-Fagion), very poor in species. The high altitudes are again covered with natural spruce forests (Soldanello-Piceetum), which have many features in common with nordic coniferous forests.

Particular biocoenoses to be mentioned are mountain streams, a glacial cirque and, above all, the high moors. These are divided into two types, richer in species in the valleys and poorer in species on the high altitudes. In the park itself there are smaller areas, but outside more extensive stretches of grassland used for grazing, in which there are very large numbers of now rare species of flora and fauna.

The description of the plant communities records a total of 61 vegetation units.

2.2. Special Features of the Flora and Fauna

The flora and fauna of the national park register the following special features:

- Nordic species
- Alpine species
- Eastern European species, which are found here on the estern edge of their dispersal area
- Special species of semi-natural mixed beech forest communities
- Special species from moors

- Species from sites extensively used for agriculture
- Species generally endangered

Below are named some of the endangered species of the individual groups or species that should be protected.

- Northern species:

Capercaillie (Tetrao urogallus), Pygmy Owl (Glaucidum passerinum), Tengmalm's Owl (Aegolius funerius), Three-toed Woodpecker (Picoides tridactylus), Bogbean (Menyanthes trifoliata), Mud Sledge (Carex paupercula), Chickweed Wintergreen (Trientalis europaea) Cranberry (Vaccinium microcarpus), Club-moss (Lycopodium clavatum), Rannoch Rush (Scheuchzeria palustris), Lesser Twayblade (Listera cordata)

- Alpine species:

Alpine shrew (Sorex alpinus), Savi's Pipistrelle (Pipistrellus savii), Ring ouzel (Turdus torquatus) (Alpine Accentor) (Laiscopus collaris) (does not breed) (Bonelli's Warbler) (Phylloscopus bonelli) (does not breed)

Scots Lovage (Ligusticum mutellina)
Alpine Dog Rose (Rosa pendulina), Purple Coltsfoot (Homogyne alpina), Alpine Sow-Thistle (Cicerbita alpina)

- East European species:

(Ural owl) (Strix uralensis) (does not breed) Red-breasted Flycatcher (Ficedula parva), White-backed Woodpecker (Dendrocopos leucotos), Fir Parrot (Loxia curvirostra), Nutcracker (Nucifraga caryocatactes)

(Lesser Spotted Eagle) (Aquila pomarina) (does not breed)
(Black Stork) (Ciconia nigra) (does not breed)
Alpine snowbell (Soldanella montana), Angular Solomon's Seal (Streptopus amplexifolius), Hungarian Gentian (Gentiana pannonica)

- Special species from original mixed wooded forests:

Garden Dormouse (Elyiomys quercinus), Dormouse (Muscardinus avellanarius), Hazel Hen (Tetrastes bonasia), Stock Dove (Columba oenas),
Yew (Taxus baccata), Martagon Lily (Lilium martagon), Perennial Honesty (Lunaria rediviva), Monkshood (Aconitum napellus), Wolfsbane (Aconitum vulparia), Mezereon (Daphne mezereum)

- Special moor species:

Teal (Anas crecca), Mealy Redpoll (Carduelis flammea)
Common Sundew (Drosera rotundifolia), Common Butterwort (Pinguicula vulgaris), Crowberry (Empetrum nigrum), Labrador Tea (Ledum palustre), Common Moor Club Moss (Lycododiella inundata), Mountain Pine (Pinus mugo)

- Species from sites used extensively for agriculture:

Black Grouse (Lyrurus tetrix), Red-backed Shrike (Lanius collurio), Wood Lark (Lullula arborea), Meadow Pipit (Anthus pratensis), Corncrake (Crex crex), Snipe (Gallinago gallinago)
Grass of Parnassus (Parnassia palustris)
Arnica (Arnica montana), Bastard Toadflax (Thesium pyrenaicum), Mountain Everlasting (Antennaria dioica), Fragrant Orchid (Gymnadenia conopsea),

Elder-Flowered Orchid (Dactylorchis symbucina),
Lesser Butterfly Orchid (Platanthera bifolia),
Round-Headed Rampion (Phyteuma nigra)

- Generally endangered species:

Otter (Lutra lutra), Lynx (Lynx lynx), (Kingfisher) (Alcedo attis) (does not breed) and others

2.3. The Scientific Value of the Park

The scientific value of the National Park Bayerischer Wald can be gauged by the objectives of the scientific research and by the type and scope of both current and completed works. Research in the National Park Bayerischer Wald has in principle four aims.

- The research of the natural and semi-natural biocoenoses with all native species of flora and fauna. Here not only the stocks and dispersal area of the individual fauna will be registered, but also the environmental conditions under which they live and the reciprocal relationships in the ecosystems.

The researches carried out up to date in this field have been concerned mainly with the environmental conditions and the stocks and dispersal area of threatened species. The research on systematic interrelationships is only in its initial stage.

- The second aim of research in the national park is to help solve the management functions, for example the control of tourists, the regulation of game stocks etc.
- The National Park Bayerischer Wald is part of a system of supraregional monitoring networks. Research facilities in the park help the general monitoring of the environment.

- Researches in the national park also enable comparisons to be made between used and unused sites and to describe the effects of utilization on the ecology of the landscape. In these researches, the national park functions as a sort of zero site.

To date about 150 research projects have been carried out in the National Park Bayerischer Wald, of these about 25 on the climate and the water economy, about 10 on the soils, about 30 on the vegetation, about 50 on the fauna and the rest on questions of planning, problems of visitors, historical questions and legal problems. This means that the National Park Bayerischer Wald is one of the best researched regions in central Europe.

2.4. The Importance of the National Park for Education and Recreation

In accordance with international recommendations and the Federal German and Bavarian Nature Conservation Law, national parks are open to visitors insofar as nature protection considerations permit. The importance of the National Park Bayerischer Wald as a place for education and recreation ranks very high. In the year 1970 the number of visitors was ca. 200,000, today the figure is 1 - 1.5 million. As Professor Kleinhenz tries to show in his attached report, the national park accounts on its periphery alone for a turnover of DM 22.9m or DM 26.4m per year at a conservative estimate. Of the total turnover from tourist traffic for the whole of the County (Landkreis) of Freyung-Grafenau amounting to DM 136.06m in 1979, DM 39.97m could be attributed to the influence of the national park. Hence the National Park Bayerischer Wald makes a substantial contribution to the structural promotion of the traditionally structurally weak

Inner Bavarian Forest region, where the average unemployment figure in winter is about 30 %. In this way tourism helps to safeguard politically the actual purpose of the park, i.e. nature conservation, and lends strength to the "park idea" in the surroundings.

The aim of the educational work is to instil a better understanding of nature by providing an intensive experience of nature. This will help the visitors

- to get to know more about the national park, its special features, its endangerment and the necessity for its protection;
- to appreciate better the threat to the forests and their need for protection;
- to learn to change their attitude, and thus contribute to the cause of a better nature conservation and environmental protection outside the park as well.

The high influx of visitors makes it possible to organize a comprehensive educational programme which explains to guests the objective of this reserve and the general problems of nature conservation and landscape protection.

As the enclosed folders show, there is an extensive programme of guided tours in summer and for certain holiday periods in winter. Guided tours are the best means of achieving the educational aims of the national park. Every year between 20,000 and 30,000 visitors are taken on guided tours by the National Park Administration. In addition there are numerous facilities for visitors to occupy themselves on their own, such as the forest playground in Spiegelau, an accessible site with flora and fauna, an accessible site with rocks near Neuschönau, the historical forest trail near Finsterau, the rock trail near Schönbrunn am Lusen and finally the National Park House near Neuschönau.

Intensive programmes for school classes are in the process of being planned.

Up to now the National Park Bayerischer Wald has suffered no serious damage in spite of the large numbers of visitors and the heavy educational programmes. Disturbances in nature have been avoided by skilful control of visitors, careful siting of facilities and the laying out of footpaths with the interest of threatened species of flora and fauna in mind. Disturbances are also avoided by facilities and by legal directives which restrict activities and subject them to systematic control (12 wardens). Added to this there are the restrictions placed on the Administration itself, and precautionary measures to prevent eutrophication (sanitary facilities and a systematic cleaning service).

The attractive facilities of the national park, such as the animal paddock and the National Park House, are sited on the periphery. About 60 % of all visitors concentrate there. Finally, technical equipment for recreational purposes is completely excluded from the park; this includes skilifts or motor sledges.

In the critical seasons, particularly in winter and spring, the more sensitive parts of the national park are closed to visitors. Mainly affected are the habitats of the Capercaillie, the spruce forests of the high altitudes, the winter stations of the Red Deer, the winter enclosure and its surroundings. Here directives lay down that visitors are confined at certain times to certain paths. The Administration has strictly avoided providing visitor facilities or organizing public functions of any sort during critical seasons or in critical sectors of the national park.

Answers to the enclosed questionnaires show that visitors to the national park have considerable understanding for this policy, and are largely in favour of the gentler forms of recreation which cause little disturbance of nature.

Skilful control of visitors, flanking legislative measures (see supplement) and the attitude of the visitors themselves have all contributed to the fact that the park now suffers only minor damage from indiscriminate trespassing or eutrophication and that the disturbance of game has been relatively slight.

2.5. The Cultural-historical Importance of the Park

In the National Park Bayerischer Wald there are a large number of valuable cultural monuments; these provide testimony of forestry activities in the past. Especially worthy of mention are the remains of timber transport systems, such as drift dams, redirected mountain streams, supply and drainage channels. Two dams have been restored to their original condition as cultural monuments for the public. The majority of the valuable cultural-historical objects are in the eastern section of the park. They have been connected up by paths in the area of the historical forest trail.

The cultural-historical features of the park also include some old glassworks sites. One glassworks dating from the 17th century is now being archaeologically processed. The Administration is now using smaller enclaves, the sites of former glassworks in the park, to preserve by special tending measures forms of extensively grazed grassland which have largely disappeared from the rest of the landscape. Important cultural monuments are preserved in the national park provided they do not seriously disturb semi-natural processes.

3. European Interests justify the Award of the European Diploma

3.1. Is the Object especially representative or an important Example of its Category in Europe?

Apart from the Swiss National Park, there is at the moment no other park in Europe where the IUCN recommendations of 1969 for central Europe have been so consistently implemented. The National Park Bayerischer Wald combines in a unique manner large scale protection of nature's potential with the attendant intensive research, a comprehensive educational programme and excellent facilities for tourism. About 50 % of the park, amounting to ca. 6400 hectares, has today been withdrawn from commercial use. Thus it is today the biggest non-commercialized forest reserve in central Europe. The reserved area is larger than the famous primary forest of Bialowieza.

3.2. What is its special cultural, aesthetic, scientific or recreational value?

The National Park Bayerischer Wald is the sole example of such a large mountainous region in which in the long term the exploitation of nature's potential is excluded and which is used for only gentle forms of tourism. Its importance for Europe results from very intensive and effective nature conservation measures combined with a high visitor potential, which in its turn means considerable economic benefit for its surroundings. Here, as nowhere else, the Administration has succeeded in keeping damage within very narrow limits by the skilful control of visitors, even when they arrive in large numbers.

The scientific value of the park is also of European importance. About 150 scientific projects have been carried out since its founding in 1970, and this makes the National Park Bayerischer Wald one of the best researched forest regions in central Europe. These scientic projects are supplemented by botanical, zoological and geological collections. Of European rank is an excellently equipped station for the investigation of the water economy in the catchment area of the mountain stream system of the Grosse Ohe.

Of European importance also are the visitors' facilities in the National Park Bayerischer Wald, such as the magnificent system of footpaths. the accessible site with flora and fauna and the National Park House. Nor will it be easy to find anywhere else in Europe the equal of this park's programmes for visitors, particularly the guided tours and lectures.

3.3. What are the special Features of the Flora, Fauna, Geology, Climate and the geographical Situation?

The ecosystems of the National Park Bayerischer Wald are typical of the mountain range of central Europe and of a part of the Carpathian arc. This park protects a characteristic, semi-natural sector of the central European mountain range. It is part of the largest, most compact and most naturalistic central European wooded mountain range that has survived.
A characteristic vegetation zoning with very naturalistic stand of mixed beach forest communities has developed very well on the climatically favorable slopes. Coniferous stands in the cold valleys and on the rugged highlands are very similar to nordic coniferous forests. Of European importance are the high moors in and around

the park because of their size, freedom from disturbance and the diversity of their plant communities.

Of central European significance is the closeness to nature and the primary forest character of exemplary stands of natural coniferous and mixed deciduous forest in surroundings where flora and fauna are seriously threatened. The special feature of this region is partly the penetration and the juxtaposition of threatened nordic, Alpine and eastern European species. These are joined by now rarer species from sites extensively used for agriculture.

The National Park Bayerischer Wald has only been to a very minor degree developed for tourism. It is this immaculacy that makes it the best preserved example of central Europe's magnificent mountain landscapes. All other comparable mountain ranges such as the Harz, the Black Forest, the Fichtelgebirge, the Vosges etc. have been far more heavily damaged by intensive development for a mass tourism which takes little account of the needs of nature conservation.

4. Description of the geographical Situation and Map with Boundaries. Scale 1/50,000

- see enclosure -

5. Photographs with typical Views of the Region and its Biocoenoses

- see enclosure -

6. Present Protection of the Region

6.1. The Establishment of the National Park

The national park was founded by a resolution of the Bavarian Parliament of 11 June, 1969. The National Park Office was set up by an ordinance of the Bavarian State Ministry of

Food, Agriculture and Forests of 22.7.1969 (renewed by an ordinance for the setting up of the National Park Administration of 15.3.1973). The Bavarian Nature Conservation Law in Article 8 of 27.7.1973, amended on 3.8.1982, lays down the definition of the term "national park" (see supplement).

6.2. Protection against Exploitations of Nature's Potential

Medium term planning in the year 1982 delineated the reserves. The boundaries are shown on the attached map. Commercial forestry was discontinued in these reserves. An internal national park instruction at the same time prohibited hunting in this region (see supplement).

6.3. Protection from Disturbances by Visitors

The protective regulations for reducing damage by visitors are based on a number of legal sources.

- Prohibition of access: Directive for the nature reserves "Rachel mit Rachelsee", "Föhrauer Filz", "Moorwald am Bahnhof Klingenbrunn" (see supplement).
  In these nature reserves access is only permitted on marked footpaths (see supplement).
- The same applies to the nature conservation directive for the nature reserve "Felsriegel am Grossen Schwarzbach".

The exploitation of stands, camping and pitching tents are forbidden in the nature reserve of Lusen with its high forest and in the nature reserve Grosser and Klosterfilz (see supplement).
There is a seasonal prohibition of access in the Capercaillie and Red Deer protected areas. These two protected areas were safeguarded by directives from the County Office of Freyung-

Grafenau of 5.1.1981 and 19.3.1982 (see supplement). The landscape protection directive of 27.11.1967 provides for the protection of the character of the landscape.

The throwing away of refuse is forbidden by the Refuse Disposal Law of 5.1.1977 (§ 18/1/1), and the use of motor sledges by the Federal Immission Law of 15.3.1974. The Federal Species Protection Ordinance and the Bavarian Nature Conservation Supplementary Law protect almost all species of flora and fauna in the national park. The Bavarian Nature Conservation Law sets very strict limits to organized functions such as mass hikes etc., and the Criminal Code (§329/3) penalizes severe cases of encroachment in national parks.

The Bavarian Forest Law forbids lighting fires in the forest, smoking and camping as well as the removal of trees, shrubs or parts of the same by third persons.

The Bavarian Hunting Law protects the breeding and moulting places in the national park from being disturbed by visitors, and also makes special provisions for hunting in the national park.

It is of particular importance that the whole of the national park is the property of the Free State of Bavaria. This means that the owner can make full use of the possibilities of protecting the region. For instance, no fishing is permitted in the whole area of the park.

7. Examples of important descriptive Material and Problems concerned with the National Park (supplements)

- Guide to the National Park Bayerischer Wald
- Plant communities of the national park
- Grouse (booklet)

- Woodpeckers
- Weather, Climate and soils
- Ice age forms and deposits
- Ecological value analysis
- Report (Kleinhenz)
- Recreational plan (Ammer)
- Development plan (Ammer)
- List of researches
- Document of recognized biosphere reserves
- Folders

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