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EUROPEAN COMMITTEE FOR THE CONSERVATION
OF NATURE AND NATURAL RESOURCES

"DE BOSCHPLAAT"

European Nature Reserve

(Netherlands)

ON-THE-SPOT APPRAISAL

by

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1. Introduction

The European Diploma, Category A, was first awarded to the "De Boschplaat" Reserve by the Committee of Ministers on 2 July 1970 and has been renewed twice, the last time after an on-the-spot inspection by Mr J Everett of the United Kingdom in August 1979 (SN-R-DP (80) 4). In accordance with the Diploma regulations (Resolution (73) 4), I was asked by the Secretariat to carry out the on-the-spot appraisal necessary for a further five-year renewal of the Diploma.

This visit took place on 14 and 15 September 1983, unfortunately without the representative of the relevant Council of Europe division, Mr Peter Baum, who was held up by a rail strike in Belgium and had to return to Strasbourg. I was accompanied by Mr C J de Lange, Head of the Forestry Office, Mr M van Nederueen, Nature Conservation and Management Officer, Mr H Horn, Regional Officer for the Terschelling District, Mr F Zwart, Assistant Regional Officer for the Terschelling District, Mr J P de Waard, Assistant Regional Officer for the Terschelling District, and Dr. A van Wijngaarden, Research Institute for Nature Management, Leersum.

On 14 September, after a preliminary talk on the reserve in the offices of the Forestry Department, we visited the "De Groede" area in the south-west on foot and discussed the problems of erosion at "De Grie", of birch reforestation by natural seeding and of pasture farming at "Groede". On 15 September we cycled and walked along the whole length of the reserve and looked at erosion problems due to visitors, dune formation in the north-east and the structures designed to halt erosion of "Amelanderduin". The guides also provided me with additional documents and maps (cf sources). This two-day visit gave an idea of the reserve's natural resources and present condition.

2. Brief description of the reserve and its natural resources

Detailed information will be found in the bibliography and in the annual reports. The purpose of this brief account is to elucidate the problems dealt with in the report.

Up to about 1900, the approximately 4,400 ha of Boschplaat formed a sandbank which was regularly flooded and separated from the island of Terschelling. A dyke was built in 1920 to protect the coast. Remains of it are still visible in places. A new structure 9 km long and 10 to 13 m high was built from 1931 to 1935. This started a process of natural deposition, enabling vegetation to take root. The characteristic features of the western part of the present-day Boschplaat are dunes rising to a height of 20 metres and partly wooded, undulating terrain (Berkenvallei) which are separated from the eastern part by the "EersteSlenk", a fairly deep, elongated hollow which is periodically flooded. Going eastwards, there are four more inlets separated by large dunes. To the north of the large dyke running WSE-ENE like a backbone, new dunes are forming. Some very interesting plant succession phenomena, virtually unparallelled in Europe, may be observed in the reserve. 124 vascular plant species were counted in the area as far back as 1946. Owing to its phyto-geographical location, the island lends itself to spontaneous colonisation.

Boschplaat is famous for its abundance of bird species. Here are some of the outstanding features: some 75 species nest there, including three species of harrier (Circus aeruginosus, C. cyaneus and C. pygargus); it is

Europe's northernmost spoonbill (Platalea laucorodia) colony; the most common species are the herring gull and the lesser black-backed gull (Larus argentatus and L. fuscus) with 21,500 and 13,000 nesting pairs, respectively.

Boschplaat is vital to migrating and wintering species. These include 20,000 oyster catchers (Haematopus ostralegus), up to 16,000 curlews (Numenius arquata) and scores of ducks. The island of Terschilling is particularly important to the Brent goose (Branta bernicla), some 20,000 of which, about 10% of the total world population, are found there from April to early May.

3. Legal status

The reserve is owned and administered by the State Forestry Department (Staatsbosbeheer). The first 2,800 ha designated as a protected area in 1924 were increased to 4,400 ha in 1934. Since 1974, this area has been governed by the Nature Conservation Act. In May 1981, this legislation was applied to other parts of the Dutch Wattenmeer, including those to the south of the reserve (see also navigation chart).

Two societies have permission to hunt rabbits in the reserve. One area is prohibited from 15 March to 15 August (Nature Conservation Act, Section 17). Neither the reserve's status as a protected area nor its size have changed since the 1979 appraisal. This means that the extension to the south requested by the Council of Europe (Resolution (82) 4) has not been put into effect.

4. Problems and dangers

Compared with other European reserves, Boschplaat is in a relatively favourable position owing to its remoteness from the parts of the island which are very popular with tourists. It is most unusual to find such areas in such a densely populated and highly developed part of Europe as the Netherlands.

Nevertheless, some problems and dangers do have to be mentioned.

4.1 Water pollution in the Wattenmeer

The shores of Terschelling on the Wattenmeer side are exposed to sea pollution, which is a major external factor. The Rhine discharges large quantities of pollutants into these shallow waters, including chlorinated hydrocarbons, which contaminate flora and fauna and probably explain the decline in the seal population. In the way of external dangers, we should also mention the tankers passing nearby in the North Sea (risk of accidents) and the risk of pollution from offshore oil wells.

4.2 Dangers due to visitors

All the islands bordering the Wattenmeer are very popular with tourists, especially in these times of recession when holidays abroad are a luxury. As Terschelling also has a highly developed tourist industry, the reserve is subject to pressure from visitors despite its remoteness. The number for 1982 is estimated at 134,000 of whom 117,500 came on bicycles, 10,500 in horse-drawn carriages and some 6,000 by boat from the neighbouring island of Ameland. Visitors who enter the reserve by walking along the shore at low tide are not included in these figures. The number of visitors has virtually doubled since the last on-the-spot appraisal.

As a result, the land area is permanently subject to the following disturbances:

- prohibited motor traffic (off-road vehicles, motocross), especially along the shores at low tide
- access to prohibited areas
- visitors with dogs not on a lead
- removal of plants
- collection of eggs.

The reserve is also increasingly subject to disturbances from the sea. Along the channel towards Ameland, one often sees 20 to 40 boats, whose occupants come ashore and disturb the large bird populations as they search for food. Surfing and the use of converted lobster fishing boats as pleasure boats are on the increase.

Disturbances from the air are increasing. 20 to 25 low-altitude flights are recorded every day. We saw some 120,000 birds wheeling around the area, frightened by low-flying aircraft. The development of microlight aircraft is alarming.

In this connection, we should note the solutions adopted in other countries (eg France, where overflying of nature reserves is prohibited).

The easternmost tip of the reserve is separated from the western end where contact with civilisation begins, by a distance of 16 km. The reserve is therefore fairly extensive. The disturbances caused by aircraft, pleasure boats and excursions from Ameland do admittedly offset to some extent the disadvantages resulting from the accessibility of some parts of the reserve. The external factors mentioned and the growing number of visitors make improved supervision a necessity, but this is made difficult by the restrictions on staff and funds.

Despite the problems it causes, the influx of visitors also has a positive side: it makes it possible to educate and inform all the more people about nature conservation matters. The Forestry Department plans to set up an information centre near the biological station.

4.3 Relations with the islanders

The preservation of Boschplaat's exceptional resources in a general environment which is constantly deteriorating requires very strict measures. Local residents must show understanding if such measures are to be enforced. They must therefore be provided with a steady stream of information and environmental education.

These are the sources of friction with local residents:

The Brent goose problem

Virtually the whole of the world's Brent goose population (Branta bernicla bernicla) spends the spring in the Dutch and German Wattenmeer. 10 to 15% of them choose the island of Terschelling and three-quarters of these the Boschplaat reserve. The remainder roam the polders causing damage.

These polders are included in a second land redistribution scheme which will lead to an intensification of farming by the 10 or so full-time farmers and hence to an exacerbation of the Brent goose problem. They are part of the 86,000 ha designated to the Netherlands as a "management area", in which farmers are entitled to compensation for damage resulting from nature and landscape conservation measures. But this compensation does not seem to solve all the problems.

The Brent geese are driven out of the polders, and even shot, although this species is protected in the Netherlands.

In addition to this, an attempt is being made to create feeding areas within the reserve by turning areas with a spontaneous herbaceous vegetation into grasslands. I personally am sceptical about this measure. The extent of the damage depends on weather conditions. It is greater in bad years because the vegetation starts earlier in the polders than on natural land.

Islanders' privileges

Further sources of friction with the islanders include erosion due to the passage of horse-drawn carriages, the closing off of some areas of special interest (dune formation areas), the hunting of rabbits with the destruction of their burrows and the attendant risk of erosion, the problem of the way in which plots of land bought by private individuals in the south-western zone are farmed (eg pesticides used in the growing of maize), competition with private individuals in the purchase of plots of land in the "de Grie" area.

In a spirit of goodwill towards the islanders, a tolerant view is taken of the damage caused, which is mostly on a small scale anyway.

Coastal protection structures and erosion

Without active artificial coastal protection measures, Boschplaat would not exist. The layman is surprised at the speed with which the ebb and flow of the tide can eat away at the land (eg from the ruts left by carriage wheels). This shows the instability of the balance between land and water.

A variety of protective measures are taken in the reserve. It is fascinating to see how nature moves sand dunes from one place to another. These dynamic phenomena, which are very interesting from the point of view of nature conservation, conflict with strict principles of coastal protection. Is it correct to think that a skilful nation, which has fought for centuries against the sea, is by conviction much more inclined to stabilise conditions than to observe their natural evolution? This would explain why they would rather take preventive measures than give nature a free rein.

For a foreign visitor passsing through, it is extremely difficult to say exactly where the happy medium lies. It would be desirable to co-ordinate sea-defence structures with nature conservation needs in such a way that they do not hinder the fullest possible achievement of the nature conservation goals pursued in the Boschplaat area.

Farming and upkeep of the area

In addition to the grassland areas used by Brent geese for feeding, about 10% of the reserve (400 ha) is occupied by 240 heifers. This means that there is about one head of young cattle per hectare. In the "de Groede" area, this

grazing land was recently extended to the south-east and north-east, and, for the first time, an area of 12 ha was used for grass-cutting experiments. It is anticipated that these operations will diversify the vegetation and enrich the bird population.

Boschplaat has been the scene of a variety of succession phenomena since the beginning of the century, but none of these suggests any miracle solution to the problem of determining the best possible objectives for a development plan. It is essential, therefore, that all the measures taken should be closely observed by scientific means in order to identify their advantages and drawbacks.

5. Conclusions

Resolution (81) 14 invited the Dutch authorities to take various measures to improve the reserve's effectiveness. Most of them have not been put into effect and appear once again in the list of recommendations below. Nevertheless, considering this reserve's unquestionable European importance, the great efforts made by the Forestry Department in the administration and upkeep of the area, the excellence of the information contained in the annual reports and the impressions gained during the on-the-spot appraisal, we propose, in accordance with Resolution (73) 4, that the Council of Europe Diploma, Category A, be renewed for five years subject to the following conditions and recommendations.

6. Recommendations

- The growing influx of visitors requires increased staff and improved staff mobility so that surveillance can be fuller and tailored to needs. The authorities should therefore be given the staff and funds they need in order to do their job properly.

- Overflying of the reserve should be prohibited, or the minimum flying height should at least be limited to 300 metres above sea level.

- The Brent goose problem, and in particular the consequences of the current attempts to contain the damage they cause in the polders by creating feeding areas for them in the reserve, should be studied scientifically.

- The phenomena of natural reforestation, dune formation and erosion, the grass-cutting experiments and the possible effects of any other operations should be studied scientifically.

- As has already been suggested, the "de Grie" area to the south-west of the reserve should be extended up to a clearly defined boundary. An extension as far as the navigation channel to the south would also be desirable.

- Coastal protection measures should be co-ordinated with nature conservation needs, and solutions taking full account of these needs should be found.

- Special attention should be paid to the provision of information for visitors. The setting up of an information centre would therefore be particularly desirable.