

Strasbourg, 29 November 2017
[de24e_2017.docx]

T-PVS/DE (2017) 24

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

37th meeting
Strasbourg, 5-8 December 2017

REPORT

**ON THE SPOT EXPERT APPRAISAL OF THE
NAARDERMEER NATURE RESERVE**

(NETHERLANDS)

6-7 September 2017

*Document prepared
by Mrs Ana Rainho (Portugal)*

Table of contents

| | |
|--|--------|
| Background | - 3 - |
| Introduction | - 3 - |
| Appraisal | - 4 - |
| 1. European interest | - 4 - |
| Biological heritage | - 4 - |
| Landscape interest | - 6 - |
| 2. Conservation measures | - 7 - |
| Legal protection status and zoning | - 7 - |
| State of conservation of the main species and their habitats | - 8 - |
| Land planning | - 8 - |
| 3. Management | - 10 - |
| Management plan for the area | - 10 - |
| Institutional arrangements | - 10 - |
| Financial management | - 10 - |
| Relationship between the body responsible for the area and the other stakeholders | - 10 - |
| Research and monitoring programmes | - 12 - |
| Natural resources management, including water resource | - 13 - |
| Use of renewable energy systems | - 13 - |
| 4. Uses and socio-economic activities | - 14 - |
| 5. Connectivity of the area | - 14 - |
| Ecological connectivity with other areas | - 14 - |
| Other forms of recognition awarded to the area or certification of protected areas | - 15 - |
| 6. Implementation of the conditions and recommendations | - 15 - |
| Condition | - 15 - |
| Recommendations | - 16 - |
| 7. Conclusions and remarks | - 16 - |
| Condition | - 16 - |
| Recommendations | - 17 - |
| Annex I | - 18 - |

BACKGROUND

The Naardermeer Nature Reserve (Naardermeer NR) was awarded the European Diploma of Protected Areas (EDPA) by the Committee of Ministers of the Council of Europe on 5 May 2004 (Resolution ResDip(2004)12) after an appraisal visit by Prof. Eckhart Kuijken in 2003. A set of seven recommendations were attached to the award. After a period of five years a new assessment was performed aiming at the renewal of the award. The EDPA was renewed to the Naardermeer NR on 21 October 2009 (Resolution CM/ResDip(2009)7) until 5 May 2019. A new set of one condition and four recommendations was then attached to the renewal.

The aim of this report is to summarise the results of the on-the-spot appraisal visit to the Naardermeer NR. During the visit any changes in the reference situation were evaluated and the respect for the conditions and recommendations attached to the renewal of the award in 2009 were monitored, all with a view to the renewal of its EDPA in 2019. The appraisal visit was performed between the 6th and the 7th September 2017 by Ana Rainho, as an independent expert. The Secretariat of the Council of Europe was not represented.

The visit followed roughly the original draft programme (see Annex I), with slight adjustments due to the weather conditions encountered at the site. This programme gave the expert the opportunity to meet the management team, experts and volunteers at the Naardermeer NR. Similarly it was also possible to informally meet and discuss diverse management issues with different stakeholders, namely the Regional Water Authority (WaterNet), the Noord-Holland Authorities, the FREE Nature manager of the grazing project, the miller of the Windmill de Onrust Naardermeer and the local reed harvester.

Many thanks are due to the Naardermeer NR management, especially to Mr. Luc Hoogenstein, for the warm welcoming and the excellent programme that facilitated the discussion and exchange of ideas between all participants during the 2-days visit.

The information made available by the management team, particularly the presentations made by Mr. Luc Hoogenstein, and by the Regional Water Authority (Waternet) were the base for the preparation of this document. Other information contained in this report was compiled from the annual reports, the first appraisal reports made by Prof. Eckhart Kuijken in 2004 and 2008 and the Natura 2000 Standard Data Form for the Site Naardermeer (NL3000061; available at www.natura2000.eea.europa.eu).

INTRODUCTION

The Naardermeer NR is an area of *ca.* 1200 ha of fens and lakes located in the centre of The Netherlands, near Amsterdam (Figure 1). Gazetted in 1905, due to the intervention of the founder of the conservation organisation Natuurmonumenten, this is the oldest nature reserve in The Netherlands, making it pivotal in the history of Nature Conservation in this country but also in Western Europe.

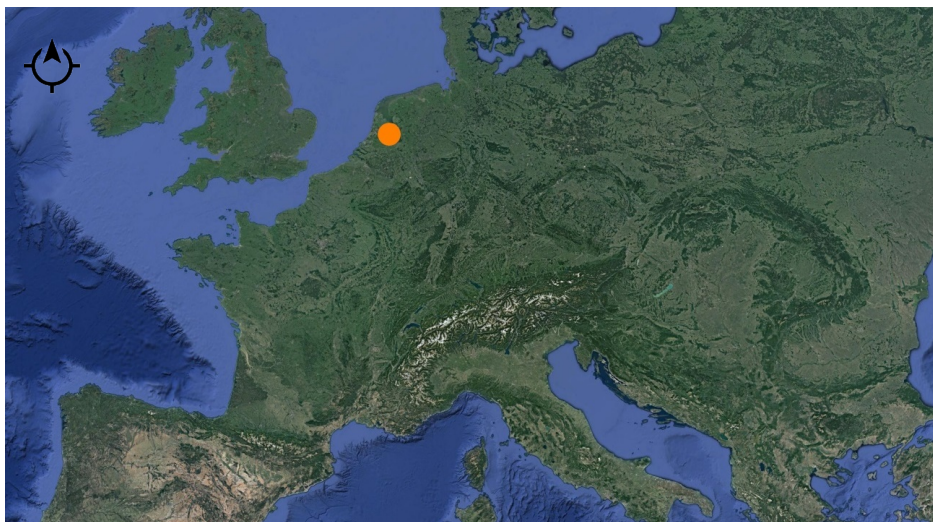


Figure 1. Location of the Naardermeer Nature Reserve (orange dot) at the centre of The Netherlands.

The Naardermeer NR application to the EDPA in 2003 included the following description of the area:

“Naardermeer is a marshland region of 1077 hectares in the centre of The Netherlands. The area consists out of lakes, reedbeds, brushes and forests. It is surrounded by a buffer zone area, agricultural land in a transition to a more natural phase. The region derives its greatest value from the fact that various rare breeding birds and migrating birds that can be found there as well as the rich variety of types of vegetation which are characteristic of a marshland area that is fed by seepage. Naardermeer forms part of the Vechtplassen region, which consists of various lakes and marshes for which it functions as a core zone. Motorways, railways and cities bound the nature reserve in the West, North and East. Cooperation with the authorities and other institutions is well developed to guarantee and to improve the quality of the area.”

The reserve is located in the Noord-Holland region, one of the most densely populated regions of the country. The Naardermeer NR is delimited in the NE by a highway (A1) and in the SW by a national road (N236), and it is crossed by a major railway line (Figure 2). Despite the relevant habitat fragmentation caused by these major transportation routes, the overall awareness and recognition of Naardermeer’s conservation importance allowed the preservation of its core area and the surrounding buffer zone. The recognition of Naardermeer’s importance was in fact fundamental to prevent (or delay) the plans for the A6-A9 motorway connection that required the construction of a new stretch of road in the open polder NW of the reserve. An alternative route was chosen through the existing A1 and A9 highways, albeit implying widening the existing A1, work which is currently ongoing.



Figure 2. Satellite imagery of the Naardermeer Natural Reserve (GoogleEarth™), showing the limits of the Reserve (light green), the major roads (yellow) namely the A1 at the NE and the N236 at the SW of the Naardermeer NR, and the railway (orange) crossing the Reserve. Lakes are labelled in blue text, localities in white.

APPRAISAL

1. EUROPEAN INTEREST

Biological heritage

i. Floristic interest

Some of the natural high value of the Naardermeer derives from the rich diversity of vegetation characteristic of marshland areas. Several habitats of European interest (Annex I of Habitats Directive) can be found in the Naardermeer NR, as is the case of the hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. (3140), natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation (3150), Northern Atlantic wet heaths with *Erica tetralix* (4010) and bog woodlands (91D0), a priority habitat under the Directive.

The diversity of habitats is the consequence of high plant richness present in the Naardermeer NR, this includes the Loesel's twayblade or Fen orchid (*Liparis loeselii*) a species that is globally classified as 'near threatened' by the UICN Red Book and is listed in the Habitat Directive Annex. Other species worth mentioning are the marsh marigold (*Caltha palustris*), several species of cotton grass (*Eriophorum angustifolium* and *E. vaginatum*) and the water soldier (*Stratiotes aloides*) that began expanding in the Reserve as a result of the implementation of the Restoration Plan.

ii. Faunistic interest

Numerous species benefit from the conditions found in the Naardermeer NR, particularly species that depend on marshlands. The Reserve hosts important breeding colonies of several bird species, some of which are protected under the Bern Convention. This is the case for the great cormorant (*Phalacrocorax carbo*), the purple heron (*Ardea purpurea*), the black tern (*Chlidonias niger*), the Savi's warbler (*Locustella luscinioides*) and the great reed warbler (*Acrocephalus arundinaceus*). Some migratory bird species are also worth mention, like the greater white-fronted goose (*Anser albifrons*) and the greylag goose (*Anser anser*) and the new arrival of species like the zitting cisticola (*Cisticola juncidis*) and the cattle egret (*Bubulcus ibis*), a rare breeder in the Netherlands.

Birds are the most visible part of Naardermeer NR's fauna, but many other species inhabit the reserve (Figure 3). Some invertebrate species listed by the Habitats Directive are present, like the Desmoulin's whorl snail (*Vertigo moulisiana*) and the lesser Ramshorn snail (*Anisus vorticulus*). Adding to the impressive list of species of dragonfly already referenced for the Naardermeer NR, namely the hairy dragonfly (*Brachytron pratense*), the green-eyed hawker (*Aeshna isosceles*), the downy emerald (*Crodeula aenea*), the scarce chaser (*Libellula fulva*) and the green hawker (*Aeshna viridis*), is the recent observation of the lesser emperor (*Anax parthenope*) in the area. Also listed in the Annexes of the Habitats Directive are two species of fish present in the Naardermeer NR, the European bitterling (*Rhodeus amarus*) and the spined loach (*Cobitis taenia*). The mammal fauna is not overly diverse, including several bat species and shrew species, but it was recently enlarged with the recent detection by camera-trapping of several pine marten (*Martes martes*) and at least one otter (*Lutra lutra*) in the area.



Figure 3 – Some animal species observed during the appraisal visit. Top left: Wasp spider (*Argiope bruennichi*), top right: Marsh frog (*Pelophylax cf. ridibundus*). Bottom left: Mallards (*Anas platyrhynchos*) and a hare (*Lepus europaeus*), bottom right: Osprey (*Pandion haliaetus*).

Landscape interest

The Naardermeer is one of the very few natural lakes of the Netherlands, located between the Gooi hills in the east and the river Vecht in the west. Located in one of the most populated regions of the Netherlands, the reserve is a small fragment of natural habitat within an agricultural and urbanized landscape.

After the first attempts of drying the Naardermeer during the 17-18th century and its purchasing by the Natuurmonumenten in 1905, the core area of the reserve with the lakes, marshes and bog forests has never been reclaimed (Figure 4). The surrounding polders were however drained and cultivated and the typical pattern of rectangular parcels is still visible (Figure 2).

Other artificial landscape elements with historic value identified in previous reports are still present in the buffer zone, namely duck decoys, the machine building and the windmill de Onrust. One of the duck decoys is currently being restored.



Figure 4 – The lake, channels, marshland and forested areas within the Naardermeer Reserve.

Conclusion: The Naardermeer NR is not a pristine area but there is no doubt of its importance for the conservation of biological diversity at a European level. It comprises breeding sites for species protected under the Bern Convention, it harbours several species protected under the Bird and Habitats Directives and it provides resting and feeding areas for several migratory birds. Surrounding the area of open water we find a mosaic of wet forests, reed banks and peatlands that include several of the habitats protected by the Habitats Directive.

2. CONSERVATION MEASURES

Legal protection status and zoning

The Naardermeer NR is included in the Dutch National Ecological Network as a Protected Site (PS_PROTECTEDSITE_32096418). The core of the protected area – including the Naardermeer and the original marshland area, is surrounded by a buffer zone of former agricultural lands. The core area and the major part of the buffer zone are owned by the ONG Natuurmonumenten that manages the area in coordination with the local and national responsible bodies. Buying the lands in the buffer area that are still not property of the Natuurmonumenten has been a priority of the management team. This effort has resulted in the recent acquisition of a large property in the NW of the Naardermeer NR – the Hilversumse Bovenmeent (De Jong grounds). The current land market rules may nevertheless hinder the acquisition of other private properties within the buffer zone.

State of conservation of the main species and their habitats

Some of the breeding bird species show significant population declines in the area. This is the case of the great cormorant that use the surrounding lakes, like the Ijsselmeer, for fishing. The water quality of this lake was greatly improved but the consequent reduction of nutrient load of the waters resulted in a decline of fish populations and consequently a decline of food availability and population size also of the cormorants. Despite the installation of artificial nests (Figure 5) the common terns also seem to favor other sites to breed, and no pair has been seen recently in the Reserve. An opposite trend is nevertheless displayed by the purple heron. The colony in the Naardermeer NR averaged 50-60 breeding pairs/year since the late 1970's, but this year's survey confirmed the presence of 101 breeding pairs. This increase should be the result of the active nest protection by fencing heron breeding sites to avoid geese foraging and consequent reed degradation (Figure 5). This action was integrated in the mitigation/compensation measures from the A1 works and a further increase in the number of breeding pairs of purple heron is expected in the near future.

The conservation of vegetation and habitats of the area is ensured by a strict water management implemented by the Regional Water Authority (Waternet). The water level in the Naardermeer NR is kept by the windmill de Onrust (Figure 6) between well defined limits (-0.9 to -1.1 m relative to the NAP¹ value) agreed by all entities involved in the management of the Reserve and defined in the current water level agreement.

The continuous monitoring of water quality of the lakes around the Naardermeer (Grote Meer Noord and Zuid, Bovenste Blik and Veertig Morgen, see Figure 2), confirmed the regular occurrence of algae blooms (with an alarming peak in June 2017) and a trend of increasing algal concentration in the lake Bovenste Blik. According to the Regional Water Authority (Waternet) the algae blooms in this lake are the result of eutrophication.



Figure 5 – Some of the direct conservation measures implemented in the Naardermeer NR to counteract some specie's declines: artificial nests for common terns (left), fencing of reeds depriving foraging geese access to the reedbeds (right) and this way improving nesting sites for purple herons.

Land planning

The recent changes in the location of the entrance and Naardermeer NR headquarters to the eastern side of the reserve has improved accessibility to visitors that may now reach the Reserve by public transport, reducing this way the perturbation due to the traffic around the reserve. It may also reduce trespassing. The new location of the quay also seems to have improved the boat tours and the zonation of the Reserve, allowing visitors to know the reserve by directing them to specific areas of the Reserve while keeping other areas undisturbed.

¹ NAP – Normaal Amsterdams Peil or Amsterdam Ordnance vertical Datum is the reference water level used in the Netherlands.



Figure 6 – Windmill de Onrust, a fundamental piece in the water management of the Naardermeer and a good example of the traditional use of wind for water pumping.

Within the buffer zone, the vegetation development is controlled by a large herd of Galloway cattle spread in 10 areas (Figure 7). Cattle are managed by the Free Nature Foundation for Restoring European Ecosystems. Other regular management lines are followed, namely cutting woodland and annual clearing of reeds by harvesting, aiming at improving the habitat for reed- and marsh- birds and also stimulating the development of reed and other peat vegetation.



Figure 7 – Galloway cattle used to control the vegetation within the buffer zone of the Naardermeer Reserve.

Conclusion: The legal regime for protection of the Naardermeer NR complies with the EDPA requirements. The recent acquisition of a large property location in the buffer zone of the Reserve is highly regarded but it is also worth mentioning that some other properties are still not owned by Natuurmonumenten and they may now be harder to acquire due to new market rules. This may hinder the management of the buffer area as a whole.

The recently acquired lands – the Hilversumse Bovenmeent (De Jong grounds) should have a development plan that ensures its appropriate management and integration within the NR buffer zone as soon as it is handed to the Natuurmonumenten in 2020.

Some bird population declines were recently observed within the Naardermeer NR but conservation and management actions are being implemented to counteract these trends when possible. Overall, the current management of the area seems to be well focused in preserving or increasing the biological value of the Reserve.

The lake Bovenste Blik should be the focus of specific research in order to identify and control or eliminate the sources of pollution causing the eutrophication of the lake.

3. MANAGEMENT

Management plan for the area

Natuurmonumenten is the responsible body for the management of the Naardermeer NR, working in close cooperation with the local and national responsible bodies. The management of the area follows the guidelines defined in the “Nature Management Plan Naardermeer 1995-2010” and the “13-year Recovery Plan Naardermeer” (1993).

The Natura 2000 Management Plan, prepared under the direction of the province of Noord-Holland, is currently undergoing a public consultation and is expected to be finalised by 2018.

Institutional arrangements

Natuurmonumenten underwent a process of reorganisation of its entire structure and the Naardermeer NR has a new management team since October 2016. Some of the previous staff and rangers remained however, preserving the memory and some fundamental knowledge of the area. According to the information provided, the Reserve staff includes 17 people covering different skills.

The management team also counts with a large team of volunteers, some of them already working in the Reserve for over 20 years. These volunteers are coordinated by the rangers of the Reserve and are responsible for several tasks, which include infrastructure maintenance, vegetation management and guiding the boat tours, among others.

The Naardermeer NR includes several infrastructures (Figure 8). Near the main entrance of the Reserve, the visitor can find a parking lot, the Reserve headquarters and the visitors’ center with catering services, a shop and some other basic facilities. In this area are also located the quay where the boat trips start, a boat shed, a picnic area and a space for children (Figures 9 and 10). Two other picnic areas can be found within the buffer zone of the Reserve. Two hiking or biking trails are signalled in the buffer area allowing the access to six viewing points for the observation of birds in open water. Some other infrastructures are accessible during the boat trips, namely the duck decoy (currently under recovery), and the hunter’s shed, used for educational activities for school children.

Financial management

The budget cuts reported annually since 2009 seemed to be somewhat relaxed with the Government change since the elections of 2012. The budget directed to the National Nature Network is now managed by the provinces, in what is considered by the Naardermeer NR management team as highly beneficial, as the Noord-Holland Province is closely involved in the management of the Reserve.

Relationship between the body responsible for the area and the other stakeholders

The management of the Naardermeer NR seems to closely involve most of the stakeholders met during the appraisal visit. The relationship between them seemed to be cordial at least at technical level. The joined effort made by Natuurmonumenten, the Regional Water Authority (Waternet) and the Noord-Holland Province to ensure the replacement of the old dephosphorisation installation is good evidence that the management body and the major stakeholders are available to work together on issues that concern the preservation of the Naardermeer NR.



Figure 8 – Map of the Naardermeer Nature Reserve with some of the facilities available to visitors (© Natuurmonumenten)



Figure 9 – Some of the infrastructures available to the Naardermeer NR visitors

Research and monitoring programmes

According to the information provided by the management team of the Naardermeer NR, several monitoring programmes are currently implemented in the Reserve. Water monitoring, including water quality and level is performed by Regional Water Authority (Waternet). A constant monitoring effort of birds is performed yearly in the western part of the Reserve with the Naardermeer NR area fully surveyed every 6 years. Butterflies are also regularly monitored and the vegetation of the reserve is mapped every 12 years (next mapping will be performed in 2018). A new *6-year Monitoring Plan* for the Reserve was prepared recently. According to the management team this seems to be adequate and very realistic.

The high diversity of dragonflies highlighted since the Naardermeer NR application to the EDPA, justified the inclusion of a monitoring plan for this group in the Reserve's Activity Plan for 2018. The Naardermeer NR management team is also joining efforts with the Noord-Holland Regional Authorities and the Research Group CaLutra to further research the occurrence and movement of otters in the Naardermeer NR. In total, ca. 30 camera-traps will be installed in and around the Naardermeer. The otter research fits well in the policy of the Noord-Holland Province to mitigate road impacts on crossing animal species. The results may support the creation of sustainable crossing facilities and thus increasing the ecological connectivity in the region.

Natural resources management, including water resource

The dephosphorisation installation, located near the windmill de Onrust is a system that removes the phosphates of the water entering the Reserve by the channels in the NW of the area. This installation was deemed too old to ensure the adequate water quality levels in the Naardermeer. After some years trying to find funds to ensure the needed renovation, this will now be possible due to the joined efforts and funding of the Regional Water Authority (Waternet), the Noord-Holland Province and the Natuurmonumenten. The entrance of water in the Naardermeer remains necessary in dry summers and the new installation will guarantee that this water will be oligotrophic.

Deciding the future water level in the Naardermeer was the aim of a recent meeting that involved authorities, stakeholders and experts in the area. One of the outcomes of this meeting was the decision to raise the upper limit of the water level by 10 cm. According to the information provided by the Regional Water Authority (Waternet), this change will soon be reflected in a new water level agreement.

Use of renewable energy systems

Solar power is the main energy source in the silent electrical boats used in the visits to the Reserve. Some of the wheels controlling the water level between different dykes are also powered with solar panels (Figure 10). It is also worth highlighting the use of wind energy in controlling the Reserve's water level. This task is performed by the windmill de Onrust which, contrary to some others in the region, is kept in perfect working conditions (Figure 6).



Figure 10 – The use of solar power in the Naardermeer Nature Reserve.

Conclusion: The recent changes in the management team of the Naardermeer NR do not seem to be a source of concern as some of the team members are very well acquainted with the area and should thus be able to ensure a smooth transition. Furthermore, the Naardermeer NR seems to be well equipped both in terms of personnel and equipment.

The current management seems to be adequate and able to cope with the major conservation issues, but it is important to notice that the two documents that are the base of the management, the “Nature Management Plan Naardermeer 1995-2010” and the “13-year Recovery Plan Naardermeer” (1993), are already out of date and should thus be replaced as soon as possible. The Natura 2000 Management Plan for the Naardermeer may be part of the solution for this issue.

4. USES AND SOCIO-ECONOMIC ACTIVITIES

As mentioned before, the Naardermeer NR is a small protected area delimited by roads and densely populated areas and crossed by a railway. Furthermore, its buffer zone is surrounded by grazed areas. According to the information provided, the context in which the Reserve is inserted has however not worsened in the last decade and in some aspects (e.g. water quality) it has improved.

Within the Naardermeer NR we can find a few socio-economic activities, but according to the information collected, most seem to be managed in harmony with the preservation of the natural values present in the area.

- Tourism / leisure activities – the recent changes in the headquarters and entrance of the reserve ensured the reduction of the perturbation caused by the visitors. All the hiking trails and viewpoints are well signed. All boats used in the tours are electric and very silent. Not all areas are accessible to visitors.
- Awareness raising / information / education resources and activities – seem to be adequate to the area and should result only in positive impacts.
- Car traffic and public access – to reduce the noise and visual impact caused by some of the roads that border the Reserve a tree curtain was installed along some stretches on the edge of the Reserve
- Hunting / fishing – no fishing is allowed within the Reserve, but some small scale illegal fishing was detected.
- Reed harvesting – the reed is harvested annually in sections of the Reserve. The harvest is performed in coordination with the Reserve and it is included in the management guidelines for the area as it is prone to increase the quality of the reed (if done properly), adding conservation importance to its economic revenue.
- Grazing - the vegetation development in the buffer zone is controlled by a large herd of Galloway cattle managed by the Nature Free Foundation for Restoring European Ecosystems.

Conclusion: The uses and socio-economic activities within the Naardermeer NR seemed not to be potentially or effectively damaging the physical, natural, biological integrity as well as the cultural values of the protected area. It is nevertheless important to ensure that the management of the areas in the buffer area that are still not property of the Natuurmonumenten will be coherent with the management guidelines implemented in the Reserve.

Some attention should be maintained concerning the pressures resulting from the highly humanised areas that bound the Reserve.

5. CONNECTIVITY OF THE AREA

Ecological connectivity with other areas

The lack of ecological connectivity in the area is quite clear and it is thus a major issue in the Naardermeer NR. Despite the success in preventing the A6-A9 motorway connection that required the construction of a new stretch of road NW of the reserve, the A1 (currently being widened) creates a barrier to the east, preventing any connection with the larger lakes of this region (IJsselmeer and Gooimeer). Similarly, the N236 road isolates the Naardermeer NR from the Vecht River and the

Ankeveenseplassen, also a Natura 2000 site. The railway line that crosses the protected area is further increasing the fragmentation of the Reserve.

Some efforts were made to mitigate the ecological isolation of the area. Two wildlife passages were already established under the N236 road (Figure 11) and another passage is being implemented under the viaducts in the A1 highway near the junction with the A6. Additionally, and as mentioned in previous annual reports, “*several corridors are under preparation to take away the barrier formed by the railway*”. These are due to be completed by August 2019.



Figure 11 – Ecological wildlife passages under the N236 road that delimits the Naardermeer Nature Reserve on the southwest.

Other forms of recognition awarded to the area or certification of protected areas.

The Naardermeer NR maintains all forms of recognition and certification listed in previous reports. At the international level, and besides the European Diploma, it was designated as wetland of international importance under the Ramsar Convention and integrates the European Natura 2000 network under the Birds and Habitats Directives.

Conclusion: The poor ecological connectivity is one of the main issues in the Reserve and although recognising the merit of the successful installation of several wildlife passages, further efforts are necessary to reduce the barrier effect created by the transportation routes that bound and cross the Naardermeer NR.

6. IMPLEMENTATION OF THE CONDITIONS AND RECOMMENDATIONS

Condition:

- i. *The authorities concerned are urged to respect the integrity of the open polder area surrounding the Naardermeer and to abandon all projects related to the motorway connection (A6-A9) which would have negative effects on the diploma area*

As mentioned before, the plans for the construction of the highway connection (A6-A9) crossing the west edge of the Naardermeer NR seemed to be cancelled. Attention should be nevertheless paid to any eventual revival of these plans.

Recommendations:

- ii. The efforts to improve the hydrological conditions of the reserve must be continued by focusing on reducing the pumping out of drinking water in the Gooi hills and completing municipal sewerage plans in order to increase the quality of infiltrated water;*

According to the information provided, the pumping out of drinking water is at a sustainable level and is not affecting the water level of the Reserve.

- iii. The decreasing area and quality of reedbeds (phragmites and other pioneer vegetation) should be subject to specific research and increased management efforts;*

Research on a more flexible water level was developed by the Regional Water Authority (Waternet). Additionally, an expert meeting took place to discuss the subject. One of the outcomes of this meeting was the decision to raise the upper limit of the water level by 10 cm. According to the information provided by the Regional Water Authority (Waternet), this change will soon be reflected in a new water level agreement.

- iv. Nature restoration and development around the Naardermeer core area is to be fully completed; to that end missing lands (notably in polders south of the lake) should be made available to Natuurmonumenten, mainly in view of the long-term maintenance of optimal water level management and the restoration of biodiversity. The province and the Dutch Government Service for Land and Water Use are urged to make greater efforts to finalise the Naardermeer recovery plan (1993);*

Although it was not yet possible for Natuurmonumenten to acquire all the missing lands and hence complete the Naardermeer Recovery Plan, it was possible to buy a large property in the NW of the Naardermeer NR - the De Jong grounds. Further acquisition of lands may nevertheless be hindered by the current land market rules.

- v. Regional planning processes should avoid further habitat fragmentation in the corridor landscapes towards the IJmeer, the IJsselmeer, the Vecht River, the Ankeveense Plassen and the Gooi hills. The realisation of the Dutch ecological main structure, its "wet axis" and "robust connections" with the Naardermeer as a core area must be given high priority.*

The landscape concept of a wet axis crossing The Netherlands was somehow revoked by a past government, but the management team of the Naardermeer NR hopes that soon it will be returned even if under a different name and probably somewhat trimmed. Some important measures were nevertheless implemented aiming at reducing the barrier effect caused by the major roads that delimit the Reserve (see Section 5).

Conclusion: The condition and all the recommendations from the last Resolution (Resolution CM/ResDip(2009)7) adopted by the Committee of Ministers on 21 October 2009 have been taken into account and mostly resolved by the Management body and by other stakeholders.

7. CONCLUSIONS AND REMARKS

Taking into consideration all that was observed and discussed during the appraisal visit, it is recommended that the renewal of the European Diploma of Protected Areas to the Naardermeer Nature Reserve is granted until 5 May 2029, under the following condition and recommendations:

Condition:

1. The integrity of the Naardermeer NR should be preserved and further habitat fragmentation within the Reserve and in the surrounding landscape should be avoided through regional planning processes. Additionally, further efforts should be made to increase the ecological connectivity, both within the Reserve and between the Naardermeer NR and the surrounding natural areas.

Recommendations:

2. The Natura 2000 Management Plan and the Water Level Agreement and Management Plan should be finished by 2020. If necessary, additional management lines should be planned and implemented to ensure the long-term conservation of the Naardermeer NR within the context and requirements of the European Diploma.
3. By 2020, have a development plan for the recently acquired lands within the buffer zone of the Naardermeer NR - the Hilversumse Bovenmeent (De Jong grounds) – in order to ensure the full integration of this area into the Reserve buffer zone by 2024.
4. Furthermore, before 2029 ensure the necessary funding to acquire the remaining areas within the buffer area that are still not property of the Natuurmonumenten. Alternatively, if the current administrative procedures will not allow the necessary land acquisition, ensure that the management of these areas will be directed by the responsible authorities.
5. Further research should be integrated with the continued monitoring of the lake Bovenste Blik aiming to identify the main reasons for the decreasing water quality in this lake. Appropriate management measures should be defined and implemented to prevent further water contamination, improving and keeping the water quality in this lake at the same levels currently observed in the remaining lakes of the Naardermeer NR.
6. Initiate studies focusing on the biological control of invasive alien plant species occurring in the Reserve and prepare a strategic plan for their mechanical or manual control.

Ana Rainho, 03 November 2017, revised on 27 November 2017 taking into account all feedback from the consultation of the EDPA Secretariat and the Management Body of the Naardermeer Nature Reserve.

Annex I**DRAFT PROGRAMME EUROPEAN DIPLOMA REVISITED**

The following stakeholders are invited:

- Water Board “Waternet”
- Local authorities
- Regional authorities
- Natuurmonumenten Beheereenheid Gooi en Vechtstreek (Naardermeer)
- Natuurmonumenten Head office
- Free Nature (grazing project)
- Reed harvester
- Miller Wind Mill “De Onrust”
- Several types of volunteers

Tuesday 5 September

Mr. Luc Hoogenstein (Natuurmonumenten) will pick up Ms. Rainho at the airport Schiphol Amsterdam) and arrange transport to the hotel and the Natuurmonumenten office.

Wednesday 6 september

9:00 Ms. Rainho transportation to Stadzigt by Luc Hoogenstein

9:30 Presentations Naardermeer

The morning will start with a word of welcome towards Ms. Rainho and two short introductions towards the Naardermeer. The first introduction will focus on the overall changes since the nomination of the Naardermeer in 2004. The second introduction will be a short introduction towards the complex yet interesting geology and hydrology of the Naardermeer and surroundings, since they are both of major importance regarding flora and fauna.

- Word of welcome by Francine Hijmans van den Bergh
- 2004 – 2017: Changes in the Naardermeer since the European Diploma by Luc Hoogenstein
- About the geology and hydrology of the Naardermeer by Baukje Sytsma

10:30 Short walk to the Muggenbult.

This walk (2 kilometer) starts at Stadzigt and passes several habitat types for which the Naardermeer has been nominated as Natura 2000-site. Ecologist and hydrologist Baukje Sytsma knows this area by heart and will accompany us for this walk.

12:00 Meeting staff Natuurmonumenten and adjusting lunch at Stadzigt

Ms. Rainho will meet the staff from Natuurmonumenten at Stadzigt, the Natuurmonumenten office at the Naardermeer. This will a.o. include Ms. Francine Hijmans van den Bergh (Overall manager Naardermeer), Ms. Baukje Sytsma (Ecologist Head Office), Mr. Kelly Meulenkamp (Coordinator nature management Naardermeer), Ms. Hanne Tersmette (Communications officer) and Luc Hoogenstein (Ecologist Naardermeer)

13:30 Presentation Wildlife Naardermeer

This presentation will be about the flora and fauna of the Naardermeer. Focus will be on the species and habitat types for which the Naardermeer has been nominated as Natura 2000-site. For instance insight will be given to the population dynamics of the Purple Heron colony in the Naardermeer and the rest of the Netherlands. We also celebrate the return of the River Otter in 2017 after an absence for exactly 50 years.

14:30 Tour du Naardermeer: bicycling

After the presentations we will go and explore a large part of the Naardermeer in a typical Dutch way, by bicycle. We'll cover the 14 kilometers easily within 3 hours and have plenty of time to stop along the way to visit important sites. Amongst others we'll focus on large-scale nature restoration projects, the flora and fauna of the Naardermeer, recreation and nature management. During this bicycle ride we will meet or be accompanied by several stakeholders, like the miller of windmill "De Onrust" and Free Nature (cattle grazing).

The following topics will be part of the bicycle ride:

- Nature restoration Keverdijkse Polder/Begrazing
- Eco-passage under Highway A1
- Dephosphorisation installation
- Windmill "De Onrust"
- Nature restoration Hilversumse Bovenmeent, including a short walk to the viewing platform looking out over the Naardermeer and a talk about the eco-passage between the Naardermeer and Ankeveense Plassen.
- If time permits: a visit to the quaking bog

18:00 Diner at Stadzigt and transportation to the hotel

Thursday 7 september

9:00 Field excursion on the Naardermeer by boat

Saving the best for last: a boat trip on the Naardermeer! During a 4 hour boat driven by one of our volunteers we will visit several important sites. We will be accompanied by representatives from the Water Board (Waternet), and local and regional authorities. Also the reed harvester will be on board. Together with the Water Board we will discuss the impact of the improvement in water quality towards nature values.

We will visit at least the following sites:

- Purple Herons and the possibility of the return of the Great Reed-warbler
- Educational site "Eendenkooi"
- Great Cormorant Colony
- Mitigation railroad
- LIFE-project

13:00 Return at Stadzigt. Goodbyes and transport Ms Rainho to the airport by Luc Hoogenstein