

Strasbourg, 25 January 2017  
[de06e\_2017.docx]

**T-PVS/DE (2017) 6**

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE  
AND NATURAL HABITATS

**Standing Committee**

37<sup>th</sup> meeting  
Strasbourg, 5-8 December 2017

---

**REPORT**

**ON THE SPOT EXPERT APPRAISAL OF THE  
STORE MOSSE NATIONAL PARK (SWEDEN)**

22-24 August 2016

*Document prepared  
by Mr Pierre Galland (Switzerland)*

## 1. INTRODUCTION

The European Diploma was awarded to the Store Mosse National Park in June 1988 and has been regularly renewed. The last visit took place in 2002; the diploma was then renewed in 2008 until June 2018 without on the spot appraisal.

In view of the renewal in 2018, a mission was organized by the secretariat. It took place from August 22nd - 24th 2016. The itinerary and the timing were very well planned and the visit perfectly organised. Our warm thanks are due to those whose helpfulness and hospitality contributed to making it both successful and pleasant, in particular Mrs. Eva Wallander, Head of nature management unit at Jönköping County Administrative Board and Mr. Patrik Wandin National Park management coordinator.

A representative from Swedish EPA Mrs Gisela Norberg, as well as the rangers and communication officer Arne Andersson, Karl Jorlén, Johan Rova and Carina Härlin contributed significantly to the success of the mission. Unfortunately we could not meet representatives from NGOs which contribute very actively to the Park management.

We toured some peatland and surrounding areas, saw the "new" Naturum (visitor center), walked on some trails. We particularly discussed the restoration measures in the former peat extraction areas and the efforts to bring sufficient waters to the open areas in order to offer suitable habitats to the birds.

We would like to warmly thank all those who made the visit very pleasant and also offered very professional contributions to the discussion and management issues.

The schedule of the mission with the name of contributing persons is attached to the report.

## 2. SITUATION AND VALUE OF THE PARK

Situated in the southern central part of Sweden, approximately 60 km south of Jönköping, Store Mosse National Park covers 7 680 ha, on the territory of the municipalities of Gnosjö, Vaggeryd and Värnamo. It is made up of a patchwork of extensive peatland, large areas of low-lying marshland, lakes and pine forests. The presence of moraine islands and elongated sand dunes means that the countryside and vegetation are varied. The global situation has not changed since the last visit in 2003; a very small modification of the Park's area is due to new measurements with modern methods. There is no formal buffer zones, but there are several nature reserves around; a large one was established in early 2016. However since they are partially on private ground, they cannot be incorporated to the National Park.

Vegetation is typically that of acid peat and sandy areas, with the exception of the Björnakullen region, where water supplies with more nutrient and calcium content encourage a different type of vegetation with several rare species.

The Kalvasjön and Kävsjön Lakes are permanent, while Häradsösjön and Horssjön Lakes are temporary. The level of Lake Kävsjön was greatly lowered by artificial means in the 19th century in order to reclaim swath and pastureland, a change which made the site more attractive for waterfowl.

The Park includes the most important peatland complex in southern Sweden. The site has other assets besides its vegetation, being of great interest for fauna, especially birds. It is home to a remarkable combination of northern and southern species. At least 100 species reproduce in the Park, including the crane (*Grus grus*), the wild swan (*Cygnus cygnus*) and the jack-snipe (*Lymnocyptes minimus*). It is also a stopping-place for migratory birds, attracting large numbers. Store Mosse National Park is on the Swedish list of internationally important wetlands and also figures on the list of sites covered by the Ramsar Convention.

The National Park area is very well preserved, but it must be noted that large areas are still influenced by the modification of the water regime and the large scale peat extraction which took place before the establishment of the National Park. The Park is also crossed in the middle by a highway and a railway track which limit the possibilities for bringing back the water level to its original state.

Further evidence of human presence includes a series of old farms surrounded by pastureland which is still partly in use, where it is not being wooded. Mowing and grazing in the marshland areas,

abandoned at the end of the century, have now been resumed over a limited area.

### **3. MANAGEMENT**

The Management Plan adopted in 2002 was completely renewed in 2015; it has an expected validity of 20 - 25 years. It was prepared by the national Park coordinator at the Jönköping County Administrative Board in cooperation with the management staff and adopted by the Swedish environmental protection agency. The lack of a comprehensive monitoring scheme allowing to control the overall management and to adjust the interventions as appropriate appears to be one gap to be filled.

The management responsibility lies with the Jönköping County but the overall responsible body is the EPA, which provides most of the financing. The entire Park is State property, this being a legal obligation for Swedish National Parks. The Park is also a Natura 2000 site, which allows to have access to European Life projects. The nature protection is highly considered by the current Swedish government and the budgets have been increased for the last few years. Sweden is in the process of expanding its network of National Parks. However the Park is still dependent upon voluntary work done by the Friends of the National Park for some of the maintenance work.

A Management Board brings twice a year all interested parties together. It is made up of representatives of the Park, the Jönköping County, the three municipalities concerned plus one adjacent, the Farmers' Union, the Society for Heritage Conservation, the Friends of Store Mosse, the Association for the Promotion of Outdoor Life, the Swedish Society for the Protection of Nature and the Society of Ornithologists. The relationships with the municipalities are very good.

The very good cooperation among the different level of authorities and between the different partners active in the management must be underlined; the nature and landscape of the Park are very well conserved despite the limited human resources available.

#### **3.1. General objectives**

Generally speaking, the Park should be left to evolve naturally while allowing visitor access in those areas where their presence is compatible with the conservation objectives. These principles correspond perfectly with the requirements of the European Diploma. However, due to previous significant impact of human activities, active restoration measures have to be undertaken in order to get back as close as possible to the original condition which allowed the harmonious distribution of peat bogs, marshland and open water areas. The existence of an updated management plan allows an easier and better communication regarding the heavy interventions done in the Park.

#### **3.2. Peatland and marsh**

Most areas are left to develop naturally without any interference. An important exception is the area with the two lowered lakes, formerly used for grazing. Following hydrological studies, it has been decided in the Management plan to reopen some of the old drainage channels in order to bring back more water into the lakes and make the water fluctuations more alike those in the 19<sup>th</sup> century. Some efforts are also done in order to maintain open marsh areas and prevent tree invasion.

Another area adjacent to the railway track (SW), has been used until the 60's for industrial peat production. An important Life restoration project has been implemented, which is part of a multi country mire restoration project. Many ditches have been filled, while trees which have grown on the intact peat stretches between the extraction pits have been cut. Ideally the water level should have been raised in order to flood the whole extraction area; however safety requirements for the railway track have obliged to limit the level of the water level and then have obliged to remove the upper layer of peat and vegetation on the former ridges maintained intact for the peat transport.

#### **3.3. Forests**

The principle of avoiding any action is in line with the objectives for the Park. The exceptions (retaining certain meadows, maintenance of edges of roads and canals) are perfectly justified. Another exception, also justified, is the intensive management of the trees around old farms. Wooded areas have been cleared and thinned to provide more light to pastures. Several species of trees are pollarded according to former practices so as to reconstruct the former landscape.

There were some outbreak of bark beetle following two big storms in 2005 and 2007. Nowadays

the BB population is back to normal.

The forest has never burned in large scale in modern days, but the risk exists. A small fire broke out along the railway in 2006. Very occasional fire in the pine forests would not necessarily be negative, being part of the natural dynamic of this type vegetation. However the current policy is to intervene in case of serious fire towards its extinction, mainly due to safety reasons. The management plan allows also prescribed burning in the forest if it is safely possible.

### **3.4. Farming land**

The land concerned includes the formerly abandoned fields and grazing land at Svänö and Lövö, lake edges and the Björnakullen meadows. Following clearing and regular mowing in the latter area, remarkable populations of orchids have reappeared. One difficulty is to have enough cattle to obtain a sufficient grazing pressure in order to maintain the pastures in good condition.

### **3.5. Wetland areas and hydrology**

The general hydrology studies have been completed following previous recommendations, and results have been used for the drafting of the management plan. The level of the lakes was lowered in 1850, in order to foster farming in the surrounding areas. Since 1960, no maintenance work has been done on channels, dams and ditches, creating problems with farmers and also a decrease in the overall birdlife.

In the new management plan, intensive management of the draining channels is planned. The practical work will start in 2017.

### **3.6. Fauna management**

No particular management measures are planned apart from restoration, grazing and grass cutting on the shore of lake Kävsjön to provide suitable open wetland habitat for birds, especially waders. "Clean" and easy accessible food is provided for golden eagles to reduce their consumption of pesticides and also to increase the survival during the first winter. There is very little fishing in the lakes (only permitted for certain former land owners and during winter until 2021) and hunting is forbidden in the Park.

### **3.7. Public access and visitors information**

The Park is very well equipped. There are several excellent observation towers and a remarkable network of paths and planked trails in the peat bogs, now extending over nearly 50 km. The network is well maintained, namely with the assistance of the Friends of the Park. The marking is very good, and an integrated marking and information system is currently being developed for the National Parks at National level.

More recent additions are worth mentioning : an impressive trail for handicapped people and cultural trails in former farmland. The "Naturum" (nature information center), not far from the existing main tower and with an excellent view on the mires, is functioning and very well equipped. It is estimated that 90 - 100'000 persons visit the Park annually, while ca. 45'000 visit the Naturum. There is a full time director of the Naturum and a full time guide.

The buildings within the Park boundaries - which are of some architectural and historical interest – continue to be well restored and fitted out. They are used to accommodate overnight visitors or rented for short stays; there are about one thousand overnight stays annually.

### **3.8. Park staff and voluntary work**

Park surveillance is limited by the human resources available. While the Park is still managed by a very small staff, the situation has significantly improved since the last visit. There is a little bit over 4 full time equivalent positions (several people work on a part time basis). Fortunately, visitors to the Park are well-behaved and there is no problem worth mentioning.

While budgets have been increased recently, the Park still relies on a considerable amount of voluntary work done by the Association of Friends of Store Mosse. While the high quality and the great amount of works performed by the association must be underlined, this dependence upon voluntary work, in particular for regular maintenance tasks in the National Park, is not satisfactory. The

core team of volunteers are getting older and renewal with younger people proves to be difficult. The park staff should organize the work and process the information, while volunteers would provide working time, local knowledge and experience.

### **3.9. Scientific monitoring and research**

A large part of the scientific information on birds and plants is collected by amateurs. In the recent years, information events have been organized to promote research projects in the Park. Quite a few applications have been submitted to funding authorities, but with very little success.

Some students do their field work in the Park.

In view of the Park's interest, it would be useful to encourage more important research activities, notably in applied ecology. The Park should also be more closely involved in the work carried out and informed of the results. The establishment of a comprehensive database regrouping all results of researches done would be a helpful management tool, in connection with a monitoring programme which should be attached to the management plan.

### **3.10. Roads and railway lines**

A road and a railway line cross the Park at its narrowest point. Their impact is acceptable, but the safety regulation limits the freedom regarding the interventions on the hydrology of the Park.

## **4. CONCLUSION**

There have been significant improvement since the last renewal, with namely the increase of the staff, the opening of the info center, the adoption of the new management plan, and the undertaking of large scale restoration projects.

In conclusion, we strongly recommend the renewal of the European Diploma for the Store Mosse National Park. The value of the site in its current limits, its remarkable state of preservation and the quality of the existing facilities for the public testify to its European interest.

The renewal should be accompanied by the following recommendations, which are meant to improve protection of the Park's natural and landscape values in the long term:

1. Reduce as much as possible the dependency upon volunteers for monitoring and regular maintenance work.
2. Continue encouraging more scientific research in the Park and ensure that all results are centralized in a database maintained by the Park or, as appropriate, a relevant scientific institution.
3. Secure the long-term management and restoration of the Lakes Kävsjön and Häradsösjön for increased birdlife.
4. Set-up a comprehensive but simple monitoring system for the Park to be attached to the management plan; monitor carefully the effectiveness and impact of the lakes management and restoration as well as of the Life mire restoration project.
5. Implement the new national system for information materials, signs and trail marking and communicate more actively about the European Diploma.

**Annexe : Programme of the mission  
On the spot expert appraisal of Store Mosse National Park, 22-23 August 2016**

*Draft program of the visit, updated 2016-08-16*

***Sunday, 21th August***

Travel to Copenhagen airport. *Booked by the Council.*

Overnight stay at hotel at Copenhagen airport. *Booked by Mr. Galland.*

***Monday, 22th August***

8:06 Departure from Copenhagen airport, Öresundståg, train 1024. *Booked by the Council.*

10:25 Arrival Alvesta train station

10:30 Transport by car to Store Mosse national park, pick-up by park manager

11:45 Arrival at Store Mosse national park and lunch at naturum Store Mosse, arranged by park management (8 pers)

13:00 Introduction to management organization

13:30 Guided tour at naturum by Director of Visitor center Carina Härlin

14:00 Indoor meeting with management organization (NGO:s are invited)

Participants:

Head of nature management unit at Jönköping County Administrative Board *Eva Wallander*

Representative from Swedish EPA *Gisela Norberg* (to be confirmed)

National Park management coordinator *Patrik Wandin*

National Park Ranger *Arne Andersson*

National Park Ranger *Karl Jorlén*

Director of Visitor center (naturum Store mosse) *Carina Härlin*

16:00 Discussion about park management

Aprox.17:00 Transport to Hestraviken Hotel and Restaurant (for dinner and overnight stay)

18:00 Dinner at Hestraviken Hotel and Restaurant (6 pers). *Booked by the NP management.*

Overnight stay at Hestraviken Hotel and Restaurant. *Booked by the NP management.*

***Tuesday, 23th August – Field trips***

Participants:

Head of nature management unit at Jönköping County Administrative Board *Eva Wallander*

National Park management coordinator *Patrik Wandin*

National Park Ranger *Arne Andersson*

National Park Ranger *Karl Jorlén*

Manager of protected areas *Johan Rova* (only afternoon)

8:00 Pick up at the hotel by park manager

8:30 Field trip in the national park (Large bird watchin tower, Fläsebäcken and Svänö)

12:00 Lunch at Svänö, arranged by park management

13:00 Continued field trip, guided tour at Addmire restauration site by Johan Rova

16:00 Transport by car to Jönköping with some member of the management staff

17:00 Arrival at Jönköping

Dinner some place in Jönköping, not organized in advance.

Overnight stay at Gårdshuset, residence of County Governor. *Booked by the NP management.*

***Wednesday, 24th August***

Breakfast at Clarion Collection Hotel Victoria, F E Elmgrens gata. 5, approx. 350 meter walk. *Booked by the NP management.*

9:06 Transport by train to Stockholm. Suggested train 7215 and 528, transfer in Nässjö, arrival in Stockholm 12:39. *Booked by the Council.*