



STORE MOSSE NATIONALPARK

Annual report for the year 2013 (1 Oct 2012– 30 Sept 2013)

State: Sweden
Name of the area: Store Mosse National Park

Central authority concerned:

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I. GENERAL INFORMATION

1. Natural heritage (general abiotic description: geomorphology, geology and hydrogeology, habitats, flora, fauna, landscape) – State of conservation
 - 1.1. Environment: changes or deterioration in the environment, of natural or anthropoid origin, accidental or permanent, actual or anticipated
 - 1.2. Flora and vegetation: changes in the plant population and in the vegetational cover; presumed causes
 - 1.3. Fauna: changes in the sedentary or migratory populations; congregating, egg-laying and breeding grounds

The small floating islands in Lake Kävsjön are densely covered with Willow. These bushes grow fast and it is hard to cut the branches close to the ground because of high water level. This makes it difficult for the Black-Headed Gulls (*Larus ribibundus*) to breed and unfortunately they did not breed in Lake Kävsjön this year. A new



attempt to cut the bushes was made during late autumn 2013 but water level was too high and the problem with sharp small branches sticking up still remains. There has been a discussion where both Rangers and birdwatchers participated about building artificial islands. This would make it easier for the Black-Headed Gulls to breed and for the Rangers to manage it.

After two feeding seasons with few individuals of both Golden eagles (*Aquila chrysaetos*) and Sea Eagles (*Haliaeetus albicilla*) something has changed dramatically. 24 Golden Eagles and 13 Sea Eagles visited the feeding place during winter period 2012/2013. We do not know the reason for this but the feeding continues during the winter 2013/2014.

2. Cultural heritage and socio-economic context

2.1. Cultural heritage

2.1.1. Changes concerning cultural heritage

2.2. Socio-economic context

2.2.1. Changes concerning the socio-economic context

3. Education and scientific interest

3.1. Visitors – Information policy

Some work has been done in the project of giving all Swedish National Parks a joint identity including logos, colors, typography and some components etcetera. The work has mainly focused on the new exhibition in the big bird watching tower (described below) and planning for intensive work during 2014-2016. The project will be fully implemented 2020.

3.1.1. Arrangements for receiving and informing the public (building, booklets, maps, cards, etc.)

The Visitors' Centre (naturum) continued to run activities, seminars, exhibitions and guided tours as usual. Approximately 40 000 people have been visiting the centre so far this year. Guided tours have been given in Swedish, English and German. The Visitors' Centre (naturum) is a highly appreciated place and offers a service that the park visitors finds valuable. The economic situation for the upcoming years are however problematic. The Swedish Environmental Protection Agency (SEPA) that funds the Visitors' Centre has announced drastic cuts in funds. This is not a good situation and we will try to find solutions during the next year..



A new exhibition was inaugurated in the big bird watching tower on The European day of parks in May. The exhibition was a result of a pilot project where The Swedish EPA, Swedish Museum of Natural History and The County Administrative Board in Jönköping has been cooperating. It focuses on bird watching and the bird life in lake Kävsjön.

3.1.2. Frequentation by visitors and behavior (number, distribution in time and space)

We will not get a fair picture of the number of visitors in the park for 2013. We encountered a lot of trouble with our visitor counters during the year but our guess is that it will be quite close to the result from last year, i.e. about 100 000.

3.1.3. Special visits (distinguished persons, groups, etc.)

On the 26th of May we celebrated The European day of parks. A lot of visitors came for a wonderful day with sunshine and a variety of different happenings. The exhibition in the Big Bird watching Tower was inaugurated by the County Governor Minoo Akhtar-zand.

3.2 Scientific research

3.2.1. Current or completed research (observation, experimentation, etc.; identification or inventory of the species listed in the appendices to the Bern Convention, etc.)

For complete list of current or completed research in the National Park during October 2012 to September 2013 see appendix 1. In addition to this, projects are regularly suggested to Swedish universities as possible projects for Master of Biology theses.

3.2.2. Scientific publications

4. Site description (vulnerability, protection status, ownership, documentation)

4.1. Changes in legislation or regulations

The work with the review of the management plan has taken considerable step forward during 2013. The management plan is almost ready and the land owner issues that are described in 4.2 are solved. The next step is a formal decision by the The Swedish Environmental Protection Agency (SEPA) and will be taken during 2014.



4.2. Changes in ownership title (conversion to public property, rentals, etc.)

During the work with the new management plan, three land owner issues were discovered that needs to be addressed. First, a small area of the park, 1.7 hectares, was private owned. Negotiations with the land owners have taken place and an agreement was signed during 2013.

Secondly, the fishing rights in Björnekulla-fen inside the park were a question. After an intense investigation we realized that the fishing rights belong to the park. Therefore the problem is solved.

Thirdly, an error in the Government's decision from 1982 has been detected. The implications of this are that all land that has been converted to public property after 1982 are not designated as National Park. It needs a new decision. It is only a fraction of the park so it does not have any practical impact but will be solved in the decision that is planned for in 2014.

4.3. Extension or transfer, new uses (for example, conversion into total reserve)

5. Site management (management plans, budget and personnel)

5.1. Improvements made

5.1.1. Ecological action affecting the flora and biotopes; controls of fauna

The following actions have been made concerning flora and fauna:

- Grazing in the old farming landscape at Svänö, Lövä and Lake Kävsjön in accordance with management plan.
- Haymaking in the Björnekulla Bogfen in accordance with management plan. A neighboring area is also under extension.
- Mowing of parts of the meadows surrounding Kävsjön to increase the areas covered with *Myrica gale* and other shrubs.

5.1.2. Protection against the elements (fire, water regime)

5.1.3. Approaches and thoroughfares (paths, roads, car parks, signposting, fencing, etc.)

Many trails in the national park and especially the ones to the big bird watching tower and to the visitors' centre have been renovated during the year. This has increased the safety for visitors.

5.1.4. Field equipment (hides and study facilities)



5.1.5. Waste management

5.1.6. Use of renewable energy systems

5.2. Management

One Italian student helped the Rangers with their daily duties during the summer period.

Local volunteers participated in building boardwalks.

5.2.1. Administrative department: changes made

There are worrying indications on a slight decrease in funding for the park management for 2014. The funding comes directly from the Swedish Environmental Protection Agency and the County Administrative Board and park management have unfortunately no real way to affect the size of the funding.

5.2.2. Wardens' department: changes made

The number of Rangers has remained the same as planned, approx. 1.8 full time employees.

5.2.3. Internal policing measures

5.2.3. Infringement of regulations and damage; legal action

II. Influence of the award of the european diploma of protected areas

The Award of the European Diploma of protected areas is important, especially for the international visitors coming to the park. The award is important for the prestige and status of the Store Mosse National Park. Although more marketing of the diploma on a European level are probably necessary.

III. Conditions and/or recommendations for award or renewal

Progress with measures taken in order to meet the conditions and/or recommendations defined during the award or renewal of the European Diploma of Protected Areas.

1. Actively pursue the hydrological survey, review and complete the management plan on the basis of the results obtained.



The hydrological situation in the park is measured continuously. The new management plan will be based upon the hydrological survey.

2. Encourage more actively scientific research in the Park, for example through a Life program

The restoration project Life to ad(d)mire has shifted from preparatory investigations to field actions. In September-October 2012, tussocks and remaining stumps were cut down in the extended rich fen area under restoration at Björnakullakärret. In late winter, clearing of invading pine trees in the degraded raised bog areas (former peat extraction areas) started. About 300 hectares of degraded bog will be restored in this Life project, much owing to the repeated urge for restoration that has been stated in previous European Diploma revisions. During spring and autumn 2013, seminars and field excursions have been arranged in order to inform the public about upcoming restoration actions in the area, even though lowering of dry ridges in the peat mining area is not planned until the beginning of 2014. Finally, in September 2013, we were for the first time able to perform haymaking in the extended part of Björnekullakärret rich fen. Traditional usage of horse proved to be successful for cost-efficient raking and hay removal, as the ground is too wet for modern farming equipment.

3. Monitor the impact of peat digging in the outer edges of the Park and make provision to restore the area close to the park in due time.

The permission for the peat industry outside the park is under revision and the park management is closely watching that issue.

4. Establish a buffer zone around the park with the objective of covering the entire hydrological system that influences the park.

The process of establishing a nature reserve of a large part of the hydrological system outside the park has taken a considerable step forward during 2013. Negotiations with land owners are in progress and a suggestion for resolution will be sent out during 2014.

Jönköping 29 November 2013

Patrik Wandin
National Park Management Administration



Appendix 1.

Complete list of current or completed research in the National Park during October 2011 to September 2012.

1	Continued inventory of bird life in the National Park (focusing on Natura 2000 inventory obligations)	County Administrative Board, Swedish Environmental Protection Agency, and private volunteers	Current
2	Observation of eagles at the carrion	Local bird watchers in collaboration with national bird watching organizations	Current
3	Hydrological readings in Store Mosse National Park	Jönköping County Administrative Board	Current
4	Study of woodliving insects in the fire effected areas	Peter Mattiasson, Jönköping County Administrative Board	Current
5	Restoration of the Björnekulla Richfen, next to the haymaking area	Jönköping County Administrative Board	Current
6	Study of changes in the long-term deposits of mercury in peat	Richard Bindler, University of Umeå	Current
7	The effects of climate change on peat formation and vegetation composition	Mats Rundgren, University of Lund	Current
8	Restoration of peat mining areas in Life+ project Addmire	Jönköping County Administrative Board	Current
9	Impact of climate change and nitrogen deposition on peatland biodiversity and biochemistry (part of European research project BiodivERSA – Peatland)	Bjorn Robroek, University of Utrecht, Netherlands	Current
10	Can diversity control peatland carbon sequestration under climate change?	Bjorn Robroek, University of Utrecht, Netherlands	Current
11	How does climate change effect the growth and establishment of trees on the bogs in the south part of Sweden?	Johannes Edvardsson, University of Lund, Sweden	Current
12	A survey of the Swedish and Scandinavian diversity of <i>Ceratopogonidae</i>	Kjell Arne Johansson, Swedish Museum of Natural History, Sweden	Current