



Ramsar Information Sheet

Published on 9 September 2016

Update version, previously published on : 1 January 2009

Sweden Store Mosse



Designation date	5 December 1974
Site number	20
Coordinates	57°17'07"N 13°56'42"E
Area	7 797,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

Store Mosse is a vast mire landscape, one of the largest in Southern Sweden. It is comprised of a mosaic of raised bogs, fen, deciduous swamp woods and dystrophic lakes. Store Mosse is also one of the largest active raised bogs in Sweden. The area is important for its diverse bird community, having a remarkable mix of northern and southern bird species. The mire area is the breeding ground for southern Sweden's possibly densest population of Crane, *Grus grus*. The site contains typical mire and wet meadow vegetation interspersed with patches of *Pinus sylvestris*, dry grasslands, and treeless areas of dwarf scrub. The flora includes a number of Orchidaceae.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Johan Rova, (AA Jenny Lonnstad)
Institution/agency	Länsstyrelsen i Jönköpings län, (AA Naturvårdsverket)
Postal address	Länsstyrelsen i Jönköpings län, SE-551 86 Jönköping, Sweden jonkoping@lansstyrelsen.se
	(AA Naturvårdsverket, SE- 106 48 Stockholm, Sweden) (AA regulator@naturvardsverket.se)
E-mail	johan.rova@lansstyrelsen.se
Phone	+46 10 223 60 00
Fax	+46 36 12 15 58

2.1.2 - Period of collection of data and information used to compile the RIS

From year	2009
To year	2015

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Store Mosse
---	-------------

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary	Yes <input checked="" type="radio"/> No <input type="radio"/>
(Update) The boundary has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The boundary has been extended	<input checked="" type="checkbox"/>
(Update) The boundary has been restricted	<input type="checkbox"/>
(Update) B. Changes to Site area	the area has increased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>
(Update) The Site has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input checked="" type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<input type="checkbox"/>

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	Yes (actual)
(Update) Are the changes	Positive <input checked="" type="radio"/> Negative <input type="radio"/> Positive & Negative <input type="radio"/>
(Update) Positive %	4
(Update) No information available	<input type="checkbox"/>
(Update) Changes resulting from causes operating within the existing boundaries?	<input checked="" type="checkbox"/>
(Update) Changes resulting from causes operating beyond the site's boundaries?	<input type="checkbox"/>
(Update) Changes consequent upon site boundary reduction alone (e.g., the exclusion of some wetland types formerly included within the site)?	<input type="checkbox"/>
(Update) Changes consequent upon site boundary increase alone (e.g., the inclusion of different wetland types in the site)?	<input type="checkbox"/>
(Update) Please describe any changes to the ecological character of the Ramsar Site, including in the application of the Criteria, since the previous RIS for the site.	

The hydrology has been restored in about 300 hectares of a former peat mining area through an EU LIFE project. The restoration affects about 4% of the site and has improved habitats for wader birds. The government has bought some private land for nature conservation purposes within the Ramsar site.

The new border has been adapted to the protected areas at the site. The site now contains the protected areas and an unprotected area with an excavation site that will be restored in the future. The new larger included areas contain a lot of open peatlands, swamp forest and some conifer forest on "islets" in the mire. The small areas excluded by this correction are mostly coniferous forest on dry land close to the edge of the mire. A few small areas with wetlands have also been excluded. These have a larger human impact than the rest of the site and were probably not intended to be part of the Ramsar site when it was established. They can also have been included by mistake when the first digitalization of the boundary took place.

(Update) Is the change in ecological character negative, human-induced AND a significant change (above the limit of acceptable change) Yes

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps

Boundaries description

Border of Ramsar site mainly follows the border of Store Mosse Natura 2000 site and Store Mosse National Park. The border is mostly situated in the marginal lag fen of the bog area.

2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre?

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

Area, in hectares (ha) as calculated from GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Bailey's Ecoregions	240 Marine division
EU biogeographic regionalization	Boreal
Udvardy's Biogeographical Provinces	10 Boreonemoral
WWF Terrestrial Ecoregions	Sarmatic mixed forest PA0436
Freshwater Ecoregions of the World (FEOW)	Ecoregion 406 Northern Baltic drainages
Other scheme (provide name below)	Sarmatic mixed forest
Other scheme (provide name below)	Boreo-nemoral zone

Other biogeographic regionalisation scheme

Nordiska ministerrådet, 1977. Naturgeografisk regionindelning av Norden. NU B 1977:34: Boreo-nemoral zone.

DMEER 2002 (EEA) Digital Map of European Ecological Regions: Sarmatic mixed forest

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Other ecosystem services provided

Store mosse is one of the largest mire complexes in southern Sweden and the peat layer is about 7 metres deep. Altogether there is a lot of carbon stored at the site. The site is also a carbon sink, and will probably continue to be that even if there is climate change (warmer and wetter at this site according to the models).

Other reasons

Store Mosse and Kävsjön contains a representative example of natural wetland types found within the boreal region (mosaic of raised bogs, fen, deciduous swamp woods and oligotrophic/dystrophic lakes), including the Natura 2000 priority habitats Active raised bogs (7110) and Bog woodland (91D0). Reference: Länsstyrelsen i Jönköpings län, 2006. Bevarandeplan för Natura 2000-område Store mosse.

- Criterion 2 : Rare species and threatened ecological communities




- Criterion 3 : Biological diversity

Justification

The site supports populations of animal species important for maintaining the biological diversity of the boreal region, including rich avian fauna with a number of nationally redlisted species and species of Annex 1 of the EU Birds Directive. Reference: Artdatabanken, 2015. Rödlistade arter i Sverige 2015. The species *Vertigo geyerii* (Geyer's Whorl Snail), listed in EU Council Directive (92/43/EEC) and NT in the Swedish Red List 2015 is present at the site as well as some species of orchids (protected according to national legislation).

- Criterion 4 : Support during critical life cycle stage or in adverse conditions

3.2 - Plant species whose presence relates to the international importance of the site



























Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Carex pulicaris</i> 		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Swedish Red List 2015 (VU). Typical for nutrient poor wet areas with high content of calcareous influence (rare habitat).	See textbox below the table.
<i>Dactylorhiza traunsteineri</i> 	Narrow-leaved marsh orchid	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Protected species in Sweden. Typical for rich fens (rare habitat).	See textbox below the table.
<i>Epipactis palustris</i> 	Marsh helleborine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Protected species in Sweden. Typical for rich fens (rare habitat).	See textbox below the table.
<i>Gymnadenia conopsea</i> 	Fragrant orchid	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Protected species in Sweden. Typical for rich fens (rare habitat).	See textbox below the table.















Criterion 2: For all Red-listed species, their status in the Swedish Red List and general information for that classification, their distribution etc can be found at <http://artfakta.artdatabanken.se/>.

Criteria 2 and 3: Observation of the species can be found in the Swedish database for observations <http://www.artportalen.se/>.

Criteria 3: Protected species in the legislation, see http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Artskyddsforordning-200784_5_sfs-2007-845/?bet=2007:845

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence ¹⁾	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7								
Birds																	
CHORDATA / AVES	 <i>Aegolius funereus</i>	Boreal Owl	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Permanent. Natura conservation plan for the Store mosse national park. See textbox below the table.
CHORDATA / AVES	 <i>Anas acuta</i>	Northern Pintail	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (VU).	Reproducing species. See textbox below the table.
CHORDATA / AVES	 <i>Anas querquedula</i>	Garganey	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (VU).	Reproducing species. See textbox below the table.
CHORDATA / AVES	 <i>Aquila chrysaetos</i>	Golden Eagle	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (NT). EC Birds Directive Annex I.	Regular visitor. Natura conservation plan for the Store mosse national park. See textbox below the table.
CHORDATA / AVES	 <i>Calidris alpina schinzii</i>	Southern Dunlin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (CR). EC Birds Directive Annex I	Visitor. Natura conservation plan for the Store mosse national park. See textbox below the table.
CHORDATA / AVES	 <i>Circus aeruginosus</i>	Western Marsh Harrier	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Habitats Directive Annex I.	Reproducing. Natura conservation plan for the Store mosse national park. See textbox below the table.
CHORDATA / AVES	 <i>Cygnus cygnus</i>	Whooper Swan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Reproducing. See textbox below the table.
CHORDATA / AVES	 <i>Dryocopus martius</i>	Black Woodpecker	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (NT). EC Birds Directive Annex I.	Permanent and reproducing. See textbox below the table.
CHORDATA / AVES	 <i>Gallinago media</i>	Great Snipe	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (NT). EC Birds Directive Annex I.	Visitor. See textbox below the table.
CHORDATA / AVES	 <i>Gavia arctica</i>	Arctic Loon; Black-throated Loon	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Reproducing. See textbox below the table.
CHORDATA / AVES	 <i>Grus grus</i>	Common Crane	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Concentrations and reproducing. See textbox below the table.
CHORDATA / AVES	 <i>Haliaeetus albicilla</i>	White-tailed Eagle	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Swedish Red List 2015 (NT). EC Birds Directive Annex I.	Regular Visitor. See textbox below the table.
CHORDATA / AVES	 <i>Motacilla flava</i>	Western Yellow Wagtail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (NT).	Reproducing. See textbox below the table.
CHORDATA / AVES	 <i>Oriolus oriolus</i>	Eurasian Golden Oriole	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (VU).	Visitor. See textbox below the table.

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / AVES	<i>Philomachus pugnax</i> 	Ruff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (VU). EC Birds Directive Annex I.	Reproducing. See textbox below the table.
CHORDATA / AVES	<i>Pluvialis apricaria</i> 	European Golden Plover; European Golden-Plover	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Reproducing. See textbox below the table.
CHORDATA / AVES	<i>Podiceps auritus</i> 	Horned Grebe	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Reproducing. See textbox below the table.
CHORDATA / AVES	<i>Porzana porzana</i> 	Spotted Crake	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (VU). EC Birds Directive Annex I.	Reproducing. See textbox below the table.
CHORDATA / AVES	<i>Sterna hirundo</i> 	Common Tern	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Visitor. See textbox below the table.
CHORDATA / AVES	<i>Tetrao urogallus</i> 	Western Capercaillie	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Reproducing and permanent. See textbox below the table.
CHORDATA / AVES	<i>Tringa glareola</i> 	Wood Sandpiper	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Reproducing. See textbox below the table.

1) Percentage of the total biogeographic population at the site

Criterion 2: For all species, their status in the Swedish Red List and general information for that classification, their distribution etc. can be found at <http://artfakta.artdatabanken.se/>.

Criteria 2, 3 and 4: Observation of the species can be found in the Swedish database for observations <http://www.artportalen.se/>.

Criteria 3, 4: The site support a lot of wetland bird species (staging, breeding, wintering). Do also see management plans and conservation plans for the site's protected areas, most of the species are mentioned in the plans.

3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Raised Bog	<input checked="" type="checkbox"/>	Acid bogs, ombrotrophic, poor in mineral nutrients, sustained mainly by rainwater, with a water level generally higher than the surrounding water table, with perennial vegetation dominated by Sphagna.	There are very few intact or near-intact raised bogs in Europe, except in the EU boreal region. Raised bogs are a prioritized habitat in the EC Habitats Directive, Annex I.

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

The site comprises a mosaic of raised bog, fen and dystrophic/oligotrophic lakes and lagoons. The site contains typical mire vegetation interspersed with patches of *Pinus sylvestris* and treeless areas of dwarf scrubs. The flora includes a number of Orchidaceae. Large parts of the lakes are covered with quagmires of Horsetails *Equisetum* spp. and Bottle sedge *Carex rostrata*, and are otherwise characterised by Common club-rush *Scirpus lacustris*. The site is important for migrating and breeding birds. Lake Kävsjön was partially drained for agricultural purposes in the early 19th century and the resulting wet meadows have since then been an important spot for bird life. The area includes e.g. the following Natura 2000 habitats (with approximate areas): 3160 (200 ha), 6410 (40 ha), 7110 (5000 ha), 7120 (400 ha), 7140 (1000 ha), 7230 (20 ha), 9010 (300 ha), 9070 (30 ha), and 91D0 (400 ha).

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		4	5	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3	200	Representative
Fresh water > Lakes and pools >> P: Seasonal/ intermittent freshwater lakes		3	100	
Fresh water > Lakes and pools >> T _p : Permanent freshwater marshes/ pools		4	25	Representative
Fresh water > Marshes on inorganic soils >> T _s : Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		4	25	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		1	5800	Representative
Fresh water > Marshes on peat soils >> X _p : Permanent Forested peatlands		2	400	Representative

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
4: Seasonally flooded agricultural land		4	20	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Western Taiga (coniferous forest)	300
Fennoscandian wooded pastures and rich fens	50
Excavation of peat	100

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Drosera anglica</i>	Sundew	Typical; Interesting to visitors
<i>Drosera intermedia</i>	Sundew	Typical; Interesting to visitors
<i>Drosera rotundifolia</i>	Sundew	Typical; Interesting to visitors
<i>Narthecium ossifragum</i>	Bog asphodel	Typical
<i>Parnassia palustris</i>	Grass-of-Parnassus	Decreasing population in Southern Sweden

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Anas clypeata</i>	Northern Shoveler				Breeding
CHORDATA/AVES	<i>Calidris minuta</i>	Little Stint				Migrating through
CHORDATA/AVES	<i>Charadrius dubius</i>	Little Ringed Plover				Rare
CHORDATA/AVES	<i>Dendrocopos minor</i>	Lesser Spotted Woodpecker				Visitor. Swedish Red List 2015, NT.
CHORDATA/AVES	<i>Falco subbuteo</i>	Eurasian Hobby;Northern Hobby				Rare
CHORDATA/AVES	<i>Gallinula chloropus</i>	Common Moorhen				Rare
CHORDATA/AVES	<i>Gavia stellata</i>	Red-throated Diver;Red-throated Loon				Breeding. Swedish Red List 2015, NT.
CHORDATA/AVES	<i>Limicola falcinellus</i>	Broad-billed Sandpiper				Migrating through
CHORDATA/AVES	<i>Numenius arquata</i>	Eurasian Curlew				Breeding. Swedish Red List 2015, NT.
CHORDATA/AVES	<i>Numenius phaeopus</i>	Whimbrel				Breeding
CHORDATA/AVES	<i>Rallus aquaticus</i>	Water Rail				Breeding
CHORDATA/AVES	<i>Tringa totanus</i>	Common Redshank				Breeding
CHORDATA/AVES	<i>Vanellus vanellus</i>	Northern Lapwing				Breeding

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mld with no dry season, warm summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

Entire river basin

Upper part of river basin

Middle part of river basin

Lower part of river basin

More than one river basin

Not in river basin

Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

The site is part of Lagan river basin. The catchment area which includes the Store Mosse and Kävsjön Ramsar site comprises about 300 square kilometres. To the largest part, the site is situated in the upper parts of the catchment area. However, the lake Kävsjön is partly fed by water originating outside the area. This water passes close to grazed lands and small roads, but it is barely affected by this.

The site, as well as the surrounding catchment area, is rather flat. Granite, gneiss, and metabasite form the bedrock in the catchment area. Sand, peat, and till are the predominating soil types. Land use is mainly forestry and to a small extent farming, mostly grazing by cattle.

4.4.3 - Soil

Mineral

(Update) Changes at RIS update No change Increase Decrease Unknown

Organic

(Update) Changes at RIS update No change Increase Decrease Unknown

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes No

Please provide further information on the soil (optional)

Soil is mainly peat, but to some extent also sand and moraine. Peat, in the form of raised bogs, covers more than 90 % of the area. See also additional material.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	No change
Usually seasonal, ephemeral or intermittent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<input type="checkbox"/>	No change
Water inputs from rainfall	<input checked="" type="checkbox"/>	No change
Water inputs from groundwater	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change
Feeds groundwater	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology:

As all peatlands, Store Mosse is an important reservoir for fresh water. The mires could to some extent prevent flooding in downstream areas, but this has not been verified. Man-made ditches are only maintained along the roads crossing the area. This will eventually regenerate most fens bordering the raised bogs, but the abandoned management of the ditches also causes flooding of areas surrounding the protected area (most of the Ramsar site is protected as a national park). This has led to conflicts with surrounding landowners.

A hydrological restoration of about 300 hectares that have been affected by peat extraction until the 1960's has been performed during 2010-2015; the aim of the restoration is to stabilize water levels and promote peat growth in the former peat excavation areas.

4.4.5 - Sediment regime

Sediment regime unknown

<no data available>

4.4.6 - Water pH

Acid (pH<5.5)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

Please provide further information on pH (optional):

Most of the site is naturally acidic peatland and that is reflected in the water pH.

4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Dystrophic

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ii) significantly different

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

Many large bogs in the surrounding landscape are affected by ditching and peat extraction. This causes trees to grow in those formerly open bog areas, which then makes them less attractive as nesting sites for wader birds. The closest surroundings consist of extensive woodland, which are used for forestry purposes, some small patches of arable land, and wetlands.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climatic processes	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	High
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Aesthetic and sense of place values	Medium
Spiritual and inspirational	Spiritual and religious values	Low
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Low
Scientific and educational	Long-term monitoring site	Medium
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	High

Other ecosystem service(s) not included above:

The site is used for tourism and outdoor recreation, and visited by approximately 70,000-100,000 visitors each year. About half of the number s foreign visitors coming in July-August. During autumn, winter, and spring the area is well visited by locals for recreation and bird-watching. Several current social relations exist: education, scientific research, tourism and outdoor recreation, and grazing. Some historical associations connected to the former peat industry and to the old villages in the area (Södra Svänö and Lövvö).

Within the site:

Outside the site:

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

- i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland
- ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland
- iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples
- iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provincial/region/state government	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

A few hectares of land within the Ramsar site is privately owned.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Länsstyrelsen i Jönköpings län, Skötselenheten

Provide the name and title of the person or people with responsibility for the wetland:

Enhetschef Skötselenheten / Head of Nature Management Department

Postal address:

Länsstyrelsen i Jönköpings län
SE-551 86 Jönköping
Sweden

E-mail address:

jonkoping@lansstyrelsen.se

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Drainage	Medium impact	Medium impact	<input checked="" type="checkbox"/>	decrease	<input checked="" type="checkbox"/>	No change

Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Renewable energy		Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Mining and quarrying	Medium impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Low impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fire and fire suppression	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Dams and water management/use	Medium impact	High impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Air-borne pollutants	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Habitat shifting and alteration	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Please describe any other threats (optional):

Renewable energy: Wind mills might be a future threat in the site's surroundings, but permits are needed to establish them. Any applications will probably result in refusal instead of permissions due to the birdlife at the Ramsar site.

Quarrying: In the south-east of the site there is an on-going peat extraction site.

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	3 Natura sites, See under national legislation		partly
Other international designation	Store Mosse National Park (European Diploma)	http://eunis.eea.europa.eu/sites/SE940003	partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000 SCI (1)	Uppebo	http://www.lansstyrelsen.se/jonkoping/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/na_tura-2000/Gnosj%C3%B6kommun/Uppebo%20Fastst%C3%A4lld%20060420.pdf	partly
EU Natura 2000 SCI (2)	Hädinge	http://www.lansstyrelsen.se/jonkoping/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/na_tura-2000/Gnosj%C3%B6kommun/H%C3%A4dinge%20Fastst%C3%A4lld%20060420.pdf	partly
EU Natura 2000 SCI and SPA	Store Mosse nationalpark	http://www.lansstyrelsen.se/jonkoping/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/na_tura-2000/Gnosj%C3%B6kommun/Store%20mosse%20Fastst%C3%A4lld%20061219.pdf	partly
EU Natura 2000 SPA and SAC	Store Mosse nationalpark	http://www.lansstyrelsen.se/jonkoping/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/na_tura-2000/Gnosj%C3%B6kommun/Store%20mosse%20Fastst%C3%A4lld%20061219.pdf	partly
National park	Store Mosse nationalpark	www.storemosse.se	partly
Nature reserve (1)	Brokullen	http://www.lansstyrelsen.se/jonkoping/Sv/djur-och-natur/skyddad-natur/naturreservat/gnosjo/brokullen/Pages/index.aspx	partly
Nature reserve (2)	Uppebo	http://www.lansstyrelsen.se/jonkoping/Sv/djur-och-natur/skyddad-natur/naturreservat/gnosjo/uppebo/Pages/index.aspx	partly
Site of National Importance for Nature Conservation (Riksintresse)	Store Mosse Natura 2000	http://nvpub.vic-metria.nu/handlingar/rest/dokument/202645	partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Lake Kävsjön and Store Mosse	http://www.birdlife.org/datazone/sitefactsheet.php?id=856	partly

5.2.3 - IUCN protected areas categories (2008)

1a Strict Nature Reserve

Ib Wilderness Area: protected area managed mainly for wilderness protection

II National Park: protected area managed mainly for ecosystem protection and recreation

III Natural Monument: protected area managed mainly for conservation of specific natural features

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation

VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Hydrology management/restoration	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented

Human Activities

Measures	Status
Fisheries management/regulation	Partially implemented
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Implemented
Research	Implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

A visitors' centre was opened in 2003. There are nature trails for children, booklets, maps, and guiding available to visitors. The visitors' centre works mainly towards three categories of visitors: schools, general public, and foreign visitors.

URL of site-related webpage (if relevant):

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Plant community	Implemented
Plant species	Implemented
Birds	Implemented

Number of visitors is monitored in the Visitor's Centre (implemented).

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Artdatabanken, 2015. Rödlistade arter i Sverige 2015.

Blank, Henrick. 2004. Fågellivet på skyddade myrmarker i Jönköpings län. Länsstyrelsen i Jönköpings län, rapport 2004:42. http://www.lansstyrelsen.se/jonkoping/Sv/publikationer/rapporter/2004/Pages/2004_42.aspx

Er iksson, Astrid. 2001. Kulturlandskapet i Södra Svänö, Store Mosse nationalpark. Länsstyrelsen i Jönköpings län, rapport 2001:24. <http://www.sverigesnationalparker.se/globalassets/store-mosse/filer/sodra-svano-rapport-2007.pdf>

Länsstyrelsen i Jönköpings län, 2006. Bevarandeplan för Natura 2000-område Store mosse. <http://www.lansstyrelsen.se/jonkoping/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/natura-2000/Gnosjö%20kommun/Store%20mosse%20Fastställd%20061219.pdf>

Länsstyrelsen i Jönköpings län. 2005. Nätprovfiske i Store Mosse Nationalpark 2002-2004. Länsstyrelsen i Jönköpings län, Rapport 2004:54. http://www.lansstyrelsen.se/jonkoping/Sv/publikationer/rapporter/2004/Pages/2004_54.aspx

Na turvårdsverket och SGU. 1996. Berggrund, jordarter och geomorfologi Store Mosse nationalpark. Naturvårdsverkets rapport 4465.

Naturvårdsverket. 2002. Skötselplan för Store Mosse nationalpark.

Svalan/ArtPortalen. Species Observations Gateway. <http://www.artportalen.se/>

Svensson, Göran. 1988. Bog development and environmental conditions as shown by the stratigraphy of Store Mosse mire in southern Sweden Boreas, vol:17 iss:1, pp: 89 -111.

Svensson, Göran. 2007. Vegetationsundersökningar inom Kävsjöområdet - Vegetationsutveckling och vegetationsförändringar från 1964 till 2004. Länsstyrelsen i Jönköpings län, rapport 2007:14. http://www.lansstyrelsen.se/jonkoping/SiteCollectionDocuments/sv/publikationer/2007/2007_14.pdf

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<2 file(s) uploaded>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

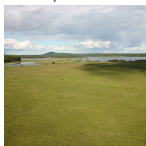
<3 file(s) uploaded>

vi. other published literature

<2 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

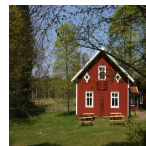
Please provide at least one photograph of the site:



Wet meadows at Lake Kävsjön (Johan Rova, 23-08-2004)



Wet meadows at Lake Kävsjön (Johan Rova, 23-08-2004)



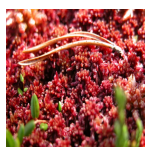
Old farmer's house, now Hostel for visitors (Johan Rova, 10-05-2006)



Raised bog with dwarf pine (Johan Rova, 14-08-2007)



Drosera rotundifolia (Johan Rova, 24-08-2003)



Sphagnum sp. (Johan Rova, 24-08-2003)



Visitor's Centre Store Mosse national park (Johan Rova, 26-08-2003)



Wet meadows at Lake Kävsjön (Johan Rova, 11-11-2003)



Raised bog, hummocks and hollows (Johan Rova, 14-08-2007)



Trail for visitors through open raised bog area (Johan Rova, 14-08-2007)

6.1.4 - Designation letter and related data

RIS for Site no. 20, Store Mosse, Sweden

Designation letter
<no file available>

Date of Designation 1974-12-05