



# Ramsar Information Sheet

Update version, previously published on 1 January 2002

## Sweden Komosse



Designation date	14 November 2001
Site number	1121
Coordinates	57°41'24"N 13°41'52"E
Area	4 288,00 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

Komosse is probably one of the most valuable peat bog complexes in Europe. It is large, diverse and the degree of human impact is low. It has representative flora, fauna and wetland types. Most of the entire region's wetland types can be found within the site, although there are no rich fens. Sloping eccentric and concentric peat bogs dominate the site. There is also a mosaic of wet forest, wet meadows and different kinds of fens. There are both coniferous and deciduous wet forests. Due to the large precipitation the natural drainage pattern creates wide soaks. These soaks have vegetation that is a little bit richer than in the surrounding wetland. Soaks are common and occur between different wetlands types, on the bogs and in other wetland types. The large pool system in the bog complex is unusual for this part of the country.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Compiler 1

Name	Sofia Åström and Johan Rova
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##### Compiler 2

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

From year	2002
To year	2015

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Komosse
Unofficial name (optional)	Komosse (bog)

#### 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 checked="" 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 %	8
(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?

(Update) Changes consequent upon site boundary reduction alone (e.g., the exclusion of some wetland types formerly included within the site)?

(Update) Changes consequent upon site boundary increase alone (e.g., the inclusion of different wetland types in the site)?

(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 Ramsar site has been extended in the south east with an area of forested peatlands and wet meadows mixed with forest that isn't wetlands. There have also been a number of small corrections so that the boundary is the same as for the nature reserves (except where the nature reserves are adjacent to each other along the county border). In general this correction has resulted in that the area of peatland and wet forest has increased and the area of non-wetland forest and arable land has decreased.

The extended part of the site was protected as a nature reserve in 2003 and restoration measures have been done in that area by the Life-project Life to ad(d)mire. The entire Ramsar site has been included in the EU Natura 2000 network as SPA (Komosse västra, 1996 and Komosse, 2004) and as SAC (2011).

(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

The boundary is identical to the boundaries for the four nature reserves (except where they are adjacent to each other along the county border).

### 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
Udvardy's Biogeographical Provinces	10 Boreonemoral
Bailey's Ecoregions	240 Marine Division
WWF Terrestrial Ecoregions	Sarmatic mixed forest PA0436
Other scheme (provide name below)	Boreonemorale zone
EU biogeographic regionalization	Boreal
Freshwater Ecoregions of the World (FEOW)	Ecoregion 406 Northern Baltic drainages

Other biogeographic regionalisation scheme

Boreonemorale zone (Nordiska Ministerrådet 1977)

### 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

Hydrological services provided	The site is by large unaffected by human activities which contributes to the maintenance of water quality downstream. The site keeps a lot of water and contributes to flood control.
Other ecosystem services provided	The site captures carbon and stores it in the peat layer.
Other reasons	<p>The site is a large and representative example of natural boreal wetland, comprising raised bogs, open peatland, bog woodland, wet meadows, and fens. This site is largely unaffected by human activities and is an important site for migrating and nesting birds, as well as for plant species dependent on open areas of nutrient poor large open bogs being a characteristic part of the landscape.</p> <p>Komosse is very valuable as a research area for both national and international mire researchers (hydrological and botanical). It is one of the most investigated peat bogs in Sweden, and was part of the IHD (International Hydrological Decade) project in 1969-1978.</p>


- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity



Justification	The site is one of the best developed and largest mire complexes in the boreonemoral region. The dominating mire types are different kinds of raised bogs. The site is important for maintaining the biological diversity typical for bog and fen habitats in the EU boreal region. There are numerous species of Sphagnum (Peat Moss), and a variety of bird species nesting on open bogs (mainly wader birds). The flora is representative for the area and for the wetland types. Because of the diversity of the site, the flora is also varied.
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- 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>Narthecium ossifragum</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		

#### 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	8								
<b>Birds</b>																		
CHORDATA / AVES	<i>Ardea cinerea</i> 	Gray Heron; Grey Heron	<input type="checkbox"/>	<input 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"/>		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 <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
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"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (NT), Included in EC Bird's Directive Annex I.	Breeding; Permanent. Do also see textbox below the table.
CHORDATA / AVES	<i>Falco tinnunculus</i>	Common Kestrel; Eurasian Kestrel	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>		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"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Breeding. Do also see textbox below the table.
CHORDATA / AVES	<i>Gavia stellata</i>	Red-throated Diver; Red-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"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (NT), Included in EC Bird's Directive Annex I.	Breeding. Do also 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"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Included in EC Bird's Directive Annex I.	Breeding. Do also see textbox below the table.
CHORDATA / AVES	<i>Lanius collurio</i>	Red-backed Shrike	<input type="checkbox"/>	<input type="checkbox"/>	<input 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.	See textbox below the table.
CHORDATA / AVES	<i>Lyrurus tetrix</i>	Eurasian Black Grouse; Black Grouse	<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.	Breeding. Do also see textbox below the table.
CHORDATA / AVES	<i>Motacilla flava 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"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (LC). Included in EC Bird's Directive Annex I.	Breeding; Migration concentration. Do also see textbox below the table.
CHORDATA / AVES	<i>Numenius arquata</i>	Eurasian Curlew	<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"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (NT). Included in EC Bird's Directive Annex I.	Breeding. Do also see textbox below the table.
CHORDATA / AVES	<i>Numenius phaeopus</i>	Whimbrel	<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"/>	Included in EC Bird's Directive Annex I.	Breeding. Do also see textbox below the table.
CHORDATA / AVES	<i>Pandion haliaetus</i>	Osprey; Western Osprey	<input type="checkbox"/>	<input type="checkbox"/>	<input 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.	Do also see textbox below the table.
CHORDATA / AVES	<i>Philomachus pugnax</i>	Ruff	<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 (EN). Included in EC Bird's Directive Annex I.	Staging, migration concentration and breeding (rare). Do also 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"/>	Included in EC Bird's Directive Annex I.	Breeding. Do also see textbox below the table.
CHORDATA / AVES	<i>Regulus regulus</i>	Goldcrest	<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)	Breeding. Do also 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"/>	Included in EC Bird's Directive Annex I.	Permanent; Breeding. Do also 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"/>	Included in EC Bird's Directive Annex I.	Breeding. Do also see textbox below the table.

1) Percentage of the total biogeographic population at the site

Criterion 2: The status for the species in the Swedish Red List and general information for that classification 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/>.

### 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 bogs (with their different communities)	<input checked="" type="checkbox"/>	Acid raised bogs, ombrotrophic, poor in mineral nutrients, sustained mainly by rainwater. A number of different communities (on strings, in hollows etc)	There are very few intact or near-intact raised bogs in Europe. Raised bogs are a prioritized habitat for conservation according to the EC Habitat's Directive on the conservation of natural habitats and of wild fauna and flora.



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

### 4.1 - Ecological character

Komosse is a diverse and highly valued peat bog complex, one of the largest in southern Sweden and in the South Western part of the sarmatic mixed forest ecoregion. Wide soaks are common, and the large pool system in the bog complex is unusual for this part of the country.

The wetlands in the site are representative and well developed. Most of the entire region's wetland types can be found within the site, although there are no rich fens. Sloping eccentric and concentric peat bogs dominate the site. There is also a mosaic of wet forest, wet meadows and different kinds of fens. There are both coniferous and deciduous wet forests.

Komosse is situated in an area where precipitation is high and the ground is flat and it serves as a natural water reservoir.

The peat bog is thought to have been completely developed around 4000 B.C. There are several traces from the latest Ice Age ice cover. The large quagmire areas were previously managed by mowing and by grazing.

The site is largely unaffected by human activities which contributes to the maintenance of water quality. Traces from previous peat extraction can be found only in a few places. The surroundings contain a large amount of ditches, and have a higher degree of human impact than the site itself.

### 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	1	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3	25	Representative
Fresh water > Lakes and pools >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		4	1	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		1	3280	Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		3	20	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		2	330	Representative
Fresh water > Flowing water >> Y: Permanent Freshwater springs; oases		4	1	Rare

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Coniferous forest	
mixed forest	

### 4.3 - Biological components

#### 4.3.1 - Plant species

<no data available>

#### 4.3.2 - Animal species

<no data available>

### 4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mild 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 situated in the upper parts of the catchment areas of the rivers Åtran and Nissan. The rivers have their outlets in the Kattegatt.

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

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	No change

Source of water that maintains character of the site

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

Water destination

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

A hydrological restoration (blocking of ditches) of about 40 hectares that had been affected by ditches for forestry purposes was performed during 2010-2015; the aim of the restoration was to re-generate wet meadows and bog woodland in the South Eastern part of the Ramsar site.

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

#### 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

Oligotrophic

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

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:

The closest surroundings contain a large amount of ditches, and have a higher degree of human impact than the site itself. Most raised bogs and bog woodlands in the surrounding landscape (at a larger scale) are heavily affected by ditching, peat mining and forestry. This means that Komosse is now one of very few open raised bog areas with fairly intact hydrology in this part of Sweden.

### 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
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	Medium
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climatic processes	High
Hazard reduction	Flood control, flood storage	Medium

##### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	High
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Inspiration	Low
Spiritual and inspirational	Aesthetic and sense of place values	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium
Scientific and educational	Long-term monitoring 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

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

Description if applicable

The site has become an important place to demonstrate good techniques for restoration of natural hydrological regimes in ditched forested peatlands.

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

#### 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"/>

##### Private ownership

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

#### 5.1.2 - Management authority

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

Länsstyrelsen i Västra Götalands län / County Administrative Board of Västra Götaland  
and

Länsstyrelsen i Jönköpings län / County Administrative Board of Jönköping

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

Kontaktperson för Ramsarområden

Postal address:

Länsstyrelsen i Västra Götalands län, 403 40 Göteborg, Sweden

and

Länsstyrelsen i Jönköpings län, 551 85 Jönköping, Sweden  
(e-mail: jonkoping@lansstyrelsen.se)

E-mail address:

vastragotaland@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	High impact	<input checked="" type="checkbox"/>	decrease	<input checked="" type="checkbox"/>	No change

##### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" 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	Low 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	High impact	<input checked="" type="checkbox"/>	No change	<input 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	High impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

#### 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	2 Natura sites se national legislation below		whole

## National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000 SAC and SPA(1)	Komosse västra (O county)	<a href="http://www.lansstyrelsen.se/vastragotaland/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/natura-2000/bevarandeplaner/Ulricehamn/komosse-se0530008.pdf">http://www.lansstyrelsen.se/vastragotaland/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/natura-2000/bevarandeplaner/Ulricehamn/komosse-se0530008.pdf</a>	partly
EU Natura 2000 SAC and SPA(2)	Komosse (F-county)	<a href="http://www.lansstyrelsen.se/jonkopring/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/natura-2000/Jonkopingss%20kommun/Komosse%20Faststalld%20051213.pdf">http://www.lansstyrelsen.se/jonkopring/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/natura-2000/Jonkopingss%20kommun/Komosse%20Faststalld%20051213.pdf</a>	partly
Nature reserve (1)	Komosse (O County)	<a href="http://www.lansstyrelsen.se/vastragotaland/Sv/djur-och-natur/skyddad-natur/naturreservat/lanets-naturreservat/ulricehamn/komosse/Pages/index.aspx">http://www.lansstyrelsen.se/vastragotaland/Sv/djur-och-natur/skyddad-natur/naturreservat/lanets-naturreservat/ulricehamn/komosse/Pages/index.aspx</a>	partly
Nature reserve (2)	Komosse södra (F county)	<a href="http://www.lansstyrelsen.se/jonkopring/Sv/djur-och-natur/skyddad-natur/naturreservat/jonkoping/komosse-och-komosse-sodra/Pages/index.aspx">http://www.lansstyrelsen.se/jonkopring/Sv/djur-och-natur/skyddad-natur/naturreservat/jonkoping/komosse-och-komosse-sodra/Pages/index.aspx</a>	partly
Nature reserve (3)	Komosse (F County)	<a href="http://www.lansstyrelsen.se/jonkopring/Sv/djur-och-natur/skyddad-natur/naturreservat/jonkoping/komosse-och-komosse-sodra/Pages/index.aspx">http://www.lansstyrelsen.se/jonkopring/Sv/djur-och-natur/skyddad-natur/naturreservat/jonkoping/komosse-och-komosse-sodra/Pages/index.aspx</a>	partly
Nature reserve (4)	Komosse södra (O county)	<a href="http://www.lansstyrelsen.se/vastragotaland/Sv/djur-och-natur/skyddad-natur/naturreservat/lanets-naturreservat/ulricehamn/komosse-sodra/Pages/index.aspx">http://www.lansstyrelsen.se/vastragotaland/Sv/djur-och-natur/skyddad-natur/naturreservat/lanets-naturreservat/ulricehamn/komosse-sodra/Pages/index.aspx</a>	partly
Riksintresse (Site of National Importance for Nature Conservation)	Komosse	<a href="http://nypub.vic-metria.nu/handlingar/rest/dokument/202623">http://nypub.vic-metria.nu/handlingar/rest/dokument/202623</a>	partly

## 5.2.3 - IUCN protected areas categories (2008)

- Ia 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

### 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

### 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
Plant community	Implemented
Birds	Implemented

Komosse is very valuable as a research area for both national and international mire researchers (hydrological and botanical). It is one of the most investigated peat bogs in Sweden, and was part of the IHD (International Hydrological Decade) project in 1969-1978.

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Andersson, L. 1976. Komosse norra delen, Jönköpings kommun. Översiktlig naturinventering. Länsstyrelsen i Jönköpings län, naturvårdsenheten.

Johansson, S. 1977. Komosse södra delen, Jönköpings kommun. Länsstyrelsen i Jönköpings län, naturvårdsenheten.

Johansson, I. 1974. Hydrologiska undersökningar inom myrkomplexet Komosse. IHD rapp. Nr 41, Stockholm. 161 s.

Länsstyrelsen i Jönköpings län. 1996. Våtmarker i Jönköpings kommun. Meddelande 18/96.

Malmer, N. 1965. The Southern Mires. Plant Cover of Sweden, Acta Phytogeographica Suecica 50, Uppsala, s. 149 – 158.

Naturvårdsverket. 1983. Våtmarksinventering i sydvästra Sverige. Katalog över samtliga objekt, norra delen. Rapport 1681.

Naturvårdsverket. 1994. Myrskyddsplan för Sverige.

Nordiska Ministerrådet, 1977. Naturgeografisk regionindelning av Norden . NU B 1977:34

Osvald, H. 1923. Die Vegetation des Hochmoores Komosse. Svenska Växtsociologiska Sällskapets Handl. i Uppsala. 436 s.

Wallentinus, H.-G. et al. 1980. Vegetationskartering av Komosse. Inst. kulturteknik, sekt. lantmäteri, KTH, rapp. Ser. A 3:35. Stockholm. 118 s.

#### 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

<1 file(s) uploaded>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

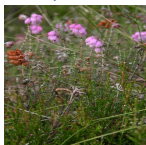
<3 file(s) uploaded>

vi. other published literature

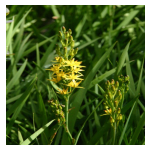
<1 file(s) uploaded>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



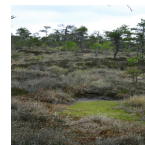
*Erica tetralix* ( Johan Rova, 13-07-2007 )



*Narthecium ossifragum* ( Johan Rova, 13-07-07 )



*Trichophorum cespitosum* ( Johan Rova, 25-05-2007 )



Hummocks and hollows on raised bog Close to forest border ( Johan Rova, 25-05-2007 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation