



Ramsar Information Sheet

Published on 2 May 2017

Update version, previously published on : 19 March 2013

Sweden

Gullhög-Tönningfloarna



Designation date	19 March 2013
Site number	2169
Coordinates	62°11'15"N 14°08'27"E
Area	1 881,00 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

Gullhög-Tönningfloarna is a large mire complex with a mixture of fens, bogs, mixed mire and wet forest. The fen vegetation types are rich with wetland brown mosses. The bogs have poor sprig vegetation. The string-flark fens have very well differentiated strings and hollow structures. The vegetation is of brown moss type and pine and birch grow on the strings. The flarks are very wet and covered with sedge and brown mosses. The topogenous fens cover big areas and have moderate rich vegetation. Some parts are open and other parts are covered by birch shrubs. Some of the open parts are very wet. In this part of the mire the moss *Hamatocaulis vernicosus* is found. The slightly raised bogs have very well differentiated structures of strings and hollows in a net shaped pattern. The strings consist of sprig vegetation and in the hollows the peat moss *Sphagnum balticum* and the cottongrass *Eriophorum vaginatum* grow. Some of the wet forests are of wet pine-type with the sedge *Carex globularis*. There are also some ponds in the central part of the site, which are significant for birds. The mixed mire contains ombrotrophic bog vegetation of sprig type and minerotrophic fen vegetation with sedge and bryophytes. The mixed mire therefore has several different plant communities. Rich fens are fairly rare in the Boreal region. The large rich fens of the site therefore have a high value for the species inhabiting this habitat. The mire structure with strings, flarks, hollows and ponds, covering large areas, offers good condition for an interesting and rich bird life. This kind of mires offers fine habitats for nesting and good feeding places to waders.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Per-Olof Nystrand
Institution/agency	Länsstyrelsen Jämtlands län
Postal address	Länsstyrelsen Jämtlands län, 831 86 Östersund, Sweden
E-mail	jamtland@lansstyrelsen.se
Phone	+46 10 225 30 00

Compiler 2

Name	Jenny Lonnstad
Institution/agency	Naturvårdsverket (Swedish EPA)
Postal address	Naturvårdsverket, 106 48 Stockholm, Sweden
E-mail	jenny.lonnstad@naturvardsverket.se
Phone	+46 10 698 15 92
Fax	+46 10 698 16 00

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

From year	2013
To year	2016

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Gullhög-Tönningfloarna
Unofficial name (optional)	Gullhög-Tönningfloarna (peatland)

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 No

(Update) B. Changes to Site area No change to area

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? No

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps	0
-------------	---

Boundaries description

The Ramsar site boundary is the same as the boundary for the Natura 2000 site and Swedish Mire Protection Plan. In general the boundary follows the border between wetland and dry ground, including a small buffer zone.

2.2.2 - General location

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

b) What is the nearest town or population centre?	Sveg, about 15 km SSE from the site
---	-------------------------------------

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	03 West Eurasian Taiga
Bailey's Ecoregions	M240 Marine regime Mountains
WWF Terrestrial Ecoregions	Scandinavian-Russian Taiga
Other scheme (provide name below)	Scandinavian-Russian Taiga
Freshwater Ecoregions of the World (FEOW)	406 Northern Baltic drainages
EU biogeographic regionalization	Boreal region

Other biogeographic regionalisation scheme

Nordiska Ministerrådet 1984. Naturgeografisk indelning av Norden. - Premountain region 33g.
EEA, 2002. Digital Map of European Ecological Regions (DMEER) - Scandinavian-Russian Taiga

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	Large areas of the fens are very wet and store vast amount of water. The site support groundwater from surrounding hills and drain to the river Veman, which at some parts, form a meandering river.
Other ecosystem services provided	The area is used for hunting and fishing and picking cloudberry. The site provides livestock fodder for the reindeer husbandry by the local Sami population.
Other reasons	The site contains several representative wetland types for the EU boreal region and also some less common ones. The stringed fens, the slightly raised bogs and the vast fens and wet forests are all representative wetlands types for the region. The site's large total area of rich fen vegetation is rare.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity







Justification	The site supports populations of mire plant and animal species important for the biological diversity of the EU Boreal region. The mires are very diverse considering mire and vegetation types that create a lot of diversity. The site covers the whole scale from poor vegetation in the bogs to very rich wetland brown moss fens. The bird life is rich with many various species of wetland birds. Gullhög-Tönningfloarna is important for breeding and migrating wetland birds. The site is a popular bird watching site during spring and summer.
---------------	---

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

- Criterion 7 : Significant and representative fish

Justification	The river Veman supports for example Brown Trout, Grayling, Burbot, Common Pike and Common Minnow.
---------------	--

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 heleonastes</i>	Hudson Bay Sedge	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	The Swedish Red List 2015 (EN).	See text box below the table and in section 3.1.
 <i>Eriophorum gracile</i>	Slender Cottongrass	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table and in section 3.1.
 <i>Hamatocaulis vernicosus</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	The Swedish Red List 2015 (NT), EC Habitats Directive, Annex II.	See text box below the table and in section 3.1.
 <i>Paludella squarrosa</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table and in section 3.1.
 <i>Tomentypnum nitens</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table and in section 3.1.
 <i>Wamstorfia tundrae</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table and in section 3.1.




































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

Observation of the species can be found in the Swedish database for observations <http://www.artportalen.se/>. For all the species observations are recorded in the Wetland survey (VMI) 1992. some are mentioned in the Swedish mire protection Plan 1994.

The existence of *Hamatocaulis vernicosus* in the rich fen, is one of just a few registrations of this species in the province Härjedalen. The site is therefore an importance site for the species in this province.

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								
Birds																		
CHORDATA/ AVES	 <i>Anas crecca</i>	Eurasian Teal; Green-winged Teal	<input checked="" type="checkbox"/>	<input checked="" 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"/>		Breeding and searching food. See textbox below the table and in section 3.1.	
CHORDATA/ AVES	 <i>Asio flammeus</i>	Short-eared Owl	<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 and searching food. See textbox below the table and in section 3.1.	
CHORDATA/ AVES	 <i>Aythya fuligula</i>	Tufted Duck	<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"/>		Breeding and searching food. See textbox below the table and in section 3.1.	
CHORDATA/ AVES	 <i>Bucephala clangula</i>	Common Goldeneye	<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"/>		Breeding and searching food. See textbox below the table and in section 3.1.	
CHORDATA/ AVES	 <i>Calidris temminckii</i>	Temminck's Stint	<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"/>		Breeding and searching food. See textbox below the table and in section 3.1.	
CHORDATA/ AVES	 <i>Falco subbuteo</i>	Eurasian Hobby, Northern Hobby	<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"/>		Searching food. See textbox below the table and in section 3.1.	

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	GITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/AVES	 <i>Gallinago gallinago</i>	Common Snipe	<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"/>		Courtship, breeding and searching food. See textbox below the table and in section 3.1.
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"/>	EC Birds Directive, Annex I.	Breeding and searching food. See textbox below the table and in section 3.1.
CHORDATA/AVES	 <i>Lymnocyptes minimus</i>	Jack Snipe	<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"/>		Breeding and searching food. See textbox below the table and in section 3.1.
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.	Courtship and breeding. See textbox below the table and in section 3.1.
CHORDATA/AVES	 <i>Melanitta fusca</i>	Velvet Scoter; White-winged Scoter	<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"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (NT).	Breeding and searching food. See textbox below the table and in section 3.1.
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"/>	The Swedish Red List 2015 (NT).	Breeding and searching food. See textbox below the table and in section 3.1.
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"/>		Breeding and searching food. See textbox below the table and in section 3.1.
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"/>					<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (VU). EC Birds Directive, Annex I.	Breeding and searching food. See textbox below the table and in section 3.1.
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.	Breeding and searching food. See textbox below the table and in section 3.1.
CHORDATA/AVES	 <i>Podiceps auritus</i>	Homed 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"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive, Annex I.	Breeding and searching food. See textbox below the table and in section 3.1.
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.	Breeding and searching food. See textbox below the table and in section 3.1.
CHORDATA/AVES	 <i>Tringa nebularia</i>	Common Greenshank	<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"/>		Breeding and searching food. See textbox below the table and in section 3.1.
CHORDATA/AVES	 <i>Vanellus vanellus</i>	Northern Lapwing	<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"/>		Breeding and searching food. See textbox below the table and in section 3.1.
Fish, Mollusc and Crustacea																		
CHORDATA/ACTINOPTERYGII	 <i>Esox lucius</i>	Common pike	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table and in section 3.1.
CHORDATA/ACTINOPTERYGII	 <i>Lota lota</i>	Burbot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (NT).	See textbox below the table and in section 3.1.
CHORDATA/ACTINOPTERYGII	 <i>Phoxinus phoxinus</i>	Common minnow; Common minnow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table and in section 3.1.
CHORDATA/ACTINOPTERYGII	 <i>Salmo trutta</i>	Herling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table and in section 3.1.
CHORDATA/ACTINOPTERYGII	 <i>Thymallus thymallus</i>	European grayling; European grayling; European grayling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table and in section 3.1.

1) Percentage of the total biogeographic population at the site

The status for the species in the Swedish red List and general information for that classification as well as their distribution etc, can be found at <http://artfakta.artdatabanken.se/>.

Observation of the species can be found in the Swedish database for observations <http://www.artportalen.se/>. For all the species observations are recorded in the Wetland survey (VMI) 1992.

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
EU7310. Aapa mires	<input type="checkbox"/>	Mire complexes characterised by centres of minerotrophic fen vegetation. Included mire units: mixed mires, string-fens, flark-fens, unraised Sphagnum fuscum-bogs, unpatterned topogenous or soligenous lawn-, carpet or mud-bottom fens.	The habitat is listed in EC Habitats Directive Annex II. The habitat had an unfavourable status in the Swedish part of the EU boreal region in 2013.
EU7230 Alkaline fens	<input checked="" type="checkbox"/>	Wetlands mostly or largely occupied by peat- or tufa-producing small sedge and brown moss communities developed on soils permanently waterlogged, with a soligenous or topogenous base rich, often calcareous water supply.	The habitat is listed in EC Habitats Directive Annex II. The habitat had an unfavourable status in the Swedish part of the EU boreal region in 2013.
EU7140. Transition mires and quaking bogs	<input type="checkbox"/>	Peat-forming habitat on oligotrophic to mesotrophic waters, including characteristics intermediate between soligenous and ombrogenous mire types. Swaying swards, floating carpets or quaking mires are also included. It includes many plant communities.	The habitat is listed in EC Habitats Directive Annex II. The habitat had an unfavourable status in the Swedish part of the EU boreal region in 2013.
EU9010. Western tundra	<input checked="" type="checkbox"/>	Natural old boreal forests with little or none human impact. They often contain a lot of dead and rotten wood; have a variation in tree age and length and species composition. Both wet and non-wet subtypes exist. They often support red-listed species.	The habitat is listed in EC Habitats Directive Annex II. The habitat had an unfavourable status in the Swedish part of the EU boreal region in 2013.

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

4.1 - Ecological character

The site is a large mire complex with a mixture of fens, bogs, mixed mire and wet forest. The fen vegetation types are rich with wetland brown mosses (*Scorpidium*, *Campylium* etc). The bogs have poor sprig vegetation. The string-flark fens have very well differentiated strings and hollow structures. The vegetation is of brown moss type and pine and birch grow on the strings. The flarks are very wet and covered with sedge and brown mosses. The topogenous fens cover big areas and have moderate rich vegetation. Some parts are open and other parts are covered by birch shrubs. Some of the open parts are very wet. In this part of the mire the moss *Hamatocaulis vernicosus* is found. The slightly raised bogs have very well differentiated structures of strings and hollows in a net shaped pattern. The strings consist of sprig vegetation and in the hollows the moss *Sphagnum balticum* and the cottongrass *Eriophorum vaginatum* grow. Some of the wet forests are of wet pine-type with the sedge *Carex globularis*. There are also some ponds in the central part of the site, which is significant for bird life. The mixed mire contains ombrotrophic bog vegetation of sprig type and minerotrophic fen vegetation with sedges and bryophytes. The mixed mire therefore has several different plant communities. Rich fens are fairly rare in the Boreal region. The large rich fens of the site have therefore a high value for the species inhabiting this habitat. Some interesting rich fen species in the site are the plants and mosses *Scirpus hudsonianus*, *Eriophorum gracile*, *Campylium stellatum*, *Meesia triquetra*, and *Paludella squarrosa*. The mires structure with strings, flarks, hollows and ponds, covering large areas, offers good condition for an interesting and rich bird life. This kind of mires offers fine habitats for nesting and good feeding places for waders. The hydrology of the site is intact, only a few small ditches are located in peripheral parts. These small ditches have no hydrological influence.

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	10	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		0		Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		3	35	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		1	1200	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		2	100	Representative

Other non-wetland habitat

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

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
D: Moist Mid-Latitude climate with cold winters	Dfc: Subarctic (Severe winter, no dry season, cool 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 located in the lower part of the catchment area of the stream Veman. Veman is a tributary to Ljusnan. Ljusnan has its outlet in the Baltic Sea.

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	

Source of water that maintains character of the site

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

Stability of water regime

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

4.4.5 - Sediment regime

Sediment regime unknown

4.4.6 - Water pH

Circumneutral (pH: 5.5-7.4)

(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

Mesotrophic

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

Oligotrophic

(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 degree of human impact is much larger in the surrounding landscape. Forestry affects the forests and a number of the surrounding mires are used for large scale peat extraction.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Picnics, outings, touring	Medium

Within 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

Private ownership

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

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

The Sami have right to have reindeer husbandry at the site and in its surroundings.

5.1.2 - Management authority

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

Länsstyrelsen Jämtlands län (County Administration Board of Jämtland)

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

Ramsar contact person, Nature conservation administrator

Postal address:

S-831 86 Östersund, Sweden

E-mail address:

jamtland@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	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input 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
Mining and quarrying		Low impact	<input checked="" type="checkbox"/>	No change	<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
Logging and wood harvesting			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

Please describe any other threats (optional):

Gullhög-Tönningfloarna was during the 1980-90's threatened by the efforts to establish peat cutting at the site. The conservation values resulted in that no permits to cut peat were granted.

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	Gullhög-Tönningfloarna SPA and SAC SE0720411		whole

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

RIS for Site no. 2169, Gullhög-Tönningfloarna, Sweden

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

<no data available>

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Proposed

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

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? No need identified

5.2.7 - Monitoring implemented or proposed

<no data available>

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Lundqvist, J. Geological Survey of Sweden. 1969. Description to the map of the Quaternary deposits of the county of Jämtland.
Danielsson, Å. & Schedin, L.O, County administration board of Jämtland. 1977. Tönningfloarna with surroundings.
Johansson, R. County administration board of Jämtland. 1981. Compilation of sites with high nature values.
Björkbäck, F. County administration board of Jämtland. 1983. Mires in east part of Härjedalen.
County administration board of Jämtland. 1992. Bird Mires in Jämtland county.
Swedish environmental protection agency. 1994. Mire Protection Plan of Sweden.
County administration board of Jämtland. 2000. Wetlands in Jämtland county (report 2002:2).
Swedish environmental protection agency. 2007. Mire Protection Plan of Sweden (report 5669).

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

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Strings and hollows in reticulate structure (Carl-Johan Wikström County administration board of Jämtland, 23-09-2014)



Strings and hollows in structures reticulate structure (Carl-Johan Wikström County administration board of Jämtland, 23-09-2014)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2013-03-19