



Ramsar Information Sheet

Published on 20 May 2020

Update version, previously published on : 1 January 2012

Estonia

Leidissoo



Designation date	27 January 2010
Site number	1998
Coordinates	59°06'25"N 23°44'07"E
Area	8 178,00 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

Leidissoo mire is a part of an extensive wilderness area that still remains in northwest Estonia. The large and particularly mosaic wetland complex supports high variety of mire types and habitats and plays a significant role in the hydrological balance of the region. While most of the fen habitats are drained all over the Europe and in Estonia, Leidissoo is one of the few, maintaining relatively well-functioning fens with specific flora and fauna. Being remote, as populated areas are far and sparse, the human influence is minor in the area.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

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

From year	2012
To year	2019

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Leidissoo
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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
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Boundaries description

The boundary is the same as an existing protected area (Leidissoo Nature Reserve)

2.2.2 - General location

a) In which large administrative region does the site lie?	Lääne
b) What is the nearest town or population centre?	Tallinn

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
EU biogeographic regionalization	1. Boreal
Freshwater Ecoregions of the World (FEOW)	2. terrestrial area Sarmatic mixed forests freshwater area Southern Baltic Lowlands temperate floodplain rivers and wetlands

Other biogeographic regionalisation scheme

1: EEA, European Environment Agency, http://www.eea.europa.eu/publications/report_2002_0524_154909
 2: Olson, D. M, E. Dinerstein, E.D. Wikramanayake, N.D. Burgess, G.V.N. Powell, E.C. Underwood, J.A. D'amico, I. Itoua, H.E. Strand, J.C. Morrison, C.J. Loucks, T.F. Allnutt, T.H. Ricketts, Y. Kura, J.F. Lamoreux, W.W. Wetters, P. Hedao, & K.R. Kassem. 2001. Terrestrial Ecoregions of the World: A New Map of Life on Earth. - BioScience 51:933-938.
 Abell, R., Thieme, M. L., Revenga, C., Bryer, M., Kottelat, M., Bogutskaya, N., Coad, B., Mandrak, N., Contreras Balderas, S., Bussing, W., Stiassny, M., Skelton, P., Allen, G., Unmack, P., Naseka, A., Ng, R., Sindorf, N., Robertson, J., Armijo, E., Higgins, J., Heibel, T.J., Wikramanayake, E., Olson, D., Lopez, H. L., Reis, R. E., Lundberg, J.G., Sabaj Perez, M.H., Petry P., 2008, Freshwater Ecoregions of the World: A New Map of Biogeographic Units for Freshwater Biodiversity Conservation. - BioScience 58: 403-414.

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 reasons

The site is a good representative of the following habitat types listed in the Annex I of the EU Habitat Directive: active raised bogs (7110), transition mires and quaking bogs (7140), bog woodland (91D0), Fennoscandian deciduous swamp woods (9080), calcareous fens with *Cladium mariscus* and species of the *Caricion davallinae* (7210) and alkaline fens (7230) characteristic of the Boreal Biogeographical region. The wetland complex plays a substantial hydrological, biological and ecological role in the region and is identified both as IBA and Natura 2000 site.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The site supports particular elements of biological diversity that are rare or particularly characteristic of the Boreal biogeographic region such as untouched naturally open raised bogs, transitional bogs and fens and populations of plant and animal species important for maintaining the biological diversity of the region.

Plants: Great Fen-sedge *Cladium mariscus*, Sweet Gale *Myrica gale*, Narrow-leaved Marsh-orchid *Dactylorhiza russowi*, endemic Alpine Saw-wort *Saussurea alpina* subsp. *esthonica*, etc.

Birds: Merlin *Falco columbarius*, Willow Grouse *Lagopus lagopus*, etc.

Mammals: Wolf *Canis lupus*, Moose *Alces alces*, Lynx *Lynx lynx*, Brown Bear *Ursus arctos* .

The site is one of the most important (top 5) breeding places in Estonia for Montagu's Harrier *Circus pygargus* (the most prevalent breeding population in Estonia), Hen Harrier *Circus cyaneus*, Willow Grouse *Lagopus lagopus*, Black Grouse *Tetrao tetrix*, Common Crane *Grus grus* and Parrot Crossbill *Loxia pytyopsittacus*.

This is also one of the few places in Estonia where Short-toed Eagle *Circaetus gallicus* is regularly seen.

- 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>Cladium mariscus</i>	Great Fen-sedge	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		Criterion 3: The site supports particular elements of biological diversity including this species.
<i>Dactylorhiza russowii</i>	Narrow-leaved Marsh-orchid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	WJ in Estonian Red List	Criterion 3: The site supports particular elements of biological diversity including this species.
<i>Lycopodiella inundata</i>	Marsh Clubmoss	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	EN in Estonian Red List	Criterion 3: The site supports particular elements of biological diversity including this species.
<i>Myrica gale</i>	Sweet Gale	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		Criterion 3: The site supports particular elements of biological diversity including this species.
<i>Saussurea esthonica</i>	Alpine Saw-wort	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Annex II of Habitats Directive	Criterion 3: The site supports particular elements of biological diversity including this species.

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>Aquila chrysaetos</i>	Golden Eagle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive; highly endangered and strongly protected (I protection category) in Estonia	
CHORDATA / AVES	<i>Caprimulgus europaeus</i>	European Nightjar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	Criterion 2: breeding, 30-50 p.
CHORDATA / AVES	<i>Ciconia nigra</i>	Black Stork	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive; highly endangered and strongly protected (I protection category) in Estonia	
CHORDATA / AVES	<i>Circaetus gallicus</i>	Short-toed Snake Eagle	<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"/>	1			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive; highly endangered and strongly protected (I protection category) in Estonia	0-1p; Criterion 3: The site supports particular elements of biological diversity including this species.
CHORDATA / AVES	<i>Circus aeruginosus</i>	Western Marsh Harrier	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	Criterion 2: breeding 2- 3p
CHORDATA / AVES	<i>Circus cyaneus</i>	Northern Harrier	<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"/>	2			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	2p Criterion 3: The site supports particular elements of biological diversity including this species.
CHORDATA / AVES	<i>Circus pygargus</i>	Montagu's Harrier	<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"/>	18	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	15-20p Criterion 3: The site supports particular elements of biological diversity including this species.
CHORDATA / AVES	<i>Crex crex</i>	Common Crane	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	Criterion 2: breeding >2p
CHORDATA / AVES	<i>Dendrocopos leucotos</i>	White-backed Woodpecker	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2012		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	Criterion 2: breeding 1-2 p.

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>Dryocopus martius</i>	Black Woodpecker	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	Criterion 2: breeding 2-4 p.
CHORDATA / AVES	<i>Falco columbarius</i>	Merlin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	3-4p Criterion 3: The site supports particular elements of biological diversity including this species. Criterion 4: The site is important breeding place for birds
CHORDATA / AVES	<i>Ficedula parva</i>	Red-breasted Flycatcher	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	10-15 p. Criterion 2: breeding
CHORDATA / AVES	<i>Grus grus</i>	Common Crane	<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"/>	30	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	30-40p; Criterion 3: The site supports particular elements of biological diversity including this species.
CHORDATA / AVES	<i>Lanius collurio</i>	Red-backed Shrike	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	riterion 4: The site is important breeding place for birds, 20-30 p.
CHORDATA / AVES	<i>Loxia pytyopsittacus</i>	Parrot Crossbill	<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"/>	5	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>		>5p Criterion 3: The site supports particular elements of biological diversity including this species. Criterion 4: The site is important breeding place for birds
CHORDATA / AVES	<i>Lyrurus tetrix</i>	Eurasian Black Grouse; Black Grouse	<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"/>	175	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	150-200 males; Criterion 3: The site supports particular elements of biological diversity including this species.
CHORDATA / AVES	<i>Pernis apivorus</i>	European Honey Buzzard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive; highly endangered and strongly protected (I protection category) in Estonia	Criterion 2: breeding, 1-2p
CHORDATA / AVES	<i>Picoides tridactylus</i>	Three-toed Woodpecker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	
CHORDATA / AVES	<i>Pluvialis apricaria</i>	European Golden Plover; European Golden-Plover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	10-20p
CHORDATA / AVES	<i>Porzana porzana</i>	Spotted Crane	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	5-15 p
CHORDATA / AVES	<i>Strix uralensis</i>	Ural Owl	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	1-2 p
CHORDATA / AVES	<i>Sylvia nisoria</i>	Barred Warbler	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	>3p
CHORDATA / AVES	<i>Tetrao urogallus</i>	Western Capercaillie	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	15-20 p
CHORDATA / AVES	<i>Tetrastes bonasia</i>	Hazel Grouse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	2013			<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	15-20 pairs
CHORDATA / AVES	<i>Tringa glareola</i>	Wood Sandpiper	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the EU Bird Directive	10-15p
Others																		
CHORDATA / MAMMALIA	<i>Alces alces</i>	moose	<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"/>		Criterion 3: The site supports particular elements of biological diversity including this species.

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 / MAMMALIA	<i>Canis lupus</i>	Wolf	<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 checked="" type="checkbox"/>	<input type="checkbox"/>		Criterion 3: The site supports particular elements of biological diversity including this species. Criterion 4: refuge for animals with large habitat requirements	
CHORDATA / MAMMALIA	<i>Lynx lynx</i>	Eurasian Lynx	<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"/>		Criterion 3: The site supports particular elements of biological diversity including this species. Criterion 4: refuge for animals with large habitat requirements	
CHORDATA / MAMMALIA	<i>Ursus arctos</i>	Brown Bear; Grizzly Bear	<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 checked="" type="checkbox"/>	<input type="checkbox"/>		Criterion 3: The site supports particular elements of biological diversity including this species. Criterion 4: refuge for animals with large habitat requirements	

1) Percentage of the total biogeographic population at the site

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
Active raised bogs (7110)	<input checked="" type="checkbox"/>		Annex I of the EU Habitat Directive
Transition mires and quaking bogs (7140)	<input checked="" type="checkbox"/>		Annex I of the EU Habitat Directive
Bog woodland (91D0)	<input checked="" type="checkbox"/>		Annex I of the EU Habitat Directive
Fennoscandian deciduous swamp woods (9080)	<input checked="" type="checkbox"/>		Annex I of the EU Habitat Directive
Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallinae</i> (7210)	<input checked="" type="checkbox"/>		Annex I of the EU Habitat Directive
Alkaline fens (7230)	<input checked="" type="checkbox"/>		Annex I of the EU Habitat Directive

Optional text box to provide further information

The site is a good representative of the habitat types listed in the Annex I of the EU Habitat Directive characteristic of the Boreal Biogeographical region. The wetland complex plays a substantial hydrological, biological and ecological role in the region and is identified both as IBA and Natura 2000 site. The site supports particular elements of biological diversity that are rare or particularly characteristic of the Boreal biogeographic region such as untouched naturally open raised bogs, transitional bogs and fens and populations of plant and animal species important for maintaining the biological diversity of the region.

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

4.1 - Ecological character

Leidissoo mire is a fine-structured mosaic wetland complex of different mire types. The most typical are *Myrica* gale-dominated species-rich minerotrophic open fens. Bog communities are found in the western part of the Leidissoo, in the southern part *Cladium mariscus* fen occurs and in the north-eastern part, a heath moor is situated. The open mire is surrounded by different types of forests among which different boreal taiga site types, swamp forests and ombrotrophic bog forests occur.

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	0.108	Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		4	4.286	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		1	4118.744	Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		3	145.5216	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		3	134.1424	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		2	2284.735	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
2: Ponds		4	0.0402	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Carex magellanica irrigua</i>		rare plant species
<i>Dactylorhiza incarnata</i>		rare plant species
<i>Gymnadenia conopsea</i>		rare plant species

Optional text box to provide further information

The other locally protected and abundant species are *Juncus squarrosus*, *Viola uliginosa*, *Huperzia selago*, *Dactylorhiza maculata*, *Platanthera bifolia*, *Dactylorhiza fuchsii*, *Listera ovata*, *Neottia nidus-avis*, *Epipactis palustris*. Rare mosses are *Leucobryum glaucum* and *Neckera pennata*. There are also found *Carex disperma*, *C. irrigua*, *Corallorhiza trifida*, *Eriophorum gracile*, *Hammarbya paludosa*, *Pedicularis sceptrum-carolinum*.

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>Gallinago gallinago</i>	Common Snipe	175	2013		
CHORDATA/AVES	<i>Lagopus lagopus</i>	Willow Ptarmigan; Willow Grouse	3	2013		
CHORDATA/AVES	<i>Lanius excubitor</i>	Northern Shrike; Great Grey Shrike	5	2013		
CHORDATA/AVES	<i>Limosa limosa</i>	Black-tailed Godwit	10	2013		
CHORDATA/AVES	<i>Numenius arquata</i>	Eurasian Curlew	10	2013		
CHORDATA/AVES	<i>Numenius phaeopus</i>	Whimbrel	5	2013		

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Mbist Mid-Latitude climate with cold winters	Dfb: Humid continental (Humid with severe winter, no dry season, warm summer)

Average temperatures range from -5°C in February to +17°C in July. The average rainfall is 745 mm and evaporation is 450 mm.

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.

Nõva river, Höbring stream

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)

The bedrock is formed by Silurian limestone. Sand, clay and thin lacustrine mud (in some places) underlie the peat layer. The peat deposition has a depth of 1 – 3 m, reaching a maximum of 4.5 m.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Water destination

Presence?	Changes at RIS update
Feeds groundwater	No change

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

The Leidissoo mire plays an important role in the recharge and discharge of groundwater, and maintenance of water quality in northwest Estonia.

4.4.5 - Sediment regime

Sediment regime unknown

<no data available>

4.4.6 - Water pH

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

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 Läänemaa Suursoo protected mire area is neighbouring from western side and forested area in northern side. Some agricultural areas are in southern and eastern part

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	High
Wetland non-food products	Reeds and fibre	Medium
Wetland non-food products	Timber	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Low
Recreation and tourism	Nature observation and nature-based tourism	Low
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Long-term monitoring site	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Carbon storage/sequestration	High

Other ecosystem service(s) not included above:

The Leidissoo mire plays an important role in the recharge and discharge of groundwater, and maintenance of water quality in northwest Estonia.

The site is an important area for the traditional berry-picking (*Oxycoccus palustris* and *Rubus chamaemorus*) and small-scale hunting (*Alces alces*). Earlier times fen areas were used for hay making.

picking of berries and mushrooms, small-scale hunting, forestry, - all in comparatively low intensity.

Research activities focus on of the censuses of breeding birds as the wetland is included to the list of the state monitoring stations of mire birds.

Hunting and berry picking is the most typical recreation activities in the area. Although there is a potential for nature tourism, there is no nature trails or information materials at the moment.

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 checked="" type="checkbox"/>

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"/>

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

within the Ramsar site: mainly state-owned, some (mostly marginal) parts belong to private owners

in the surrounding area: both private and state land

5.1.2 - Management authority

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

Environmental Board , Western region

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

Mr Sulev Vare, Western Region of Environmental Board

Postal address:

Roheline 64, 80010, Pärnu, Estonia

E-mail address:

sulev.vare@keskkonnaamet.ee

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 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
Unspecified	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Logging and wood harvesting	Medium impact	Medium impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	increase

Please describe any other threats (optional):

within the Ramsar site: Before the site was taken under protection, peat extraction has repeatedly been applied by peat extraction companies.

in the surrounding area: Threats to the site from outside are now being posed by the intensification of forestry and drainage of surrounding areas.

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	Leidissoo		whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Nature Reserve	Leidissoo		whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Leidissoo		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
- 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

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:

There is no visitor center and other facilities (nature trails) for visitors are also lacking. Since 2009 the visiting management is the responsibility of the State Forest Management Centre.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but restoration is needed

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented

Research activities focus on of the censuses of breeding birds as the wetland is included to the list of the state monitoring stations of mire birds. In plans the inventories for invertebrates and bats will be implemented.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Leivits, A., Ojaste, I., Tammekänd, I., Lelov, E., Randla, T., Vilbaste, E., Leibak, E. 2001. A survey of breeding birds of the Leidissoo Mire System in 2000. – Linnurada 2001: 3-18.

Lõhmus, A., Kalamees, A., Kuus, A., Kuresoo, A., Leito, A., Leivits, A., Luigujõe, L., Ojaste, I., Volke, V. 2001. Bird species of conservation concern in the Estonian protected areas and important bird areas. Hirundo Supplementum 4: 37-167.

Luhamaa, H., Ilkonen, I., Kukk, T. 2001. Seminatural Communities of Lääne County, Estonia. – Pärandkoosluste Kaitse Ühing, Tartu-Turku. 96 pp.+ App

Orru, M. 1995. Estonian mires. Eesti Geoloogiakeskus, Tallinn. 240 pp. (in Estonian).

Paal, J., Ilomets, M., Fremstad, E., Moen, A., Børset, E., Kuusemets, V., Truus, L., Leibak, E. 1998. Estonian wetlands inventory 1997. Publication of the project "Estonian Wetlands Conservation and Management". Eesti Loodusfoto, Tartu. 166 + 28 pp.

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

<1 file(s) uploaded>

vi. other published literature

<no file available>

6.1.3 - Photograph(s) of the Site

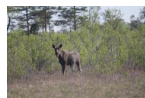
Please provide at least one photograph of the site:



Leidissoo Mire (Agu Leivits, Estonian Wetland Society, 23052016)



Leidissoo Mire, fen part (Agu Leivits, Estonian Wetland Society, 23052016)



Leidissoo mire, morning with Moose (Agu Leivits, Estonian Wetland Society, 23052016)



Leidissoo mire in morning mist (Agu Leivits, Estonian Wetland Society, 23052016)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation