

Ramsar Information Sheet

Published on 16 December 2022 Update version, previously published on : 3 May 2022

Netherlands Deelen



Designation date 30 December 1992

Site number 579

Coordinates 53°01'17"N 05°54'16"E

Area 514,00 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

The Deelen (514 ha) is located to the north of the city of Heerenveen. It is one of the few remnants of the extensive complex of peat bog landscapes that once covered northwestern Overijssel and Friesland provinces. It is an area of former peat-workings along the small river Boorne (or Koningsdiep) comprising open water, channels ("petgaten"), reedbeds, shrubs and wet meadows. The "petgaten" (channels dug for the harvesting of peat) are relatively young, because peat digging started early 1900. Petgaten are also dug for nature development purposes. This resulted in a large area of shallow open water, where succession from land to water takes place. The petgaten are separated from each other by small ridges (strips of land where peat was laid to dry). Reed, alder and willows grow on these ridges. The site is especially important for waterbird species.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and addre	ss of the com	piler of t	this RIS
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Responsible compiler

Institution/agency Wageningen Environmental Research

PO Box 47
6700 AA Wageningen
The Netherlands

National Ramsar Administrative Authority

Institution/agency Ministry of Agriculture Nature and Food Quality

Bezuidenhoutseweg 73

Postal address

P.O. Box 20401 2500 EK The Hague The Netherlands

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

From year 2015

To year 2020

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Unofficial name (optional)

Originally designated as 'De Deelen'

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 O No

(Update) B. Changes to Site area

(Update) For secretariat only: This update is an extension □

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?

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 boundary of the Ramsar site is equal to the Natura 2000-site with the same name.

In 2014 the Ramsar Site boundary has been delineated more accurately and aligned with the Natura 2000 site boundary decreasing the area by 6 ha.

2.2.2 - General location

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

Friesland

b) What is the nearest town or population centre?

Heerenveen with a population of 50.650 in 2021 (Source: CBS, Netherlands Statistics).

2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries? Yes O No \odot
- b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes O No lacktriangle

2.2.4 - Area of the Site

Official area, in hectares (ha): 514

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Atlantic

Other biogeographic regionalisation scheme

The bio-geographic regions dataset used, contains the official delineations used in the Habitats Directive (92/43/EEC) and for the EMERALD Network set up under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 3: Biological diversity

Justification

The Deelen is designated as a Natura 2000 site (SPA) and can therefore be considered important for maintaining the biodiversity of the Atlantic biogeographic region. Besides the species mentioned under criterion 2, the site has also been designated as a SPA for a number of bird species that are not on Annex Lof the Birds Directive.

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

The Ramsar site is also part of the Natura 2000 network in the European Union. It is designated as a Special Protection Area (SPA) for the functions that it provides to specific breeding and non-breeding Optional text box to provide further bird species (e.g. migratory, hibernating, sleeping, resting, foraging). information | For detailed information please see Natura 2000 data sheet: https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=NL2000001 https://www.natur a2000.nl/gebieden/friesland/deelen

☑ Criterion 5: >20,000 waterbirds

Overall waterbird numbers	26,986
Start year	2015
End year	2020
Source of data:	Sovon, Dutch Centre for Field Ornithology
Optional text box to provide further	Start season 2015/2016. End season 2019/2020. Peak numbers for four out of five seasons > 20,000.
information	Average 26,986 individuals.

☑ Criterion 6 : >1% waterbird population

Optional text box to provide further The 1% waterbird population thresholds are based on the 7th Edition of the Conservation Status Report information (CSR7).

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

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA / MAGNOLIOPSIDA	Gentiana pneumonanthe	 ✓					National red list species	

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

3.3 - An	ımal species	s whose presence rela	tes to the interna	tional im	iport	tance o	t the site	е	
Phylum	Scientific name		Pop. Size Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Fish, Moll	usc and Crustacea								
MOLLUSCA/ BIVALVIA	Pisidium pseudosphaerium				LC			National red list species	
Birds									
CHORDATA / AVES	Acrocephalus schoenobaenus				LC				The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Anas clypeata		990 2015/16-2019/20	1.5	LC			National red list species	Reference population: North-west & Central Europe (win). The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union. Pop: NORTH-WEST & CENTRAL EUROPE (WIN)
CHORDATA / AVES	Anas crecca		475 2015/16-2019/20	0.1	LC			National red list species	Reference population: crecca, North-west Europe. foraging, resting
CHORDATA / AVES	Anas penelope		1720 2015/16-2019/20	0.1	LC			National red list species	Reference population: Western Siberia & NE Europe/NW Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Anas strepera		1294 2015/16-2019/20	1.1	LC				Reference population: strepera, North-west Europe. foraging, resting Pop: STREPERA, NORTH-WEST EUROPE
CHORDATA / AVES	Anser albifrons		15906 2015/16-2019/20	1.3	LC				Reference population: albifrons, NW Siberia & NE Europe/North-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union. Pop: ALBIFRONS, NW SIBERIA & NE EUROPE/NORTH-WEST EUROPE
CHORDATA / AVES	Anser anser		3456 2015/16-2019/20	0.4					Reference population: anser, NW Europe/South-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Ardea alba		140 2015/16-2019/20	0.2	LC			National red list species	Reference population: alba, W, C & SE Europe/Black Sea & Mediterranean. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Ardea purpurea		35 2015/16-2019/20	0.1	LC			National red list species	Reference population: purpurea, West Europe & West Mediterranean/West Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Botaurus stellaris		5 2015/16-2019/20	0.1	LC			National red list species	Reference population: stellaris, W Europe, NW Africa (bre). The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Branta leucopsis		10804 2015/16-2019/20	0.9	LC				Reference population: Russia/Germany & Netherlands. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.

Phylum	Scientific name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion 3 5 7 8	Pop. Size	Period of pop. Est.		IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA / AVES	Chlidonias niger			34	2015/16-2019/20	0	LC			National red list species	Reference population: niger, Europe & Western Asia/Atlantic coast of Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Circus aeruginosus						LC				The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Cygnus olor			192	2015/16-2019/20	0.1	LC				Reference population: North-west Mainland & Central Europe. foraging, resting
CHORDATA / AVES	Limosa limosa			52	2015/16-2019/20	0.1	NT			National red list species	Reference population: limosa, Western Europe/NW & West Africa. foraging, resting
CHORDATA / AVES	Mergellus albellus			63	2015/16-2019/20	0.2	LC				Reference population: North-west & Central Europe (win). The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Platalea leucorodia			8	2019/20	0.1	LC				Reference population: leucorodia, West Europe/West Mediterranean & West Africa. foraging, resting

¹⁾ Percentage of the total biogeographic population at the site

Bird data are provided by SOVON, Dutch Centre for Field Ornithology.

The 1% waterbird population thresholds are based on the 7th Edition of the Conservation Status Report (CSR7).

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

<no data available>

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

4.1 - Ecological character

The Deelen is one of the few remnants of the extensive complex of peat bog landscape that once covered north-western Overijssel and Friesland.

Plant communities of European interest that occur are:

- Cicuto-Caricetum pseudocyperi,
- Carici elongatae alnetum,
- Thelypterido-Alnetum.

The Deelen is an important breeding area for birds of reed marshes, such as Marsh harrier, Savi's warbler, Sedge warbler, Purple heron and Bittern. Also the largest colony of Black terns in Friesland occurs here. Compared to other marshes also a large density of Grasshopper warblers occurs here. The area is also important as foraging, resting and moulting area for geese and waders.

Human activities include small scale reed-harvesting and peat extracting. The site is open for public: there are hiking routes, a hide for birdwatching and boat and hiking excursions are organised.

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 > Lakes and pools >> O: Permanent freshwater lakes		1	257	
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		2	207	
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		3	51.4	

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
9: Canals and drainage channels or ditches		4	

4.3 - Biological components

4.3.1 - Plant species

<no data available>

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
ARTHROPODA/INSECTA	Graphoderus bilineatus				HD Annex: II & IV
CHORDATA/MAMMALIA	Myotis dasycneme				HD Annex: II & IV; National RL category - (2009): LC

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)

The climates according to Köppen are rainy (Cbf) and montane (EH).

RIS for Site no. 579, D	eelen, Netherlands		
a) Minimum elevation ab	pove sea level (in		
	metres)		
a) Maximum elevation at	pove sea level (in metres)		
	Ent	ire river basin \square	
	Upper part	t of river basin	
	Middle part	t of river basin	
	Lower part	t of river basin 🗷	
	More than o	ne river basin \square	
	Not	t in river basin \square	
		Coastal	
		· · · · · · · · · · · · · · · · · · ·	e the larger river basin. For a coastal/marine site, please name the sea or ocean.
			ace area of the catchment is 185.000 km2. Geologically and Mesozoic sediments and Tertiary mountains.
4.4.3 - Soil			
		Organic 🗹	
	(Update) Changes	at RIS update No change	Increase O Decrease O Unknown O
	No availab	le information \square	
Are soil types subject to	change as a result of changing ons (e.g., increased salinity or a	g hydrological Yes O No ©	
Please provide further inform		aoidinoadon).	
		ons, which started ear	ly 20th century. The average water depth is 1,3 meters, but some locations
are very shallow. The general soil types	are: Alluvial, Brown fore		oils. The general land use is forestry, pasture farming, arable farming,
inproductive land (high	Titiouritains).		
4.4.4 - Water regime			
Water permanence			
Presence?	Changes at RIS update		
Usually permanent water present	No change		
Source of water that maintain	s character of the site		
Presence? Water inputs from	Predominant water source	Changes at RIS update	
precipitation	Ц	No change	
Water inputs from surface water		No change	
Water destination			
Presence?	Changes at RIS update		
Feeds groundwater	No change		
Stability of water regime	1		
Presence? Water levels largely stable	Changes at RIS update No change		
	-	terminants (if relevant). Use	this box to explain sites with complex hydrology:
-	pth is 1,3 meters, but so		
The hydrological value	es of the Deelen include t	flood control and grour	dwater replenishment.
4 4 5 - Sediment regim	0		

Sediment regime unknown 🗵

Please provide further information on sediment (optional):

No data available at the time of completing this database but probably no significant erosion, accretion, deposition or transportation of sediments.

4.4.6 - Water pH

Unknown 🗹

Probably no change although the pH of the water was not exactly known at the time of completing this database.	

4.4.7 - Water salinity

Fresh (<0.5 g/l)
(Update) Changes at RIS update No change
Unknown
.4.8 - Dissolved or suspended nutrients in water
Eutrophic ☑
(Update) Changes at RIS update No change ■ Increase □ Decrease □ Unknown □
Unknown
Please provide further information on dissolved or suspended nutrients (optional):
The dissolved or suspended nutrients in water were not exactly known at the time of completing this database.

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 i) broadly similar O ii) significantly different o site itself:

Surrounding area has greater urbanisation or development 🗹

Surrounding area has higher human population density lacktriangledown

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types $\ensuremath{\checkmark}$

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)	Medium
Fresh water	Drinking water for humans and/or livestock	Medium
Wetland non-food products	Livestock fodder	Medium
Wetland non-food products	Reeds and fibre	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium
Hazard reduction	Flood control, flood storage	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Water sports and activities	Medium
Recreation and tourism	Nature observation and nature-based tourism	Medium
Recreation and tourism	Picnics, outings, touring	
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Major scientific study site	Medium

Supporting Services

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

Optional text box to provide further information

The hydrological values of the Deelen include flood control and groundwater replenishment.
Diary farming 5 - 35%, Reed cutting 5 - 35%, Wind mills, Paths, tracks, cycling tracks 5 - 35%, Nautical sports 5 - 35%, Walking, horse-riding and non-motorised vehicles 5 - 35%, Water management >95%. Number of visitors not known.
Ongoing biodiversity monitoring is one of the obligatory activities in relation to the designated Natura 2000 species. SOVON, the Dutch Bird Research Organisation, coordinates for instance a continues national bird monitoring program in which it cooperates with 7000 volunteers, research institutes and organisations in the monitoring of birds throughout the Netherlands (among which the Deelen).
Visitors centre, excursions, hide.
Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes O No O Unknown ●
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

<no data available>

4.6 - Ecological processes

with local communities or indigenous peoples

character of the wetland

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological $\hfill\Box$

<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

-			
Pill	חוור	owners	hin

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	✓	

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	/	2

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

within the Ramsar site:

The site is owned by Staatsbosbeheer (465 ha); the remainder is in private ownership. Surrounding area: several private owners.

in the surrounding area:

Surrounding area: several private owners.

5.1.2 - Management authority

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

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

Postal address:

See https://www.staatsbosbeheer.nl/natuurgebieden/de-deelen

See https://www.staatsbosbeheer.nl/natuurgebieden/de-deelen

Head office: Staatsbosbeheer, P.O. Box 2, 3800 AA Amersfoort, the Netherlands, tel. 030-6926111

E-mail address:

info@staatsbosbeheer.nl

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	✓	No change		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	/	No change		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	 ✓	No change	/	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents	High impact	High impact	✓	No change	✓	No change

5.2.2 - Legal conservation status

Regional (international) legal designations

Regional (international) legal designations			
Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Deelen	https://www.natura2000.nl/gebied en/friesland/deelen	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Ecological Network (NEN)	Deelen	https://www.government.nl/topics /nature-and-biodiversity/nationa l- ecological-network-nen	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Deelen	http://datazone.birdlife.org/sit e/factsheet/1234	whole
Other non-statutory designation	KBA Deelen	http://www.keybiodiversityareas. org/site/factsheet/1234	whole

5.2.3 - IUCN protected areas categories (2008)

	la Strict Nature Reserve
	lb Wilderness Area: protected area managed mainly for wilderness protection
	Il National Park: protected area managed mainly for ecosystem protection and recreation
	III Natural Monument: protected area managed mainly for conservation of specific natural features
V	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

Legal protection		
Measures	Status	
Legal protection	Implemented	

Habitat

Measures	Status
Habitat manipulation/enhancement	Implemented
Hydrology management/restoration	Implemented
Improvement of water quality	Implemented

Species

Measures	Status	
Threatened/rare species	Implemented	
management programmes	Implemented	

Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Implemented
Livestock management/exclusion (excluding fisheries)	Implemented
Research	Implemented

5.2.5 - Management planning

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

Has a management effectiveness assessment been undertaken for the site? Yes **1** No O

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

URL of site-related webpage (if relevant): https://www.natura2000.nl/gebieden/friesland/deelen

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	
Birds	Implemented	
Water quality	Implemented	

Ongoing biodiversity monitoring is one of the obligatory activities in relation to the designated Natura 2000 species. SOVON, the Dutch Bird Research Organisation, coordinates for instance a continues national bird monitoring program in which it cooperates with 7000 volunteers, research institutes and organisations in the monitoring of birds throughout the Netherlands (among which the Deelen).

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

The site equals the Natura 2000-boundaries. For up-to-date information and references about the site see https://www.natura2000.nl/gebieden/friesland/deelen.

6.1.2 - Additional reports and documents

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

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

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

iv. relevant Article 3.2 reports

v. site management plan

<1 file(s) uploaded>

vi. other published literature

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



- (Hans Dekkers, -)

6.1.4 - Designation letter and related data

Designation letter

<2 file(s) uploaded>

Date of Designation 1992-12-30