

# Ramsar Information Sheet

Published on 10 January 2017 Update version, previously published on : 1 January 1992

# **Netherlands**

## Zwanenwater en Pettemerduinen



Designation date 15 June 1988 Site number 400

Coordinates 52°47'55"N 04°40'54"E

Area 770,30 ha

https://rsis.ramsar.org/ris/400 Created by RSIS V.1.6 on - 8 May 2020

## 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

An area of shifting and fixed sand-dunes along the mainland coast, with humid dune-slacks, two lakes, coastal marshes and woodland.

Zwanenwater en Pettemerduinen is a dune area south from the town of Callantsoog. It is a nearly undisturbed landscape of decalcified dunes mainly, with moist and marshy dune slacks. Tow larger lakes are in the core of the area, both surrounded with marshland. Development of bogs appears in some of the humid dune slacks and locally on the shores of the lakes.

The site is characterised by a great diversity in vegetations which is due to the large variation in abiotic circumstances, ranging from dry to very moist and from calcareous to acid circumstances.

## 2 - Data & location

## 2.1 - Formal data

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

Compiler 1

Name	Ms. A. Pel-Roest
Institution/agency	Ministry of Economic Affairs, Department of Nature and Biodiversity
	Prins Clauslaan 8
	D.O. Day 20404
	P.O. Box 20401
i ostai addicss	2500 EK The Hague,
	the Netherlands
	ure inetitieriatius
E-mail	a.j.pel@minez.nl
Phone	+31 70 378 6868
Priorie	+31 /0 3/6 0000

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

From year 2013

To year 2013

## 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Zwanenwater en Pettemerduinen

## 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   No   O
(Update) The boundary has been delineated more accurately
(Update) The boundary has been extended ✓
(Update) The boundary has been restricted
(Update) B. Changes to Site area the area has increased
(Update) The Site area has been calculated more accurately □
(Update) The Site has been delineated more accurately
(Update) The Site area has increased because of a boundary extension ☑
(Update) The Site area has decreased because of a boundary restriction □

## 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>

Boundaries description (optional)

The Ramsar site Zwanenwater has also been designated as the European Natura 2000-site Zwanenwater & Pettemerduinen. For this RISversion, the new Ramsar site boundary has therefore been adjusted to the (proposed) Natura 2000-boundary, while the name for the Natura 2000-site has been adopted. Some residential terrain has been excluded or exclavated, while natural terrain in the south has been included within the Ramsar site. In total this new boundary resulted in an increase of +175,3 ha.

#### 2.2.2 - General location

a) In which large administrative region does the site lie?	Province of Noord-Holland
b) What is the nearest town or population	ca. 10 km north-west of Alkmaar (population 94.505 per 1-1-2013; 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 Yes O No 

Yes O No countries?

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): 770.3

Area, in hectares (ha) as calculated from 770.36 GIS boundaries

## 2.2.5 - Biogeography

Biogeographic regions

Diogoogiapino rogiono	
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

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

Other ecosystem services provided

The Dutch coastal dunes system stretching from the north-eastern border with Germany and the south-western border with Belgium is actually one big nature reserve. Within the Netherlands but also within the Atlantic biogeographic region it may be regarded as one of the most biodiverse ecosystems. The almost 600 ha of the Zwanenwater en Pettemerduinen is a relatively small dune reserve. The site has never been used for the extraction of drinking water however, resulting in very well developed humid dune slacks. The site represents a unique dune-system containing a large variety of species and (priority) habitat types of European importance (see among others the habitat types listed under criterion 3).

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

Justificatio

The Zwanenwater en Pettemerduinen is designated as a Natura 2000 site (both SAC and 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 SAC for a range of habitat types (Annex I of HD) and SPA for a number of bird species that are not on Annex I of the BD.

☑ 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
Dactylorhiza incarnata	Early Marsh-orchid	<b>V</b>	<b>V</b>				National Red List - VU	
Epipactis palustris	Marsh Helleborine	<b>₽</b>	V		LC		National Red List - VU	
Oenanthe lachenalii	Parsley Water-dropwort	<b>₽</b>	V				National Red List - VU	
Parnassia palustris	Grass-of-parnassus	<b>V</b>	<b>V</b>		LC ©SS		National Red List - VU	
Pedicularis palustris	Marsh Lousewort	<b>/</b>	<b>/</b>		LC Sign		National Red List - VU	

National Red List (2004)		
National Red List (2004)		

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

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion 3 5 7 8	Pop. Size	% occurrence 1)	IUCN Red / List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds											
CHORDATA/ AVES	Anas clypeata	Northern Shoveler									Non-breeding
CHORDATA/ AVES	Anser erythropus	Lesser White- fronted Goose	<b>2</b> 000				VU © iii © IIII		<b>₽</b>	Annex I of the EU Birds Directive	Non-breeding
CHORDATA/ AVES	Botaurus stellaris	Eurasian Bittern	<b>2</b> 000				LC Sign			Annex I of the EU Birds Directive; National Red List - EN	breeding
CHORDATA/ AVES	Larus fuscus graellsii	Lesser Black- backed Gull								National Red List - LC	breeding Criterion 4: Gathers in relatively small areas
CHORDATA /	Oenanthe oenanthe	Northern Wheatear					LC OSS			National Red List - EN	breeding
	Phalacrocorax carbo	Great Cormorant					LC OTH			National Red List - LC	breeding Criterion 4: Gathers in relatively small areas
	Platalea leucorodia	Eurasian Spoonbill					LC OSS			AnnexI of the EU Birds Directive; National Red List - LC	breeding Criterion 4: Gathers in relatively small areas
Fish, Mollus	c and Crustacea						·				
MOLLUSCA/ GASTROPODA	Myosotella myosotis	mouse-eared snail	<b>2</b> 000							National Red List - VU	

<sup>1)</sup> Percentage of the total biogeographic population at the site

#### National Red List (2004)

Criterion 6: The site does not qualify anymore for criterion 6. Compared to the period of 1992-98 (previous updated version) the species Spoonbill Platalea leucorodia (BR) did meet the 1% threshold in the period 1999-2003 (1.5%) but not anymore in the period 2006-2010. Breeding numbers may fluctuate substantially between years, sometimes due to predation by foxes, which makes that individuals migrate to other safer sites. The site however still has a substantial population of breeding Spoonbills every year and the carrying capacity of the site is still sufficient for a viable population. The species was among others the reason to designate the wetland as a Natura 2000-site, which means that measures will be taken to support the species. Currently its numbers do not meet the 1%, but it may be again in the future.

## 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
H2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes)		priority habitat type	Annex I of Habitats Directive
H2180 Wooded dunes of the Atlantic, Continental and Boreal region			Annex I of Habitats Directive
Humid dune slacks H2190			Annex I of Habitats Directive
H2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)		priority habitat type	Annex I of Habitats Directive
H2140 Decalcified fixed dunes with Empetrum nigrum		priority habitat type	Annex I of Habitats Directive
H6230 Species-rich Nardus grasslands, on siliceous substrates in mountain areas		(and submountain areas, in Continental Europe) priority habitat type	Annex I of Habitats Directive
H2170 Dunes with Salix repens spp. Argentea (Salicion arenariea)			Annex I of Habitats Directive
H7210 Calcareous fens with Cladium mariscus and species of the Caricion davallianae		priority habitat type	Annex I of Habitats Directive

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

## 4.1 - Ecological character

Zwanenwater en Pettemerduinen is a dune area south from the town of Callantsoog. It is a nearly undisturbed landscape of mostly dune land with a lime deficiency with moist and marshy dune slacks. In the centre of the area are two connected fresh water dune lakes, which are among the largest of its kind in Europe. Both lakes are surrounded by marshland. Humid dune slacks exist locally as well as bogs at the lake shores. Here are characteristic fresh water vegetations which are rare in this part of the Netherlands.

The large variation in abiotic circumstances, ranging from dry to very moist and from calcareous to acid allows for the development of a diverse vegetation pattern with several rare species.. Empetrum nigrum heath land for instance occurs in the decalcified fixed dunes.

Apart from the vegetations, the Zwanenwater en Pettemerduinen is also an important breeding area for birds of (reed)marshes and open dunes and is of importance for non-breeding birds as well.

The site is an integral part of the North Sea dunes which protect the Netherlands against the North Sea. The site is partly open to public and non-members of management organisation Natuurmonumenten need to pay for an entrance fee. There are two hides for bird watching and it is possible to attend excursions.

#### Physical features:

The Zwanenwater en Pettemerduinen evolved after the Zijpe, a former creek, was closed off in 1597. As a result of this closure sand dunes were formed, first to the east of the existing beach barrier (Hondsbosche Zeewering), later also to the west. Between the two dune ridges a dune valley was formed. The result is a complex of secondary valleys and parabola dunes which overlap and transect each other many times.

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

#### Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
E: Sand, shingle or pebble shores		1	693.3	Unique
K: Coastal freshwater lagoons		2	38.5	

#### 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 >> Tp: Permanent freshwater marshes/ pools		2	38.5	

## 4.3 - Biological components

## 4.3.1 - Plant species

<no data available>

## 4.3.2 - Animal species

<no data available>

## 4.4 - Physical components

## 4.4.1 - Climate

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

The climate according to Köppen is rainy (Cbf).

#### 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in [ metres) 13

Entire river basin	
Upper part of river basin □	
Mddle 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 catchment area of the Zwanenwater en Pettemerduinen is the surrounding dune area. Geologically and geomorphologically it consi Quarternary sediments.	ists of
4.4.3 - Soil	
Mneral ✓	
(Update) Changes at RIS update No change	
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 soil type is Alluvial.	
4.4.4 - Water regime	
Water permanence Presence? Changes at RIS update	
Usually permanent water present	
Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.	
The freshwater supply has a convex water table, which makes that the water is above ground water level in the lowest parts resulting in t dune lakes. These lakes are approximately 1,5 m. deep.	he two
The water level within the area is more or less natural, high in winter, low in summer. In order to stop drainage to the adjacent agricultura 1,4 km long dam of foil was constructed at the eastern border of the site in 1996.	ıl area a
4.4.5 - Sediment regime	
4.4.5 - Sediment regime  Sediment regime unknown   ✓	
Sediment regime unknown ☑  Please provide further information on sediment (optional):	
Sediment regime unknown ☑	
Sediment regime unknown   Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.	
Sediment regime unknown  Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH	
Sediment regime unknown ☑  Please provide further information on sediment (optional):	
Sediment regime unknown  Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH	
Sediment regime unknown  Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH  Unknown <pre></pre>	
Sediment regime unknown Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH  Unknown   Invariant tegime unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):  Unknown Image: Please provide further information on sediment (optional):	
Sediment regime unknown  Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH  Unknown □ <no available="" data="">  4.4.7 - Water salinity  Fresh (&lt;0.5 g/l) ☑</no>	
Sediment regime unknown  Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH  Unknown   Increase O Decrease O Unknown O	
Sediment regime unknown  Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH  Unknown □ <no available="" data="">  4.4.7 - Water salinity  Fresh (&lt;0.5 g/l) ☑</no>	
Sediment regime unknown  Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH  Unknown   Increase O Decrease O Unknown O	
Sediment regime unknown  Please prowide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH  Unknown □ <no available="" data="">  4.4.7 - Water salinity  Fresh (&lt;0.5 g/l)  (Update) Changes at RIS update No change Increase Decrease Unknown Unknown □  Unknown □</no>	
Sediment regime unknown  Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH  Unknown   Incomplete the sequence of th	
Sediment regime unknown  Please provide further information on sediment (optional):  The coast is prone to erosion, which makes that so-called sand suppletion is regularly needed.  4.4.6 - Water pH  Unknown □ <no available="" data="">  4.4.7 - Water salinity  Fresh (&lt;0.5 g/l)   (Update) Changes at RIS update No change  Increase ○ Decrease ○ Unknown ○  Unknown □  4.4.8 - Dissolved or suspended nutrients in water  Eutrophic   Eutrophic   Eutrophic   ■</no>	

4.4.9 - Features	of the	surrounding are	a which ma	v affect the	Site
------------------	--------	-----------------	------------	--------------	------

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

## 4.5 - Ecosystem services

## 4.5.1 - Ecosystem services/benefits

#### **Cultural Services**

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

## Other ecosystem service(s) not included above:

Within the Ramsar site:

Paths, tracks, cycling tracks, walking, horse-riding and non-motorised vehicles, military training, Removal of sediments, Water management >95%, Dams, reservoirs & hydro-electric activities.

In the surroundings/catchment: intensive farming.

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site?

## 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

D.,	ы	li o	OW	ma	ro	hi	n
Гu	U	IIG	UVV	пе	15	ш	IJ

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

#### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Foundation/non- governmental organization/trust	<b>2</b>	
Other types of private/individual owner(s)	<b>&gt;</b>	✓

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

۱١	$\Lambda I$	ıth	ทก	th	` L	n	nsar	· CI	to.
ш	/ V	ıu	II I I	LI 10	7 I	м	ıəaı	O.	LC.

The site is owned by Natuurmonumenten and to a lesser extent by Staatsbosbeheer.

In the surrounding area:

The North Sea and beach is state owned, on land several private owners.

## 5.1.2 - Management authority

Please list the local office / offices of any (1) Natuurmonumenten agency or organization responsible for  $\,$  (2) Staatsbosbeheer managing the site

Postal address:

(1) P.O. Box 9955, 1243 ZS 's Graveland, the Netherlands, +31 (0)35 6559933

(2) P.O. Box 1300, 3970 BH Driebergen, the Netherlands, +31 (0)30-6926111

## 5.2 - Ecological character threats and responses (Management)

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

#### Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
(Para)military activities	Low impact		✓	No change		No change

#### Please describe any other threats (optional):

Disturbance to birds (military activities - shooting)

## 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	Special Protection Area "Zwanenwater & Pettemerduinen"(Birds Directive 79/409/EEC, 1988) - Special Area of Conservation "Zwanenwater & Pettemerduinen"(Habitats Directive 92/43/EEC)		whole

## 5.2.3 - IUCN protected areas categories (2008)

la 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

IV Habitat/Species Management Area for conservation	a: protected area managed mainly 🗾 through management intervention
	orotected area managed mainly for cape conservation and recreation
	a: protected area managed mainly

#### 5.2.4 - Key conservation measures

## Legal protection

	Measures	Status
	Legal protection	Implemented

#### Other:

Nothing particular. The site will be managed according to the Natura2000 management plan. The Ramsar site matches 100% with the (proposed) designation for Natura2000. The process for the Natura2000 management plan has not been started yet.

## 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 Yes O No oprocesses with another Contracting Party?

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

Excursions, hide.

#### 5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Please select a value

#### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented

Ongoing biodiversity monitoring is one of the obligatory activities in relation to the (proposed) designation of Natura2000 habitat types and/or 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 others the Zwanenwater en Pettemerduinen).

## 6 - Additional material

## 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

- BirdLife International, 2004. Birds in Europe, population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series No. 12).

- Hornman, M., Hustings, F., Koffijberg, K., Kleefstra, R., Klaassen, O., van Winden, E., SOVON Ganzen- en Zwanenwerkgroep & L. Soldaat, 2012. Watervogels in Nederland 2009/2010. SOVON-rapport 2012/02, Waterdienst-rapport 12.06. SOVON Vogelonderzoek Nederland, Nijmegen.

- Janssen, John, A.M. & Joop, H.J. Schaminée, 2009. Europese Natuur in Nederland. Zee en kust Natura 2000-gebieden. KNNV-Uitgeverij. 296p.

- Ministerie van LNV. Ontwerpbesluit Natura 2000-gebied Zwanenwater en Pettemerduinen.

- Van Roomen M.W.J, Boele A., van der Weide M.J.T., van Winden E.A.J, Zoetebier D. 2000. Belangrijke vogelgebieden in Nederland, 1993-97. Actueel overzicht van Europese vogelwaarden in aangewezen en aan te wijzen speciale beschermingszones en andere belangrijke gebieden. SOVON-informatierapport 2000/01. SOVON Vogelonderzoek Nederland, Beek-Ubbergen

#### 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 availables

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<1 file(s) uploaded>

## 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Ramsar logo ( logo Ramsar, 02-02-1971 )

## 6.1.4 - Designation letter and related data

## Designation letter

<1 file(s) uploaded>

Date of Designation 1988-06-15