



# Ramsar Information Sheet

Published on 2 April 2015

## Netherlands

### Duinen Schiermonnikoog



Designation date	29 August 2000
Site number	2214
Coordinates	53°29'15"N 6°10'25"E
Area	833,10 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 island of Schiermonnikoog is the smallest and easternmost of the five inhabited Wadden Sea barrier islands. The Ramsar site comprises the system of dunes in the west of the island. The beaches to the north belong to the Ramsar site Noordzeekustzone, while the saltmarshes and younger dunes in the east and southwest side of the island belong to the Ramsar site Waddenzee. The village and adjoining agricultural grassland polders are excluded.

## 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
Postal address	Prins Clauslaan 8 P.O. Box 20401 2500 EK The Hague The Netherlands
E-mail	A.J.Pel@minez.nl
Phone	+31 70 378 6868

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

To year

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

## 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 'Duinen Schiermonnikoog' was formerly an integral part of the Ramsar site 'Waddeneilanden en Noordzeekustzone'. The Ramsar site 'Waddeneilanden en Noordzeekustzone' has also been designated as six separate European Natura 2000-sites, one named Noordzeekustzone and the others named after the respective islands 'Duinen en Lage land Texel', 'Duinen Vlieland', 'Duinen Terschelling', 'Duinen Ameland' and 'Duinen Schiermonnikoog'. A logical step as the ecosystems of the Noordzeekustzone and the islands are quite different, and all islands have their own nature management plan.

For this RIS-version, the new Ramsar site boundaries have therefore been adjusted to the Natura 2000- boundaries, while the respective names for the Natura 2000-sites have been adopted. For the Ramsarsite 'Duinen Schiermonnikoog' this results in a size of 833,1 ha.

### 2.2.2 - General location

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

### 2.2.3 - For wetlands on national boundaries only

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

d) Transboundary Ramsar Site name:

### 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
Other scheme (provide name below)	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 over 800 ha of the Duinen Schiermonnikoog represent a vast and unique natural or near-natural 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

Justification

The Duinen Schiermonnikoog 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.

Please refer to Section 3.4 Ecological communities whose presence relates to the international importance of the site for a list of Habitat types (according to the interpretation manual of EU-Habitat Directive) for which the site has been designated as a SAC).

#### 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>Botrychium lunaria</i> 	Moonwort	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - VU	
<i>Cirsium dissectum</i> 	Meadow Thistle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - VU	
<i>Dactylorhiza incarnata</i> 	Early Marsh orchid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - VU	
<i>Epipactis palustris</i> 	Marsh Helleborine	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - VU	
<i>Equisetum variegatum</i> 	Variiegated Horsetail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - EN	
<i>Gentianella amarella</i> 	Autumn Gentian	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - VU	
<i>Herminium monorchis</i> 	Musk Orchid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - CR	
<i>Liparis loeselii</i> 	Fen Orchid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - EN ; HD Annex II,IV	
<i>Parnassia palustris</i> 	Grass of parnassus	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC 	<input type="checkbox"/>	National Red List - VU	
<i>Schoenus ferrugineus</i> 	Black Bog-rush	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC 	<input type="checkbox"/>	National Red List - VU	

Species listed under Criteria 2:

Mushroom species:

- Hohenbuehelia culmicola (Marram Oyster) - National Red List (EN) ; has not yet been assessed for the IUCN Red List, but is in the Catalogue of Life

Vascular plants:

- Cicendia filiformis (Yellow Centaury) - National Red List (EN) ; has not yet been assessed for the IUCN Red List, but is in the Catalogue of Life

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	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / AVES	<i>Asio flammeus</i>	Short-eared 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"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - CR ; BD Annex I	
CHORDATA / AVES	<i>Botaurus stellaris</i>	Eurasian Bittern	<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"/>	National Red List - EN ; BD Annex I	
CHORDATA / AVES	<i>Circus aeruginosus</i>	Western Marsh Harrier	<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"/>	National Red List - LC ; BD Annex I	
CHORDATA / AVES	<i>Circus cyaneus</i>	Northern Harrier	<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"/>	National Red List - NT ; BD Annex I	
CHORDATA / AVES	<i>Oenanthe oenanthe</i>	Northern Wheatear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	National Red List - EN	Criteria 3: Bird species (not on Annex I of the BD) for which the site has been designated as a SPA as well as their status on the National Red List (2004).
CHORDATA / AVES	<i>Saxicola rubetra</i>	Whinchat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	National Red List - EN	Criteria 3: Bird species (not on Annex I of the BD) for which the site has been designated as a SPA as well as their status on the National Red List (2004).
CHORDATA / AVES	<i>Somateria mollissima</i>	Common Eider	<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"/>	National Red List - LC	Criteria 3: Bird species (not on Annex I of the BD) for which the site has been designated as a SPA as well as their status on the National Red List (2004).

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
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes')	<input type="checkbox"/>		
Fixed coastal dunes with herbaceous vegetation ('grey dunes')	<input type="checkbox"/>	priority habitat type	
Decalcified fixed dunes with <i>Empetrum nigrum</i>	<input type="checkbox"/>	priority habitat type	
Dunes with <i>Hippophaë rhamnoides</i>	<input type="checkbox"/>		
Dunes with <i>Salix repens</i> ssp. <i>argentea</i> ( <i>Salicion arenariae</i> )	<input type="checkbox"/>		
Wooded dunes of the Atlantic region	<input type="checkbox"/>		
Humid dune slacks	<input type="checkbox"/>		
Molinia meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> )	<input type="checkbox"/>		

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

### 4.1 - Ecological character

Due to the harsh climatic circumstances natural woodland in the Wadden area is generally low and dominated by oak (*Quercus robur*); this type of woodland has only developed on the five largest dune islands, among which the Duinen Schiermonnikoog. In the 20th century many conifers have been planted to stabilise shifting sand dunes, partly as an employment project in the 1930-ies. The dunes encompass many habitat types of European importance.

Main ecosystem services of the site are:

- The chain of Wadden islands and dune systems creates shelter from the North Sea which protects and sustains the highly productive Wadden Sea (a.o. in terms of fisheries);
- The Wadden islands dunes protect the islands hinterland from the North Sea;
- The dunes are a catchment area for rainwater which provides high quality drinking (ground)water;
- The sunny climate and the scenic and natural beauty of the Wadden islands has turned the islands into one of the main tourism destinations in the Netherlands.

### 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	814	Unique

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		2	17	

### 4.3 - Biological components

#### 4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Carex notha</i>	Dotted Sedge	National Red List Category - NT
<i>Drosera rotundifolia</i>	Roundleaf Sundew	National Red List Category - NT
<i>Neottia cordata</i>	Lesser Twayblade	National Red List Category - NT

#### 4.3.2 - Animal species

<no data available>

### 4.4 - Physical components

#### 4.4.1 - Climate

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

#### 4.4.2 - Geomorphic setting

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 Wadden island represents its own catchment area. The islands basically consist of dune sands and silt polders claimed from the sea. The land surface of the island ranges approx. 40 km<sup>2</sup>.

High biodiversity grasslands are locally present. Pine forests were planted in the past. These are naturally converting into deciduous stands. A fresh water lake can be found in the west. Management stimulates sand shifts. In the east the sea created a small tidal lagoon.

#### 4.4.3 - Soil

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)

Schiermonnikoog is one of the smallest and most unspoiled islands in the Waddensea. The dunes stretch along the western part of the island. The dune slacks are rich in lime.

#### 4.4.4 - Water regime

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

The dune area forms the natural coastal defence of the island against the North Sea. Furthermore the dunes play an important role for fresh (drinking) water extraction.

#### 4.4.5 - Sediment regime

<no data available>

#### 4.4.6 - Water pH

<no data available>

#### 4.4.7 - Water salinity

<no data available>

#### 4.4.8 - Dissolved or suspended nutrients in water

<no data available>

#### 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  ii) significantly different  site itself.

Please describe other ways in which the surrounding area is different:

The Wadden Sea and the North Sea represent the immediate surroundings of the Wadden Island.

### 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

##### Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	Medium

##### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium

Other ecosystem service(s) not included above:

A primary indicator of the extent of tourism and recreation in the Wadden Sea region (here all five islands and mainland municipalities) is the number of overnight stays in commercial enterprises (nine beds or more). These are approx. 12 million overnight stays per year (data 1996).

## RIS for Site no. 2214, Duinen Schiermonnikoog , Netherlands

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

<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

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

a) within the Ramsar site:  
Staatsbosbeheer

b) in the surrounding area:  
The water (Wadden Sea and North Sea) is state owned, on land several private owners.

#### 5.1.2 - Management authority

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

Main management authorities:  
- Natuurmonumenten, PO Box 9955, 1243 ZS 's Graveland, the Netherlands, tel. +31 35 6559933.  
- Rijkswaterstaat Noord-Nederland, Zuidersingel 3, 8911 AV Leeuwarden, P.O. Box 2301, 8901 JH, Leeuwarden, tel. +31 (0)58 234 43 44.

Postal address:

See above

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

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

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Tourism and recreation areas	Medium impact		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Water abstraction	Medium impact		<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 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	Duinen Schiermonnikoog		whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Park	Schiermonnikoog National Park		whole

### 5.2.3 - IUCN protected areas categories (2008)

II National Park: protected area managed mainly for ecosystem protection and recreation

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

### 5.2.4 - Key conservation measures

<no data available>

### 5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

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:

The site has a visitor centre 'Bezoekerscentrum Schiermonnikoog', Torenstreek 20, P.O. Box 32, 9166 ZP, Schiermonnikoog. Tel: +31 (0)519 531 641. Information on excursions etc. can be obtained through the visitor centre and Tourist Office (VVV) of Schiermonnikoog.

#### 5.2.6 - Planning for restoration

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

#### 5.2.7 - Monitoring implemented or proposed

Ongoing biodiversity monitoring is one of the obligatory activities in relation to the designated Natura 2000-habitat types and species.

Numerous scientific research projects are ongoing in the Wadden Sea, North Sea Coastal area and the Wadden Islands. Main responsible executors are:

- NIOZ: Royal Netherlands Institute for Sea Research;
- Wageningen IMARES: The Institute for Marine Resources and Ecosystem Studies (which joins same facilities with NIOZ);
- Wageningen Alterra: research institute for our green living environment (mainly terrestrial and fresh water research);
- University of Groningen (offering an MSc in Marine Biology);
- SOVON, the Dutch Bird Research Organisation, coordinates 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;
- TNO: Netherlands Organization for Applied Scientific Research (Den Helder);
- NIOO: Netherlands Institute of Ecology;
- RIKZ: The National Institute for Coastal and Marine Management.

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

The number of scientific/technical references is too extended to list here. For a complete list please surf to the publication lists of the research institutes on the internet. For an arbitrary selection see below:

- BirdLife International, 2004. Birds in Europe, population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series No. 12).
- Homman, 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, 2008. Aanwijzingsbesluit Natura-2000 gebied Duinen Schiermonnikoog.

#### 6.1.2 - Additional reports and documents

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

<no file available>

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

<no file available>

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

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

<no data available>

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

Please provide at least one photograph of the site:

<no data available>

#### 6.1.4 - Designation letter and related data

Designation letter

<2 file(s) uploaded>

Transboundary Designation letter

<1 file(s) uploaded>

Date of Designation