Information Sheet on Ramsar Wetlands

(RIS) - 2009-2012 version

1. Name and address of the compiler of this form:	FOR OFFICE USE ONLY	7.
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Department of Nature and Biodiversity		
Prins Clauslaan 8	Designation date	Site Reference Number
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Tel: +31 (0)70 378 6868		
2. Date this sheet was completed/updated:		
September 2013		
3. Country:		
5. Country:		
the Netherlands		
4. Name of the Ramsar site:		
Broekvelden, Vettenbroek en Polder Stein (see 7b)		
5. Designation of new Ramsar site or update of existing	ng site:	
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^{**} Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in

the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site: Nothing particular.

7. Map of sit	e:
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- a) A map of the site, with clearly delineated boundaries, is included as:
 - i) a hard copy (required for inclusion of site in the Ramsar List): \square ;
 - ii) an electronic format (e.g. a JPEG or ArcView image) ;
 - iii) a GIS file providing geo-referenced site boundary vectors and attribute tables .

b) Describe briefly the type of boundary delineation applied:

Ramsar site 'Broekvelden en Vettenbroek' has also been designated as the European Natura 2000-site Broekvelden, Vettenbroek & Polder Stein. For this RIS-version, the Ramsar site boundary has therefore been adjusted to the Natura 2000-boundary. Some residential areas were excluded or exclavated from the Ramsar site.

In total this new boundary resulted in a slight decrease of -13,9 ha

8. Geographical coordinates (latitude/longitude, in degrees and minutes):

52°03'N - 04°47'E

9. General location:

Province of Zuid-Holland, northeast of Gouda (population 70.904 per 1-1-2013; Source: CBS, Statistics Netherlands).

10. Elevation: (in metres: average and/or maximum & minimum)

NAP - 5 / -1 m

11. Area:

696,5 ha

12. General overview of the site:

The site Broekvelden, Vettenbroek en Polder Stein is a complex of shallow lakes (criss-crossed by strips of land), reed beds and wet meadows. The area is part of the peat meadows in the so-called Groene Hart (Green Hart) of the province of Zuid-Holland. The vegetation mainly consists of eutrophic grasslands but nutrient poor grasslands with a diverse flora also still exist. The site encompasses a deep lake at the north of the so-called Reeuwijkse Plassen.

13. Ramsar Criteria:

1 • 2 • 3 • 4 • 5 • 6 • 7 8 • 9

14. Justification for the application of each Criterion listed in 13 above:

The Ramsar site Broekvelden, Vettenbroek en Polder Stein, has been designated under Natura 2000 as well. Natura 2000 is the centrepiece of EU nature & biodiversity policy. It is an EU-wide network of nature protection areas which aims to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SAC) designated by Member States under the Habitats Directive, and also incorporates Special Protection Areas (SPAs) designated under the Birds Directive. Natura 2000 applies to SACs and SPAs which are divided into biogeographical regions. The Ramsar site Broekvelden, Vettenbroek en Polder Stein applies to the Bird Directive only and the justification for the application of each Ramsar criterion below, greatly refers to its designation as a SPA.

Justification criterion 2

The table below shows Annex I species (BD) for which the site has been designated as a SPA, as well as their current status on the National Red List. Some other threatened species of the National Red Lists have also been added to the tables.

Species of Annex I of the European Bird Directive for which the site has been designated as a SPA, as well as some threatened species of the National Red Lists (- = Not Applicable). Year of adoption of the National Red List in parentheses.

Species(group)	Species	BD	National RL
	Code	Annex	category
Vascular plants			(2004)
Snake's Head Fritillary Fritillaria meleagris	-	-	EN
Marsh Lousewort Pedicularis palustris	-	-	VU
Mushrooms			(2004)
Alnicola submelinoides	-	-	EN
Non-breeding birds			
Bewick's Swan Cygnus bewickii	A037	I	-
Molluscs			(2004)
Gyraulus riparius	_	_	CR

Justification criterion 3

The Ramsar site Broekvelden, Vettenbroek en Polder Stein 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 I of the BD. See the table below.

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).

Species	BD Species
	code
Non-breeding birds	
Eurasian Wigeon Anas [Mareca] penelope	A050
Gadwall Anas strepera	A051
Northern Shoveler Anas clypeata	A056

Justification criterion 4

The site is of particular importance non-breeding bird species (see criterion 2, 3 and 6), of which several species gather in high numbers and relatively small areas during wintering and/or migration periods.

Justification criterion 5

The average peak number was 50.954 for the period 2005/2006-2009/2010, which is more than the average peak number of 30.962 for the former period 1999/2000-2003/2004 (Source: Sovon, Dutch Centre for Field Ornithology).

Justification criterion 6

Species meeting the 1% threshold (WPE-4, Wetlands International 2006; Source: Sovon, Dutch Centre for Field Ornithology). (NB = nonbreeding, BR = breeding period 2006-2010).

			81			
Species (UK)	Species	NB/	Biogeographic population	1%	Average number	% at site
		BR		threshold	of birds between	
					2006-2010	
Eurasian Wigeon	Anas penelope	NB	W. Siberia/ NW-NE Europe	15000	48328	3,2
Gadwall	Anas strepera	NB	NW-Europe	600	1092	1,8

Compared to the period of 1992-98 (previous updated version) the species Gadwall *Anas strepera* (NB) now also meets the 1%-threshold, while Bewick's Swan *Cygnus columbianus* (NB) does not.

15. Biogeography:

a) biogeographic region:

The Ramsar site belongs to the Atlantic biogeographic region.

b) 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).

16. Physical features of the site:

Most peat lakes around Gouda were formerly drained for economic and safety reasons. Due to the peaty soil however the area of Broekvelden and Vettenbroek continuously received upwelling groundwater. The costs to drain this polder remained high. In 1970 it was decided to put the area under water again. The current landscape has been formed by reclamations and peat digging. The soil consist of a 10 m package of peat and clay on a sandy base. The water of the lakes is slightly brackish. The Reeuwijkse Plassen are eutrophic lakes.

17. Physical features of the catchment area:

The site belongs to the catchment area of the river Rhine and Meuse:

- The surface area of the Rhine catchment is 185.000 km². Geologically and geomorphologically it consists mainly of Quarternary, Paleozoic and Mesozoic sediments and Tertiary mountains. The general soil types are: Alluvial, Brown forest soils and montane soils. The climates according to Köppen are rainy (Cbf) and montane (EH).
- The surface area of the Meuse catchment is 33.000 km². Geologically and geomorphologically it consists mainly of Quarternary and Mesozoic sediments and Paleozoic (eroded) mountains. The general soil types are: Alluvial, Brown forest soils and montane soils. The climate according to Köppen is rainy (Cbf).

18. Hydrological values:

The area mainly receives water from rain and upwelling groundwater.

The area has no specific hydrological values.

gebruik, heeft een voedselriike situatie opgeleverd.

19. Wetland Types

a) presence:

b) dominance:

O-4-U

20. General ecological features:

The site generally consist of 20% permanent freshwater lakes, 7% permanent freshwater marshes and 70% wet eutrophic grasslands though nutrient poor grasslands with a diverse flora (like Snake's Head Fritillary *Cladium mariscus*) also still exist. The site is important as moulting and resting place for water birds.

Plant communities of European interest that occur are:

- Potametum lucentis
- Stratiotetum
- Cicuto-Caricetum pseudocyperi
- Thelypterido-alnetum

The ecosystem services mainly refer to:

- the opportunities of the Reeuwijkse plassen for water recreation.
- the ability for agriculture to take fresh water in.
- **21. Noteworthy flora:** Most noteworthy flora is listed under no. 14.
- 22. Noteworthy fauna: Most noteworthy fauna is listed under no. 14.

23. Social and cultural values:

- a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socioeconomic values: See 25. Current land use.
- b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

24. Land tenure/ownership:

a) within the Ramsar site:

The site is partly owned by Staatsbosbeheer; the remainder is in private ownership.

b) in the surrounding area: Several private owners.
25. Current land (including water) use:
a) within the Ramsar site: Boating 55%, Tourism and leisure 10%, Residential (conurbation) 4%, Farming 25%, Commercial fisheries 55%, Conservation and research 15%, Water management 100%.
b) in the surroundings/catchment: Agriculture represents the main land-use in the surrounding of the site. On a broader scale of the river Rhine catchment is forestry, pasture farming, arable farming, inproductive land (high mountains). For the Meuse catchment this is pasture farming, arable farming and forestry.
26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:
 a) within the Ramsar site: Agricultural intensification/ expansion (C - land allocation); Recreation/ tourism (B -); Pollution (B - not Industrial discharge).
b) in the surrounding area: No information available
27. Conservation measures taken: a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:
 Special Protection Area (Birds Directive 79/409/EEC, 2000) Natura 2000-site
b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site:
Ia \square ; Ib \square ; III \square ; IV \square ; VI \square
c) Does an officially approved management plan exist; and is it being implemented?: The Ramsar site matches 100% with the designation for Natura2000. The draft Natura 2000-management is available.
d) Describe any other current management practices: Nothing particular.
28. Conservation measures proposed but not yet implemented: Nothing particular.
29. Current scientific research and facilities:

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 Broekvelden, Vettenbroek en Polder Stein).

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site: Nothing particular.

31. Current recreation and tourism: See 25. Current land use. Number of visitors not known.

32. Jurisdiction:

Municipality Reeuwijk. Functional jurisdiction (conservation purposes): Ministry of Economic Affairs.

33. Management authority:

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

34. 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. Laag Nederland Natura 2000-gebieden. KNNV-Uitgeverij. 248p.
- Ministerie van LNV, 2010. Besluit Natura 2000-gebied Broekvelden, Vettenbroek en Polder Stein.
- 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.

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