# Information Sheet on Ramsar Wetlands

(RIS) - 2009-2012 version

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 2. Date this sheet was completed/updated:		
May 2012		
3. Country:		
Denmark		
4. Name of the Ramsar site:		
The precise name of the designated site in one of the three official langua Alternative names, including in local language(s), should be given in parenth		
Nordre Rønner		
(International No. 148; National No. 9)		
5. Designation of new Ramsar site or update of existing s	site:	
This RIS is for (tick one box only):		
a) Designation of a new Ramsar site □; or		
b) Updated information on an existing Ramsar site ⊠		
6. For RIS updates only, changes to the site since its desi	gnation or earlier	update:
a) Site boundary and area		
The Ramsar site boundary and site area are unchar	nged: 🗖	
0*		
Of  If the site houndary has abanced.		
If the site boundary has changed:	71	
i) the boundary has been delineated more accurately	ম; or	
ii) the boundary has been extended ; or		
iii) the boundary has been restricted**		

and/or

## If the site area has changed:

- i) the area has been measured more accurately **∑**; or
- ii)ii) the area has been extended  $\square$ ; or
- iii) the area has been reduced\*\*
- \*\* 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:

No major changes to the ecological character of the site are known.

In terms of the application of the criteria, Criterion 6 cannot be applied during this reporting period, but criterion 4 is now being applied.

### 7. Map of site:

Refer to Annex III of the Explanatory Note and Guidelines, for detailed guidance on provision of suitable maps, including digital maps.

- 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) ⊠; Denmark\_ramsar9.pdf
  - iii) a GIS file providing geo-referenced site boundary vectors and attribute tables ⊠.

A comprehensive ESRI ArcView GIS 3.1 shapefile named DKRamsar\_WGS84geo is submitted in conjunction with the Danish RIS 2008 update files. The shape is geo referenced and projected in datum WGS84. The shape is composed of five files:

- a. DKRamsar\_WGS84geo.shp
- b.DKRamsar\_WGS84geo.dbf
- c. DKRamsar\_WGS84geo.shx
- d. DKRamsar\_WGS84geo.sbn
- e. DKRamsar\_WGS84geo.sbx

and is considered self-explanatory in its database fields.

## b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

All Danish Ramsar sites are also designated as Special Protection Areas for Birds (SPAs) under the EEC Birds Directive, and most of them as Special Areas of Conservation (SACs) under the EEC Habitats Directive, hence part of the Danish Natura 2000 network. Generally the delineation of the Ramsar-sites are identical to that of the SPAs, follow coastlines or lake shores, but also includes adjacent salt marshes.

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

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

57°22'N, 10°56'E

#### 9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

Sea area approx. 8 km north of Læsø (Ramsar area No. 160). Nearest town is Vesterø. Administrative region is Nordjylland Region.

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

0-2 m

11. Area: (in hectares)

2,993 hectares

#### 12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The site is a sea area (2,993 hectares) with stony banks and uninhabited islands (12 hectares) situated north of the island of Læsø. Very isolated.

#### 13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the Explanatory Notes and Guidelines for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked

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

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

**Criterion 1**: The habitat of stony islets with northern Atlantic seabird colonies is very rare in Denmark. A large occurrence of "bubble-reefs" in the area represents a unique example of this "endemic" habitat type which is only found in the marine areas of Kattegat and Skagerak.

**Criterion 2:** The site is an important breeding area for Common Seal *Phoca vitulina* covered by Annex 2 of the EEC Habitats directive.

The site is also a breeding site for waterbirds, including some species listed in Annex 1 of the EEC Birds Directive, Arctic Tern (*Sterna paradisaea*) and Common Tern (*Sterna hirundo*). Has also been used as a breeding site by Sandwich Tern (*Sterna sandvicensis*), but this was not recorded in recent years.

**Criterion 4.** The Rock Pipit (Anthus spinoletta) listed as NT on the current Danish Red List (DMU 2007) has its second largest breeding concentration inside the Ramsar site (Grell 1998).

Previous RIS reports mentioned internationally important numbers of (i.e. fulfilling Criterion 6): of Common Eider (*Somateria mollissima*) from the Baltic/Denmark/Netherlands population have not been recorded during this reporting period.

**15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

# a) biogeographic region:

Continental

#### b) biogeographic regionalisation scheme (include reference citation):

Biogeographical Regions Europe, 2005, European Environment Agency

#### a) biogeographic region:

European Union

For Criterion 2, species are listed either:

- i) with reference to their presence on the International lists of species of conservation concern, i.e. listed on the most recent IUCN Red list and according to most recent criteria for concervation concern (IUCN 2007).
  ii) or with reference to their presence on the National lists of species of concervation concern. The latter are under transition from published information to online information which means that for some taxa older IUCN criteria for red listning have been applied (e.g. fish, Stoltze & Pihl 1998), while for other taxa the most
- recent IUCN criteria are adopted (e.g. birds, amphibians DMU 2008). iii) or with reference to their presence on Annex 1 of the EEC Birds Directive, or Annex 2 of the EEC Habitats Directive, and are considered threatened in the European Union

#### 16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

The site holds out the "bubbling reefs" which are submarine landscapes of carbonate-cemented rocks.

#### 17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

No specific information.

## 18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

No information.

## 19. Wetland Types

#### a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the Explanatory Notes & Guidelines.

Marine/coastal:  $\underline{A} \cdot \underline{B} \cdot C \cdot \underline{D} \cdot \underline{E} \cdot F \cdot G \cdot H \cdot I \cdot J \cdot K \cdot \underline{Zk(a)}$ 

Human-made:  $1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9 \cdot Zk(c)$ 

## b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

A, B, E, D

## 20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Shallow sea areas with stony banks and stone islets. "Bubble-reefs" in the marine area.

#### 21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS*.

The site has a rich and varied algae flora.

#### 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.

One of the more important breeding sites in Denmark for Black Guillemot (*Cepphus grylle*), which has been a red listed species in Denmark until 1997. The area is also a nationally important breeding site for the red listed Rock Pipit (*Anthus spinoletta*) and breeding area and haul-out for Common Seal (*Phoca vitulina*)

Unfortunately monitoring of breeding bird populations have generally not been carried out during 2004-09 (standard period dealt with in Danish 2012 Ramsar Information Sheets), except Cormorant.

	Breeding population (in pairs)					
Species \ Year	2004	2005	2006	2007	2008	2009
Phalacrocorax carbo	156	49	128	83	0	0

A survey in 2010 recorded (numbers are pairs recorded):

Species	2010
Phalacrocorax carbo sinensis	40
Cygnus olor	1
Anas platyrhynchos*	+
Tadorna tadorna*	12
Mergus serrator*	+
Haematopus ostralegus	12
Recurvirostra avocetta	2
Tringa totanus	6
Charadrius hiaticula	1
Larus argentatus	185
Larus marinus	235
Larus fuscus	36
Larus canus	21
Sterna paradisaea	88

	Sterna hirundo	25
	Cepphus grylle	8
ſ	Anthus spinoletta	10

The site is a resting and feeding area, especially for diving ducks.

Table giving the most recent information about staging waterbirds around Hirsholmene (which is located approx. 20 km from the site). Being an offshore and inaccesble site by any public means of transportation means that comprehensive surveyes only are carried out during country-wide aerial surveys, which are carried out at 3-4 year intervals (Petersen et al. 2006b, 2010). Data below are thus results from these two last surveys.

	Annual Maxima		Average	
Species \ Year	2004	2008		
Phalacrocorax carbo	171	172	172	
Anser anser	0	10	10	
Branta bernicla bernicla	35	29	32	
Anas platyrhynchos	6	0	6	
Somateria mollissima	164	939*	552	
Clangula hyemalis	0	0	0	
Melanitta nigra	1384	1284*	1334	
Melanitta fusca	0	8	8	
Bucephala clangula	6	0	6	
Mergus serrator	5	27	16	
Haematopus ostralegus	1	2	2	
Larus argentatus	470	313	392	
Larus marinus	4	7	6	
Sum of annual maxima	2246	2791	_	

All species have been counted using transect surveys. Numbers mentioned are actual counted numbers, true numbers are probable 3-5 times higher (as demonstrated by Petersen et al. 2006b using spatial modelling for selected species). Totals for a few seaduck species for 2008 have been spatial modeled (Petersen & Nielsen 2011), and are more exact estimates of numbers recorded that year.

#### 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 socio-economic values:

Local fishery of eels.

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?

If Yes, tick the box  $\square$  and describe this importance under one or more of the following categories:

- i) sites which provide 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) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where 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:

## 24. Land tenure/ownership:

a) within the Ramsar site:

Territorial waters and Læsø Municipality. The small island Borfeld is owned by the Ministry of Environment, the Forest and Nature Agency.

b) in the surrounding area:

Territorial waters.

## 25. Current land (including water) use:

a) within the Ramsar site:

None. Uninhabited.

b) in the surroundings/catchment:

# 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:

The island is gradually overgrown with bushes and grasses, which is changing the conditions for breeding birds. Potential threats are illegal landings and disturbance of breeding waterbirds and seals. Fishery and sailing/anchoring is a potential threat for the reefs and the "bubble-reefs". Eutrophication from surrounding marine waters and nitrogen deposition from the air is too high for the reefs and the "bubble-reefs" causing their degradation.

b) in the surrounding area:

## 27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

Access is forbidden by Læsø municipality in the breeding season, except for local fishermen, and except for the small harbour and the nearest surroundings of the lighthouse buildings.

The whole Ramsar site is protected under EU legislation, and included in: Natura 2000-site No. 20
Special Protection Area for Bird (SPA) No. 9
Special Area of Conservation (SAC) No. 176

**b)** If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia 🔾; Ib 🔾; II 🔾; III 🔾; IV 🔾; V 🔾; VI 🔾

c) Does an officially approved management plan exist; and is it being implemented?:

For all Danish Ramsar sites, being part of the Danish Natura 2000 network, concervation status base-line reports were finalised in 2006 by the former counties, and published by the regional Environment Centres of the Agency for Spatial and Environmental Planning in 2007. In 2011 Natura 2000 plans were issued by the Danish Ministry of Environment/Danish Nature Agency setting up site-specific nature goals and priorities for all Danish Natura 2000 sites, including all Danish Ramsar sites. Parallel to this initiative on Natura 2000 sites, river basin management plans were likewise issued by the Danish Ministry of the Environment/Danish Nature Agency for all Danish river basins in 2011, aimed at meeting demands from the EU Water Framework Directive, hence to improve water quality and ecological status in wetland catchments and coastal areas.

National Ramsar site No. 9 is covered by Natura 2000 plan No. 20 (Naturstyrelsen 2011a) and river basin management plan No. 1.1 (Naturstyrelsen 2011b).

d) Describe any other current management practices:

Not applicable.

## 28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

During 2012 the Government and Municipalities will develop site-specific management action plans to meet the goals of the Natura 2000 and river basin management plans.

## 29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

In 2003 Denmark launched the NOVANA programme. This programme forms the basis for future nature and water quality assessments in Denmark, and as such also supports the administration of the Ramsar site networks. NOVANA is an acronym that could be translated to English as NMWANA (New Monitoring programme for WAter quality and NAture), and aims at fulfilling the Danish obligations with regards to reporting conservation status of species and habitats covered by the EEC Birds and Habitats Directives annexes, as well as water quality and associated target species covered by the National 3rd Action Plan for the Aquatic Environment (Vandmiljøplan 3) as well as the EEC Water Framework Directive. The programme is described by Bijl et al. (2007). A first 'pre'-NOVANA assessment of the national conservation status of birds was published in 2003, and translated to English in 2006 (Pihl et. al 2006). National criteria for assessing favourable conservation status for the listed species and habitats were likewise published in 2003, and translated to English in 2007 (Søgaard et al. 2007), except for marine habitats, published solely in Danish (Dahl et al. 2005a). First assessments of reference conditions and development of Ecological Quality Objectives (EQOs) related to the Water Framework Directive were published in 2005-2006 (Dahl et al. 2005b, Petersen et al. 2006). Water bird monitoring programmes involves complete national mid-winter surveys every third year (e.g. Petersen et al. 2006b), and annual complete counts of selected species groups (e.g. swans, geese, dabbling ducks, rare breeding birds, e.g. e.g. Søgaard et al. 2006, 2007). The dabbling duck monitoring programme is built upon the much more comprehensive reserve monitoring programme from 1994-2001 (Clausen et al. 2004). Annual assessments of water quality are also available (latest summary report, Nordemann Jensen et al. 2010).

# 30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

No specific information.

#### 31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

A private company does boat trips, eg. seal watching tours, in the area.

## 32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

National legislation on Nature Conservation and Hunting regulations, as well as national administration of the Ramsar Convention and EEC Birds and Habitats Directives: *Ministry of the Environment*. National legislation on Agriculture and Fisheries: *Ministry of Food, Agriculture and Fisheries*. Local administration and implementation of Nature Conservation: Municipalities listed below under point 33.

#### 33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

### **Municipality**

Læsø Kommune Doktorvejen 2 9940 Læsø Skov- og Naturstyrelsen Vendsyssel Sct. Laurantiivej 148

9990 Skagen Tel: +45 72543000

E-mail: kjy@nst.dk

Local unit of the Nature Agency

#### 34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Bijl, L. van der, Boutrup, S. & Nordemann Jensen, P. (ed.) (2007): NOVANA. Det nationale program for overvågning af vandmiljøet og naturen. Programbeskrivelse 2007-09 - del 2. Danmarks Miljøundersøgelser, Aarhus Universitet. - Faglig rapport fra DMU 615: 120 pp. <a href="http://www2.dmu.dk/Pub/FR615.pdf">http://www2.dmu.dk/Pub/FR615.pdf</a>

Clausen, P., Bøgebjerg, E., Hounisen, J.P., Jørgensen, H.E. & Petersen, I.K. (2004): Reservatnetværk for trækkende vandfugle. En gennemgang af udvalgte arters antal og fordeling i Danmark 1994-2001. Danmarks Miljøundersøgelser. - Faglig rapport fra DMU 490: 144 pp. <a href="http://www2.dmu.dk/1">http://www2.dmu.dk/1</a> viden/2 Publikationer/3 fagrapporter/rapporter/FR490.PDF

Dahl, K., Petersen, J.K., Josefson, A.B., Dahllöf, I. & Søgaard, B. (2005a): Kriterier for gunstig bevaringsstatus for EF-habitatdirektivets 8 marine naturtyper. Danmarks Miljøundersøgelser. - Faglig rapport fra DMU 549: 39 pp. <a href="http://www2.dmu.dk/1">http://www2.dmu.dk/1</a> viden/2 Publikationer/3 fagrapporter/rapporter/FR549.PDF

Dahl, K.(ed.), Andersen, J.H.(ed.), Riemann, B.(ed.), Carstensen, J., Christiansen, T., Krause-Jensen, D., Josefson, A.B., Larsen, M.M., Petersen, J.K., Rasmussen, M.B. & Strand, J. (2005): Redskaber til vurdering af miljø- og naturkvalitet i de danske farvande. Typeinddeling, udvalgte indikatorer og eksempler på klassifikation. Danmarks Miljøundersøgelser. - Faglig rapport fra DMU 535: 158 pp.

DMU (2007). Den danske rødliste / Fagdatacenter for Biodiversitet og Terrestrisk Natur (B-FDC). - Danmarks Miljøundersøgelser, [2004]. <a href="http://redlist.dmu.dk">http://redlist.dmu.dk</a>. Accessed 1 March 2008.

Grell, M.B. (1998): Fuglenes Danmark. - Dansk Ornitologisk Forening, Gads Forlag, Copenhagen. 825 pp.

IUCN (2007): 2007 IUCN Red List of Threatened Species. http://www.iucnredlist.org/ Accessed 5 March 2008.

Miljø- og Energiministeriet, Skov- og Naturstyrelsen (1996): EF-fuglebeskyttelsesområder og Ramsarområder. Kort og områdebeskrivelser, status 1995. [With an English summary] (national report on delineation of and species found within the Danish SPA and Ramsar site network). 273 pp.

Miljo- og Energiministeriet, Skov- og Naturstyrelsen (1999): Birds of Danish SPAs – trends in occurrence. (national report on the status of species found within the Danish SPA and Ramsar site network). 119 pp. http://www.sns.dk/natur/netpub/birds/helepubl.pdf

Naturstyrelsen 2011a: Natura 2000-plan 2010-2015. Havet omkring Nordre Rønner. Natura 2000-område nr. 20 Habitatområde H176 Fuglebeskyttelsesområde F9. - Miljøministeriet, Naturstyrelsen. All Natura 2000 plans are available at: <a href="http://www.naturstyrelsen.dk/Naturbeskyttelse/Natura2000/Natura2000">http://www.naturstyrelsen.dk/Naturbeskyttelse/Natura2000/Natura2000</a> planer/Se Planerne/

Naturstyrelsen 2011b: Vandplan 2010-2015, Nordlige Kattegat og Skagerrak. Hovedvandopland 1.1. Vanddistrikt: Jylland og Fyn.- Miljøministeriet, Naturstyrelsen. All river basin management plans are available at: <a href="http://www.naturstyrelsen.dk/Vandet/Vandplaner/Se\_vandplanerne/">http://www.naturstyrelsen.dk/Vandet/Vandplaner/Se\_vandplanerne/</a>

Nordemann Jensen, P., Boutrup, S., Bijl, L. van der, Svendsen, L.M., Grant, R., Wiberg-Larsen, P., Jørgensen, T.B., Ellermann, T., Hjorth, M., Josefson, A.B., Bruus, M., Søgaard, B., Thorling, L. & Dahlgren. K. 2010: Vandmiljø og Natur 2008. NOVANA. Tilstand og udvikling. Danmarks Miljøundersøgelser, Aarhus Universitet. 106 s. – Faglig rapport fra DMU nr. 767. http://www2.dmu.dk/Pub/FR767.pdf

Petersen, J.K., Andersen, J.H., Dahl, K., Hansen, O.S., Josefson, A.B., Karlsson, J., Loo, L.-O., Magnusson, J., Moy, F. & Nilsson, P. (2006a): Reference conditions and EQOs for aquatic vegetation and macrozoobenthos. Copenhagen: Nordic Council of Ministers. - TemaNord 2006:510: 138 pp.

Petersen, I.K., Pihl, S., Hounisen, J.P., Holm, T.E., Clausen, P., Therkildsen, O.R. & Christensen, T.K. (2006b): Landsdækkende optælling af vandfugle januar-februar 2004. Danmarks Miljøundersøgelser. - Faglig rapport fra DMU 606: 76 pp. <a href="http://www2.dmu.dk/Pub/FR606.pdf">http://www2.dmu.dk/Pub/FR606.pdf</a>

Petersen, I.K., Nielsen, R.D., Pihl, S., Clausen, P., Therkildsen, O., Christensen, T.K., Kahlert, J. & Hounisen, J.P. (2010). Landsdækkende optælling af vandfugle i Danmark, vinteren 2007/2008. Danmarks Miljøundersøgelser, Aarhus Universitet. 78 s. – Arbejdsrapport fra DMU nr. 261. <a href="http://www.dmu.dk/Pub/AR261.pdf">http://www.dmu.dk/Pub/AR261.pdf</a>

Petersen, I.K. & Nielsen, R.D. (2011). Abundance and distribution of selected waterbird species in Danish marine areas. Report commissioned by Vattenfall A/S. National Environmental Research Institute, Aarhus University, Denmark. 62 pp.

Pihl, S., Clausen, P., Laursen, K., Madsen, J. & Bregnballe, T. (2006): Conservation status of bird species in Denmark covered by the EU Wild Birds Directive. National Environmental Research Institute. - NERI Technical Report 570: 128 pp. <a href="http://www2.dmu.dk/Pub/FR570.pdf">http://www2.dmu.dk/Pub/FR570.pdf</a>

Søgaard, B., Pihl, S. & Wind, P. (2006): NOVANA Arter 2004-2005. Danmarks Miljøundersøgelser. - Faglig rapport fra DMU 582: 148 pp. <a href="http://www2.dmu.dk/1 viden/2 Publikationer/3 fagrapporter/rapporter/FR582.pdf">http://www2.dmu.dk/1 viden/2 Publikationer/3 fagrapporter/rapporter/FR582.pdf</a>

Søgaard, B., Skov, F., Pihl, S., Nygaard, B., Laursen, K., Fredshavn, J.R., Ejrnæs, R., Clausen, P., Bregnballe, T., Madsen, J., Baattrup-Pedersen, A., Lauridsen, T.L., Søndergaard, M., Aude, E., Riis-Nielsen, T., Buttenschøn, R.M., Møller, P. & Nielsen, K.E. (2007): Criteria for favourable conservation status in Denmark. - Natural habitat types and species covered by the EEC Habitats Directive and birds covered by the EEC BirdS Directive. National Environmental Research Institute, University of Aarhus. - NERI Technical Report 647: 92 pp. http://www2.dmu.dk/Pub/FR647.pdf

Søgaard, B., Pihl, S. & Wind, P. (2007): Arter 2006. NOVANA. Danmarks Miljøundersøgelser, Aarhus Universitet. - Faglig rapport fra DMU 644: 88 pp. http://www2.dmu.dk/Pub/FR644.pdf

Vandmiljøplan 3. – see <a href="http://www.vmp3.dk/">http://www.vmp3.dk/</a>