Designation date: 06/08/02 Ramsar Site no. 1188

Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

- 1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

	1. Name and address of the compiler of this form: Miljøfaglig Utredning AS commissioned by Norwegian Directorate for Nature Management, Tungasletta 2, 7485 Trondheim Tlf +47 73580500 Fax: +47 73580501 E-mail: postmottak@dirnat.no	Y. Site Reference Number
_	2. Date this sheet was completed/updated: January 2012	
	3. Country: NORWAY	
	4. Name of the Ramsar site: Dokkadelta (International No. 1188, National No. 26)	
	5. Designation of new Ramsar site or update of existing 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 designation or earlier a) Site boundary and area	update:

The Ramsar site boundary and site area are unchanged:

or					
If the site boundary has changed:					
i) the boundary has been delineated more accur	rately \square ; or				
i) the boundary has been extended \Box ; 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) the area has been extended \Box ; or	,				
iii) the area has been reduced** □					
** Important note: If the boundary and/or area of the	e designated site is being restricted/reduced, the				
Contracting Party should have followed the procedure					
the Annex to COP9 Resolution IX.6 and provided a r					
to the submission of an updated RIS.	The second secon				
ı					
b) Describe briefly any major changes to the eco	ological character of the Ramsar site, including				
in the application of the Criteria, since the previous					
Minor changes may occur since one of the two riv	vers draining into the delta has been regulated for				
hydropower production. Details are not known/report	rted.				
7. Map of site:					
Refer to Annex III of the Explanatory Note and Guidelines, for demaps.	tailed guidance on provision of suitable maps, including digital				
шаръ.					
a) A map of the site, with clearly delineated boundaries, is included as:					
i) a hard copy (required for inclusion of site in					
, 13 (1	,				
ii) an electronic format (e.g. a JPEG or ArcV	riew image) ☑				
, , , , , , , , , , , , , , , , , , , ,					
iii) a GIS file providing geo-referenced site boundary vectors and attribute tables					
□;					
b) Describe briefly the type of boundary delineati	on applied:				
e.g. the boundary is the same as an existing protected area (nature					
follows a geopolitical boundary such as a local government juris	diction, follows physical boundaries such as roads, follows the				
shoreline of a waterbody, etc.					
The border of the Ramsar site is the same as the bord	er of Dokkdelta Nature Reserve.				
8. Geographical coordinates (latitude/longitude):					
60° 48' N 10° 8'E					
9. General location:					
Include in which part of the country and which large administrative	re region(s), and the location of the nearest large town.				
Dokkadelta is situated at the north end of Randsfjord					
Land in Oppland county, about 30 km west of the tov	vn of Gjøvik in south-east Norway.				
10. Elevation: (average and/or max. & min.)	11. Area: (in hectares)				
131-135 m.a.s.l.	375 ha				
12. General overview of the site:					

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

Dokkadelta is the second largest inland delta inn southern Norway, after Nordre Øyeren (which is also a Ramsar site). Deposits from the rivers Dokka and Etna have created a delta with varied wetland topography. There are large shallow areas within the delta, numerous small and larger islands, channels, bogs, meadows beside freshwater and clay-rich mudbanks which are exposed when water levels are low due to regulation of Randsfjorden.

The area's main function is as a staging site for waterbirds during both spring and autumn migration. A number of nationally and regionally rare species breed or have bred in the delta. There are often over 1000 wildfowl in the area during spring, with Eurasian teal *Anas crecca* being most common. Wildfowl numbers are lower during autumn. Waders are not that numerous, yet in a regional perspective the area is also important for this group.

There are populations of 10 fish species in Randsfjorden. The trout population in Randsfjorden spawns in Dokka/Etna. The delta is important as a spawning place for several of Randfjorden's fish species. The mudbanks and shallow areas have a diverse invertebrate fauna. More crustacean species are recorded in the delta than anywhere else in Norway.

The waterside marshes and grassy meadows (previously managed) have a number of geographically interesting species and within the alder / bird-cherry woods along the river bank and channels a number of red data listed fungi occur.

13. Ramsar Criteria:

Circle or underline 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).



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. Southern Norway's second largest inland delta with a number of permanent and temporary waterbodies, channels and oxbow lakes is representative of this biogeographic region. A number of large and smaller islands with characteristic vegetation belts and large areas of fine-grained mudbanks with annual vegetation on exposed banks (*Nanocyperetalia*).
- Criterion 2. The area is important during migration for several nationally red-listed species such as Bean Goose *Anser fabalis* (VU), Smew *Mergus albellus* (VU), Hen Harrier *Circus cyaneus* (VU). Other red listed species are: *Entoloma griseocyaneum* (VU), *Clavaria amoenoides* (VU), *Hygrocybe ingrata* (VU), *Porpoloma metapodium* (EN). (Status is given according to National Red-List 2010).
- Criterion 3. Undeveloped inland deltas have become less common due to in-filling in connection with industry and such like. Therefore it is important to preserve the remaining examples of this type, and thus protect the regional biodiversity. The mudbanks and shallow areas have a diverse invertebrate fauna. There are recorded more crustacean species in the delta than anywhere else in Norway.
- Criterion 4. Dokkadelta is one of the most important staging sites for wetland bird during both spring and autumn migration in inland Norway, together with Lågendelta at the north end of Lake Mjøsa and the Ramsar sites at Åkersvika and Nordre Øyeren. A number of nationally and regionally rare species breed or have bred in the delta. For more details see point 22.

- Criterion 6: Flocks of between 500-1000 (max 1409 ind 25.9.2010) pink-footed geese *Anser brachyrhynchus* are regular within the reserve in spring and autumn, according to artsdatabanken.no (1% of the Svalbard population is 420 birds according to Waterbird Population Estimates 4rd Ed. 2006).
- Criterion 8: The Trout Salmo trutta population in Randsfjorden spawns in Dokka/Etna. The delta is important as a spawning place for several of Randsfjorden's fish species. The following fish-species uses the site: Trout Salmo trutta, European whitefish Coregonus lavaretus, European Perch Perca fluviatilis, Northern Pike Esox lucius, Common Minnow Phoxinus phoxinus, Treespined stickleback Gasterosteus aculeatus, Ninespined Stickleback Pungitius pungitius, Arctic Char Salvelinus alpines, European Smelt Osmerus eperlanus.
- **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:

- 1. Boreal
- 2. Southern boreal vegetational zone, transitional section (SB-OC).
- b) biogeographic regionalisation scheme (include reference citation)
 - 1. Biogeographical regions of Europe, European Environment Agency, 2005
 - 2. Zonal division showing the variation in vegetation from south to north and from the lowlands to the mountains, and sectional graduation showing the variation between the coast and inland (In: Moen, A. 1998. Nasjonalatlas for Norge; vegetasjon. Statens kartverk, Hønefoss).

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.

Geology	Deep alluvial deposits (typical delta deposits with more or less fine-grained				
	material) over transformed sedimentary bedrocks from Cambrosilurian period.				
Geomorphology	A "bird's foot delta" with an irregular deltafront. Outer submerged delta				
	platform with an uneven surface and gullies and holes, the inner delta complex				
	with several channels, areas of sediment with continuous tongue-shaped banks				
	(levées), with dense bog vegetation and a large number of backwaters in between.				
Substrate / soil type	The outer delta platform is made up of fine-grained material (silt and sand)				
	whereas farther in is mainly sand and coarser material. A build up of organic				
	material has formed into peat in damp areas in the inner delta.				
Water quality	The water quality in Dokka is good, with a pH of between 6.8 and 7.1.				
	Randsfjorden is poor in nutrients and plant plankton.				
Water depth /	A large part of the area is shallow $(0.5 - 3 \text{ m deep})$ under normal summer water				
fluctuations	levels, and there are deep channels in the outer northern part which go down to				
	10 m. Randsfjorden has a regulation regime of 3.2 m, and during winter large				
	areas of the delta are dry land. The river Etna is unregulated, whereas the river				
	Dokka was regulated for production of hydroelectricity in 1988.				
Climate	The area has a slightly continental climate, with relatively warm summers and				
	cold winters and moderate annual precipitation (715 mm p.a.).				

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

Randsfjorden's watershed covers an area of around 2077 km² within the municipalities of Nordre Land, Etnedal, Nord-Aurdal and Gausdal, all of which are in the county Oppland. This stretches from the southern boreal vegetation zone, via middle boreal and the northern boreal to the low alpine zone. Most of the area is coniferous forest, although there are large areas of mountain birch woodland, marshes and bare mountains in the north. There are several agricultural areas along the lower reaches of Etna and Dokka, as well as small towns and other settlements. The catchment area lies within the Caledonian Trust-sheet zone, which provides large variations in bedrock conditions (partly basement rocks, , partly rich Cambrosilurian rock types). Morraine material which may be considerably thick covers most of the watershed, whereas in the valleys there are considerable glacial and alluvial deposits, especially along the lower stretches. In general there are most morraine soils and peat soils connected with mires. The climate within the catchment area is less continental than by Randsfjorden (higher annual precipitation and colder summers).

18. Hydrological values:

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

The transport of sediment from the large rivers Etna and Dokka are responsible for the building up of the delta and for the changing mudbanks in the delta. The area functions as a sediment trap and is important for fixing of nutrients (in particular those containing phosphor and nitrogen). The large watershed makes the rivers important in alleviating floods, but extensive drainage of mires in the lower reaches have resulted in more frequent flooding, especially in spring. The remaining, undrained mires and wetland areas in the catchment area are therefore very important in reducing flooding.

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.

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.

L, O, M, Tp, Ts, 4

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

The area lies in the southern boreal vegetation zone and is characterised by waterside meadows with distinct zonation, islands in a state of succession (formerly managed) and deciduous woodland and willow scrub along the rivers and channels. Rich belts of floating vegetation occur in open water with *Potamogeton natans*, *Persicaria amphibia*, *Nuphar lutea* and *N. pumila*. The outer terrestrial vegetation composes large areas of *Equisetum fluvialtile*. Within is a zone of either *Carex acuta* or *C. rostrata*. This graduates into damp meadows dominated by *Calamagrostis canescens* and *C. purpurea* and characteristic species such as *Filidpendula*

arundinacea and Lysimachia vulgaris. The higher riverbanks are dominated by *Phalaris arundinacea*. The woodland belt along the rivers and channels is mainly alder/bird-cherry, with *Salix myrsinifolia* and *S. cinerea* in the zone between woodland and meadow.

The invertebrate fauna in the delta is well documented, and the mudbanks have a high biomass comprising *Oligochaeta* and other benthic creatures. The area is rich in fish, and the delta is an important spawning and rearing area for whitefish *Coregonus lavaretus* og pike *Esox lucius*.

21. Noteworthy flora:

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. *Do not include here taxonomic lists of species present* – these may be supplied as supplementary information to the RIS.

Detailed studies of the reserve's flora have been carried out and of special interest is the occurrence of the regionally rare *Hammarbya palludosa*, the mountain species *Pedicularis sceptrum-carolinum* and *Astragulas alpinus*, and the normally coastal species *Myrcia gale*. Two red-listed fungi have been found in the alder/bird-cherry woods; *Microglossum olivaceum* and *Crepidotus epibryus*.

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.

Mammals:

There is an unconfirmed record of either Whiskered *Myotis mystacinus (DD)* or Brandt's bat *M. brandtii* from Våten in the south-eastern part of the delta.

Fish:

The Randsfjorden population of Trout *Salmo trutta* moves to the spawning grounds in Dokka/Etna in autumn.

Birds:

Staging site for several nationally rare and red-listed species, including up to 100 Whooper Swans *Cygnus cygnus* before the area ices up in autumn, 50-100 Common Cranes *Grus grus* both during spring and autumn, small flocks of Northern Pintail *Anas acuta (NT)* and Northern Shoveler *Anas clypeata* (NT) in autumn, up to 100 northern pintail in autumn, up to 650 Eurasian Teal *Anas crecca* and 76 Eurasian Wigeon *Anas penelope* in spring. We also find Tufted Duck *Aythya fuligula* and Common Goldeneye *Bucephala clangula* (max 96 ind) during the spring/summer/autumn.

The site is also an important staging site for pink-footed goose *Anser brachyrhynchus* and bean goose *Anser fabalis* (VU), especially in spring when hundreds may be present. In addition small numbers of the internationally near threatened Great Snipe *Gallinago media* (NT- according to IUCN red-list), and Broadbilled Sandpiper *Limicola falconellis*. The most common waders are: Wood Sandpiper *Tringa Glareola*, Greenshank *Tringa nebularia*, Green Sandpiper *Tringa ochropus*, Common Redshank *Tringa totanus* and Ruff *Philomachus pugnax*.

Nationally and regionally uncommon breeding birds include Great Crested Grebe *Podiceps cristatus* (6-7 pairs) (NT), Whooper Swan (1 pair in 2000) (NT), Garganey *Anas querquedula* (0-1 pair)(EN), Northern Shoveler *Anas clypeata* (0-1 pair) (NT), Marsh Harrier *Circus aeruginosus* (1 pair in 2000, one of few breeding records in Norway) (VU) and Sedge Warbler *Acrocephalus scirpaceus* (1-2 pairs). Typical upland species such as Short-eared Owl *Asio flammeus* occasionally breed. Several pairs of Osprey *Pandion haliaetus* (NT) hunt in the area (these nest on nearby slopes). Red list categories are given according to the national red list 2010.

Invertebrates:

The mudbanks and shallow waters have a rich invertebrate fauna, including *Boreobdella verrucata* which was firsts found in the delta in 1987 (as a new species for Norway).

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:

The waterside meadows and grassy meadows in the delta were formerly cut for hay, and there are remains of several hay barns in the area. Management by cutting and burning in order to recreate former meadows has been started. The delta is regularly used by school classes from the district. Fishing was formerly an extra source of income for local farmers.

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: Private
- (b) in the surrounding area: Private

25. Current land (including water) use:

(a) within the Ramsar site:

Some water is extracted for irrigation in the western part of the reserve and immediately outside the reserve. The delta is much used by hobby fishermen, not least using nets. The old meadows are now cut and burned, although the hay is not used in agricultural production. There is a recreational area in the south-west, which is partly within the reserve boundary and which is use for bathing. Hunting is not permitted within the reserve. In general the reserve is little affected by human activities.

(b) in the surroundings/catchment:

Randsfjorden and Dokka river are regulated in connection with production of hydroelectricity. The reserve is surrounded by agricultural areas and extensively exploited woodlands. The town of Dokka with around 2000 inhabitants is situated beside the river Dokka and lies about 4 km north-west of the reserve.

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:

Hydroelectric schemes in Dokka river have reduced water transport through the Dokkadelta by almost 50%. Some of the water from Dokka is channelled through the power station at Odnes and pumped out in Randsfjord outside the reserve. This has resulted in a decrease in sedimentation in the delta, and that a larger amount of sedimentation occurs along the river and the inner parts of the delta. Consequently the composition of plankton has changed, and density of bottom-dwelling organisms has increased in areas of increased sedimentation and decreased where sedimentation has been reduced (such as the outer parts of the delta). In sum this has had a negative effect regarding food availability for the majority of waterbirds in the area. The regulation of Randsfjorden causes large mudbanks to be exposed in spring, whereas an unregulated situation would perhaps lead to lower water levels in autumn. Cessation of grazing and hay cutting on many of the larger islands in the inner part of the delta has allowed rapid vegetational succession. This has resulted in several plants and birds (such as yellow wagtail *Motacilla flava* and Eurasian curlew *Numenius arquata*) have either disappeared or become scarcer.

(b) in the surrounding area:

In recent years changes in farming practices, treatment of run-off from farming, and treatment of domestic waste water has led to a reduction in plant nutrients. This has consequences for the productivity of the area, and has probably resulted in a reduction in biomass of benthic organisms and therefore a reduction in available food to migrating birds.

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.

The area was designated as a nature reserve on 12th October 1990. The Ramsarsite border is the same as the border of the nature reserve.

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?:

A management plan was approved in 2007, and is now being implemented.

d) Describe any other current management practices:

None

28. Conservation measures proposed but not yet implemented:

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

Management plan in preparation

29. Current scientific research and facilities:

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

Recording of breeding and staging birds is carried out as part of wardening of the site.

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.

A tower for birdwatching has been erected in the north-eastern part of the delta, and from there there is a nature trail along the reserve boundary. There is also a nature trail starting in Dokka which leads to the nort-western part of the reserve. The reserve is used by local school classes. The county governor's office has produced an information brochure about the Dokkadelta.

A Wetlands Center is being planned in the area.

31. Current recreation and tourism:

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

The area is used for birdwatching and recreational activities by local residents, mainly for fishing and bathing (in the recreational area in the south-west).

32. Jurisdiction:

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

Norwegian Directorate for Nature Management (DN), Tungasletta 2, 7485 Trondheim Ph
 $+47\,73580500$

Fax +47 73580501

Email: postmottak@dirnat.no

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.

The site is managed by the County Governor of Oppland, which is under the instruction of DN. Address: County Governor of Oppland, Serviceboks, N-2626 Lillehammer, Norway. Phone (+47)61266000 E-mail: postmottak@fmop.no

34. Bibliographical references:

scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Botanical and management plans:

Bendiksen, E. & Bendiksen K. 1996. Flora og vegetasjon i Dokkadeltaet med forslag til skjøtselstiltak i naturreservatet. Fylkesmannen i Oppland Miljøvernavdelingen. Rapport nr. 2/96: 1-55. (In Norwegian – on the flora of Dokkadelta and management proposals).

Brandrud, T. E. Mjelde, M. & Rørslett, B. 1994. Vannvegetasjonen i Dokkadeltaet, Randsfjorden. Status og vurdering av konsekvenser av Dokkareguleringen. NIVA-rapp. 3126 (O-87171). (In Norwegian – on aquatic vegetation in Dokkadelta and the effects of water regulation).

Kålås, J.A., Viken, Å., Henriksen, S. and Skjelseth, S. (eds.). 2010. The 2010 Norwegian Red-list for Species. Norwegian Biodiversity Information centre, Norway.

Mohn, A. O. 1980. Arealbruken i Dokkadeltaet. Hovedoppgave ved Telemark Distriktshøgskole. 63 s. (In Norwegian – on area use in Dokkadelta).

Freshwater ecology / fish / invertebrates:

Halvorsen, G., Sloreid, S.-E. & Walseng, B. 1993. Limnologiske undersøkelser i Dokkadeltaet, Randsfjorden, og betydningen av redusert vanngjennomstrømming og tilførsel av alloktont materiale. NINA Forskningsrapport. (In Norwegian with English abstract – on limnology and effect of environmental changes in Dokkadelta).

Halvorsen, G., Sloreid, S. E. & Walseng, B. 1996. Dokka-deltaet - ferskvannsbiologiske konsekvenser av utbyggingen i Dokkavassdraget. NINA Oppdragsmelding 437: 1-101. (In Norwegian with English abstract – on Freshwater biology and effects of development in Dokkadelta).

Halvorsen, G., Sloreid, S.-E. & Walseng, B. 1996. Dokka-deltaet etter kraftutbyggingen i Dokka: Redusert vannføring har gitt biologiske effekter. NINA-NIKU Fakta nr. 25-1996: 1-2. (In Norwegian with English abstract – on biological effects of the hydropower regulation of river Dokka).

Prejs, K. 1993. Distribution and feeding of the predatory nematode *Anatonchus dolichurus* (*Mononchoidea*) in the Dokka delta (Norway) and its impact on the benthic meiofauna. Freshw. Biol. 29: 71-78.

Økland, K. A. 1988. Vorteiglen *Boreobdella verrucata* og damiglen *Batracobdella paludosa* funnet for første gang i Norge. Fauna 41: 51-55. (In Norwegian with English abstract – on a rare species of leech found in Norway).

Birds:

Artsdatabanken.no, Link: http://artskart.artsdatabanken.no/Default.aspx

Halvorsen, G. 1986. Dokkadeltaet - vil Dokkautbygginga endre deltaets funksjon som hekke- og matleitingsplass for fugl. Hujon 12: 6-11. (In Norwegian – on the effect of the hydropower regulation of Dokka on the birdlife)

Høitomt, G. 1980. Dokkadeltaet - samlerapport. Fugler i Oppland nr 3-1980: 1-70. (In Norwegian – report on the birdlife)

Geomorphology:

Bogen, J. 1988. Etna-Dokkas delta i Randsfjorden. Sedimenttilførsel og sedimentasjon. Norges vassdragsog energiverk. VHB-notat 17. (In Norwegian – on sedimentation in the delta)

Please return to: Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 Gland, Switzerland Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@ramsar.org