

Nordre Tyrifjord

1. Country: Norway

3. Ref: 7NO015

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5. Name of wetlands: Nordre Tyrifjord wetlands system. Consists of five different nature reserves: 1) Juveren, 2) Synneren, 3) Kalsrudtangen, 4) Averøya and 5) Lamyra.

7. Geographical coordinates: 60°07'N, 10°12'E

8. General location: Situated in the municipality of Ringerike and Hole, in Buskerud county. The nature reserves are all situated 3-8km southwest of Hønefoss city.

9. Area: The reserves cover a total area of 323ha: 1) Juveren (44ha), 2) Synneren (50ha), 3) Kalsrudtangen (90ha), 4) Averøya (105ha) and 5) Lamyra (34ha).

10. Wetland type: L,M,O,S,U,X

11. Altitude: 63-80 m.a.s.l.

12. Overview: The wetland system consists of several shallow bays dotted with islets in the estuary, and small dams, seasonally flooded deciduous forests, pastures and mud/sandflats. Two rivers (one small) flows into the lake Tyrifjorden. The largest river is characterised as slow and meandering, with riverbeds in different successional stages.

13. Physical features: The bedrock is partly covered by cambrosilurian sediments, and quaternary deposition. The Storelva river is one of the largest in southeastern Norway. The water level varies between 1.5-2m through the season. Parts of the former wetlands have been transformed into agricultural purposes. The lake Tyrifjorden is moderately eutrophicated. The catchment area for these two riversystems cover 8,500km². The area has an inland climate with relatively warm summers and cold winters, annual precipitation is moderate with around 600mm.

14. Ecological features: Juveren and Synneren nature reserves are shallow permanent oxbow lakes characterised by stands of Equisetum, surrounded by flooded marshland and deciduous wood. Lamyra nature reserve is a shallow seasonal oxbow lake characterised by successional stages of Phragmites communis and minerotrophic mires. Karlsrudtangen and Averøya nature reserves consists of two deltas with several dams, islets, oxbow lakes, creeks edged by deciduous wood. Mud/sandflats and seasonally flooded forests also characterise the area. All reserves are bordered by agricultural land.

15. Land tenure/ownership of: (a) site: private
(b) surrounding area: private and municipality

16. Conservation measures taken: Four of the nature reserves were established 28 June 1985, while Lamyra nature reserve was established 21 March 1975. A management plan for Lamyra has been accepted.

17. Conservation measures proposed, but not yet implemented: Five adjacent and important wetlands has recently been proposed as reserves, and will eventually be included as Ramsar sites.

18. Current land use: (a) site: Nature conservation, recreation, fishing and boating, agricultural activities such as maintenance of ditches and roads.

(b) surroundings/catchment: Principal human activities: Agricultural use, forestry, fishing and hunting, recreation, military use, excavation of sand and deposition of waste.

19. Disturbances/threats, including changes in land use and major development projects:

(a) at the site: Some disturbance of wetland birds due to leisure activities, and neglected pastures being overgrown with bushes and trees.

(b) in the surroundings/catchment: Agricultural activities, neglected pastures, forestry, excavation of peat, building of canals for boats at low water level and disturbance of birds. Plans for a new railway line may affect the area negatively.

20. Hydrological and physical values:

21. Social and cultural values: This area is regionally important for leisure activities such as bathing, fishing and birdwatching. The University of Oslo and Norwegian Institute for Nature Research use the area as a study site. A bird observatory at Averoya has documented the birdlife of the area.

22. Noteworthy fauna: Besides Nordre Øyeren Ramsar site the Nordre Tyrifjord is the second most important inland locality for migrating and wintering waterfowl in southern Norway. 215 bird species have been noted in the area, including 27 species of Anseriformes and 30 species of waders. Nationally rare breeding species are *Anas clypeata*, *Anas querquedula*, *Gallinula chloropus*, *Fulica atra*, *Charadrius dubius*, *Dendrocopos minor*, *Acrocephalus scirpaceus*, *Nucifraga caryocatactes*, *Carpodacus erythrinus*, *Rallus aquaticus* and *Porzana porzana*. The area is feeding ground for several pairs of *Pandion haliaetus*. National important wintering ground for *Cygnus cygnus* with ca. 600 birds. *Cygnus olor* (350), *Anas platyrhynchos* (1,500), *Aythya fuligula* (320), *Bucephala clangula* (500), *Mergus merganser* (600). Breeding species include *Cygnus olor* (25 pairs), *Mergus serrator* (5-10 pairs), *Sterna hirundo* (40 pairs), *Charadrius dubius* (5 pairs). Other interesting fauna include *Rana arvalis*, and a large population of *Astacus astacus*.

23. Noteworthy flora: Contains a high diversity of wetland flora, but few rare or demanding species.

24. Scientific research and facilities: A local bird observatory operates on an irregular

basis.

25. Conservation education: Posters, brochures and a booklet covering the natural history of the reserves.

26. Recreation and tourism: Camping sites, fishing and boating.

27. Management authority: Fylkesmannen i Buskerud, Fylkeshuset, N-3020 Drammen.

28. Jurisdiction: Dept. of Environment.

29. Bibliographical references: 18 different publications from the local bird observatory,, the management authority, the municipality, University of Oslo and articles in different magazines. Booklet: Ree, V. 1995. The birdlife of Tyrifjorden (in Norwegian). 34pp. Includes a bibliographical list.

30. Reasons for inclusion: 1b,1c,2c,3b.

31. Map of Site: Enclosed