## Lista wetlands system

- 1. Country: Norway
- 3. Ref: 7NO017
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- 5. Name of wetlands: Lista wetlands system. Consists of 10 different reserves: 1) Einarsneset plant and bird protection area, 2) Havika bird protection area, 3) Kviljo plant and bird protection area, 4) Fuglevika bird protection area, 5) Nordhasselvika bird protection area, 6) Steinodden plant and bird protection area, 7) Nesheimvann nature reserve, 8) Prestvannet bird protection area, 9) Hanangervann and Kråkenesvann landscape protection area and 10) Røyrtjønn nature reserve.
- 7. Geographical coordinates: 58° 13'N, 6° 45'E
- 8. General location: Situated in Farsund municipality, Vest-Agder county, near Kristiansand city.
- 9. Area: The reserves cover a total area of 723,8ha: 1) Einarsneset (87,7ha), 2) Havika (28,9ha), 3) Kviljo (60ha), 4) Fuglevika (4ha), 5) Nordhasselvika (34,4), 6) Steinodden (130ha), 7) Nesheimvann (77,6ha), 8) Prestvannet (36,5ha), 9) Hanangervann og Kråkenesvann (256,7ha) and 10) Røyrtjønn (8ha).
- 10. Wetland type: A,D,E,O
- 11. Altitude: 0-20 m.a.s.l.
- 12. Overview: The wetland system consists of several shallow bays, sand, shingle and rocky beaches, sanddune systems and smaller lakes.
- 13. Physical features: Lista is the southernmost part of Norway and is characterised by a flat landscape formed by the ice-age and by a variation of different quaternary deposits of high value for conservation. The ancient bedrock has also become classical in the study of geology. Literature: Andersen, B.G. 1960: "Sørlandet i sen- og postglacial tid." NGU 210; Falkum, T. 1972: "Listalandets geologi". Kristiansand Museums Årbok 1972:5-16. The area has a coastal climate, but due to its sheltered position on the Skagerak coast it still enjoys relatively warm summers. Winters are mild, with annual precipitation around 800mm.
- 14. Ecological features: Shallow bays with sand or rocky outcrops allows large quantities of seaweed to accumulate, and thus create rich feeding opportunities for birds. The geographic position of Lista combined with shallow waters, sanddune systems and wetlands makes this area internationally important for migrating birds. Active sanddune systems characterise the beaches, with several typical plant species like *Eryngium maritimum* and *Ammophila arenaria*. The whole coastline along the Lista shores (ca. 25km) have been protected. Nesheimvann, Prestvann, Hanagervann -

Kråkenesvann and Røyrtjønn are all freshwater lakes partly eutrophicated and partly dominated by *Phragmites communis*. The complex of natural habitats make Lista valuable for migratory birds and for a number of plant communities which are nationally rare.

- 15. Land tenure/ownership of: (a) site: Partly municipality and partly private.
- (b) surrounding area: Private and municipality.
- 16. Conservation measures taken: Area nos. 1-6 were protected 28 August 1987, while nos. 7-10 were protected 10 November 1988. This includes two nature reserves, one landscape protection area and four bird protection areas and three plant and bird protection areas. A management plan for the coastal zones of Lista has bee proposed.
- 17. Conservation measures proposed but not yet implemented: Protection of Norways largest stand of *Phragmites communis* at Slevdalsvann.
- 18. Current land use: (a) site: Nature conservation, recreation, fishing and boating.
- (b) surroundings/catchment: Principal human activities: Agricultural use, fishing and hunting, recreation and camping, military use, excavation of sand and industry. Planting of alien coniferous trees as windshelter.
- 19. Disturbances/threats, including changes in land use and major development projects:
- (a) at the site: Some problems due to leisure activities which can be harmful to the vulnerable sanddunes. Hanangervann Kråkensvann is used as a freshwater supply for the local aluminium plant, and warm unpolluted water are returned.
- (b) in the surroundings/catchment: Agricultural, army activities (to be closed down), gravel quarries, treeplanting and development for housing and industry.
- 20. Hydrological and physical values:
- 21. Social and cultural values: This area is important for leisure activities such as swimming, camping and birdwatching. The Lista area is noted for a large number of archaeological findings of national importance, including ancient and monumental burial sites, ca. 1,500 in all. Many sites are located within the reserves. Hanangervann and Kråkenesvann are listed by IBP/Project Aqua as freshwater reservoirs of scientific interest.
- 22. Noteworthy fauna: Lista is rightly famed for its rich birdlife, particularly during migration, but the area also holds nationally important breeding populations of birds. More than 100 bird species breed, of these the breeding population of 2,500 pairs of Larus fuscus intermedius is of international importance. Breeding birds include Somateria mollissima 350 pairs, Larus ridibundus 900 pairs, Larus canus 350 pairs and Acrocephalus schoenobaenus 300 pairs. In the freshwater wetlands Rallus aquaticus,

Gallinula chloropus, Motacilla flava flavissima, Acrocephalus palustris, Acrocephalus scirpaceus and Emberiza schoeniclus breed. As a staging area for Acrocephalus species the area is internationally important. Even the rare Acrocephalus paludicola on a regular basis use the wetlands at Lista during the fall migration. Waders and seaducks frequent the beaches and shallow waters, while huge numbers of passerines pass through the area during the migration times (maximum one day figures given): Anser anser 4,000, Aythya fuligula 1,000, Aythya ferina 300, Melanitta nigra 4,000, Calidris alpina 7,000, Charadrius hiaticula 1,000 and Sturnus vulgaris 60,000. The shallow waters and the freshwater lakes also support substantial numbers of diving ducks during the winter. Lista bird observatory and the local bird club publishes an annual report on the birdlife.

- 23. Noteworthy flora: The size and form of vegetation types as found along the sanddunes on Lista can only be found at one other site in Norway (Jæren Ramsar site). A number of nationally rare plant species occur in the area. Examples of these and other typical plants of the area are: Corynephorus canescens, Ammophila arenaria, Eryngium maritimum, Atriplex aciniata, Crambe maritima, Carex diandra and Gentiana pneumonanthe, Ilex aquifolium and Hedera helix reflect the mild winter climate of the area.
- 24. Scientific research and facilities: The Lista bird observatory situated at Lista lighthouse records the bird migration in the area as a part of a European network.
- 25. Conservation education: Posters, brochures and a booklet covering the natural history of the reserves and the seashore in general.
- 26. Recreation and tourism: Camping sites, hunting, windsurfing and boating.
- 27. Management authority: Fylkesmannen i Vest-Agder, Tinghuset, N-4605 Kristiansand.
- 28. Jurisdiction: Dept. of Environment.
- 29. Bibliographical references: Numerous reports (in Norwegian) and studies have been published on the natural history and archeological findings in the area. The management authorities have published reports on the management of all protected areas at Lista.
- 30. Reasons for inclusion: 1b, 2a, 2c, 3b
- 31. Map of Site: Enclosed.