

PORVOONJOKI ESTUARY - STENSBÖLE (includes RUSKIS)

- Location:** 60° 22' N, 25° 40' E.
The area is situated in the province of Southern Finland, in the city of Porvoo.
- Area:** 1 331 ha, comprising about 780 ha of water.
- Protection status:** The area is in private ownership and over 700 ha of varied habitats are protected by the Nature Conservation Act. The Ruskis Protected Area (235 ha), which was established in 1945 and extended in 1966, is already included in the Ramsar Convention sites. Most of the area is included in the national Bird Lake Protection Programme and in other protection programmes. Private protection areas include e.g. the Ekudden Grove, the old forests of Stensböle and the Stormossen Mire. The whole area is included in the Natura 2000 network of protected areas and the wetland area is proposed to the Helcom network of Baltic Sea Protection Areas.
- Site description:** The River Porvoonjoki estuary broadens to the sea bay of Stensbölefjärden beside the city of Porvoo. The average water depth is 1 m on Stensbölefjärden Bay. The aquatic flora of the estuary is abundant and rich. The Common Reed (*Phragmites australis*) dominates and Common Club-rush (*Scirpus lacustris*) is also abundant. In the Ruskis Protected Area rather few open water areas occur at the present as reeds and the White Water-lily (*Nymphaea alba*) have conquered space. On the shore areas there are e.g. coastal meadows, old coniferous forests, broadleaved deciduous forests, an esker area, an active raised bog and traditional landscapes.
- Protection criteria:** 1b, 2b and 3b.
- International and national importance:**
The breeding bird fauna is abundant. Among the sea bays of southern Finland the area has the most valuable bird community and one of the densest populations of waterfowl species. Altogether about 700 pairs of waterfowl breed (1989) in the area, of which about 170 pairs in the Ruskis Protected Area. The breeding bird fauna includes e.g. Great Crested Grebe (*Podiceps cristatus*) with 220 pairs, Mallard (*Anas platyrhynchos*) 270 pairs, Shoveler (*A. clypeata*) 19 pairs, Garganey (*A. querquedula*) 18 pairs and Coot (*Fulica atra*) 50 pairs. There is a large colony (1 350 pairs) of Black-headed Gulls (*Larus ridibundus*) in the protection area. Breeding birds also include Marsh Harrier (*Circus aeruginosus*), Bittern (*Botaurus stellaris*), Crane (*Grus grus*), Corncrake (*Crex crex*) and four pairs of Spotted Crakes (*Porzana porzana*). The Great Reed Warbler (*Acrocephalus arundinaceus*) is exceptionally abundant (11 pairs in 1989). In the forest zone breeds e.g. several pairs of Grey-headed Woodpeckers (*Picus canus*) and Red-breasted Flycatchers (*Ficedula parva*).

During the waterfowl migration the River Porvoonjoki estuary is among the most important (*albellus*).

The vegetation of the estuary is diverse. Many rare or threatened plant species exist in the area.

Changes in ecological character:

The expansion of the reedbeds and the White Water-lily is diminishing the area of open water suitable for waterfowl. The effluent waters of Porvoo city were discharged into the protected area without purification still in the 1970's. Also the River Porvoonjoki yields nutrients from the surrounding fields. The area has become strongly eutrophicated and this has influenced the species composition of the flora and bird fauna. Thanks to purification measures the water quality is improving, but the hygienic condition of the water is still weak and the nutrients run high in River Porvoonjoki.

Management measures:

A management and conservation plan for Ruskis was established in 1997, and for Stensböle area in 1996. There are also plans to carry out the management of meadows and traditional landscapes of Stensböle. The management of Ruskis will be carried out partly under Life project; new open water areas will be dredged. There is a bird-watching tower and a nature trail in the area.

Possible threats: As a consequence of nutrient-rich waters the Ruskis Protected Area is getting overgrown. Building on the shores of Stensbölefjärden Bay is causing disturbance to the birds.

Research: The bird fauna and the flora have been studied for some time. An extensive survey of the birds was carried out in 1989. The water quality of River Porvoonjoki has been studied closely since the 1970's.

References: Haapanen & Rassi 1980, Henriksson & Myllyvirta 1994, Hirvonen 1991, Lammi & Nironen 1997, Lehtonen & Penttilä 1991, Leivo 1990, Committee Memorandum 1981a, Finnish Forest and Park Service 1996, Nironen et al. 1987, Finnish Legislative Collection 44/76, Vesi-Hydro 1990, 1993, 1995.