VALASSAARET-BJÖRKÖGRUNDEN ISLANDS

Location: a: Valassaaret 63° 26' N, 21° 04' E

b: Björkögrunden 63° 22' N, 21° 05' E

The islands are situated in the Gulf of Bothnia, in the province of

Western Finland and in the municipality of Mustasaari.

Area: 16 590 ha, of which Valassaaret 11 800 ha and Björkögrunden 5

900 ha. The water area covers 15 761 ha and land area 830 ha.

Protection status: The area is in private ownership and it is protected as a bird

sanctuary. It is already included in the Ramsar Convention sites and

in the Natura 2000 network of protected areas.

Site description: The area includes two separated groups of islands, divided by a

shallow open sea area. Valassaaret includes Storskär Island with numerous small islands and islets around it. Björkögrunden includes numerous small islands south of Valassaaret. Because of strong landupheaval (90 cm per century) new shallow shore areas (e.g. coastal meadows) are quickly born. The shores are low and stony. Larger islands are covered with forests and there are natural forests of primary succession stages. Forested areas include dry heaths and rich wooded meadows. There are also small patches of mires on the islands. The bedrock is composed of the so-called Vaasa granite. The arched and curved morainic ridges are the special feature of the geomorphology. Typical of the hydrology are the strong water-flow, strong fluctuation of the water level and hard ice conditions. The strong water-flow keeps the quality of the water

in good condition.

International and national importance:

Situated in the narrowest and shallowest area of the Gulf of Bothnia there is a strong salt gradient, thus the area being the northern limit for many marine species such as Eider (*Somateria mollissima*), Cod (*Gadus morhua*) and Blue Mussel (*Mytilus edulis*). The determining features of the archipelago are the polymorphous and small-featured geomorphology and set of living organisms.

The breeding bird fauna of the area is exceptionally abundant. Valassaaret is an outstanding research site for archipelago birds because of its long-term monitoring records, and the bird fauna is very well known. The first censuses were made in 1931 and annual data exists from 1949 onwards. The breeding waterfowl fauna of Valassaaret holds about 600 pairs (1987). The most abundant species are Eider with about 400 pairs and Tufted Duck (Aythya fuligula) about 80 pairs. Waterfowl also include some threatened species such as Scaup (Aythya marila) and Velvet Scoter

(Melanitta fusca). The most numerous wader is the Turnstone (Arenaria interpres) with 79 pairs.

The most valuable part of the bird fauna are the auks. Black Guillemots (*Cepphus grylle*) are abundant (1 960 pairs in 1987). The number of Razorbills (*Alca torda*) is continuously increasing. In 1987 there were 87 pairs of Razorbills on the Valassaaret Islands.

There are five species of Gulls on Valassaaret Islands totalling about 1 500 breeding pairs. The most numerous is the Common Gull (*Larus canus*) with about 1 500 pairs. The Arctic Tern (*Sterna paradisaea*) is the most common Tern with about 300 pairs. The breeding bird fauna also includes the threatened Caspian Tern (*Sterna caspia*) with 40-50 pairs.

The whole area is an important resting area for waterfowl and waders during migration and molting. White-tailed Eagles (*Haliaeetus albicilla*) overwinter in the outer archipelago.

The stock of fish is rich and the area is an important spawning ground for Whitefish (*Coregonus lavaretus*) and Grayling (*Thymallus thymallus*). The threatened Grey Seal (*Halichoerus grypus*) is common.

Protection criteria: 1b, 2a and 3b

Changes in ecological character:

Rapid landupheaval (9 mm per year) and the succession of vegetation create new habitats.

Management measures:

None implemented

Possible threats:

The most serious threat for the fragile archipelago environment is posed by oil shipping. In 1984 an oil accident in a nearby sea area caused the pollution of an archipelago area of over 150 000 ha. The area of Valassaaret Islands was saved from the oil accident only because of favorable wind conditions. Increasing boating during the breeding time and breaking of the protection regulations by landing on the islands disturb the breeding of birds.

Research:

The breeding bird fauna of the area has been studied since the 1930's. Several ecological studies on bird fauna have been carried out.

References:

Haapanen 1973, Haapanen & Rassi 1980, Hilden 1964, 1966, 1986, 1991, Hilden & Hario 1993, Hilden et al. 1978, Malinen et al. 1984, Rassi 1977, Stara and Taxell 1987, Finnish Legislative Collection 44/76.