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The Changing Perception of the Wetlands in and around Kristianstad, Sweden

From Waterlogged Areas toward a Future Water Kingdom, *Kristianstads Vattenrike Biosphere Reserve*

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ABSTRACT: Kristianstads Vattenrike (The Rich Wetlands of Kristianstad/Water Kingdom) is a 35-km-long wetland area surrounded by cultivated landscape in south of Sweden. The project area covers some more than 100 000 hectares and includes the lower catchment areas of River Helge å and the coastal areas of the bay Hanöbukten, a part of the Baltic Sea. The River Helge å flows from upstream forests through agricultural land, lowland lakes and wetlands, and passes straight through the town of Kristianstad, which is the regional capital.

An 'MAB candidate office' is now in the process of completing the application form to become a biosphere reserve according to the UNESCO-MAB concept, but in the past the wetlands often were seen as waterlogged areas, especially in the 19th century.

KEYWORDS: Kristianstads Vattenrike, River Helge å; changing perception; wetlands; waterlogged areas; ecomuseum; biosphere reserve.

THE CHANGING PERCEPTION

There has been increasing pressure on the wetlands and the values they provide since Kristianstad (Christianstad) was established 1614, on a small island near the River Helge å. The Danish king Christian IV used the surrounding wetlands as a defence against the enemy, the Swedes.

Using wet grasslands for harvesting hay and grazing, is an ancient tradition in Sweden described for the area by Carl von Linné in his journey through Scania in 1749. **(FIG.1)** The size of the lakes and the wetlands in the area of lower River Helge å has been considerably reduced over the last 400 years.

In 1774, the farmers of Yngsjö village, near the Baltic coast, dug a ditch to the sea to prevent the annual high water from flooding their land. Unfortunately the spring flood of 1775 was so severe that it transformed the ditch into a new channel for the River Helge å to reach the sea. This venture lowered the water level in the in the water system more than 35 km upstream. At Kristianstad the water level was lowered 0,6 to 0,7 meters.

Building embankments and dredging to control the river have further decreased the size of the wetland area.

In the late 19th century there was a large embankment project east of the town Kristianstad. The northern bay Nosabyviken, in the lake Hammarsjön, was embanked for agricultural purpose. Nowadays some of the eastern parts of the town are situated on this embanked area, some areas even under the sea level.

A dredging project between 1940 and 1945 was carried out to speed the flow of water through the wetlands and prevent the flooding.

During the 20th century several other embankments have been made

The increasingly bad water quality in the early 1900's due to untreated sewage water from industry and households was apparent by the many public complaints and the fact that the city of Kristianstad stopped taking its drinking water from the River Helge å in 1941.

In 1964 there was a massive incidence of fish mortality in the area and it is believed that this event wiped out the population of the rare European catfish (*Silurus glanis*) in the river.

Because of the bad water quality people did not find the river and the surroundings attractive. Some companies turned the backyards of their factories to the river and at this time (1960's) the municipality, with support from the county administration board, established a garbage dump on the wet grasslands (Härlövs ängar) close to the west of the town, despite protests from local and national nongovernmental organization conservation interests.

The worthless swamps were described by the public health committee at the Municipality of Kristianstad 1958 as follows " water infested and unhealthy swamp areas should immediately be cleaned up".

In 1967 there were plans to embank wet grasslands at the shore of Lake Hammarsjön (Håslövs ängar), south of the city, to permanent agricultural land. Among conservation interests there were protests and for the first time the county administrative board decided to protect cultivated wet grasslands in this region by establishing a nature reserve.

In 1971 there was a presentation of a plan for restoring Lake Araslövssjön and Lake Hammarsjön. This was to protect the lakes from becoming overgrown by reed and other macrophytes.

During the 1970's inventories were made by the state and some parts of the area were declared to be of international interest for nature conservation, cultural heritage, fishing and recreation.

In 1975, the 35-km stretch of wetlands along the lower part of River Helge å was designated as having international importance by the Convention on Wetlands, known as the Ramsar Convention.

However, despite all the inventories, plans, policy documents, and protection efforts, several inventories and observation during the 1980's indicated that the values of the lower parts of the River Helge å and the Ramsar area continued to disappear. This was linked to the fact that the wet grasslands used for harvesting hay and grazing had decreased drastically.

In 1988-89 we started a discussion how to manage the decreasing ornithological values in the wetlands. We found out that we have to widen the approach, otherwise we should not get any support to our ideas. Very soon we provided overall goals and vision in a holistic approach to wetland management.

The objective was” *to preserve and develop the ecological values and cultural heritage of the area while at the same time making careful and judicious use of them*”..

The name Kristianstads Vattenrike (The Rich Wetlands of Kristianstad/Water Kingdom) was coined. We linked people and ongoing projects connected to water in the area into a network dealing with nature conservation, environmental protection, tourism, education and cultural heritage management. As a tool to explain and to be very concrete in our way of working we started to build an ecomuseum with lots of different visitors’ sites spread out in the 35 km long wetland area.

Our work is now an example of cooperation between local-national-international authorities and organisations. The inhabitants in the area are of course key partners. The staff at the Ekomuseum Kristianstads Vattenrike coordinates many of the activities and the ecomuseum office come under the direct supervision of the Chairman of the local municipal executive committee.

At the request of the municipal executive committee we are now in the process of completing the application form to become a biosphere reserve according to the UNESCO-MAB concept. Therefore we think that the old ideas of the wetlands as waterlogged areas have changed quite a bit.



FIG 1

Periurban wetlands at Kristianstad, Sweden

Two tributaries of the River Helge å join downstream of the medieval ruined castle “Lillö”. In summer, the surrounding wet grasslands are used for grazing, and it becomes a continuous lake landscape when flooded in winter.

Several of the rare plant species that Linné found here in 1749 still grow in the area.

Photo: P. Olofsson/N

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