

# Migrating birds aided by cattle and horses - FI

## 1. Policy Objective & Theme

- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space

## 2. Key Approaches

- Participation
- Knowledge-based
- Socio-economic
- Technical

## 3. Experiences that can be exchanged

Restoration of the natural ecology of 3650 ha. of key wetland areas in Finland has thrown a lifeline to several species of waders and waterfowl during their migration and nesting period. 12 Natura 2000 sites have been restored by cutting overgrown reed beds and re-introducing grazing with local support. Newly created ponds also benefit the insect population.

## 4. Overview of the case

The restoration and monitoring of a diversity of unmanaged habitats.

## 5. Context and Objectives

### a) Context

The coastal wetlands of the Gulf of Finland are an important stopover point for migrating birds. Every Spring and Autumn large numbers of rare and endangered wading birds migrate through the area. The decline of traditional grazing activities and increased nutrient levels have caused some of these wetlands to become overgrown with reeds, bushes and trees. Altogether 12 bird wetland sites, where 35 bird species included in the birds directive Appendix I come to rest or nest in the Natura 2000 network, were identified for restoration. They were mainly shallow overgrown bays. The overall area of these sites is nearly 3,630 hectares.

### b) Objectives

The main objective was to establish a functional network of N2000 wetland areas along the northern coast of the Gulf of Finland flyway and to secure favourable conservation status for wetland species mentioned in the Birds and Habitats Directives, by restoration and management of 12 wetlands.

## 6. Implementation of the ICZM Approach (i.e. management, tools, resources)

### a) Management

The work was coordinated by Uusimaa Regional Environment Centre and Southeast Finland Regional Environment Centre. In addition 27 cooperation partners and financers contributed to the funding of the national share.

## b) ICZM tools

During the project, flood meadows were restored by clearing trees and bushes, and by reaping, crushing and cutting cane-grass. Altogether 161 hectares of open area with low growth was created for waders and water birds. This procedure was carried out with an exterior contractor and special machinery. After the basic restoration, the flood meadows have been taken into pasture use. With an appropriate pasture strain, the cows and sheep have kept the vegetation of the meadows at a low level. Some of the restoration procedures were carried out by organising voluntary camps; trees and bushes were cleared, and duckboards and a bird tower were built. The moisture conditions in flood meadows were restored by decentralising ditches and making them flow through flood meadows. In addition, new open water areas were dug to the flood meadows invaded by plants. Nesting patches were left between ditches for Black-headed gulls which then, after a decade, finally returned to the Natura area to nest. Open water bog lakes were dug to the shore areas to provide a suitable living environment for insects which depend on wetland, such as the rare yellow-spotted whiteface (*Leucorrhinia pectoralis*).

Participatory planning was used to settle the conflicts between conservation and other land use. Mowing, grazing and clearing of trees and bushes increased open meadows by more than 200 ha. Removal of aquatic plants increased the open water area by 70 ha, thus extending the area of mosaic habitats by almost 190 ha. Improving hydrological conditions of coastal meadows (70 ha) enhanced the quality and naturalness of coastal habitats. Hunting of small predators improved the breeding success of wetland birds and thereby the diversity of bird communities. Controlling recreational use reduced damage and secure undisturbed breeding and resting for many bird species. The accessibility and recreational facilities were improved through the addition of information boards, nature paths and bird towers and the removal of eyesores. Dissemination and awareness activities increased interest in and appreciation of the project areas among the local population.

## 7. Cost and resources

The overall budget for the project was approximately €3.2 million with half of the funding from the European Union LIFE Nature fund.

## 8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

With restoration and management, the significance of the project areas, especially as a resting area for birds during migration, was improved. Active management also aimed at supporting the diversity of the wetland nature. During the project, flood meadows and open water areas invaded by plants were cleared and the amount of small predators was reduced. Recreational use of the areas was developed by building bird towers, duckboards, map guides and nature trails. Various educational materials and brochures were produced to promote awareness on wetland nature. The effect of restoration work on birdlife in these areas was followed up with extensive counts. The birdlife counts were carried out as the project started in autumn 2003 and spring 2004, and again at the end of the project in autumn 2006 and spring 2007. The birds which favour open meadows as their living environment were sensitive to change. In several target areas, the amount of species and individual birds, especially the amount of waders resting during migration, increased significantly due to the restoration of flood meadows. The accumulation of water birds during migration also increased significantly. At its best, the amount of dabbling duck individuals became tenfold as a result of the restorations. Several species nesting in the flood meadows, such as lapwing and common redshank, increased. The effect of management procedures on vegetation and habitat type was monitored with aerial photographs. The aerial photographs were taken in late summer 2004-2006. The air views show extensive changes in the open flood meadows which are dominated by common reed and belong to the category of transition mires and coastal swamps. Insect monitoring focused on yellow-spotted whiteface. In the project, the viability of the populations was improved by dredging small dragonfly bog lakes. The insect monitoring showed that yellow-spotted whiteface and many other dragonflies began to inhabit these bog lakes faster than anticipated.

## 9. Success and Fail factors

The game districts of Uusimaa and Kymi made hunting plans for the project areas, defining suitable hunting methods and procedures.

The water-line still needs to be cleared with machines, because the cattle do not like to go to the wettest areas.

## 10. Unforeseen outcomes

None so far.

## 11. Prepared by

A. H. Pickaver, Coastal & Marine Union (EUCC)


## 12. Verified by

It has not been possible to verify this case.


## 13. Sources

- <http://ec.europa.eu/environment/life/index.htm>
- <http://www.environment.fi/default.asp?contentid=252434&lan=EN>
- Lintulahdet Life Management of Wetlands along the Gulf of Finland
- Migratory Flyway 2003-2007 Final report (undated) Uusimaa Regional Environment Centre



Lintulahdet Life Management of Wetlands along the Gulf of Finland - cover (382.48 KB) 



Lintulahdet Life Management of Wetlands along the Gulf of Finland - text (1.94 MB) 



Management of wetlands along the Gulf of Finland (1.53 MB) 