

Study visit to Sweden

Study visit to Sweden took place from August 17th -19th, 2010.

During the first day of study tour Svartådalen (Black river valley) was visited. Black river area is classified as Ramsar site and Natura 2000 area and is unique because of:

- unusual example of little affected wetland (lake, wet meadows and river) in European boreal region;
- it holds three globally red-listed bird species and more than 30 species endangered at national level (15 of them are bird species);
- species that are rare for European boreal region occur;
- it holds approximately 4% of the northwest European population of whooper swans (about 1600).

The area consists of four nutrient-rich lakes - Fläcksjön, Gussjön, and Rörbosjön and Gorgen. Lakes are connected via river Svartån. Wet meadows, which are flooded during spring, are found everywhere in lowlands. Some of them have been cut for hay making continuously, others have recently been restored.

Sedge meadows dominate in lowlands. Parts of the meadows have been overgrown by shrubs and trees, in some places meadows have converted to birch swamps. The area is of international importance for migrating whooper swans - during days of intensive migration up to 1800 of them can be seen resting. Bean goose, pintail, and different wader species also rest in the area. Breeding birds include white-tailed eagle, corncrake and possibly great snipe, all global red listed. Among many other species bittern, curlew, teal, shoveler, spotted crake, black tern and yellow wagtail are found nesting there.

Study visit participants were guided by Mr. Daniel Green who is a professional ecotourism operator in the Black river valley. First stop was made at a Bed & Breakfast farm where a short introduction to the area was made. After short drive the group visited local farmer producing "green meat" in cooperation with WWF Sweden. The green meat concept is based on grazing of valuable grasslands and using locally produced winter fodder. While demonstrating his farm, the farmer gave a presentation of his business concept. There are two production lines, selling "green meat" based on heifers mixed breeds (90 animals per year) and selling young calves to other producers.

Next visited site was on a small gravel road leading down to the wet meadows along the river. Most of these areas have traditionally been mowed and still some of the restored old timber barns could be seen there - most of them are flooded every year but some of them still used for hay storage.

Next visited site was the local rural development office where several projects are managed and coordinated (local food production, bio-energy, and tourism). Then

local food shop (owned by cooperative) was visited, where marketing (cooperation) principles of selling local products were discussed.

Next area visited was restored wetlands at Västerås city. Restored area is formerly drained meadows along the river owned by a dairy farmer. Farmer demonstrated results of works that have been done to restore wetland in these drained meadows.

During the second day of study trip areas near Tysslingen and Örebro were visited. Tysslingen is a typical shallow and nutrient lake in the open agricultural landscape of southern Sweden. Thousands of migrating whooper swans, waders and ducks stay there in spring and some of them also nest in the area. In winter white-tailed sea eagles could be seen almost every day in the vicinity of the lake. The lake is surrounded by meadows and riparian forest and its depth does not exceed 0.9 meters. Almost the entire surface is covered by aquatic and submerged vegetation.

Tysslingen located in an area which has very long history. Regularly flooded lands around the lake were used for many centuries for grazing and mowing. Humans and animals have created the open landscape with meadows. To get more arable land in the 1860s water level in the lake was lowered. After this, lake began to overgrow with reeds and bushes.

Since the 1980s, there are ongoing restoration works at lake Tysslingen. Continuous reed stands have grazed to patchy mosaic by cattle. Because there are plenty of insects and wetland plants the shallow-water lake-shores and puddles are good feeding habitats for wading birds and ducks.

Participants of study trip visited local farmer at Tysslingen area. The owner presented his farm and "green meat" business concept. Concept is based on cooperation with the main Swedish retailer ICA and WWF. The farm has 300 cows and produces 350-400 offspring per year. There is shortage of grazing areas around the lake. Thus, cattle are transported to graze also on valuable grasslands in other places. The valuable parts of the meat (e.g. beef) are mainly sold to local shops and restaurants but also to Stockholm. The frontal parts (minced meat etc) are sold to Örebro city as food for schools, elderly centres etc. In the city of Örebro participants of study trip visited food shop to learn how ecological and local products are marketed and labelled.

Then nature reserve Rynninge Bay in the eastern part of Örebro was visited. The nature reserve was established in 1995. During large-scale restoration works former harbour and waste dump had turned to meadows which floods in the spring and attract nesting birds. In the area there are also pastures, wet forests, and shallow bays covered by reed. There is Water Park located in the southern part of the nature reserve. There was a former oil terminal for Örebro oil tanks and other factory buildings. In 1969 the last tanker entered the terminal. After clean up and restoration several paths have been established. In the central part of Water Park there is Nature's house, with a restaurant and meeting place.

During the third day of study trip areas near Västerås were visited. First, Nature school at Asköviken was visited. It is located just outside of Västerås. Nature school's activities and practices are based on idea "to learn out there". Nature school is a common resource for urban schools from Västerås and it is used for outdoor learning, nature and environmental education. The target groups of outdoor learning are children and teachers from Västerås city schools starting from kindergarten to high school. Nature school works also with public sector, various businesses and public by providing guided tours and training days.

There are four key ideas in organizing Nature school:

- to attract children's and young people's interest to the nature and the environment. It is best achieved through positive experiences, practical studies and studies in the wild, where students' own experiences and feelings are the basis for active learning;
- to provide basic explanations about ecological relationships and create an understanding of environmental processes. This knowledge serves as a background for further knowledge and future understanding and sustainable life-style;
- to stimulate and support teachers in their teaching process about nature and the environment and
- to provide opportunities for the target groups to carry out experiments.

After the presentation of the Nature school, participants of study trip visited representatives from the regional County administration. Two main topics had been discussed with County administration:

- Nature protection and management in the county of Västmanland;
- EU agri-environmental measures in the county of Västmanland.

After discussions participants of study trip visited an area where grassland restoration had been carried out. There was infrastructure such as birdwatching tower and walking paths which provide an overview over the bay and shore meadows. Asköviken is a shallow, nutrient-rich bay of Lake Mälaren which has long been known as suitable habitats for birds breeding. Approximately hundred species of birds breed in the area, and more than 250 species have been recorded. Diversity of environmental conditions makes the area attractive to so many species of birds. Asköviken is surrounded by reedbeds and wet meadows around the bay and their management is mowing and/or grazing. However, mosaic-like wetland environments in the area are under eutrophication risk. Thus, the strict regulations for visiting and management of Lake Mälaren and wet meadows have been prepared. Several measures had been implemented in the area to preserve wetland environments of Asköviken and the species that are associated with them. The County Administrative Board of Västmanland applied for funding from the EU's LIFE-Nature environmental fund to finance the project entitled "Improvement of habitats for wetland birds in Askö-Tidö". The funding was granted in August 2004.

Next site visited was Strömsholms nature reserve with broadleaf forests, grasslands, lake, and river. There are also castle and centre for horse riding sport in the nature reserve. The arena for the Swedish "Grand national" horse riding also was visited. This area is unique by old big oak trees with rare beetles. The presentation held

focus on how to combine protection of the oak trees with the strong pressure from horse activities.

Participating in this study trip was useful to study practical issues on grassland restoration, management of farmland biodiversity, and work with the public. There were demonstrated useful examples of best practices in maintenance of biodiversity in rural areas and practical management for sustainable eco-farming and maintaining the ecosystem services provided by biodiversity rich grasslands.

Lessons learnt include also conclusions on farms economical success. It was found that labelling and market development for „green meat” is a successful tool how to develop sustainable farming for biodiversity.