

## SHARED CONCERNS ACROSS THE BORDER – PRACTICE IN RESTORATION AND MANAGEMENT OF SPECIES RICH SEMI-NATURAL GRASSLANDS IN SWEDEN AND NORWAY

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### Abstract:

Agricultural land use changes, followed by regrowth, are threats to biodiversity (Norderhaug & Ihse 2003). In Scandinavia we still have a lot of nature to destroy before the governments will focus on restoration, but some of us have started developing a practice for the future, combining restoration of valuable areas, management, education and information towards students, school children and the general public. The poster presents two projects owned by the municipalities, Böensaetre in southeastern Norway and EkoPark Strömstad in western Sweden, situated 80 km apart from each other in different environments, with Natura 2000 qualities. Böensaetre comprises two cottar places with species rich meadows and pastures, and volunteers have been mowing the most species rich meadows since 1990, and the University College and schools in the county use it for excursions covering different subjects. The EkoPark Strömstad consists of an information and education centre, a recycling centre, a sewage plant and two nature trails. Along one of the trails there are remnants of old meadows and pastures. From 2004 the nature trail was cleared and later maintained, and the meadow has been kept open by hay making with a mower. We ask how the two projects mutually can benefit from each other and develop strategies for informing and engaging children and students in management and conservation, the public and the politicians in decision making and restoration/practical management. We plan to make a resource book for teachers and a guide for politicians and decision makers based on the experiences from the projects.

**Keywords:** land use changes, increasing public support and participation, education, restoration for traditional management techniques, **6270 Fennoscandian lowland species-rich dry to mesic grasslands.**

### Introduction

By starting a pilot project sharing experiences and concerns we hope to develop more efficient and sustainable projects in the future with the aim to build understanding and knowledge concerning the conservation, maintenance and necessary restoration of biodiversity in the cultural landscape and seeing the value of creating a landscape with biodiversity qualities in our every day surroundings. The two very different projects owned by the municipalities, Böensaetre in Aremark in southeastern Norway and EkoPark Strömstad in western Sweden are situated 80 km apart from each other in different environments, with Natura 2000 qualities. Böensaetre comprise exceptional nature qualities, and the project has involved the public in management for more than 15 years, while the Eko Park is a professional information centre for school children and the public. We ask how the two projects mutually can benefit from each other and develop strategies for informing and engaging children and students in management and conservation, and the public and the politicians in decision making and restoration/practical management. We plan to make a resource book for teachers and a guide for politicians and decision makers based on the experiences from the projects and our shared concerns.



### **Bøensaetre in Aremark, Norway**

This valuable traditional agro-landscape is situated in a forested area in Aremark in Østfold, in the southeastern part of Norway, close to the Swedish border, consisting of two cottar places with old buildings and an old school surrounded by fields and meadows. The area has been managed traditionally from pre 1700. 246 species have been registered in the cultivated area, on the lake shores and at the forest margins. Among them are 8 species (*Botrychium lunaria*, *Urtica urens*, *Gentianella campestris*, *Campanula cervicaria*, *Arnica montana*, *Crepis praemorsa*, *Scorzonera humilis* and *Gymnadenia conopsea*) in the Norwegian Red List (Artsdatabanken 2006). In the Natura 2000 system the vegetation can be classified as **6270 Fennoscandian lowland species-rich dry to mesic grasslands** (Fremstad 2002).



Fig. 1 Bøensaetre



Fig. 2 Traditional management

The most species rich areas are meadows managed by volunteers using the scythe, medio July to early August every year since 1991 (Eriksen 2000). These are partly the rocky forest margins and slopes, not suitable for cultivation. In addition to the nationally rare species on the red list, a lot of regionally rare species with affinities to the cultural landscape are found here, like *Anthemis arvensis*, *Arnica montana*, *Campanula cervicaria*, *Crepis praemorsa*, *Briza media*, *Scorzonera humilis* and *Plantana bifolia*. The place has been well suited to teach children and students about nature, history and culture, but a pool of ideas and a plan for these activities have not yet been developed and documented. The school authorities has not yet put priority to place a person in the role of organizing and taking care of this. Another specific concern here, is the lack of a plan for traditional use and management of the area.



### **Ekoparken in Strömstad, Sweden**

This is a centre belonging to the municipality of Strömstad in western Sweden, situated close to a bay that is frequently visited by a large variety of birds. An experienced teacher working as an environmental informer is running the place. The center consists of the **Eco house** (an education- an exhibition centre), a **recycling centre**, a **sewage plant** under constant development and two **nature trails**. Inside the Eco house you can

learn about the environment and have a lot of fun at the same time. Here the **essentials for life** on earth are explained, and the focus is on solutions to the problems our lifestyle has caused, which means **renewable energy sources** and **sustainable transports**. It also means **water management, organic/climate friendly food and recycling**. The sewage plant consists of the usual mechanical, biological and chemical treatments, but also of two ponds and five reed beds. This means a sanctuary for many kind of birds. Together with the nature trails there is **a large variety of habitats and an impressing biodiversity**. One nature trail passes a **bird hide** with a good view over the bay (from where we can see probably the largest heron colony in Sweden), continues past a **meadow**, through **old pastures** and a **forest** of fascinating biodiversity. The second trail goes round a hill with an ancient hill fort, in an area with a large variety of **deciduous trees**. During the summer, walks with different themes are arranged. During the academic year school groups are welcome for a variety of nature studies, such as wild flowers, minibeasts, trees, mammals, birds, wild neighbours and outdoor mathematics.

The clearing of the nature trail and the hay making at the old meadow is partly a result of the inspirational work being done at Böensaeter. The area for traditional management will be increased every year, hopefully by growth of interest. The rest of the area will be mowed by machines, and there will be opportunities for comparing the plant and animal diversity differing in management regimes. We hope that this eventually will include grazing animals.



Fig. 3 Activities in the EkoPark



Fig.4 Building insight



Fig.5. The bird hide.

### Materials and methods

This paper introduce the first step in a cause to establish a joint project. The work is initiated from an already existing cooperation between persons and projects involved, but we hope to establish more sustainable plans with anchorage in the local communities, the politicians involved and in the public.

## **Conclusion**

By sharing concerns across the national border, and focus on values in the seminatural landscape, we think we will be able to communicate with politicians and stakeholders through a **neighbour's perspective**.

At this stage in our pilot project, based on our shared concerns, we have some plans for future work:

Develop a resource book for teachers focusing on the biodiversity in seminatural landscapes with examples from our area. We will include pedagogical methods like teacher thinking (TT), storytelling and storyline. We will also make a book of ideas for children being scientists in the cultural landscape.

Make a guide book for politicians and stakeholders with a focus on valuable areas and the need for conservation and management of seminatural landscapes in community planning, with relevance to our region.

Continue the exchange of approaches and experiences to mediate and inform school children and the public about the natural values in the seminatural landscape .

Develop existing and new practical activities, including old and new ways of management to restore and conserve biodiversity.

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