Plante

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#### Summary

Since 1993, Norwegian governmental subsidies have been applied to preserve valuable semi-natural grasslands in Norway. After 8 years of management and payments, the effects of the subsidies were investigated in the county of Nord-Trøndelag. The intention of the subsidies, to secure both open landscapes and biodiversity, was not obtained due to a general lack of knowledge of ecology and biodiversity at all levels. This clearly demonstrates the importance of knowledge and information exchange between scientists, authorities, politicians and farmers to secure maintenance of the most valuable semi-natural grasslands. In addition, transdisciplinary research and exchange of knowledge between archaeologists, historians and ecologists are necessary to preserve the most valuable cultural landscapes with regard to both biodiversity and cultural monuments. This study was presented at the EGF meeting 21-24 June 2004, Luzern, Switzerland.

## Introduction

Re-growth is the main threat to valuable seminatural grasslands in Norway, resulting in fragmentation, local plant extinction and endangered species and landscapes. Governmental subsidies (STILK) have been used to promote landscape management and maintenance of valuable habitats since 1993. The idea behind the subsidies was to compensate farmers for extra work with landscape management when producing food and fodder. The farmer had to apply for the grant, which was administrated by the Agricultural Department of the County Council (FMLA).

A project was initiated in 2000 to evaluate the effect of these subsidies and assess whether the intention with STILK was obtained (regarding landscape and biodiversity).

## Methods

25 representative grasslands were investigated. 20 grasslands which had received STILK in the period of 1993-1999, and 5 nearby grasslands which had not been subsidised. Each grassland was investigated with regard to the re-growth status. All vascular species were recorded and the vegetation was classified. The grazing pressure in each area was estimated, as well as the clearing.

### Results

The results showed that some grasslands of little importance for biodiversity had received STILK. Other nearby species-rich grasslands had not obtained STILK, due to lack of applications, or denied applications. The results indicated the authorities' difficulties in identifying the most valuable grasslands with regard to biodiversity.

Grønn kunnskap



Figure 1. Area 1 and 2 have been cleared, but there has been no further management. Area 3 and 4 were the most species rich grasslands investigated, but were not subsidised. Photos: B. Bele and L. D. Sterten



# Conclusion

The intention of the subsidies, to secure both open landscapes and biodiversity, was not obtained due to a general lack of knowledge of ecology and biodiversity at all levels. This clearly demonstrates the importance of knowledge and information exchange between scientists, authorities, politicians and farmers to secure maintenance of the most valuable semi-natural grasslands. Transdisciplinary research and exchange of knowledge are necessary to preserve the most valuable cultural landscapes with regard to both biodiversity and cultural monuments.



Figure 2. 1) Leuchantmum vulgare

- 2) Dactylorhiza maculata
- 3) Rhinanthus minor and
- 4) *Campanula rotundifolia* are found in semi-natural grasslands.
- Photos: B. Bele, H. Hovd and L. Rosef



Figure 3. When management ceases species found in seminatural grasslands will soon be replaced by more nitrophilous species like *Filipendula ulmaria*, *Urtica dioica* and *Geranium sylvaticum*. Photos: B. Bele, H. Hovd and L. Rosef

#### Reference

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