# Moorland landscapes in Switzerland – the changing significance of near-natural cultural landscapes

#### Marion Leng, Thomas Hammer

### Abstract

Moorland landscapes consist of a large number of natural, near-natural and human-made elements, which in their entirety determine the character of each individual moorland landscape. They are the only constitutionally protected landscape type in Switzerland. The legal definition describes a moorland landscape as "a near-natural landscape that is strongly characterised by moors" and whose moor-free sections are "closely interrelated with the moors in an ecological, visual, cultural or historical sense" (Article 23b §1 Swiss Nature and Cultural Heritage Protection Act). Usually they are valuable in terms of ecology, history and aesthetics: they provide habitats for endangered species and for human beings, they bear witness to traditional, extensive land use forms, and they are perceived as being aesthetically valuable for leisure and recreation. In spite of the widely accepted aim to protect them, they are by no means secure. Conflicting trends such as the intensification of land use and non-cultivation of agricultural land and the growth in outdoor sports mean that the biodiversity, unique character and variety of the remaining moorland landscapes are threatened, in spite of regulations for their protection. They can only be preserved if extensive land use adapted to the special conditions in moorland landscapes, associated maintenance measures continue, and unsuitable land uses and over-use are avoided.

### Keywords

Moor, moorland landscape, cultural landscape, land use, landscape protection, landscape preservation

### Aims and duration

The problematic situation described above provided the starting point for this research project, which is part of the Swiss involvement in European co-operation in the area of scientific and technological research, the COST Action A27 *Understanding Pre-Industrial Structures in Rural and Mining Landscapes* (LANDMARKS).

The super ordinate aim of the project is to identify and describe the many aspects of the changing human significance of moorland landscapes in order to identify and document associated changes in the landscape.

Overall, the project should make a contribution to the collection and preservation of knowledge about a near-natural cultural landscape that developed over centuries of human use and maintenance. Changes in land use and in the significance of moorland landscapes are described, together with associated conservation and preservation aims as well as spatial and qualitative changes in the landscape. Research is carried out into options for the long-term conservation of moorland landscapes using traditional and new uses in order to preserve their multi-functionality for society. Furthermore, the development of conservation aims is described together with an overview of conservation concepts in Switzerland.

The central research question is: What changes have occurred in the use and significance of moorland landscapes in the course of their development?

It is the aim of this research to understand changes in significance in their historical context and to discover what significances were important during what periods and how material and non-material significances were weighted. The changes in the significance of the moorland landscapes for humans include the emergence and institutionalisation of conservation and preservation measures and their justification.

The project was conducted between 2006 und 2008.

## Area of Study

The research project focuses on moorland landscapes in Switzerland and especially on those 89 moorland landscapes which are constitutionally protected as "moorland landscapes of particular beauty and national significance" (Swiss Constitution Art. 78). They are spread over the country but most of them are in the region of the northern pre-Alps.

## Methods

The research methodology applied included systematic literature and document searches in data banks, libraries and archives, comparative analysis of historic maps, field observation and photography. The data thus gathered was evaluated through systematic analysis of literature and documents, interpretation of maps, drawings and photographs as well as comparative analysis of maps and photographs. Descriptions, maps, diagrams and photographs are particularly important, with the special aim of securing the documentation thus collected.

### Results

About 20 years after the acceptance of the decisive initiative to protect moors and moorland landscapes in Switzerland (Rothenthurm initiative in 1987) and in spite of the manifold efforts, the aims concerning the protection of moors and moorland landscapes were not or at least not entirely achieved.

The ecological quality of many nationally protected moors is degrading and the area of intact bogs is decreasing. A lot of the buildings, ways and roads that have been constructed during the last 20 years do not accord with the aims of protection. Incipient scrub and forest encroachment increase.

Moorland landscapes change slowly but steadily, due to the combined effect of many creeping changes which threaten the specific character of the moorland landscapes.

### Discussion

Changing significances of the moorland landscapes for humans, the appreciation of the nonmaterial significances and the identification of new significances reflect the changes that occurred in the human-nature relationship.

Nowadays, moorland landscapes are more and more perceived as ecological, historical and aesthetical valuable near-natural cultural landscapes. This fosters hope for local and regional development.

Especially the new and increasingly important non-material significances (recreation and leisure) have become central arguments for the protection and preservation. They probably have an effect on the local social and economic creation of value, such as new jobs in the local tourism industry.

The challenge now is to avoid the creeping changes in the moorland landscapes and to preserve the manifold material, non-material and geo-ecological significances. To meet these challenges, it is important to foster the general publics' awareness of the values of the moorland landscapes.

#### References

BUWAL (Bundesamt für Umwelt, Wald und Landschaft) (Hg., 2002): Moore und Moorschutz in der Schweiz. Bern.

HAMMER T., EGLI H.-R. & ATMANAGARA J. (2008): Cultural Landscape in Conflict between Economy, Ecology, and Institutional Steering. The Example of the UNESCO Biosphere Entlebuch (Switzerland). In: C. Bartels, M. Ruiz des Arbol, H. Van Londen & A. Orejas (Eds.): Landmarks. Profiling Europe's Historic Landscapes. Bochum, pp. 99-112.

HAMMER T. & LENG M. (2008): Moorlandschaften im Bedeutungswandel. Zur gesamt-gesellschaftlichen Aufwertung naturnaher Kulturlandschaften. In: Allgemeine Ökologie zur Diskussion gestellt, Nr. 10. Schriftenreihe der Interfakultären Koordinationsstelle für Allgemeine Ökologie (IKAÖ), Universität Bern. Bern.

HAMMER T., LENG M. & RAEMY D. (accepted): Swiss Moorland Landscapes and the Significance of Economic and Technological Change. Origins, Threats and new Patterns of Use. In: L. Lévêque et al. (Eds., 2009 in print): Heritage, Images, Memory of European Landscapes.

HINTERMANN U. (1992): Inventar der Moorlandschaften von besonderer Schönheit und von nationaler Bedeutung. Schlussbericht. Bundesamt für Umwelt, Wald und Landschaft (BUWAL), Schriftenreihe Umwelt, Nr. 168. BUWAL, Bern.

KLAUS G. (Red.) (2007): Zustand und Entwicklung der Moore in der Schweiz. Ergebnisse der Erfolgskontrolle Moorschutz. Umwelt-Zustand, Nr. 730. BAFU, Bundesamt für Umwelt. Bern.

Schweizerischer Bundesrat (1996): Bundesinventar der Moorlandschaften von besonderer Schönheit und von nationaler Bedeutung. Bern.

Succow M. (1988): Landschaftsökologische Moorkunde, Berlin und Stuttgart.

VON WYL A. (1997): Moorlandschaften – ein kulturelles Erbe. Schüpfheim.

### Contact

Dr. Marion Leng leng@ikaoe.unibe.ch	Universität Bern Interfakultäre Koordinationsstelle für Allgemeine Ökologie (IKAÖ)
Prof. Dr. Thomas Hammer hammer@ikaoe.unibe.ch	Schanzeneckstrasse 1 P.O. Box 8573 3001 Bern
	Switzerland