FIELD LANDSCAPE AND ITS RESTORATION

Hedvika Psotová

Arvita P spol. s r.o Otrokovice, Czech Republic

https://doi.org/10.11118/978-80-7509-963-1-0092

Landscape plain pure as a human's hand, among the mountains it calls me back soothes, caresses, with good words

Song of Jana Kirschner

Abstract

The paper deals with the specifics of the field landscape, which belongs to common and neglected landscape types. It shows its specific values and characteristics and presents ways to restore it.

Keywords: Potential of field landscape, production, revitalization

Introduction

Intensively managed field landscapes are among the most common landscape types in Central Europe. It is a landscape so mundane that we do not pay much attention or care to it. It is shaped by natural, cultural and historical conditions, but also by man, who continuously cocreates the landscape and adapts it to his needs. In the conditions of the Czech Republic, the landscape was strongly influenced by forced collectivization and subsequent large-scale forms of large-scale agricultural production.

In my contribution, I would like to present the restoration of a typical field (rural) landscape in the cadastral area Zahnašovice, which was realised step by step in the period 1998 -2024

Materials and methods

The European Landscape Convention covers the entire territory of the Contracting Parties and covers natural, rural, urban and peri-urban areas. It includes land, inland bodies of water, and marine areas. It applies both to landscapes that can be considered remarkable and to landscapes that are common and disturbed.

Landscape is defined as an essential component of the environment in which people live, as an expression of the diversity of their common cultural and natural heritage and as the basis of their identity.

The field landscape is still shaped to the maximum extent by large-scale agricultural production. The pursuit of maximum yields entails huge fields with one and the same crop, without borders, field edges, field roads, green networks and other landscape features. The Czech Republic is the absolute record holder in Europe in the size of soil flanks (57% of arable land is in blocks over 20 hectares) and this fact alone is a major obstacle to higher natural diversity. (Vermouzek et al. 2018

Efforts to restore the field landscape are highly fragmented. While farmers have the most important role to play, agricultural subsidies, which should be the main tool for recovery, are not yet sufficiently targeted. For landscape restoration, national programmes and European subsidies focused primarily on nature protection and support for biodiversity.

The institute of land consolidation has a comprehensive approach.

The institute of land consolidation has a comprehensive approach. Unfortunately, however, they are not solved across the board and their implementation is very lengthy. The basic basis for the full-scale restoration of the landscape is thus represented by the zoning plan in the chapters of the landscape layout concept.

The road to landscape restoration is thus quite winding, as the direction is determined by three ministries:

Ministry of Agriculture, Ministry of the Environment and Ministry of Regional Development. The interests of landowners, farmers and a wide range of other land users contribute to this

A key role in landscape restoration can currently be played by a conscious landowner, who is also supported by legislation. Owners or tenants have a general obligation to manage the land in accordance with the principles of protection of agricultural land under Section 3 of the Act on the Protection of the ALR, i.e. so that they do not pollute the soil, do not damage it and protect cultivated land according to approved modifications.

Tthe owner can influence how his land is managed. If the owner does not manage it himself, he can influence how the land will be handled through a lease agreement.

The municipality, as a major landowner, can set an example in land management and in the care of the land entrusted to it. In this way, it shows the public that they value the environment and thus influence the behavior of others.

Results

The village Zahnašovice is there situated in the Zlín Region, in an intensive cereal growing area about 3 km south of the town of Holešov. It is a small village with about 340 inhabitants. which is adjacent to the emerging Holešov industrial zone. Before the start of the project, the area of interest represented an emptied agrarian landscape, with very low ecological stability and significant manifestations of wind erosion (see photos No 1 and No 2).

The representatives of the Municipality of Zahnašovice decided not to wait and embarked on a gradual and systematic restoration of the landscape as early as 1998 in cooperation with the design studio Arvita P spol. Otrokovice.

The aim of the project was the gradual restoration of all functions of the landscape. The project is aimed at revitalizing disturbed areas of agricultural land, reducing wind erosion, increasing the ecological stability of the landscape, retaining water in the landscape and restoring the landscape character. Part of the plan is to improve the permeability of the landscape and create recreational potential for the inhabitants of the village.

In the beginning, the settlement had the character of an island surrounded by a cultural desert without the possibility of going out into the countryside. The degree of ploughing of agricultural land was 96.4%. However, grasslands, small wetlands, margins, landscape-forming greenery and alleys of fruit trees lining the road network have completely disappeared from the landscape. The landscape mosaic was very rough. The typical silhouette of the settlement was disrupted by a spatially significant agricultural area .

The restoration of the landscape was carried out gradually, step by step. Over the course of 25 years, the following plans have been implemented:

- Establishment of BiocentrumWmedřický, area 35 123 m²
- Restoration of the pond area. 3 000 m²
- Creation of small water and wetland areas in the floodplain of Ludslavka, area 2 200 m²
- Planting of new linear greenery with a total length of more than 9 km
- Planting of trees on TSES (territorial systém of ecological stability)in the number of 26 736 pieces
- Establishment forest, area 8 200 m²
 - Recontruction of the bank vegetation of the Ludslávka stream
- Change of the type of land in the area of 26.3 ha from arable land to grassland or orchard.

Municipal land registered at cadastral area Zahnašovice is primarily used for the implementation of the plans, as well as land of owners who have expressed their consent to the implementation of the project, including sustainability.

The current state of the landscape has thus improved significantly, its biodiversity has increased, and new species have appeared. In theBiocentrum Medřický Biocentre is there family of beavers that have relocated from the nearby Záhlinické rybníky Nature Park.

The paths planted with alleys of fruit and natural trees are ideal for walks and rides. Outdoor events such as Hunter's Day, Children's Day, Pond Unlocking, etc., are held at the restored sites.

Over the past 20 years, the current state of the landscape has improved significantly, its biodiversity has increased, and new species have appeared. In the Medřický Biocentrum, for example, is living a family of beavers that have moved from the nearby Záhlinické rybníky Nature Park.

The paths planted with alleys of fruit and natural trees are ideal for walks and rides. Outdoor events such as Hunter's Day, Children's Day, Pond Unlocking, etc., are held at the restored sites.

The implementation of the plans was ensured in cooperation with the Nature Conservation Agency, Zlín workplace. From year to year, available subsidy titles were used, especially the Landscape Care Program. Follow-up care is provided by the municipality with its own resources with the substantial help of the local Hunting Association and other units small example of the implemented changes is shown in photos No. 3 and 4.



Fig.1: Emptied field landscape - eastern view - 1998



Fig. 2: Emptied field landscape - view of Holešov- 2002



Fig. 3: New plantings in the eastern part of the cadastre – 2022



Fig. 4: Wetland in the floodplain of Ludslávka - 2023

Discussion

Field landscapes with intensive large-scale agricultural production are very vulnerable. They are not a pleasant environment for biota life, including humans.

On the example of a small village, it is shown that the most important role in landscape restoration is not played by the legal framework or subsidies, but by the active approach of the inhabitants and the municipality, which is usually a significant owner of the land.

The basis of a successful renewal is a high-quality long-term plan, which is continuously updated and gradually, in partial steps, implemented. For a small village, it is very important to have a reasonable size of new biotopes, so that quality follow-up care can be ensured.

This project shows the positive impact of long-term cooperation between the landscape designer, the municipality and its inhabitants, including farmers. Long-term cooperation also enables the monitoring of restored landscape segments and possible direction of development at restored sites.

The landscape studio has similar positive experience with other, small and large municipalities like. Dolní Němčí, Žlutava, Šakvice,Vítonice, Machová, etc.) These are municipalities have already been awarded in the Competition Village of the Year as part of the Rural Renewal Program.

Conclusion The aim of the project is to restore the agricultural landscape, which has been used for large-scale agricultural production for a long time. The implemented measures are beneficial for the inhabitants of the village, but they are also a place of environmental education for children and students and a destination for observers of life in nature.

The revitalization of the landscape is being implemented in gradual steps based on the extremely active approach of the mayor, the council and the citizens of the small village of Zahnašovice in the Kroměříž district. The municipality, as a major owner, sets a good example of how to dispose of land.

The restored sites are monitored by the developers of the plan in the long term and the management of the established biocentre and other landscape elements is regulated. The implementation of the project is not the end of the interest of the municipality and citizens in the restoration of the landscape. On the contrary, other plans are being prepared aimed at retaining water in the landscape and measures to adapt the landscape to climate change.

References

Act No. 334/1992 Coll. on the protection of agricultural land.

Act No. 289/1995 Coll. Forestry Act.

Květ J.: Duše krajiny – Staré stezky v proměnách věku (2003), Academia Praha, 195 pp.

Löw J., Míchal I. (2003): Krajinný ráz, Lesnická práce, Kostelec nad Čenými lesy, 552 pp.

Salašová A.: Krajinné plánování I, Mendelova univerzita Brno, 2015, 184 pp.

Vermouzek Z., Reif J., Šálek M.: Jak se mají polní ptáci v Česku, in Ochrana přírody, č.4/2018

Souhrn

Příspěvek se zabývá problematikou polní krajiny, která je významně ovlivněna a stále ovlivňována intenzivní velkovýrobním zemědělstvím. Jedná se o krajinu narušenou, s nízkou ekologickou stabilitou, která není dobrým domovem pro biotu včetně člověka. Na příkladu malé, ale velmi aktivní obce, je ukázána možnost obnovy vyprázdněné polní krajiny v krajinu sice produkční - zemědělskou, nicméně přátelskou k biotě a otevřenou obyvatelům i návštěvníkům, kteří zde najdou obnovené zajímavé lokality.

Contact:

Ing. Hedvika Psotová E-mail: arvita©arvita.cz

Open Access. This article is licensed under the terms of the Creative Commons Attribution 4.0 International License, CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/)

