THE IMPORTANCE OF HISTORICAL VINEYARD LANDSCAPES IN NATURE CONSERVATION AND RECREATION

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Abstract

One of the current research projects in the Czech Republic, focusing on complex landscape research is represented by Centre for Landscape and Biodiversity (Divland). Within this project, one part focuses on historical cultural landscapes and their structures. Historical cultural landscapes are long-term created and influenced by human activities. These are mainly sustainable activities without intensive mechanization, and lead to an increase in the cultural and natural values of the area. The vineyard landscape can be also evaluated as one of the valuable historical structures of the landscape. In the model area around the towns of Hodonín and Kyjov, the individual features of this landscape, their importance of preservation for cultural and natural heritage, sustainable business in agriculture and the development of tourism were monitored. During map archival research and field investigation, various types of preserved traditional historical structures of landscapes with typical features, which are desirable to maintain and preserve for future generations, were found. The difficulty of maintaining this type of landscape was discussed with local winemakers. From discussions with local operators of wineries, accommodation facilities and restaurants, it emerged that the historical structures of wine landscapes are one of the important aspects for tourists to visit this region.

Keywords: Extensive agriculture, vineyards, archival maps, tourism

Introduction

Historical landscape structures are a very important phenomenon of the cultural landscape as they record the historical way of using the landscape and at the same time give the territory a specific landscape character (Muchová, Petrovič, 2014). In agricultural landscapes, it is desirable to preserve or restore valuable landscape structures with traditional farming methods (Petrovič et al., 2017; Dawson et al., 2017), which help to preserve/increase biodiversity (Skokanová et al., 2016), and can be considered as a form of sustainable management of agricultural land (Dumbrovský, Larišová, 2016). The remains of traditional and regionally conditioned farming methods are very attractive landscape features, showing the mixture of arable fields, meadows, orchards, pastures, gardens, hop fields, vineyards, and borders (Amici et al., 2017; Súľovský et al., 2017). In the Czech Republic, complex landscape research is currently undertaken under the umbrella of the project Centre for Landscape and Biodiversity (Divland), where one part deals with the research of historical landscape structures (HLS). It focuses on identifying potential localities of preserved HLS of different types, ranging from agricultural landscapes with small arable fields through forest, meadow, orchard, hopfield, vineyard and pond landscapes to composed landscapes of spas, pilgrimage landscapes and mining landscapes. The first result is represented by a map of these landscapes (Šantrůčková et al., 2023). The map was based on various existing data, including historical land use (TopoLandUse), using old topographic maps (Havlíček et al., 2018a). The map of historical landscapes shows a potential localisation of above mentioned HLS. However, follow-up field research is necessary to assess objectively significance and value of historical landscape structures (Havlíček et al., 2018b). The aim of this article is to focus on verifying identified potential vineyard HLS from the map of potential HLS (Šantrůčková et al. 2023). In particular, it assesses the individual features of the vineyard historical landscapes and evaluates their importance for the preservation of cultural and natural heritage, for sustainable agricultural management and tourism development. The research was conducted in the vineyard landscapes of the Hodonínsko and Kyjovsko regions, using archival map research as well as field investigations and discussions with local winemakers and entrepreneurs in the tourism industry.

Materials and methods

Detailed cadastral maps at a scale of 1:2,880 from around 1830, aerial photographs from around 1950 and aerial photographs from 2022 were used to target the historical vineyard landscape structure. All these maps were available in digital form and were processed in ArcMap software. By comparing these map materials, areas with a predominance and preservation of vineyards were selected, in

which more detailed field research (including survey with UAV), focusing on specific vineyard-related features (e.g. wine sheds, trees, wine cellars), and interviews with local winemakers and entrepreneurs in accommodation services were carried out. For 15 municipalities we also assessed parameters related to tourism. They were represented by number of inhabitants, area of vineyards in hectares and number of accommodation facilities listed in three different sources: portal www. mapy.cz, Booking.com and Czech Statistical Office (CSO), where accommodation capacities with more than 10 beds are registered.

For a detailed assessment we selected the municipalities in the vicinity of Hodonín and Kyjov, which are located in a predominantly hilly relief (Fig. 1).

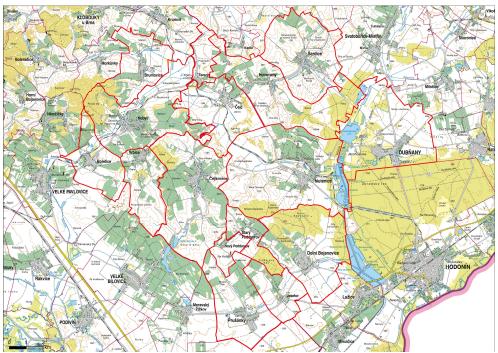


Fig. 1: Study area of historical vineyard landscapes, source: Base map of Czechia 1:100 000 (State Administration of Land Surveying and Cadastre)

Results and discussion

The highest representation of preserved vineyard structures were identified in the villages of Čejkovice, Mutěnice, Dubňany, Bořetice, Vrbice, Kobylí, Prušánky, Hovorany. Smaller areas of preserved historic vineyard structures were registered in the municipalities of Dolní Bojanovice, Čejč, Starý Poddvorov, Josefov. In the other municipalities, the historical structures of the landscape were disturbed by new plantings of vineyards in a different system and, in general, by changes in the distribution of land. During the evaluation of preserved historical wine structures, three basic types were recorded:

1. Historical vineyard structures in combination with other types of agricultural land, most often small orchards, small fields or meadows; these landscape structures are typical for the municipalities of Čejkovice, Vrbice, Kobylí, Hovorany (Fig. 2 and Fig. 3). Nowadays, some localities have lost their solitary trees, although they retain their small-scale structure (Fig. 3). From the interviews with local winemakers, we found out that they are very reluctant to replant old solitary trees. It is due to the fact that the solitary trees can create an obstacle in the management of their vineyards, since the vineyard management has turned mostly from manual to mechanisation.



Fig. 2: Historical vineyard, orchard a and arable land (Čejkovice)



Fig. 3: Historical vineyards with lack of solitary trees (Čejkovice)

2. Historical vineyard structures, which included the original wine cellars and directly adjoining plots of vineyards, or a combination of vineyards, orchards and small arable fields. Such objects can be found, for example, in the villages of Dubňany, Prušánky, Bořetice, and partly also in the village of Čejč (Fig. 4).



Fig. 4: Wine cellars and adjacent plots of vineyards and orchards (Dubňany)

3. Historical vineyard structures, which include working wooden or brick buildings/sheds intended mainly for the storage of tools, aids for work in the vineyard, for collecting rainwater for use in chemical treatment of plants, exceptionally also with a smaller cellar. These objects are most represented in the village of Mutěnice, Hovorany, Čejč, Prušánky (Fig. 5).



Fig. 5: Wooden sheds for storing tools in the vineyards (Mutěnice)

Interviews with hikers, cyclists, visitors to wineries, winemakers and owners of accommodation facilities and restaurants in the model area, revealed that the historical vineyard landscapes and preserved wine cellars are one of the most important attractions for visiting the region. The importance of the historical structures is also evidenced by the number of accommodation facilities and their types (Table 1).

While before 1990 accommodation in these villages was only available in hostels, or there were no accommodation options, today there are dozens of guesthouses, private accommodation, several ordinary hotels, luxury hotels, parking options for caravans, glamping, etc. For some municipalities, a typical way of accommodation is directly in wine cellars with the possibility of wine tasting (Mutěnice, Bořetice, Prušánky, Vrbice). Table 1 shows that the highest number of accommodation facilities is currently registered on the map application www.mapy.cz and a large number of objects for accommodation are offered on the international accommodation platform Booking.com. Large accommodation facilities (hotels, larger guesthouses, campsites) are registered by the Czech Statistical Office (CSO). The differences between these three providers can be explained by different

conditions for registering the accommodation. While at mapy.cz the accomodation provider can only provide basic information (e.g. telephone number and email), at booking.com the provider needs to provide more information. Furthermore the booking.com platform requires a fee from the provider to be registered with their platform. Finally, the CSO registers only accommodation with more than 10 beds. The research on accommodation facilities shows that the municipalities with the highest proportion of historic wine-growing regions also provide the most accommodation options (Table 1).

In addition to the very existence of historical landscape structures, their accessibility through hiking trails and bike paths also plays a role. The attractiveness of the historical landscape structures in the model area has been internationally recognized in recent years thanks to the photographic phenomenon of Moravian Tuscany. In this undulating agricultural area, photographs of small agricultural holdings with vineyards are increasingly becoming the subject of interest for both Czech and foreign photographers.

During the ongoing research activities focused also on the differences in biodiversity in the normal intensively farmed landscape and the landscape of historical vineyard structures. Especially in the combination of small vineyards with orchards and small fields, the biodiversity of plant species, insects and birds is many times higher than in large blocks of arable land.

Tab. 1: The number of accommodation facilities, the number of inhabitants and the area of vineyards

Village	Inhabitants	Vineyards (ha)	www.mapy.cz	Booking	cso
Mutěnice	3770	302	40	17	6
Bořetice	1379	140	29	18	10
Čejkovice	2401	375	19	11	7
Vrbice	1087	115	18	5	4
Prušánky	2170	213	14	7	3
Dubňany	6234	81	11	6	2
Hovorany	2168	177	10	7	4
Kobylí	2001	313	10	7	5
Dolní Bojanovice	3044	121	7	5	2
Šardice	2177	99	6	2	2
Čejč	1286	70	4	0	2
Nový Poddvorov	228	21	4	3	0
Starý Poddvorov	950	70	4	2	0
Brumovice	1017	80	3	2	0
Terezín	381	23	3	2	0
Josefov	453	137	2	2	0

Conclusion

Preserved historical vineyard landscapes can contain different landscape features, making them more attractive and desirable for tourism. This is clearly shown by here presented research, which shows not only examples of different vineyards but also quite large number of tourism facilities and interviews with tourists. Furthermore, the interviews with local business owners revealed that attraction of preserved historical vineyard landscapes can be one of their incomes. Therefore protection and preservation of historical vineyard landscapes is essential for the sustainable development of the territory and the preservation of cultural and natural heritage.

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Souhrn

V České republice je v současné době řešen komplexní krajinný výzkum v rámci projektu Centrum krajiny a biodiverzity (Divland), část projektu se zabývá historickými strukturami v krajině. Historická kulturní krajina je dlouhodobě vytvářena a ovlivňována lidskou činností. Lidské aktivity jsou zde převážně udržitelné aktivity bez intenzivní mechanizace, tyto aktivity vedou ke zvýšení kulturních a přírodních hodnot území. Vinohradnická krajina byla také hodnocena jako jedna z cenných historických struktur krajiny. V modelovém území v okolí měst Hodonín a Kyjov byly sledovány jednotlivé znaky této krajiny, jejich význam pro zachování kulturního a přírodního dědictví, udržitelné podnikání v zemědělství a rozvoj cestovního ruchu. Při mapovém archivním průzkumu a terénním průzkumu byly nalezeny různé typy dochovaných tradičních historických struktur krajiny s typickými rysy, které je žádoucí zachovat a zachovat pro další generace. S místními vinaři byla diskutována náročnost údržby tohoto typu krajiny. Při terénní šetření a diskuzích s místními vinaři, podnikateli v cestovních ruchu a turisty bylo zjištěno, že typické historické viniční krajiny a přilehlé historické vinné sklepy jsou jedním ze zásadních důvodů pro pravidelné návštěvy regionu. Jejich ochrana a zachování je nezbytná pro udržitelný rozvoj území a zachování kulturního a přírodního dědictví.

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