

## FOREST ENGINEERING VERSUS HERITAGE CONSERVATION

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<https://doi.org/10.11118/978-80-7509-831-3-0142>

### **Abstract**

The paper deals with the following and often ignored topic: the conservation of evidence of human settlements in the forests, which is threatened by the rising of forest engineering activities. In our paper, we analyse contemporary legislative means of heritage conservation, and we try to apply these means in a case of an archaeological locality in a forest environment. Our model case is an abandoned medieval village in the area of Dražanská Highlands (Czech Republic). We intend to present how the object is registered in an information system of heritage conservation institutions, and we try to suggest some instructions on how to proceed in potential industrial activities to this object's owner. Finally, we mention the classification issue of non-archaeological forest objects' heritage values (i.e., a coppice's).

**Key words:** archeology, cultural heritage, legislative process, coppice, Dražanská Highland

### **Introduction**

This paper was inspired by the lack of information about heritage conservation in the field of forest engineering. The values held by contemporary heritage conservation specialists are spreading rapidly. Heritage conservation is not just about castles, monuments or statues, but also about old factories or workers' colonies. Nowadays, cultural landscape is considered to be one of the most crucial areas of interest. By cultural landscape we mean an area that appeared in a specific period of time by cooperation of human actions and those of nature. We can classify a landscape in many ways (Kuča) and we are all familiar with medieval landscape, composed baroque landscape or an industrial landscape (Landscape and Power). Dražanská Highlands, which was thoroughly inspected by our team of researchers, is one of these. In Czech Republic, this area is unique because of its many cultural aspects. Since prehistoric until modern times, it has been influenced by mining, metallurgy and charcoal burning. At the same time, it's a landscape that went through an intensive agricultural colonization in the 13<sup>th</sup> century which was followed by a steep downfall in the 15<sup>th</sup> century. Since the 17<sup>th</sup> century this area has been popularized as a touristic and recreational region as one of the first regions in the Middle Europe (Tartaro Mastix Moravie). Important migration and communication trajectories went through this area since prehistoric times. We can also see it as a "magical land" with a lot of prehistorical (Byčí skála, Kateřinská jeskyně) and modern (St. Mary's church in Křtiny) pilgrimage sites. We cannot deny heritage protection of most of the places, that we can identify as historically, culturally or aesthetically valuable. However, there still exist a lot of objects (mostly of archaeological nature), which are not obviously identifiable, though they serve as an important proves of historical development of human settlements since the prehistoric times until nowadays, such as the Heritage Act defines them. These were the kind of objects we focused on in our MaHoLe project. We aim to focus on some aspects of these object's heritage protection in the Czech legislative environment and we'll try to discuss some possibilities for an owner of such an object.

### **Material and methodology**

#### **Current legislative in relation to forest environment analysis**

The main legislative regulation of heritage conservation is the Act 20/1987 Coll. About heritage conservation (hereinafter the Heritage Act). It's one of the oldest valid laws in Czech Republic and together with the implementing regulations it comprehensively regulates heritage conservation.

In its first part, the Heritage Act defines the concept of Cultural Monument and the process of declaring something as a Cultural Monument. In its second part, it deals with rights and obligations which follow from being an owner of a Cultural Monument. Other definitions, such as National Cultural Monument or Protected Heritage Areas, are rarely applicable in forest environment, so we won't be focusing on them. Well, what does the concept of Cultural Monument really mean? According to the law it's a significant evidence of historical development, ways of life or society's environment from the earliest until present times. This evidence represents creative abilities and works of man in various fields of expertise and is valued for its revolutionary, historical, artistic and technological features or because it's related to famous people or historical events. The process of declaring something as a

Cultural Monument is relatively complicated. The Department of Culture (MK ČR) requests an opinion from the relevant regional authority and municipality with extended powers. In practice it also requests an expert opinion from the National Heritage Institute (NÚ). Then they inform the owner of the object and ask him to comment on the suggestion. After getting all the relevant opinions MK ČR decides about the declaration. We should mention that an object can become a Cultural Monument even if his owner doesn't agree. If an object of archaeological nature is concerned, MK ČR requests an opinion of Institute of Archaeology of the Czech Academy of Sciences (Institute of Archaeology).

If an object becomes Cultural Monument, it's recorded in the Central List of Cultural Monuments of the Czech Republic which is held by the NHI and which is linked to one of the basic registers of public administration RUIAN (Register of Territorial Identification, Addresses and Real Estate), so the information, that this particular plot of land is under the protection as a Cultural Monument, appears in the Real Estate Cadastre.

There is a common problem with Cultural Monuments of archaeological nature, because the area of such a monument is usually defined by geographical coordinates which are not compatible with the plots in the Real Estate Cadastre, so the information about their protection doesn't appear in the register. However, after the approval of the new civil code, only the whole plot can become a Cultural Monument of archaeological nature. On one hand, the problem with recording them in the Real Estate Cadastre is solved, but on the other, the question of archaeological findings on large forest plots remains. Declaring the whole plot might "disqualify" large forest area. The only solution seems to be to divide the given area with the archaeological locality as a separate plot. That, however, requires cooperation of its owner.

Specific obligations follow from an ownership of a Cultural Monument. First, the owner has to maintain the Cultural Monument in good shape. In the case of archaeological monuments in forest environment, influences that might damage or destroy the monument should be avoided. If a Cultural Monument is seriously neglected, the state can even expropriate it, which is hardly used in practice. On the other hand, the ownership of a Cultural Monument brings some compensations. Besides expert help of NHI for free, one can receive a contribution to renovate the Cultural Monument and is exempt from property tax. This fact should be seriously considered when we talk about forest engineering. Classification of the territory where the Cultural Monument is located among the "special purpose forests" seems to be an ideal solution because these are also exempted from the tax.

The third part of the Heritage Act, which deals with archaeological researches and localities, is crucial in the context of applying heritage conservation in forest environment. This part regulates the authorization to conduct archaeological research and defines the role of the Archaeological Institute, which is the only institution legally authorized to conduct such a research. There exist two of them: one in Prague and one in Brno. Other institutions or individuals (hereafter authorized institution) have to meet some conditions and receive the authorization to conduct such a research from MK ČR. If an archaeological research is started, the authorized organization has to inform the Archaeological Institute and provide them with research report. If a Cultural Monument or a Protected Heritage Area is considered, NÚ has informational obligations too.

If an archaeological research is conducted in a forest area, the authorized institution (including the Archaeological Institute) has to make an agreement about the conditions of archaeological research with the owner. The law, however, doesn't state the requisites of this agreement. It might as well be an oral agreement, but it's recommended to sign a written contract, where both sides oblige to fulfill some deadlines, conditions or compensations of damages. If the owner doesn't accept the agreement, the authorized institution can ask the Regional Office to force the owner to tolerate the archaeological research.

Another important concept in the Heritage Act is rescue archaeological research. Basically, it is an obligation to carry out archaeological research in the event of disturbance of an area with archaeological findings. This is considered to be the entire territory of the Czech Republic. So before preparing any construction or other activity, the owner of the land has to carry out an archaeological research. At the same time, the builder is obliged to inform the Archaeological Institute about the construction plan.

For the owner of forest land, the last sentence of Section 22(2) of the Heritage Act is important, as it applies a similar procedure as for construction activity also in the case of other activities. This means such activity that may endanger or damage archaeological situations. For example, afforestation of land or logging. Thus, the forest owner should discuss his procedure with the Archaeological Institute before any such activity and, if he is a legal entity or an individual entrepreneur, he must pay for any rescue archaeological research.

The presence of archaeological findings in the forest environment must also be taken into account. Especially in connection with the development of amateur detector research. An archaeological finding

is defined as an evidence or a remnant of human activity. It can be both movable (e.g., tiles, coins, or jewellery) and immovable (most often the remains of human settlements). However, human remains are not considered to be an archaeological finding under the Heritage Act. The law does not define the temporal classification of a finding. It can only be said that it is an object, the study of which can trace the development of human history, and which is located underground. Therefore, if an archaeological finding is made during normal forest management activities, the finder is obliged to report the find to the relevant Regional Authority within the next day. If he fails to do so, he appropriates the find and its value exceeds CZK 5,000, he commits a criminal offence. The finder is entitled to a reward, which in this case is up to 10% of its value. This will be determined by an expert opinion of the Archaeological Institute or the National Museum.

Another legal norm for the field of archaeological heritage conservation is the Convention for the Protection of the Archaeological Heritage of Europe (hereinafter referred to as the Malta Convention). The Convention became valid in the Czech Republic in 2000. It was essentially a response to unregulated construction and development activities that directly threatened archaeological heritage. The most important part of the Convention is the chapter dealing with Heritage Identification and Protection Measures. In the second article of this chapter, the Contracting Parties undertake, in accordance with their legal systems, to maintain an inventory of archaeological heritage and to establish archaeological reserves even in places where there are no visible remains.

The Czech legal system reacted to this part of the Malta Convention by creating the so-called archaeological findings sites (hereinafter referred to as AFS). These are areas with elements of archaeological heritage, which are divided into four categories. AFS I – territories with unequivocal archaeological findings, AFS II – territories with reasonably expected archaeological findings, AFS III – territories where archaeological findings are currently not expected but cannot be unequivocally excluded, AFS IV – territories without archaeological findings. The first two categories are not in dispute. It is a valuable area that is spatially clearly defined. Very often AFS II forms a buffer zone for AFS I. For example, the core of a vanished medieval village is AFS I and the surrounding plains are AFS II. The category AFS IV includes quarries or opencast mines, i.e. mined out areas. However, what about evidence of historic mining. On the one hand, these are fully established as historic industrial heritage. For example, the Erzgebirge/Krušnohoří mining region has become a UNESCO World Heritage Site. According to the AFS categorisation they do not carry archaeological value, which is not true. Therefore, the whole AFS classification will have to be adjusted. The AFS III category includes areas that are not in other categories, i.e. the rest of the country.

The AFS are recorded in the Significant Archaeological Sites (SAS), which is divided into a map and database section. This system is technically and content-wise outdated. Currently, the NPÚ, as the administrator of SAR, is creating a new version of the system, which should be deployed in 2023.

For the forest owner, the information in Article 3 of the Malta Convention concerning archaeological excavations is relevant. According to the convention, non-destructive survey methods are preferred. In the context of the significant development of these methods in the last decade (airborne laser scanning, geophysical measurements, remote sensing, geobotanical indications), this concept takes on a whole new dimension. Therefore, the forest owner should primarily require the application of non-destructive methods in any archaeological activity on his land.

After almost 40 years of the existence of the Heritage Act and more than 20 years of the Czech Republic's accession to the Malta Convention, it appears that Czech legislation in the field of archaeology is outdated and therefore insufficient. This fact is particularly evident in the protection of archaeological heritage in the forest environment. The Heritage Act deals primarily with archaeology in the relationship of the builder to the protection of archaeological heritage and is very complicated to apply to other environments. The more modern Malta Convention is unfortunately insufficiently anchored in our legal system and therefore more difficult to enforce.

## Results

From March 2020 to the present, several dozen archaeological remains of human economic activity in forests have been documented within the MaHoLe project. Three sites with different natural and geographical conditions have been selected within Dražanská Highlands. In addition, each of the sites was located in a different historical area, so the source base also differed. The southern area is located near the village of Pozoříce. The centre of the area is the ruins of Vildenberk Castle, in the vicinity of which a number of relics related to the castle's economic background have been preserved (pond system, water cisterns, stone quarries). The central area is situated southeast of Blansko near the village of Klepačův. It is a plateau above the Punkva valley. This area is rich in mires that surround the extinct medieval village of Polom with a pond and an interesting water channel. The northern area

is close to the important medieval centre of Holštejn Castle. Within this area, the research focused on the extinct medieval village of Bohdalůvka. It serves as a model example of an archaeological site.

The site of the extinct medieval village from the 13<sup>th</sup> and 15<sup>th</sup> centuries is located on the border of the cadastral areas of Holštejn and Housko. The village was in the place where there is a small forest meadow, known as Bohdalevská meadow. Remains of the original buildings have been preserved on the sides of the watercourse that springs in the northern part of the meadow. A small dam of a pond in the southern part of the intravillan has been preserved. The village was a short, double-rowed, wooded lane settlement typical of most colonial settlements in Dražanská Highlands. The two rows were 50 to 60 metres apart. The length of the whole village was 155 metres. Two rounded elevations in the form of piled stones were preserved around the perimeter of the village. These elevations are now only slightly visible.

The first written record of the village dates back to 1463, but archaeological findings date the beginnings of the settlement to the second half of the 13<sup>th</sup> century. In 1492 it is mentioned as deserted. It is evidence of the remains of an extinct medieval village preserved in a forest environment. It is a valuable archaeological and cultural and historical monument that bears witness to the medieval landscape.

If we want to carry out archaeological research on the site, it is necessary to inform the Archaeological Institute. The digital form in the Information System on Archaeological Data is used to notify the archaeological research. The information is then stored in the Archaeological Information System of the Czech Republic (AIS). The information can be viewed within the Digital Archive of the AMCR database and visualised within the Archaeological Map application. The entire information system has been newly built since 2016. It contains a number of databases with professional and educational content. The map and databases are clear and the full-text search works well. It is evident that the system is intended for the general public.

The creation of an AFS is somewhat more complicated. The Information System on Archaeological Data (ISAD), based on the above-mentioned SAS database, is designed for this purpose. A new polygon can be created within the mapping application, to which additional information must be added in a multi-component form. The saved information then goes to the NHI for approval. It is an outdated system. The database is no longer populated. The polygon can only be drawn in a very schematic way and many unnecessary predefined fields have to be filled in the database.

The highest form of protection for an archaeological site is the declaration of a Cultural Monument. This is a complicated process, as discussed in the previous chapter. Anyone can submit a proposal for Cultural Monument designation, but the registration of the proposal is entirely in the hands of the National Heritage Institute. A specialist in the inventory part of the Heritage Catalogue, which is a registration system including objects of conservation interest, fills in the information for the site and links the entry to other components of the Integrated Information System for the Protection of Monuments (IISPP). In particular, localisation using the NPÚ geoportal is essential. After the Ministry of Culture actually initiates the administrative procedure of declaring an object a Cultural Monument, a record of the legal status is created in the Central List of Cultural Monuments, which is a database recording the life of the Monument within the legislative process. That is, when the Cultural Monument was declared, when the Cultural Monument protection was extended, or when it ceased to exist. This information is combined with the information in the inventory part of the Heritage Catalogue to create a full-fledged record of the Cultural Monument, which is spatially defined and contains links to other documents (photographs, planning documentation). IISPP is a robust system that captures all components of the Czech cultural heritage. It records information i.e. on defunct factories, but also on i.e. medieval bells, so the data is very coherent. Archaeological cultural heritage is a relatively significant part (approximately 10%), so the Heritage Catalogue is set up for this type of information, but lacks a better link to ISAD. The link to the Archaeological Information System is completely missing.

## **Discussion and conclusion**

### **Identification of new values – What to do with the relics of human economic activity that are not archaeological in nature**

In the previous chapter, we demonstrated the process of recording an archaeological site in the various archaeological conservation systems using a case study. We showed the advantages and weaknesses of the existing systems, especially their lack of continuity. However, during the project research we came across objects of a non-archaeological nature. These are mainly stumps, i.e. the remains of coppice forest, which are evidence of pre-industrial forest management. The stumps fulfil the definition of a Cultural Monument as evidence of a society's way of life and environment. So, from the point of view of heritage conservation, there should be no problem in declaring a stump as a

cultural monument. However, in practice this has not yet happened. One of the reasons may be the difficult spatial definition of the object from the point of view of the Civil Code, where the tree is considered a thing connected with the land, i.e. the stump in the forest area would have to be declared a Cultural Monument with the plot on which it grows. This, as with archaeological objects, complicates the situation considerably. Another way to apply heritage protection to a stump is to declare a larger area of ancient coppice forest as a Heritage Area. According to the international classification of cultural landscapes, the forest is considered a "relict landscape". It is a category of landscape where evolutionary development has stopped at a certain period and the characteristic features are still visible. It is therefore possible to fulfil the definition of a Heritage Area as part of a landscape unit. The advantage of a Heritage Area is the possible absence of cultural monuments within its territory. In practice, the declaration of this type of cultural landscape has not yet been implemented. The closest approach to this type is the Mining Cultural Landscape Háji - Kovářská - Mědník, where, among other things, the object of protection is defined as "sparse mountain spruce forests and peat bogs, extensive meadows around smaller settlements", i.e. certain types of relict landscape. The protection of stumps is much more effective from the point of view of nature conservation. The Nature Conservation Act defines the terms "commemorative tree" or "group of commemorative trees", which can be declared by the municipality with extended jurisdiction.

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## Acknowledgements

Supported by the Ministry of Culture of the Czech Republic within the programme for the support of applied research and experimental development of national and cultural identity for the years 2016 to 2022 (NAKI II), project "Mapping the cultural heritage of human economic activity in forests", No. DG20P02OVV017.

## Souhrn

Příspěvek podává informaci o ochraně pozůstatků lidské hospodářské činnosti v prostředí lesa z pohledu památkové péče. Cílem příspěvku bylo prezentovat možnosti památkové péče v této v současné době okrajové části spektra kulturního dědictví. Příspěvek vycházel z údajů získaných výzkumem tří geograficky a historicky odlišných lokalit v oblasti Dražanské vrchoviny. Byla provedena analýza dvou zásadních právních úprav pro tuto oblast kulturního dědictví – Památkového zákona a Maltské konvence. Jednotlivé články a pojmy výše uvedených norem byly aplikovány na archeologickou složku kulturního dědictví, případně byly uvedeny postupy pro majitele dotčeného lesního pozemku. Na konkrétním příkladu archeologické lokality, zaniklé středověké vesnice Bohdalůvka, byly prezentovány možnosti evidence lokality v systémech archeologické památkové péče. V rámci diskuze byly komentovány výhody a nevýhody jednotlivých systémů. Především bylo poukázáno na jejich malou vzájemnou provázanost. Rovněž byla řešena problematika ochrany pařezin z pohledu památkové péče. Bylo konstatováno, že nejvhodnější ochranou pro oblast Dražanské vrchoviny by byla památková zóna.

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