

LANDSCAPE SURVEY AND PRESENTATION IN THE CZECH REPUBLIC

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Background and objectives

The objectives of the University of West Bohemia's contribution to the project are to encourage the use of aerial photography and other forms of remote sensing in landscape exploration and conservation are as follows.

- Through research, involving the combined use of new and innovative techniques, including new aerial reconnaissance and the investigation of existing 'historical' air photographs of the Czech Republic.
- Through education, involving the preparation of a centrally-funded film/video and an on-line *Encyclopaedia of Aerial Archaeology and Remote Sensing*.
- Through public presentation, involving the preparation (with others) of a major travelling exhibition on the role of aerial survey and related techniques in landscape exploration, analysis and conservation.

Progress to the end of 2005

The period from September 2004 to December 2005 saw significant progress with the first two objectives. The third, to be carried out in partnership with the Institute of Archaeology and the National Museum in Prague, will be addressed mainly in Year 3, though the first steps have been taken through consultation between the Archaeology Departments at the University and National Museum regarding the overall pattern of the exhibition and the space needed for its arrangement and display.

Research

The main **study area** selected for aerial and other forms of investigation is a tract of landscape in central Bohemia, north of Prague, including the solitary mountain of Říp, where field-walking, test excavations and geophysical survey will be carried out in the second and third years of the project. The intention is to explore the dynamics of past settlement processes in the vicinity of this 'sacred' mountain, with its legendary connections with the beginnings of Czech history in the early Middle Ages.

In June and July 2005, **aerial survey** was carried out both in this study area and in other parts of central and western Bohemia. The sites recorded, some of them not previously known, included Bronze Age enclosures, prehistoric open settlements and Post-Medieval to Early Modern field monuments.

The evaluation and interpretation of recent and historical air photographs began with the analysis of a collection of recent orthophotos of the chosen study area. This revealed a number of previously-unknown cropmark enclosures, some of which will be selected for field-walking and geophysical survey later in the project. The study of earlier 'historical' air photographs, which have often been under-exploited in archaeological research and conservation, will be undertaken during 2006.

Sample excavations and geophysical survey were carried out on a key site at Ledčice, distr. Mělník, within of the Říp study area. The site, first discovered from the air in 2000 by the Institute of Archaeology of the Czech Academy of Sciences, consisted of conjoined rectangular and sub-rectangular enclosures. The aim of the excavations was primarily to find artefacts and other material that would date the site, initially suspected to be of late prehistoric origin, perhaps similar to the Hallstatt-period moated sites well known from central European countries such as Bavaria.



Conjoined enclosure discovered from the air (on the left) and under excavation in 2005 (on the right). The dating of the enclosure to the Medieval period, rather than to prehistory as expected, has major implications for interpretation of heritage landscapes in the Czech Republic.

The excavations, however, showed the site to be of Medieval origin. In the context of Czech archaeology this is in fact the first site of its kind – a representative of the earliest country feudal seat – whose plan is completely preserved, in this case in the form of ‘aerial’ evidence. Pottery from the lower layers of five ditch-sections dated the rectangular enclosure to about 1150-1250 AD, the earliest stage of the High Medieval period in Bohemia. The rectangular enclosure probably represents the ‘bailey’, with the sub-rectangular enclosure serving as the central, residential, part of the site, as indicated by a solitary sunken feature (perhaps a tower house) at its centre.

Educational work

The **aerial survey** already mentioned, along with reconnaissance during the winter of 2004/05, recorded selected monuments and landscapes in various parts of Bohemia for the planned documentary film on the history of aerial archaeology and the past landscapes of Bohemia.

Following discussions with English Heritage (as sponsors of the project) a second educational contribution will be the preparation of an on-line **Encyclopaedia of Aerial Archaeology and Remote Sensing**. The basic technological support and necessary programming have been created in the past year, with a provisional address for system-testing at <http://athena.zcu.cz/airdb>. The encyclopaedia will consist of individual entries and a related database system. The aim is to provide easily accessible information, including images, on aerial archaeology and remote sensing in all their aspects to students, teachers and the general public, the only pre-condition for free access being an internet connection.

A third educational contribution came through the involvement of students from the University in various aspects of the project, including aerial reconnaissance, sample excavations and geophysical work.

Caesium magnetometer

A significant advance during the year was the purchase by the University of a sophisticated caesium magnetometer, capable of greatly enhancing the information recoverable from sites initially identified through aerial survey or related fieldwork. This will make a special contribution both to the Culture 2000 project and to continuing landscape survey after its completion. Because of established financial practices within the University permission was given by the European Commission for the whole of the project’s contribution towards depreciation (14% of the initial cost) to be debited to Year 1, with consequent re-allocation of costs in Years 2 and 3.