

EUROPEAN LANDSCAPES: past, present and future



ENGLISH HERITAGE



Baden-Württemberg

REGIERUNGSPRÄSIDIUM STUTTART
LANDESAMT FÜR DENKMALPFLEGE



Co-organisers

English Heritage, Project Sponsor

University of Ghent

State Authority for Culture and the Preservation
of Monuments, Mecklenburg-West Pomerania

Cultural Heritage Service Baden-Württemberg

Baranya County Museum Authority, Pécs

University of Foggia

University of Siena

Co-partners

University of West Bohemia, Pilsen

National Heritage Board of Estonia

Helsinki University of Technology

Institute for Landscape Management,
University of Freiburg

Agency for Euromediterranean Cultural Heritage
and the University of Salento, Lecce

Department of Lithuanian Heritage Protection

Adam Mickiewicz University, Poznań

Poznań Archaeological Museum

Institute of Archaeology and Ethnology,
Polish Academy of Sciences

Institute for Cultural Memory, Bucharest

Institute of Archaeology,
Slovak Academy of Sciences



Education and Culture

Culture 2000

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Representatives from all of the project co-organisers and co-partners, on the steps of the National Museum in Prague on 24 October 2007 following the project's final event, organised by English Heritage with the help of Dr Martin Gojda and his colleagues in the Czech Republic.

All participants would like to record their thanks to Chris Musson who from the project's inception until its completion, has made an enormous contribution without remuneration to ensure the smooth running of the project and the furtherance of its aims; without his efforts, along with those of Bob Bewley and Sarah Prince within English Heritage, the project would not have happened and would not have reached such a successful conclusion.

This report has been compiled and edited by Chris Musson and Pete Horne
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The complete Final Report or individual reports from partners can be downloaded from:

e-landscapes.com or

<http://www.muzarp.poznan.pl/EuLandscapes/EuLandscapes/index.htm>

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SUMMARY AND OVERALL ASSESSMENT OF PROJECT RESULTS

Pete Horne, Bob Bewley and Chris Musson, for English Heritage

Aims and objectives

The aim of the project was to increase awareness and conservation of the shared cultural heritage within European archaeological landscapes, especially through non-destructive techniques of investigation such as aerial reconnaissance, air-photo mapping, field survey and the innovative use of satellite, airborne and ground-based remote sensing. The project did not have a single unified programme. Instead, the participants responded to their local situations, contributing to however many of the project's nine key Actions which seemed relevant to their individual capacities and needs. The nine Actions can be summarised as follows:

- Action 1 The promotion of training schools, workshops and seminars
- Action 2 Aerial and ground-based surveys of threatened sites and landscapes
- Action 3 Air-photo interpretation and mapping of cultural landscapes
- Action 4 Innovative surveys using air-photographs, laser scanning and satellite imagery
- Action 5 The search for under-exploited air photo sources from World War II
- Action 6 Networking and the exchange of skills across Europe
- Action 7 The Creation of a *European Centre* as a focus for future events and developments
- Action 8 Public outreach through websites, TV, radio, films and exhibitions
- Action 9 Centrally-funded activities, student exchanges, support for meetings etc

Achievements, October 2004 – October 2007

Overall, the planned activities, with inevitable modifications to meet changed situations since the project application in November 2003, were successfully completed, though the planned expansion into the Iberian Peninsula had to be postponed and the intended 'book of the project' was not in the event thought practical.

Highlights of the project included numerous productive training schools, conferences and workshops, focusing activity on individual countries or helping to spread expertise across Europe. There were successful programmes of exploratory air survey and mapping in several countries (including for the first time in Romania), along with exploratory work on the use of laser-scanning technology (lidar) in landscape and archaeological recording. The combination of aerial survey and ground-based remote sensing was explored in Italy, Germany and Hungary. A major international exhibition was mounted in Prague and there were several other exhibitions, along with press, radio and TV coverage in many countries across Europe. A central website, with links to many others, was maintained throughout the project and will continue to be so. It is clear that the impact of the project, both within individual institutions and more broadly in the participating countries, will continue well into the future.

Achievements within individual Actions

The results achieved in each of the countries and partner institutions are set out more fully in Appendix A. The following notes summarise the main results within each of the nine Actions.

Action 1 Promotion of Training Schools, Workshops and Seminars

Six training schools, with in-air and ground-based experience for students from across Europe, were held in Italy, Germany and the UK. Ground-based workshops, seminars or conferences were held in Estonia, Finland, Germany, Lithuania, Poland (twice) and Romania (twice). Assistance of one kind or another was given for other meetings in Belgium, Denmark, Italy and the UK. A total of about 130 students participated in the training schools and workshops, and a further 100 participants took part in other events, taking their acquired skills and understandings back to their native countries.

Action 2 Aerial and ground-based surveys of threatened sites and landscapes

Substantial programmes of aerial reconnaissance, mainly concentrating on sites and landscapes at risk from ploughing or other modern developments, were conducted in the Czech Republic, Italy and Poland.

Exploratory flights focusing on specific aspects of the landscape were undertaken in Belgium, Estonia, Germany, Hungary, Lithuania, Slovakia and the UK. The first 'home-based' air photographic flights were undertaken in Romania. In all of these countries important archaeological discoveries were made and photographs were taken of heritage landscapes, townscapes and buildings for the benefit of present and future conservation work and public presentation.

Action 3 Air-photo interpretation and mapping of cultural landscapes

Photo-interpretation and mapping work was undertaken in all of the countries that carried out flying programmes, in particular for newly discovered sites or groups of sites within the landscape. Particularly important photo-interpretation and mapping work was undertaken in Italy and Belgium, in the latter case revealing, interpreting and publicising previously un-mapped traces of Great War military landscapes in Flanders, opening up possibilities and setting standards for similar projects in the future.

Action 4 Innovative surveys using air-photo, laser-scanning and satellite imagery

The use and testing of satellite imagery, airborne laser scanning (lidar), geophysical survey and other remote-sensing methods was undertaken in Germany and Italy. Co-partners in the Czech Republic, Hungary and Slovakia experimented successfully with the integration of one or more of these techniques alongside more established ground-based methods such as field survey, finds-collection and sample excavation.

Action 5 Under-exploited air photo sources from World War II and earlier

The search for German photo-maps from the 1930s and 1940s was less fruitful than hoped but several as yet un-exploited 'historical' archives of air photographs were located in Poland. Information about the already-known German photo-maps has been publicised on the web and the search for more of these precious documents will continue beyond the end of the Culture 2000 project. The project in Belgium clearly demonstrated the importance of 'historical' and modern air photographs in the understanding and conservation of Great War landscapes and military remains, a subject discussed at an international conference at Ypres in November 2006.

Action 6 Networking and the exchange of skills across Europe

The European network of specialists taking or using air photography and other forms of remote sensing has been substantially enhanced, both in numbers and geographical range. As a result of the project many students and young researchers have acquired international contacts which will serve them well in their future careers and in the development of aerial archaeology across Europe. A particularly useful range of new contacts was made in Scandinavia and the Baltic area, with initial contacts also in Iberia.

Action 7 Proposed 'European Centre'

The idea of a European Centre for Landscape Archaeology and Remote Sensing, to act as a 'nerve-centre' for future work and activities in this field of research and conservation, was refined throughout the project. In 2006 a first 'home' for the centre was offered at the University of Siena but this initiative stalled with the tragic death early in 2007 of the professor most closely involved in the discussions, Riccardo Francovich. In the following months, however, the idea has matured into a potentially more flexible and sustainable concept of a 'network' of 'centres of expertise' across Europe, each contributing according to its own capacities to a core of agreed values and objectives. The concept was warmly endorsed at the annual meeting of the international Aerial Archaeology Research Group at Copenhagen in September 2007. It is hoped that several such centres will declare their participation in 2008.

Action 8 Public outreach: websites, TV/radio, films and exhibitions

The project's central website (www.e-landscapes.com) went on-line in November 2005 and has been regularly enhanced and updated ever since. It will be maintained for at least three years beyond the end of the Culture 2000 project. Several partners have added 'Culture 2000' pages to their own websites. Work on a TV/video film assisted by Culture 2000 funding will be completed in late autumn 2007 and a major international exhibition was mounted in Prague as the final event of the project. Smaller exhibitions were presented in other countries, including one in a busy shopping mall in Hungary. Project members have also contributed to many radio and TV broadcasts.

Action 9 Centrally-funded activities, student exchanges, support for meetings etc

Funds were made available from a 'central' reserve to assist participation at training schools, workshops, seminars and meetings. Students and researchers were helped to undertake periods of research, study or practice in other countries. Funds were also used for other related purposes, including publication.

DEVELOPMENT, PROGRESS AND ACHIEVEMENT OF THE PROJECT

Pete Horne, Bob Bewley and Chris Musson, for English Heritage

Initiation and basic character of the project

Several co-partners in the present project also worked on a Culture 2000 project in 2001 (*Conservation through Aerial Archaeology – CAA*). This built on earlier training schools and exchanges organised by the Aerial Archaeology Research Group (AARG), a UK-founded body which has subsequently expanded into Europe and beyond. By 2003, when the present project was being planned, the Group provided an international network of contacts which was crucial to its conception, framing and successful execution.

The project was an ambitious one, involving 7 co-organisers (in the UK, Belgium, Hungary and two each in Germany and Italy), along with 11 co-partners in 7 other countries. The focus was on aerial archaeology, heritage conservation and public awareness, with particular emphasis on the broader landscape and on the spread of ‘aerial’ and other remote-sensing techniques to areas where the method has as yet been little used (such as the Baltic and Nordic region, the Mediterranean rim, some of the former communist states and the Iberian Peninsula).

Through consultation with the co-organisers and others, 9 key fields of activity, or ‘Actions’, were framed for the project. These are summarised in the previous section. There was no intention, however, to create a single unitary programme for the whole project, rather to outline a series of actions from which the participating institutions could choose those which they felt particularly suited to their needs of experience. The 18 participating organisations spanned from those who were pioneering the introduction of aerial archaeology and landscape studies in their own countries to those who were already well experienced but wished to carry out specialist studies or to develop particular aspects of their work. The wide range of experience, objectives and results amongst the project co-partners is illustrated in the individual reports.

Achievements and future prospects

The project has made a considerable impact in the field of aerial archaeology and landscape studies across Europe, with regular reports and discussions at meetings of the international Aerial Archaeology Research Group and elsewhere. At the final meeting of the participants in October 2007, it was unanimously agreed that the project had been a great success, with worthwhile results in each institution and across Europe as a whole. All of the participating institutions committed themselves to continuing and developing similar work in the future, given adequate funding from whatever source.

New cooperative partnerships have been formed, the level of debate about the use of new techniques has been raised, and plans are already being laid for future action, in particular to encourage and support the work just begun by the less experienced participants in the present project, and to extend its application to countries where (in recent years at least) aerial archaeology has hardly been used (in Scandinavia, Denmark, Holland, Ireland, Spain and Portugal, for instance). New funding will be needed for this and similar initiatives but the experience and contacts created during the present project will provide a firm basis for their planning, management and successful execution.

Progress and development of the project

The progress of the project, subject to inevitable adjustments of timing and emphasis in activities often conceived more than three years before their completion, was encouragingly smooth. There were early bureaucratic and financial problems in southern Puglia, Italy, but these were eventually overcome and excellent results were achieved. Less work, perhaps, than originally envisaged, was done with satellite imagery but this was offset by excellent experience

in the use of airborne laser scanning (lidar) and ground-based geophysical survey combined with aerial photography and 'traditional' methods such as field-survey and excavation.

The search for 1930s/1940s German photo-maps of Poland and other parts of Europe was less fruitful than hoped but their existence has been made known through the web and several important collections of war-time air photography were identified. The search will continue.

In the event, pressure of work in other parts of the project prevented an expansion into Spain and Portugal, though plans are being made, using contacts created over the past three years, to develop in this direction after the end of the present project. As a counterbalance to this disappointment, two ground-based workshops (only speculatively envisaged in the original application) were brought to successful outcomes in Poland in the final year of the project.

Particular satisfaction was given by the progress made in countries that were relatively new to aerial archaeology (Estonia, Lithuania and Romania) and by striking discoveries in Poland which may help to advance the long-delayed development of aerial archaeology and landscape studies in that country. In Italy and elsewhere progress was made in the processing of 'aerial' information to achieve long-term benefits in the conservation of sites and landscapes from the past in the face of modern agricultural and industrial development.

Administrative and financial support

Although time-consuming (especially for the project's supposedly 'retired' and un-paid project co-ordinator) the management and financial reporting of the project proved relatively straightforward. The 7 co-organisers met as a Management Group at Munich, Germany in 2004 (before the start of the project), at Leuven, Belgium in 2005, at Schwerin in Germany in 2006 and at Prague at the end of the project in October 2007. Many of the co-partners also contributed to discussions of project policy and management at these meetings.

Apart from this, mutually supportive email contact was maintained throughout the project. In a project in which 18 separate institutions, each managing its own financial expenditure and reporting (with specific approval from Brussels), the pro-forma Invoice Spreadsheet provided by the Culture 2000 office – at first frighteningly complex in appearance – proved invaluable in imposing a consistent pattern of reporting despite wide variations in internal practice in the different institutions. Computer programmes for merging the individual invoice spreadsheets from all 18 institutions were developed as part of the project's financial management.

Financial outcome

Some of the participants slightly overspent their original budgets (English Heritage more than slightly) while a few others fell fractionally short of their targets. The total expenditure amounted to €920,188 against an original target of €883,055, the participants contributing €502,233 against an agreed maximum from the EU of €417,955. None of the participants was able to reclaim VAT so the full cost of each expenditure was included in the financial accounting system.

The project also benefited from much time and experience contributed, without charge, by staff at the participating organisations, and from time given freely by experts and administrative staff from outside the project (in particular those acknowledged on the final page of the report).

The Aerial Archaeology Research Group also gave indirect financial support, to an approximate value of about €34,000, amongst other things by funding students – particularly those from central European countries – to take part in Culture 2000 activities.

'Spin-off' activities and interaction with other projects

There were many 'spin-off' benefits from the project. These are more fully recorded in the "What Else?" section further on in the report. They included publications, first links with Syria and the USA, the formation of new organisations in Denmark and Holland, promising developments in Romania, and contributions to recent and future international discussions.

WHAT ELSE?

Spin-Off Activities and Associated Events

Associated events

In several cases members of The Culture 2000 'team' instigated or facilitated events funded largely from outside the Culture 2000 project. In addition to advice and experience, the project was able to offer small grants to students for attendance at such meetings, for example an aerial archaeology workshop at the British School al Rome in November 2004, mainly funded by grants from the Aerial Archaeology Research group (though contributions from the Association for Cultural Exchange and the British Academy).

Aerial archaeology in Denmark, Holland, Ireland, the USA and Syria

In recent decades air photography has been little used in Denmark despite excellent results in the past. As a result of participation in Culture 2000 events, archaeologists in Denmark are now planning a self-financed training school in 2008 or 2009. Similar ideas are under discussion in Holland, and 'national' aerial archaeology groups have been formed in both countries as a direct result of involvement in Culture 2000 events. Two of the training schools attracted participants from Ireland, where there is a growing interest (but as yet little active work) in air photography and aerial archaeology. An archaeologist from the USA, already working on aerial observation in America, attended the UK training school in July 2006. A Hungarian team-member has also been fostering the idea of archaeological air photography in Syria while working there as a direct result of experience gained during the Culture 2000 project.

Expanding the European network

Culture 2000 events have helped to boost membership of the Aerial Archaeology Research Group. After a cull of lapsed members in 2004 the Group's membership stood at just over 100. By the end of the Culture 2000 project this figure had risen to nearer 200, with a progressively increasing proportion of members now drawn from various parts of continental Europe. The Group's meetings and twice-yearly newsletter keep members of the European network in touch with one another and with latest developments in heritage-based aerial studies.

Other indirect results from the Culture 2000 project

As a result of cooperation between three of the project's most active members (also involved in an earlier Culture 2000 project in 2001), the first Italian-language book on exploratory air photography was published in Florence in 2005. A book of essays and articles on aerial archaeology was also published in Poland with the help of small but significant financial assistance from the Culture 2000 project and the Aerial Archaeology Research Group.

In partnership with a member of the research team in another Culture 2000 project (on the Roman Frontier in Europe), a successful session on landscape archaeology was organised at the 2007 meeting of the European Association of Archaeologists at Zadar, Croatia, prompting an invitation to organise a similar session at the World Archaeological Congress in 2008.

A Romanian archaeologist who attended several of the Culture 2000 training schools and workshops has subsequently made contacts and started aerial survey work in other parts of Romania. He has also been invited to take part in exploratory flights in Hungary.

Students from several European countries who first made contact through Culture 2000 events have spent time in the UK receiving advanced training by Rog Palmer, one of the most stalwart (but unpaid) supporters of the Culture 2000 project.



HIGHLIGHTS 2004-2007

Belgium Air photographs uncover the battlefields of Ypres

Czech Republic Air survey, excavation and a grand exhibition

English Heritage Air photo training schools at home and abroad

Estonia Estonian archaeologists take to the air

Germany (Mecklenburg-Vorpommern) Seeing beneath the waves

Germany (Baden-Württemberg) Iron Age fortresses in their landscape setting

Germany (Freiburg) Airborne laser scanning to 'see through the trees'

Hungary Combining techniques to explore the Neolithic

Italy (Puglia) Uncovering and mapping the past through aerial survey

Italy (Salento) Modern techniques and a Roman harbour

Italy (Tuscany) Air survey, laser scanning and geophysics

Lithuania Raising awareness through aerial archaeology

Poland New discoveries and new systems for heritage conservation

Slovakia Stone Age monuments from the air and on the ground



A LOST TOWN RE-FOUND

Szamotuly, in Poland is a medieval town, its originally open market square now filled with later buildings (top). Until recently historians believed that the town always occupied its present site. This view changed dramatically in July 2006 when spectacular air photographs, taken as part of the Culture 2000 project, revealed its original location at Mutowo, 2.5km away, where it had stood before a disastrous fire in the 14th century. One of the photographs is shown here (centre), rectified to fit the present-day map. In the bottom image the town's large open square, outlined by the dark marks of cellars beneath its surrounding buildings, has been plotted on the rectified photograph, along with the presumed lines of the linking streets.

