



Remote Sensing for Archaeological Heritage Management

Edited by David C Cowley

Remote sensing is one of the main foundations of archaeological data, underpinning knowledge and understanding of the historic environment. The volume, arising from a symposium organised by the Europae Archaeologiae Consilium (EAC) and the Aerial Archaeology Research Group (AARG), provides up to date expert statements on the methodologies, achievements and potential of remote sensing with a particular focus on archaeological heritage management. Well-established approaches and techniques are set alongside new technologies and data-sources, with discussion covering relative merits and applicability, and the need for integrated approaches to understanding and managing the landscape. Discussions cover aerial photography, both modern and historic, LiDAR, satellite imagery, multi- and hyper-spectral data, sonar and geophysical survey, addressing both terrestrial and maritime contexts. Case studies drawn from the contrasting landscapes of Europe illustrate best practice and innovative projects.

Language: English with abstracts in French and German

Publication date: 2011

Distribution: Archaeolingua, Budapest

Format: 297 × 210mm, hardback

Extent: 312 pp + 218 illustrations in full colour throughout

ISBN: 978-963-9911-20-8

Price: € 40 + packing and shipping

Copies of the book can be ordered from:

Archaeolingua, H-1014 Budapest, Úri utca 49, Hungary

tel/fax: +36 1 3758939

email: kovacs@archaeolingua.hu

web: www.archaeolingua.hu/books/eac.html



ARCHAEOLINGUA

Payments can be made by credit card (VISA or Mastercard), cheque (in euro) or by bank transfer.

**ORDER FORM**

(Please address to:)

Archaeolingua Foundation

H-1014 Budapest, Úri utca 49 * H-1250 Budapest, Pf. 41.

Telefax: (+361) 3758939; e-mail: kovacs@archaeolingua.hu <http://www.archaeolingua.hu>

VAT: HU19668545

Number of copies:		Price/copy
<input type="checkbox"/>	EAC Occasional Paper No. 1 The Heritage Management of Wetlands in Europe Edited by Byrony Coles and Adrian Olivier. Brussels 2001, 207 pp, with illustrations, Language: English, French, German, ISBN 90-76972-01-X, WARP occasional paper 16 ISBN 0-9519117-9-1	€ 15
<input type="checkbox"/>	EAC Occasional Paper No. 2 Europe's Cultural Landscape: archaeologists and the management of change Edited by Graham Fairclough and Stephen Rippon, Brussels 2002, 234 pp, with illustrations, Language: English. Abstracts in English, French, German, ISBN 90-76975-02-X	€ 22
<input type="checkbox"/>	EAC Occasional Paper No. 3 Listing Archaeological Sites, Protecting the Historical Landscape Edited by Peter A. C. Schut, Brussels 2009, 169 pp, with illustrations, Language: English, French, ISBN 978-90-579-9144-8	€ 38
<input type="checkbox"/>	EAC Occasional Paper No. 4 Heritage Management of Farmed and Forested Landscapes in Europe Edited by Stephen Trow, Vincent Holyoak and Emmet Byrnes, Brussels 2010, 184 pp, with illustrations, Language: English with abstracts in French and German, ISBN 978-963-9911-17-8	€ 30
<input type="checkbox"/>	EAC Occasional Paper No. 5 Remote Sensing for Archaeological Heritage Management Edited by David C Cowley, Brussels 2011, 312 pp, with illustrations, Language: English with abstracts in French and German, ISBN 978-963-9911-20-8	€ 40

Method of paymentAvailable to purchase online at: <http://www.archaeolingua.hu/books/eac.html>

Credit card (VISA/MASTER)

Bank transfer

Name of card holder:
Card number and type:
Date of expiry:
CVC2 code:

CIB BANK Budapest
Bank Identifier Code (BIC),(SWIFT): CIBHHUHB
Inter. Bank Acc-Nr:
IBAN HU70 1070 0464 6586 8315 5000 0005

A charge for postage and handling will be added to the bill.

Name:

Address of invoice:

Address of delivery (if different):

e-mail address:

Date:

Signature:

Acknowledgments

Opening address

Katrín Jakobsdóttir, Minister of Education, Science and Culture, Iceland

Foreword

Katalin Wollák, President of Europae Archaeologiae Consilium

Acknowledgments

- 1 | Introduction: remote sensing for European archaeological heritage management
Dave Cowley and Kristín Huld Sigurðardóttir

Making remote sensing work for archaeological heritage management

- 2 | Identifying the unimaginable – Managing the unmanageable
Dominic Powlesland
- 3 | 'Total Archaeology' to reduce the need for Rescue Archaeology: The BREBEMI Project (Italy)
Stefano Campana
- 4 | Remote sensing for European archaeology and heritage management
– site discovery, interpretation and registration
Dave Cowley

New environments, platforms and technologies: challenges and potential

- 5 | Airborne Laser Scanning in forested areas – potential and limitations of an archaeological prospection technique
Michael Doneus and Christian Briese
- 6 | High resolution LiDAR specifically for archaeology: are we fully exploiting this valuable resource?
Robert Shaw
- 7 | Archaeological applications of multi/hyper-spectral data – challenges and potential
Anthony Beck
- 8 | Making the most of Airborne Remote Sensing Techniques for Archaeological Survey and Interpretation
Rebecca Bennett, Kate Welham, Ross A Hill and Andrew Ford
- 9 | 3D recording for cultural heritage
Fabio Remondino
- 10 | Through an imperfect filter: geophysical techniques and the management of archaeological heritage
Chris Gaffney and Vince Gaffney
- 11 | Marine geophysics: integrated approaches to sensing the seabed
Antony Firth

Exploring the archaeological resource base

- 12 | The English Heritage National Mapping Programme
Pete Horne
- 13 | Integrating survey data – the Polish AZP and beyond
Wlodek Rączkowski

- 14 | As far as the laser can reach...: Laminar analysis of LiDAR detected structures as a powerful instrument for archaeological heritage management in Baden-Württemberg, Germany
Jörg Bofinger and Ralf Hesse
- 15 | Between the Lines – enhancing methodologies for the exploration of extensive, inundated palaeolandscapes
Simon Fitch, Vincent Gaffney, Benjamin Gearey and Eleanor Ramsey
- 16 | The Aerial Reconnaissance Archives – a shared European resource
Lesley Ferguson

Using remote sensed data: interpretation and understanding

- 17 | Approaches to the integrated study of archaeological sites, architectural monuments and historical urban units in the Czech Republic
Martin Gojda
- 18 | Airborne Laser Scanning for the management of archeological sites in Lorraine (France)
Murielle Georges-Leroy
- 19 | Aerial archaeological survey of a buried landscape: The Tóköz project, Hungary
Zoltán Czajlik, László Rupnik, Máté Losonczy and Lőrinc Timár
- 20 | The archaeological landscape of northeast Iceland: a ghost of a Viking Age society
Árni Einarsson and Oscar Aldred
- 21 | Reserved optimism: preventive archaeology and management of cultural heritage in Slovenia
Gašper Rutar and Matija Črešnar
- 22 | World War I Heritage in Belgium: combining historical aerial photography and EMI
Birger Stichelbaut, Timothy Saey, Fun Meeuws, Jean Bourgeois and Marc Van Meirvenne
- 23 | An aerial view of the past – aerial archaeology in Denmark
Lis Helles Olesen
- 24 | Interpretation and map making
Rog Palmer
- 25 | Training and development: the next phase?
Chris Musson

Contributor addresses

Résumé	Catherine Fruchart
Zusammenfassung	Johanna Dreßler