

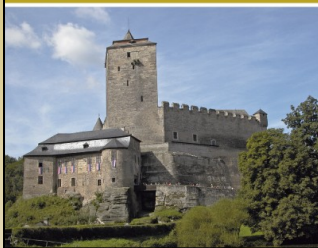


The
Geological
Society

**Natural Stone Resources
for Historical Monuments**

Edited by
R. Prikryl and A. Torok

Geological Society
Special Publication 333



Edited by R. Prikryl and A. Torok

- ISBN: 978-1-86239-291-5
- April 2010
- 256 Pages
- Hardback
- Subject Categories:
Engineering Geology
Environmental Geology
- Price:
List
£80.00/\$160.00
GSL
£40.00/\$80.00
Other Qualifying Societies
£48.00/\$96.00

Order Online Now:
[www.geolsoc.org.uk/
bookshop](http://www.geolsoc.org.uk/bookshop)

Geological Society Publishing House

Unit 7 Brassmill Enterprise centre,
Brassmill Lane, Bath BA1 3JN, UK

Tel: +44 (0) 1225 445046

Fax: +44 (0) 1225 442836

Email: sales@geolsoc.org.uk

Postage:

UK: +5% (£4.00 minimum) Europe: +15%
(£8.00 minimum) Rest of world: +15%
(£12.50 minimum)

Please allow up to 28 days for delivery of in stock items in the UK. Parcels to Europe and the Rest of the World are sent by surface mail and can take 6 to 12 weeks to arrive. (Air courier rates available on request).

All prices and postage valid until
31 December 2010.

Special Publication 333

Natural Stone Resources for Historical Monuments

Natural stone is considered to be a versatile, durable and aesthetically pleasing building material. From the beginning of civilization, important structures and monuments have been built from, or based on, natural stone. Until the end of the nineteenth century, the use of local stone resources was mostly in balance with the local environment. Strict environmental legislation has resulted in the closing of many long-standing quarries in industrialized countries, which has led to a shortage of traditional stone varieties. This has caused problems for restoration practice. Cheap, imported stone from less industrialized countries has become more widely available in recent years.

Some of the issues related to built stone conservation and restoration covered by this volume are: the establishment of inventories of possible replacement stones; understanding the decay mechanism and use of preventive conservation methods for slowing down decay processes; evaluation of the properties of natural stone; and assessing the risks of using replacement stones of different qualities.

Contents and Authors

Prikryl, R. Torok, A.

Natural stones for monuments: their availability for restoration and evaluation

Siedel, H.

Alveolar weathering of Cretaceous building sandstones on monuments in Saxony, Germany

Fronteau, G. Thomachot, C. Chopin, E.

Barbin, V. Mouze, D. Pascal, A.
Black-crust growth and interaction with underlying limestone microfacies

Angeli, M. Hebert, R. Menendez, B. David, C. Bigas, J. P.

Influence of temperature and salt concentration on the salt weathering of a sedimentary stone with sodium sulphate

Yu, S. Oguchi, C. T.

Is sodium sulphate invariably effective in destroying any type of rock?

Oguchi, C. T. Yuasa, H.

Simultaneous wetting/drying, freeze/thaw and salt crystallization experiments of three types of Oya tuff

Gillhuber, S. Lehrberger, G. Goske, J.

Fire damage of trachyte: investigations of the Teplá monastery building stones

Pereira, D. Peinado, M. Yenes, M.

Monterrubio, S. Nespereira, J. Blanco, J. A.

Serpentinites from Cabo Ortegal (Galicia, Spain): a search for correct use as ornamental stones

McCabe, S. Smith, B. J. Warke, P. A.

A legacy of mistreatment: conceptualizing the decay of medieval sandstones in NE Ireland

Gomez-Heras, M. Smith, B. J. Viles, H. A.

Oxford stone revisited: causes and consequences of diversity in building limestone used in the historic centre of Oxford, England

Beck, K. Al-Mukhtar, M.

Evaluation of the compatibility of building limestones from salt crystallization experiments

Nijland, T. G. Van Hees, R. P. J.

Bolondi, L.
Evaluation of three Italian tuffs (Neapolitan Yellow Tuff, Tufo Romano, Tufo Etrusco) as compatible replacement stone for Römer tuff in Dutch built cultural heritage

Andriani, G. F. Walsh, N.

Petrophysical and mechanical properties of soft and porous building rocks used in Apulian monuments (Southern Italy)

Unterwurzacher, M. Obojes, U. Hofer, R. Mirwald, P. W.

Petrophysical properties of selected Quaternary building stones in western Austria

Figueiredo, C. A. M. Folha, R. Mauricio, A. Alves, C. A. S. Aires-Barros, L.
Contribution to the technological characterization of two widely used Portuguese dimension stones: the 'Semi-rijo' and 'Moca Creme' stones

Martinez, P. Vavro, M. Scucka, J. Maslan, M.

Properties and durability assessment of glauconitic sandstone: a case study on Zámel sandstone from the Bohemian Cretaceous Basin (Czech Republic)

Laho, M. Franzen, C. Holzer, R. Mirwald, P. W.

Pore and hygric properties of porous limestones: a case study from Bratislava, Slovakia

St astna, A. Jehlicka, J. Prikryl, R.
Raman spectra of reduced carbonaceous matter as a tool for determining the provenance of marbles: examples of 'graphitic' marbles from Czech quarries

Cooke, L.

The 19th century Corsi Collection of Decorative Stones: a resource for the 21st century?

Frangipane, A.

Working for an electronic database of historical stone resources in Friuli Venezia Giulia (Italy)

Kampfova, H. Prikryl, R.

Electronic database of historical natural stones of the Czech Republic: structuring field and laboratory data

Allocca, F. Calcaterra, D. Calicchio, G. Cappelletti, P. Colella, A. Langella, A. de Gennaro, M.

Ornamental stones in the cultural heritage of Campania region (southern Italy): the Vitulano marbles



The Lyell Collection: Journals, Special Publications and books online: www.geolsoc.org.uk/lyellcollection