



**Circular No 10**

**September 2015**

[www.globalheritagestone.org](http://www.globalheritagestone.org)

**Information and discussion on the 'Global Heritage Stone Resource' (GHSR)  
a new international designation recognising natural stone resources  
that have achieved widespread utilisation in human culture**

**This project operates as a "Task Group" of the "International Union of Geological Sciences" (IUGS) and  
under "Commission C-10 Building Stones and Ornamental Rocks  
of the International Association of Engineering Geology and the Environment" (IAEG C-10)  
with support from the International Geoscience Programme via IGCP Project 637**

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## **OPENING MESSAGE**

Over past months HSTG continues to be very active.

Two major publications have appeared.

1. Special Paper 407 of the Geological Society of London entitled "Global Heritage Stone: Towards international recognition of building and ornamental stones".
2. Special Issue of the journal "Episodes" entitled "Global Heritage Stone Resource: An Update"

You should try and obtain copies of both these excellent publications.

Additional funding for our project has also become available with approval of IGCP 637 – Heritage Stone Designation, a new project of the International Geoscience Programme.

Successful conferences have been held in Vienna in April 2015, in association with the European Geoscience Union, and in Madison, Wisconsin, in May 2015, in association with the North Central Section of the Geological Society of America.

During our Vienna conference, a splinter group meeting has confirmed the approval of Portland Stone as the first formally approved "Global Heritage Stone Resource (GHSR) and it has been announced subsequently in the IUGS Monthly Bulletin 110 for July 2015.

As discussed in this Circular the closing date for GHSR nominations for consideration during 2016 is 31 December 2015.

As of 1 September 2015, HSTG has 228 correspondents from 51 countries. As per routine, please feel free to nominate additional HSTG Correspondents at any time. All new applicants are asked to submit an "HSTG Information Form".

Barry Cooper (Secretary General)

## **SUMMARY DIARY OF FUTURE HERITAGE STONE MEETINGS**

### **September 22-26, 2015**

International Congress – Geoheritage Inventories: Challenges, Achievements and perspectives, Muséum de Toulouse, France. Please see details at [www.progeo.se/Toulouse-2015\\_Flyer\\_Geo\\_inv\\_2015\\_LEGER2.pdf](http://www.progeo.se/Toulouse-2015_Flyer_Geo_inv_2015_LEGER2.pdf). The abstract deadline has now closed.

### **October 31– November 5, 2015**

A Heritage Stone conference is being planned for the first time as part of the Annual General Meeting of the Geological Society of America in Baltimore, Maryland USA, November 1-4. Pre Conference Field trips around Baltimore are on October 31 with a special post conference field trip to Washington DC on 5 November. Please watch [www.geosociety.org/meetings/](http://www.geosociety.org/meetings/) for details. Abstract submission has now closed. More details below.

### **April 17-22, 2016**

The General Assembly of “European Geoscience Union” (EGU) to be held in Vienna in 2016 will have a repeat session entitled “Natural stone research and Heritage Stone designation. More details will be circulated to all Correspondents soon. The Convenors are Lola Pereira, Sabina Kramar and Björn Schouenborg. The Abstract deadline is 13 January 2016. Please also see the website at [www.egu2016.eu](http://www.egu2016.eu) for information.

### **August 27– September 4, 2016**

A heritage stone seminar will be linked with the 35th International Geological Congress to be held in Cape Town, South Africa. Abstract submissions are now open and close on 31 January 2016.

### **Other potential heritage stone meetings during 2016**

- North Central Section, Geological Society of America, Champaign, Illinois (18-19 April 2016)
- Australian Earth Sciences Convention, Adelaide, South Australia (26-30 June 2016).

**During 2017**, it is hoped that HSTG will have a conference in India

**HERITAGE STONE CONFERENCE -BALTIMORE, MARYLAND, USA –**  
**1-4 NOVEMBER 2015**  
**(WITH ASSOCIATED PRE & POST CONFERENCE FIELD TRIPS)**

The principal Heritage Stone conference in 2015 has been planned as part of Annual General Meeting of the Geological Society of America to be held in Baltimore, Maryland, USA, 1-4 November 2015. Abstract submissions have closed and the following schedule of presentations has been planned.

The planned session is entitled “Dimension stone and heritage stone: Quarries, building stones, monuments, sculpture, utilitarian stones and more”.

All correspondents are encouraged to participate in this conference. Further details are available via [www.geosociety.org/meetings/](http://www.geosociety.org/meetings/).

Conference Presentations:

Monday 2 November 2015: 01:30 PM - 05:30 PM, Baltimore Convention Center, Room 339

INTERNATIONALLY SUPPORTED HERITAGE STONE DESIGNATION: A  
PROGRESS REPORT by B.J. Cooper

VICTORIAN BLUESTONE: PROPOSAL FOR NOMINATION FOR A 'GLOBAL  
HERITAGE STONE RESOURCE' FROM AUSTRALIA by S. Walter

HERITAGE STONE IN INDIA by V.K. Sharma

ENHANCEMENT OF HERITAGE BASED ON THE CANDIDACY OF GLOBAL  
HERITAGE STONE RESOURCE AND PROVINCE NOMINATION ON THE IBERIAN  
PENINSULA. CASE STUDY: THE PIEDRA BERROQUEÑA PROVINCE by D.M. Freire-  
Lista and R. Fort

ONYX FROM AIN SMARA (NORTH- EASTERN ALGERIA): A NATURAL STONE TO  
BE CONSIDERED AS A GLOBAL HERITAGE STONE by Diab Hamida

TENNESSEE MARBLE by D. Byerly and S. Knowles

THE CANDOGIA MARBLE FROM VERBANO CUSIO OSSOLA QUARRY BASIN  
(NORTHWESTERN ITALIAN ALPS): CHARACTERIZATION, QUARRYING  
EVOLUTION AND APPLICATION FOR THE MILANO CATHEDRAL  
CONSTRUCTION by G.A. Dino, A. Borghi, F. Canali, D.C. Castelli and B.J. Cooper

PETROGRAPHY OF NORWEGIAN MILLSTONES: A TOOL FOR VISUAL  
IDENTIFICATION OF QUARRY SITES by G.B. Meyer, T. Heldal, T. Grenne, B.  
Willemoes-Wissing and O.J. Jansen

GETTING TO KNOW THE DIMENSION STONES OF MALAWI: A HERITAGE  
CONCERN by T.F. Kamanga

ARABESCATO OROBICO': A NOMINATION FOR "GLOBAL STONE HERITAGE RESOURCE" FROM ITALY by P. Primavori, G.V. Vola and F.J. Jadoul

CADALSO DE LOS VIDRIOS LEUCOGRANITE: A CANDIDATE FOR GLOBAL HERITAGE STONE RESOURCE FROM SPAIN by D.M. Freire-Lista and R. Fort

TRENTINO PORPHYRY: A NOMINATION FOR "GLOBAL HERITAGE STONE RESOURCE" FROM ITALY by P. Primavori and A.A. Angheben

INDIANA LIMESTONE--WORLD CLASS STONE RESOURCE by N.R. Shaffer

THE RISE AND FALL OF THE SENECA SANDSTONE INDUSTRY by E. Aloiz, C.A. Grissom and R. Livingston

STONE SLEEPERS OF THE CAMDEN AND AMBOY RAILROAD, NEW JERSEY by P.J. Lacombe

THE STONES OF BALTIMORE: CLASSIC NINETEENTH CENTURY BUILDING AND MONUMENTAL STONES by J.T. Hannibal

#### Heritage Stone Field trips

Three heritage stone field trips are planned including tours of Baltimore city and Washington DC as well as an active local stone quarry. The schedule on Saturday 31 October is designed so that correspondents can attend both trips.

In detail, these field trips are as follows.

#### *Building Stones of Downtown Baltimore - Saturday morning 31 October 2015*

Buildings in downtown Baltimore are constructed with many different types of building stones that collectively span about three billion years. From the beautiful swirls of the Morton gneiss at the Baltimore Police Headquarters to the historic popularity of the Cockeysville Marble at Baltimore City Hall, downtown Baltimore provides an excellent opportunity to see a variety of igneous, metamorphic, and sedimentary rocks, all within a small geographic area. Baltimore's building stones, which come from local quarries as well as other quarries around the world, often reflect the confluence of aesthetics, history, politics and economics. This walking tour of downtown Baltimore will feature stops at buildings whose stones tell stories, both geological and human. Primary leader: David W. Bolton

#### *History of Stone Quarrying in the Baltimore area, including a visit to the Cockeysville Marble Quarry - Saturday afternoon 31 October 2015*

The history of stone quarrying and use in the Baltimore area will be discussed during visits to quarry sites. We will visit a quarry in the Cockeysville Marble, a stone famous for its use in now-historic structures. The trip will also include a visit to the Churchville Quarry, which produces armourstone from an igneous/metamorphic complex. Primary leader: Joseph T. Hannibal

*The Building Stones of the National Mall, Washington DC - Thursday 5 November 2015*

This will be a half-day walk of sites located on or nearby the National Mall in Washington, D.C. The monumental architecture of the Smithsonian Institution dates from 1847 with the construction of the Smithsonian Castle up to the completion of the National Museum of the American Indian in 1989. The building stones are thus representative of the development of the American dimension stone industry with respect to style, quarrying techniques and geology over this time period. Prominent types of stone include locally quarried stones such as: Aquia Creek sandstone (National Portrait Gallery and U.S. Capitol), Seneca sandstone (Smithsonian Castle) and Texas, Maryland marble (Washington Monument). Stones transported from other regions include Mankato, Minnesota, dolomite; Salem, Indiana, limestone; Holston, Tennessee, marble; and Vermont white marbles and various types of granite. The trip will also stop at other monuments around the Mall such as the Lincoln Memorial, the Washington Monument, and the Vietnam Veterans Memorial contain additional stone types. Topics to be covered include geological origins, architectural design considerations, weathering problems and conservation issues. Primary leader: Richard A. Livingston

**35th INTERNATIONAL GEOLOGICAL CONGRESS, CAPE TOWN, SOUTH AFRICA - 27 AUGUST–4 SEPTEMBER, 2016**

The major meeting of HSTG for 2016 will be a session at the International Geological Congress held in Cape Town, South Africa.

HSTG has a symposium proposal, under the “Engineering Geology and Geomechanics” Theme entitled “Dimension stone and building materials”.

A field trip examining “black granite quarries” is also being considered. In addition a day field trip entitled “Building Stones of Cape Town” has been planned.

For up-to-date information on our Cape Town meeting contact our Vice President Africa Phil Paige-Green at email: [ppaigegreenconsult@gmail.com](mailto:ppaigegreenconsult@gmail.com).

General information on the 35IGC is available at [www.35igc.org/](http://www.35igc.org/)

Abstracts are now open and close on 31 January 2016.

## **APPROVAL OF GHSR NOMINATIONS**

### *Portland Stone*

Since our last Circular, the HSTG Board has approved designation of Portland Stone from the United Kingdom as a “Global Heritage Stone Resource” (GHSR).

Public announcement of the approval has been made in the IUGS E-Bulletin 110 of International Union of Geological Sciences (IUGS), issued in July 2015. This has been circulated to all Correspondents.

This is the first stone to be formally approved by HSTG and hence appointed/designated as a GHSR.

In the final approval process, the nomination of Portland Stone has been subjected to an independent assessment by Correspondents outside of the HSTG Board.

At this stage, with respect to Portland Stone, consideration needs to be given as to what further announcements or promotion needs to be done.

It has been suggested that the company quarrying Portland Stone could be provided with a formal letter from HSTG or IUGS advising that international designation has been attained. It has also been suggested that additional announcements in prominent media and publication outlets are needed.

What do our Correspondents think?

### *Annual GHSR Nomination List for 2016 and GHSR Procedural Guide*

Special Publication 407 of the Geological Society of London published in May 2015 as well as the Global Heritage Stone Special Issue of “Episodes” published in June 2015 contains several papers that effectively nominate additional stones for GHSR designation.

An additional file accompanying this Circular offers a draft annual procedural guide that has been suggested as guidance for future GHSR designation.

All Correspondents are also invited to comment on this procedure.

Notably the draft procedure suggests that an annual list of proposed nominations be collected during the September-December period each year and be finalised by the HSTG Board each January before undergoing rigorous assessment during the following year.

Consequently with this HSTG Circular, Correspondents are asked to suggest GHSR and GHSP nominations for consideration during 2016. The HSTG Secretary General will also consult Correspondents and review recent literature especially HSTG publications in order to prepare a list of nominations for Board consideration and independent assessment during 2016.

The closing date for GHSR nominations for consideration during 2016 is 31 December 2015.

## **HERITAGE STONE PUBLICATIONS**

Special Paper 407 of the Geological Society of London entitled “Global Heritage Stone: Towards international recognition of building and ornamental stones” has been published in May 2015 and is available to all correspondents.

A Special Issue of the journal “Episodes” entitled “Global Heritage Stone Resource: An Update” has also been issued in June 2015.

The Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP) is also compiling a book entitled “Stone Heritage in East and Southeast Asia”. Chapters dealing with Indonesia, Japan, Korea, Laos, Malaysia, Papua New Guinea, Philippines, Thailand, Vietnam have been edited and a contribution from Cambodia is also planned. Planned publication date for this volume is end 2015.

A special heritage stone issue of “Geoscience Canada” is being planned for March 2016 with selected contributions from the EGU 2015 meeting in Vienna. Publication will be coordinated by Brian Pratt and Lola Pereira (Guest Editors).

In our forward plan prepared as part our application for IGCP funding, it has been envisaged that Special Publications of Geological Society of London entitled “Global Heritage Stone: Towards International Recognition of Building and Ornamental Stones” Volumes 2, and 3 will be issued during 2017 and 2019 respectively.

## **IGCP PROJECT 637 – HERITAGE STONE DESIGNATION (2015-2019)**

As advised in our last Circular, in late 2014 HSTG applied for additional funding under the International Geoscience Programme (IGCP).

In March 2015, we were advised that we were successful with the result that IGCP Project 637 – Heritage Stone Designation has been created and an additional \$US6000 has been received for use during 2015.

This is being used primarily to develop a new website and to support attendance at the GSA Baltimore conference. Strong preference is being given to supporting scientists from developing countries, young scientists and women scientists.

## **GEMSTONES AS A GHSR?**

At the heritage stone session, held in Vienna last April, your Secretary General was rather rash in speaking on the topic.....

*Ornamental Stones and Gemstones: The limits of heritage stone designation: The case for and against Australian Precious Opal.*

The paper provoke significant objections suggesting that HSTG should not include gemstones in heritage stone designation because the GHSR designation was meant primarily for building stones whilst many gemstones can be considered as minerals.

As a consequence of the presentation, your Secretary General was interviewed by BBC Science Correspondent, Jonathan Amos, and this interview is available at <http://www.bbc.co.uk/news/science-environment-32665035>.

There are also now a few HSTG Correspondents who are interested specifically in gemstones.

The topic was also raised at the subsequent Splinter Group meeting held in Vienna as well as in subsequent HSTG Board discussions.

Preliminary consensus suggests

- Gemstones can be considered by HSTG however they should possibly be placed in a separate category for example being designated as a “Global Heritage Gemstone” and “Global Heritage Gemstone Province” rather than a “Global Heritage Stone Resource” or “Global Heritage Stone Province”.
- A paper should be prepared for “Episodes”, discussing this subject in detail and suggesting possible future directions.

Please contact the Secretary General if you have further comments or want to contribute to developing the concept of a Global Heritage Gemstone

## **CHANGE IN CONTACT DETAILS**

HSTG has become a significant network which works efficiently only if the administration has your current contact details.

If you change your email address or any other contact information please advise the Secretary-General as soon as possible.

With every mailing, there are always a few emails that are rejected.



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**PLEASE ADDRESS ALL CORRESPONDENCE TO THE HSTG SECRETARY GENERAL, WHO IS ALSO  
EDITOR AND COMPILER OF THIS CIRCULAR**