



## **3rd REPORT OF THE INTERNATIONAL COMMISSION ON GEOHERITAGE December 2018**

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### **Introduction**

The ICG is a Scientific Commission of the International Union of Geological Sciences ([www.iugs.org](http://www.iugs.org)) and was formally established at the 35th International Geological Congress, held in Cape Town, South Africa, from the 27th August to 4th September 2016. The Commission was formed through the re-constitution of two pre-existing geological heritage Task Groups within IUGS, the Task Group on Geoheritage (TGG) and the Heritage Stone Task Group (HSTG) as two sub-commissions, respectively the Heritage Sites and Collections Sub-commission (HSCS) (<http://geoheritage-iugs.mnhn.fr>) and the Heritage Stones Sub-commission (HSC) (<http://globalheritagestone.com/>).

The objectives of the ICG includes the development and dissemination of guidelines for good practice in the selection and management of geoheritage sites, institutional collections and culturally significant geological resources such as Heritage Stones. The ICG will endeavour to promote and co-ordinate these activities at the international, national and regional level through research, workshops, conferences and publications, as well as through training and other educational activities. Crucially, the ICG aims to actively collaborate with and seek partnerships with other commissions, organisations and networks at all scales, from local to regional to international, which area active within the field of geoheritage and related disciplines.

\* Benjamin van Wyk de Vries replaced Kevin Page as Secretary General for the Commission and Sub-commission in the second half of 2018

## **Achievements**

This report is divided into a very short information about common Commission activities and 2 separate reports from the 2 Sub-commissions.

The main common activities were:

The joint session at the European Geological Union's annual congress in Vienna. It was subsequently evaluated and for 2019 the plan is to have separate sessions for wider visibility and more efficient impact.

Much work has been done on amending the Terms of Reference for the Commission. The new version will be more reflecting the way we work and will provide better support to fulfil our objectives.

In the second half of 2018 Benjamin van Wyk de Vries replaced Kevin Page as Secretary General and we like to thank Kevin for his extensive work promoting the Commission at numerous events.

Formal links have now been made between ICG and IUCN Geoheritage Specialist Group. See also below.

Finally, the ICG has been more involved in collaboration with UNESCO on Global Geopark matters, including producing and delivering through the IUGS 'Guidelines for Assessment' through an efficient working group, coordinated by José Brilha.

## **Future aims and objectives (2019 onwards)**

The updated Terms of Reference will be finalised and sent to IUGS EC for ratification.

The Commission will thus continue to consolidate the new structure and effective working procedures.

Promotion of the ICG will be made at several international events such as conferences and joint meetings with associated commissions.

Representation will be made in 2 sessions at the EGU in Vienna and splinter meetings will follow.

The ICG EC will arrange a physical meeting in 2019 as well and among other things prepare common communication material, provided sufficient funding is received.

Much focus this year will be made on preparation for the 36<sup>th</sup> IGC in Dehli where seminars are expected to be arranged by the Sub-commissions.

See also under each Sub-commission report.

## Finances and Budget

Most of the budget has been used to cover the attendance at various international conferences in which the ICG has been promoted, either together or the Sub-commissions separately. In addition, we have had costs for the EC meeting in Paris and development of the websites. N.B! It is inevitable that funds for one year will have to be used also on other years due to the late arrival of the funds to the Commission. Normally the funds arrive in August, i.e. month 8! This is a problem, especially for members having to pay travelling and conference fees with private money until proper reimbursement from the Commission can be made.

### Conferences, meetings etc. partly funded by IUGS

- EGU Vienna (session and splinter meetings)
- Global Stone Congress, Brazil (organizing committee and several presentations)
- ICG EC meeting in Paris (4 persons)
- IUCN, Vilm (S-G attended)
- IUGS RFG2018, Vancouver (S-G attended)
- Heritage stones workshop, Salamanca (organized by board members +)

### Request for funding for 2019 (for both Sub-commissions)

The following table display the most urgent needs for funding during 2019

Activities and attendance at seminars, conferences...	Budget requested
Participation in European Geological Union (EGU) congress, Vienna: Sessions and splinter meetings. Funding for to x2 participants from each subcommission	1700
IUGS EC meeting, 1 person	1200
Meeting of executives of ICG, HSCS and HSS, Paris or UK (date and venue to be confirmed): Up to x4 persons	1500
April 'Knowing Planet Earth' event that ICG Secretary General is organising at UNESCO	1500
UNESCO World Heritage – to promote IUGS	500
IGC in Dehli 2020, registration and part of travelling cost, 2 persons	2500
Website development and maintenance (including registration costs and links	500
Publications: Design and printing of leaflet informing about the ICG and its component sub-commissions and their aims, objectives, etc:	1000
<b>SUM requested for the entire Commission</b>	<b>10400</b>

# **IUGS Geoheritage – Heritage sites and collections – Sub-commission Report 2018**

## **Achievements**

This sub-commission has been in existence since the creation of the Commission for Geoheritage in 2016. The broad nature of its scope, covering geosites of all types, protected areas and collections, and UNESCO denominations such as Global Geoparks and World Heritage, as well as themes like geoheritage and natural risk, has meant that the full scope of the sub-commission will take some years to become fully operational. At the same time, geoheritage is a rapidly evolving and growing subject, so new avenues will open up.

For 2018 there have been meetings and publications, and an updated website, and notably a set of guidelines for Geoheritage Assessment in Global Geoparks.

In summary, this year, the main events in the sub-commission have been:

- Up-dating of the Web site (hosted at the National Museum for Natural History in Paris).
- European Geophysical Union 2018, Vienna April – Geodiversity and Geoheritage session was sponsored and coordinated by the commission. Also a splinter meeting to discuss geoheritage governance, attended by e.g. UNESCO and IUCN personnel.
- IUGS RFG in Vancouver in June 2018 where Kevin Page represented the ICG sub-commission on sites and collections with a seminar
- Meeting for the bureau for the Commission for Geoheritage in Paris 1<sup>st</sup> July.
- A reorganisation of the bureau after the resignation of the secretary general, Kevin Page in September 2018. Benjamin van Wyk de Vries (université Clermont Auvergne) agreed and was accepted as replacement in October 2018.
- Meeting in Chambéry on the national inventory of geoheritage in France took place the 15-17 October 2018.
- The Global Geoparks meeting in Madonna di Campiglio, Italy was attended by Kevin Page and Benjamin van Wyk de Vries, where these two were able to arrange the transfer of secretary general, and to meet with UNESCO Geosciences programme personnel and Global Geoparks members.
- Working group on Geoheritage Assessment: Lead by José Brilha (University of Minho, Portugal) this group has produced a document on assessment guidelines for UNESCO Global Geopark Assessment. These have been passed to the IUGS executive committee and are being introduced to UNESCO Geosciences.
- Benjamin van Wyk de Vries was appointed to the IUCN Geoheritage Specialist Group as IUGS representative. (Both Patrick DeWever and Ben are members of the IUCN World Council for Protected Areas). We are currently providing input to the IUCN five-year plan through the Specialist Group.

## **Publications** (with acknowledgements, logo IUGS / International Commission for Geoheritage)

1- One article submitted to Episodes on "Géologie sur le Tour de France" (De Wever P. et Oberhänsli R.: The Tour de France, the perfect geological showcase".

2 – Geological Walks 'Balades géologiques à Palaiseau' : . Driou G. & Roniou D., Edit Biotope/MNHN, 38 pages (Figure 1 top).

This is the 37th booklets published for France. 12 booklets are being finalised and, 11 others are being written. To date, 80 000 copies have been distributed.

3 - Stratotype Turonien : Amédéo F., Matrimon B. & Robaszynski F. (Editors), De Wever P. (Foreword by), 414 pages, colour & b/w photos, colour & b/w illustrations and colour & b/w maps, tables; includes CD-ROM (Figure 1 bottom).

4- Stratotype Danien : Montenat C. & Merle D. (Editors), De Wever P. (Foreword by), 478 pages, 348 colour & b/w photos, colour & b/w illustrations and colour & b/w maps, 19 tables; includes CD-ROM.

5- Inventaire national du patrimoine géologique : De Wever P., Egoroff G., Cornée A., Graviou P., Avoine J. et Baillet L., 2018, Bound book in colour – 252 pages - Isbn : 978-2-7598-2294-2.

## **Future activities**

The sub-commission will continue to grow and consolidate. With the Commission on Geoheritage we will concentrate first on developing the expertise base with a full voting membership. We shall work more on the Working Group on Geoheritage Assessment to assist the IUGS and partners on the implementation of the Global Geopark assessment guidelines.

We will send one representative to the IUGS executive meeting in Beijing (Benjamin van Wyk de Vries).

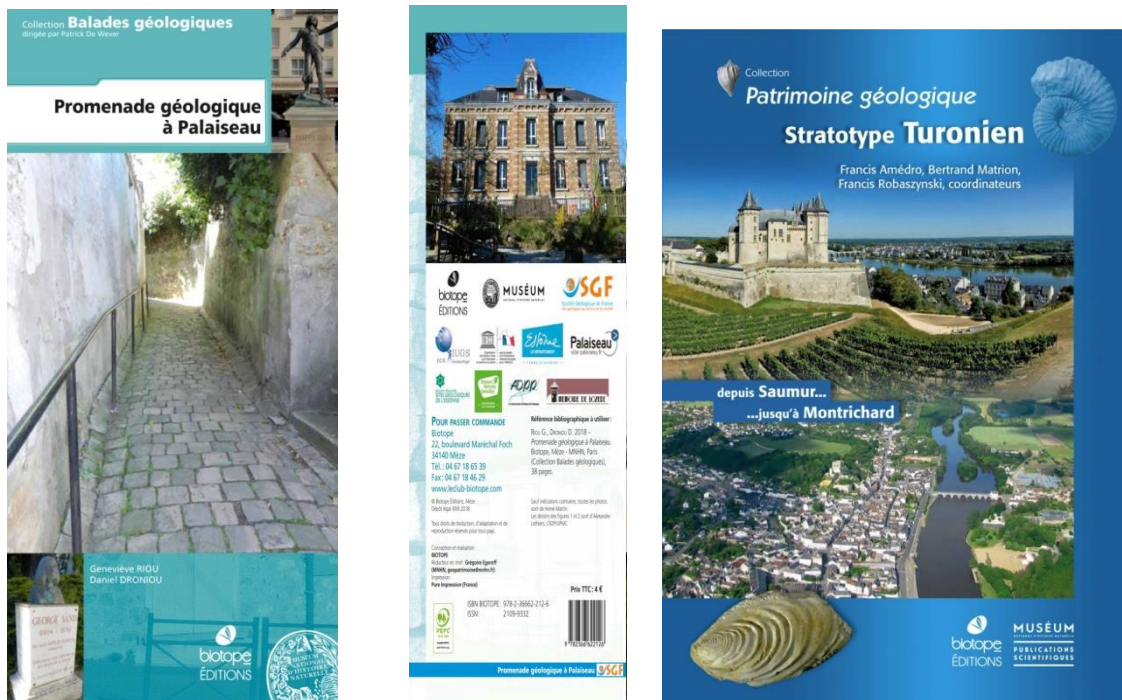
There is a session on Geodiversity and Geoheritage, co-sponsored by the sub-commission at the EGU in April. We will also have a splinter group meeting there, like in 2018.

Further on:

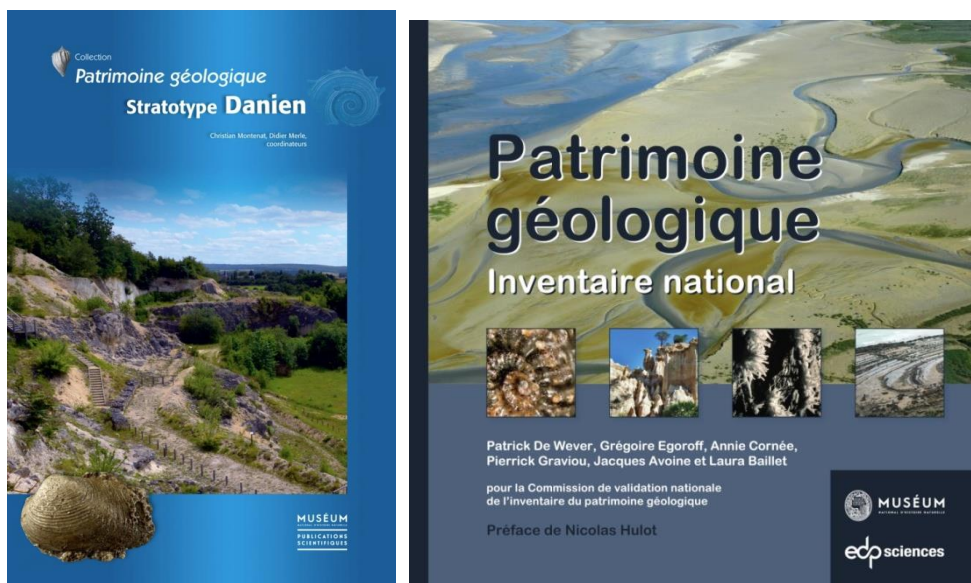
1. We aim to develop more working groups, such as one to deal with geoheritage and natural risk.
2. A working group to study the idea of a Diamond Open Access Geoheritage Journal will be set up with the aim of in 2020 starting with a fully Open Access special issue. (This initiative is being supported by national and university open access initiatives)
3. Start a Geoheritage E-mail listserv to animate the global community (the listserv has been created at University Clermont Auvergne and will be tested in 2019).
4. Work to globalize the sub commission and commission to make sure the composition fully representative and equitable.

- Engage in Outreach at a global level. Benjamin van Wyk de Vries is preparing an event at UNESCO in Paris (15-16 April) subsidised by the IUGG 'Knowing Planet Earth', that we will support also with IUGS personnel / funds.

We suggest that the IUGS considers having a side event at the UNESCO World Heritage June/July committee meeting in 2019 or 2020 to promote IUGS activities and raise its profile. The composition, objectives and funding of this could be discussed at the February Executive meeting.



**Figure 1.** Examples of Publications with IUGS acknowledgement. **Top** 'Balades géologiques à Palaiseau'. **Bottom** 'Stratotype Turonien'.



**Figure 2.** Examples of Publications with IUGS acknowledgement (2). **Top** 'Stratotype Danien'. **Bottom** 'Patrimoine Géologique: Inventaire National'.

## **IUGS Geoheritage - Heritage stones – Sub-commission Report 2018**

The contents of this report are in many parts the same as for IGCP 637, a project initiated by and run in parallel with the Heritage Stones Sub-commission and by the same people. The S-G of the Sub-commission, Lola Pereira, is project leader of the IGCP project.

**Website address:** [www.globalheritagestone.com](http://www.globalheritagestone.com)

### **Summary of major achievements**

At present 105 correspondents (10 more than last year) from 31 countries are actively involved in the project. Our correspondents are committed with activities when requested, such as review papers, review GHSR proposals.

A Special Issue on “Natural Stone and Architectural Heritage” has been opened for paper submission for the journal Sustainability (Impact Factor: 2,075). The issue will be fed with contributions from the I Workshop on Heritage Stones and EGU 2019

A second volume on heritage stones is under preparation by members of the Sub-commission. Expected publication will be in 2019

During 2018 we have also been able to review and designate another seven stones: Maltese Globigerina Limestone, Jacobsville Sandstone, Lede stone Welsh Slate, Piedra Mar del Plata, Kolmården serpentine marble, and Lioz limestone. The IUGS EC also approved a design for ratified Heritage Stone Resources for posters to be placed with local government agencies or communities and for educational purposes.

### **List of meetings/symposia and project related meetings/symposia**

Global Stone Congress (24<sup>th</sup> April – 2<sup>nd</sup> May, 2018)  
(170 participants from 12 countries)

I Workshop on Heritage Stones (2-4<sup>th</sup> of October, 2018)  
(49 participants from 16 countries)

### **Educational, training or capacity building activities related to the sub-commission:**

Early career researchers were part of the organizing committee of the I Workshop on Heritage Stones. Some of them had participated in an ERASMUS Intensive Program on Geoheritage, under the guidance of the leader of the meeting that made a call to recruit them for the organization of the Workshop.

## List of the publications of this year

- Proceedings of I Workshop on Heritage Stones  
[https://issuu.com/home/published/compilacion\\_abstract\\_reducido](https://issuu.com/home/published/compilacion_abstract_reducido)
- Freire-Lista, D and Fort, R. (2018) Historical City Centres and Traditional Building
- Stones as Heritage: Barrio de las Letras, Madrid (Spain). Geoheritage.  
<https://doi.org/10.1007/s12371-018-0314-z>
- Navarro, R., Pereira, D., Gimeno, A. del Barrio, S. (2018) Influence of natural carbonation process in serpentinites used as construction and building materials. Construction and Building Materials 170, 537–546
- Pereira, D., González Neila, C., del Arco, A. (2018) Salamanca, city of Stone and Heritage. Diputación de Salamanca.
- Pereira, D. (2018) Natural Stone and World Heritage: Salamanca, Spain. Taylor and Francis (ed.). See end of the report

We have also published a Special Issue and several papers in different issues of Episodes since we started our project. We aim to keep publishing in Episodes and propose another Special Issue at the end of the IGCP.

## Public information (media reports, etc.)

Due to the celebration of the I Workshop on Heritage Stones during the 800<sup>th</sup> anniversary of the University of Salamanca, many media reports were published in local papers, university of Salamanca and other institutions web pages, IUGS Social Media... Following are some links:

- <https://saladeprensa.usal.es/node/115647>
- <https://saladeprensa.usal.es/node/115673>
- <https://www.lagacetadesalamanca.es/salamanca/2018/10/02/restauraciones-anos-70-peligrar-titulo/249817.html>
- <http://www.villamayor.es/noticias/villamayor-sigue-presente-en-el-viii-centenario-con-su-piedra-i-workshop-on-heritage-stones.html>
- <https://www.salamanca24horas.com/albums/view/58800/i-workshop-on-heritage-stones>
- <https://www.facebook.com/iugspage/posts/the-i-workshop-on-heritage-stones-at-salamanca-from-2nd-to-4th-october-was-a-big/1682162815256984/>

Also, the online Global Magazine for Architecture, Art and Design with Natural Stone published an article with the achievements of the IGCP:

<https://www.stone-ideas.com/64790/global-heritage-stone-resource-ghsr/>



## Activities planned

### General goals

The general goal for next year is to advance in the designation of stones from all over the world as GHSR. Our aim is to include more stones from emerging countries where this resource has not been considered as important as it should, mainly in the field of preservation of Heritage.

### Tentative list of specific meetings and field trips

The most important meeting taking place in 2019 will be at EGU 2019, where we already have organized a session:

ERE7.2/EOS11.2, Conveners: Dolores Pereira, Gurmeet Kaur and Maria Heloisa Frascá.

Heritage Stones: construction and restoration materials for sustainable development.

As with the Sub-commission for Sites and collections there will be much preparation for the 36<sup>th</sup> IGC. One session has been proposed by sub-commission members and will be place under Theme-1:

*Theme-1 "Geoscience for the Society". Coordinators:*

R. Shankar *rshankargeo@gmail.com (India)*,

Anish K. Warriar *akwarrier@gmail.com (India)*,

Chris King *chrisjking36@gmail.com (UK)*

### **Session: 1.4 Natural Stones and Architectural Heritage**

Fareeduddin fareedromani@gmail.com (India), Gurmeet Kaur (India), Dolores Periera

(Spain)

Heritage stones are those stones that have been used for many years, even centuries, to build the historic buildings and monuments of places around the world. Some of these stones are still being used for construction, but others are no longer used, either because quarries were exhausted or closed or because architects and constructors do not know about their particularities and importance. Several scientific papers discuss many of these stones, and a number of papers are currently being prepared, but this book is the first to emphasize the importance and significance of natural stone in the construction of a city, Salamanca, recognized as a World Heritage Site by UNESCO since 1988. In light of this recognition, Salamanca has a duty to preserve all historic buildings that make up the city by restoring those that are starting to deteriorate centuries after their construction. This book describes the buildings, the sinuses (all quarried centuries ago in the surrounding area), and the stone quarries, some of them inactive for many years, but that should still allow extraction of blocks on demand to restore and replace damaged specimens in the buildings, preserving the very character that saw the city receive recognition by UNESCO in the first place. There are many other places around the world that should follow this initiative and disseminate the importance of their heritage stones. This book will be of interest to professionals and academics in Geology, Engineering, architectural and artistic work in stone, both construction and conservation, but also to the general public.

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1 Natural Stone and World Heritage  
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## Natural Stone and World Heritage

1



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