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Abstract Book

BUILDING CONNECTIONS FOR GLOBAL GEOCONSERVATION

Editors: G. Lozano, J. Luengo, A. Cabrera
and J. Vegas



10th International ProGEO online Symposium

ABSTRACT BOOK

**BUILDING CONNECTIONS FOR
GLOBAL GEOCONSERVATION**

Editors

Gonzalo Lozano, Javier Luengo, Ana Cabrera and Juana Vegas

Instituto Geológico y Minero de España

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International Geodiversity Day: developing a global outreach initiative

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It is quite frequently assumed by the geoscientific community that there is a serious lack of knowledge in society about the whole set of benefits provided by the variety of non-living elements of nature and associated processes: geodiversity. Nevertheless, all geoscientists are well aware that it is not possible to solve the huge environmental, social, and economic challenges society has to face, without including in the equation all elements of geodiversity and the knowledge provided by the geosciences.

Over 600 participants from more than 60 countries came together at the Oxford Geoheritage Virtual Conference, 25-29 May 2020. Appreciating the values of the natural environment and noting the threats from human actions, they shared current research in geodiversity and geoheritage. These participants approved a final declaration where it was recognized that:

- Geoheritage continues to be at risk due to human and natural factors.
- Geoconservation continues to be a justified and needed practice.
- Local, National, and International cooperation is required to ensure the proper recognition and conservation of Earth's geodiversity.
- Geodiversity is fundamental to implementation of many of the Sustainable Development Goals (SDGs), including those associated with biodiversity, human wellbeing, and sustainable resource use.
- There is a need to increase public understanding and awareness of geodiversity and its interrelation with other areas of conservation.

In addition, participants called for the establishment of an International Geodiversity Day (IGD), to increase understanding and awareness of geodiversity issues and urged geoscience and conservation organisations worldwide to work together in the development of this International Day.

The United Nations General Assembly designates "International Days" to mark important aspects for society. Each international day is a springboard for awareness-raising actions related to the theme of the day, with the involvement of governments, civil society, the public and private sectors, NGOs, the media, schools and universities and, more generally, citizens. UNESCO is the only UN organization with a mandate to support research and capacity in Earth Sciences, through the flagship of the International Geoscience and Geoparks Programme. UNESCO has recognized the importance of geodiversity since the establishment of the International Geoscience Programme (IGCP) in 1972. IGD aims are aligned with current UNESCO and other international efforts to combat climate change, modification of hydrological and biogeochemical cycles, increasing pollution of land, water and air, loss of biodiversity, habitat fragmentation, rapid loss of productive farmland, changes in land cover and land-use, reduced water supply, and decrease of ecosystem services.

In order to give continuity to the Oxford Declaration, four of the conference delegates prepared a one-page letter and sent it to international and national geoscientific organisations, asking for their support. After a few months, the result was overwhelming: 17 international, 7 regional, and 85 national organisations from all continents have declared their support for the idea of an International Geodiversity Day, as well as 10 outstanding geoscientists.

In September 2020, a full dossier explaining the importance of geodiversity and the need to have an annual global commemoration, together with all the support letters, was sent to the International Union of Geological Sciences (IUGS), asking for its endorsement and to send the proposal to UNESCO. In

November, the UNESCO's Earth Sciences and Geo-hazards Risk Reduction Section acknowledged the proposal and a new phase was started. With the support of its staff, the draft text of a future resolution was prepared (document 211 EX/37), together with a concept note to explain the proposal to UNESCO's Member States. It was necessary not only to explain in simple language the concept of geodiversity but also its importance for society and to demonstrate how an annual celebration of geodiversity is absolutely coherent with the UNESCO's mandate, strategy and policy.

The International Geodiversity Day proposal was approved by the 211th Session of the UNESCO's Executive Board (21 April 2021), less than one year after the Oxford Conference where the idea was first developed. A final decision is expected to be made in November 2021, during the 41st Session of the UNESCO's General Conference. So far, over 70 nations have declared their support for the IGD, ranging from large countries (e.g. Russia and China) to small ones (e.g. Andorra and Monaco).

Considering the multiple relations between geodiversity, biodiversity and human development, there are 15 of the UN's Sustainable Development Goals (SDGs) and 55 targets that are associated with IGD. In particular, SDG 4 (Quality Education), SDG 6 (Clean Water and Sanitation), SDG 13 (Climate Action), and SDG 15 (Life on Land) are closely related with IGD aims. The establishment of IGD will create a momentum to raise awareness of policy- and decision-makers, students, and citizens in general about how human activities and behaviours are putting at risk life-support conditions of future generations and causing a massive biodiversity decline. Teacher training on geodiversity, particularly in developing countries, is a crucial target to achieve IGD and the Education 2030 Framework for Action (FFA) goals. The free resources made available by the International Geoscience Education Organisation are an excellent starting point to increase the literacy on geodiversity and boosting gender equality in science.

The involvement of the private sector related with geodiversity – mining, water, and engineering companies, environmental consultants – is also expected. Their engagement with IGD will contribute to a permanent improvement of their processes and actions towards geoethical principles and SDG 8 (Decent work and Economic Growth).

The 1st International Geodiversity Day is expected to occur on the 6th October 2022, which corresponds to the publishing month of the first known document, published by Chris Sharples in October 1993, where the term 'geodiversity' was used with a similar meaning that is in use today. In order to gather increasing support for this initiative, a website is available at www.geodiversityday.org. This website will be updated with all relevant information, simple explanations about the relevance of geodiversity in all aspects of human development, ideas to celebrate this day, etc. We call all the geoscience community to support this initiative that for sure will be an excellent opportunity to raise awareness of the need for geoconservation and sustainable resource management worldwide.

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