ProGEO was established as an association formally at a meeting in Cologne in 1993. Here Walter Krieg from Austria was elected president of the association following George Black who was president in the working group that preceded ProGEO. The establishment of ProGEO did not at once result in big changes for ProGEO members as the activity was continued from the more informal working group for earth science conservation which had been in existence for five years. One of the first big results was thus the publishing of the Proceedings of the first international symposium on the conservation of our geological heritage in 1994. The symposium was held in 1991, but these proceedings mark the start of a high level of production of papers for the international community from ProGEO activities. Results from several meetings of the working group had been published before, but not in this scale. In 1995 a regular publishing of ProGEO NEWS also was started as a major communication effort between ProGEO members. Since then ProGEO NEWS has been published every year, normally with 4 editions. All old issues of ProGEO NEWS are to be found in our website and is the main source of this article.

In 1995 ProGEO held its first General assembly in Sigtuna, Sweden. This was part of a meeting jointly arranged by Finland and Sweden. Carl-Erik Johansson was elected new president. In 1995 the first meeting in a subregional ProGEO working group was also arranged. This was the South-East European group, called Regional working group no 1 who started its activities. The regional groups are a very important tool for ProGEO activities and the south- eastern group has always been in the front as an inspiration for the rest of Europe. 1995 was also the European nature Conservation Year and this was an issue for ProGEO, how to influence the rest of the nature conservation community with the ideas of geoconservation.

The second international symposium on the conservation of our geological heritage was then arranged in Rome in 1996 and the proceedings was also now published in a special issue of Memorie Descrittive della Carta Geologica d’Italia.

ProGEO was represented in the 30th international geological Congress (IGC) in Beijing in 1996. In his comments to the meeting ProGEO president Carl-Erik Johansson stated in ProGEO NEWS No3 1996: “The special symposium and expert workshop strengthened our opinion that a systematic and holistic approach to get a representative network of European geosites. The biological and cultural aspects of IUCN must be completed and backed up with geoscientific ones.”

At this stage ProGEO also realised that the task to activate members to contribute in discussions, produce contributions to ProGEO NEWS etc. actually was quite challenging. Therefore, a competition was launched: Geosite of the Year. The idea was that ProGEO members should send in a description of specific geosites, their value and management experiences and that a jury decided which one was awarded the prize. The prize was awarded to the North Estonian Clint presented in ProGEO NEWS no 4, 1996. As with many other ProGEO tasks this initiative was dependent of active contributions from our members. Although some were received, the activity declined and as there was no resources following it up, this was the only time this prize was awarded. This is a pity as highlighting geosites and their management is in the core of ProGEO activities.
It was also clearly linked to the development of the GEOSITE project. The idea of this project was to list (through inventories) Geosites in each country. This listing should be done according to a framework designed especially for each country. The next stage should be international comparisons and selecting the best sites for an international list of Geosites. This would lift geoconservation to a new level internationally. Although the project went well and had a large impact in many countries, others were not able to follow up and thus the base for international comparisons has not reached a level required for international listing. It was also problematic that IUGS withdrew from the project after some time, although the project formally has continued as a ProGEO project. It is still up to us to find a way to proceed and eventually reach the international goals and ideas of the Geosite project.

On the general Assembly in Estonia in 1997 professor Todor Todorov was elected new ProGEO president and the year thereafter the annual ProGEO meeting was held in Bulgaria. Both meetings were very important in developing ProGEO as an association and its ideas on geoheritage and geoconservation in practical work.

In 1999 the III International Symposium with the title "Towards the Balanced Management and Conservation of the Geological Heritage in the New Millennium” was held in Spain and in 2000 in the General Assembly in Praha we made an important change in our administration. The treasurer function was transferred to Sweden with Gunnel Ransed as treasurer and as part of this arrangement ProGEO was legally registered in Sweden. This is an arrangement we still have, now with Sven Lundqvist as treasurer. In 2002 we had our third General assembly in Ireland participating in the Conference on Natural and Cultural Landscapes, the Geological Foundation. Here Francesco Zarlenga was elected as president.

Even with a tight schedule of symposia and meetings ProGEO has participated in several other international meetings such as EGU and IGC among others and thus played an increasingly active role in developing geoconservation in Europe as well as on the global scene.

References


EGU Training School
geoheritage management: conservation, promotion and monitoring

The Training School on “geoheritage management: conservation, promotion and monitoring” was held at the University of Minho, Braga, Portugal, between the 24th and the 28th of September 2018.

A total of 45 young researchers from 19 countries (Brazil, Cameroon, Chile, Croatia, Czech Republic, Ecuador, Finland, Hungary, Iran, Italy, Morocco, Poland, Portugal, Romania, Slovakia, Sweden, Uganda, United Kingdom, United States of America) were at Braga during that week to learn and discuss specificities regarding geoheritage management, namely in conservation, promotion and monitoring of geosites and sites of geodiversity. Understanding these management tasks and learning from successful examples are essential tools in any geoconservation strategy and in the establishment of priorities in site management.

The training school was open to everyone dealing with any topic related to geoheritage and aiming to know more in these subjects. However, it was especially addressed to early career scientists (35 years old or younger) and undergraduate or postgraduate students (who obtained her/his highest degree qualification within the last two years).
It was organized by the geoheritage team of the University of Minho and was the first training school sponsored by EGU (European Geosciences Union) under the main topic of geoheritage. EGU sponsored partially or totally the travel and accommodation expenses to facilitate the attendance of 13 key young researchers, which were selected from a group of 110 candidates.

Besides this support, the training school had the institutional support from ProGEO, the Geoheritage Specialist Group of the World Commission on Protected Areas (IUCN), the Working Group Geomorphosites of the International Association of Geomorphologists, the Arouca UNESCO Global Geopark (Portugal) and the Institute of Earth Sciences (Pole of the University of Minho).

The training school comprised 4 full days of lectures and discussion in Braga. The keynote speakers were Diamantino Pereira (University of Minho, Portugal), Emmanuel Reynard (University of Lausanne, Switzerland), Herbert Meyer (Denver Museum of Nature & Science, USA), John Gordon (University of St Andrews, UK), José Brilha (University of Minho, Portugal), Juana Vegas (Spanish Geological Survey), Paulo Pereira (University of Minho, Portugal) and Renato Henriques (University of Minho, Portugal).

A total of 11 lectures regarding geoheritage management topics were included in the programme: “Geoheritage management: principles and challenges”; “Geosite conservation: principles and management objectives”; “Monitoring and new technologies for geoconservation in protected natural areas of Spain”; “Using scientific research to manage conservation and create knowledge”; “Urban geotourism, the case of Segovia City (Spain)”; “Geosite conservation: best practice guidance”; “Geotourist promotion of geomorphological heritage”; “Examples of management of geocultural sites”; “Assessing paleontology for geoheritage management”; “Using technology in geoheritage management”; “Geoheritage management initiatives in Portugal”.

The participants also had the opportunity to present their current research in a special session in the first day of the training school.

The 26th of September was dedicated to fieldwork in the Arouca UNESCO Global Geopark.

The group was welcome by the Arouca major and the geopark management staff in the Tourism Office at the city center, where an introduction to the geopark was made. Led by Daniela Rocha, the visit followed to the Paiva Walkways, a wooden footpath along the Paiva River co-founded by the European Regional Development Fund, and after that in the Geological Interpretative Center of Canelas. In this little museum the biggest samples of trilobite fossils in the world are exhibited, among other types of Palaeozoic fossils, an example of cooperation between the extractive industry, the education and the science. After the lunch in the city of Arouca, the group went towards the Freita Mountain, where other significant geosites are located. After a stop at the Detrelo da Malhada viewpoint, from where all the Arouca valley can be seen, the visit to the geopark ended at the Pedras Parideiras (“Delivering Stones”) House / Interpretative Center. This center contributes to the preservation and promotion of this relevant geosite, supporting touristic and educational visits to this place. Besides a reception area with local products, the house has an auditorium, where the visitants can watch the 3D movie “Pedras Parideiras: a geological treasure”. In the outside, it has a roofed exhibition and an open-air outcrop of the Pedras Parideiras.

The number of participants and the worldwide distribution were very significant, with the general feedback by the participants being highly positive. The sessions and fieldwork were very participated with interesting discussions on essential issues regarding management of geosites. It was underlined the importance to continue to have more events like this one, focused on geoheritage and with funding to support the attendance of key young researchers who otherwise would not be able to join.
Field meeting on geological heritage organized by the Spanish Geoheritage Commission at the geopark project of Granada
Geoheritage Commission, Geological Society of Spain

The Geoheritage Commission of the Geological Society of Spain (CPG-SGE) has held its 14th Field-Meeting on Geological Heritage on the 2nd and 3rd of November 2018 at Guadix (Granada), with the collaboration and support of the local Rural Development Group of the Guadix Region and of the Granada Provincial Council.

The kick-off of the fieldtrip was a visit to the Fardes River Valley Paleontological Station (http://www.igme.es/epvrf/), a fossil-rich Early Pleistocene large-mammal paleontological site located near Fonelas (Granada, Spain). In 2013, the site was acquired by the geological survey of Spain (Instituto Geológico y Minero de España, IGME). The paleontological station was created in order to safeguard such an exceptional geological heritage, and was opened to the public in 2014. José Antonio Garrido (IGME) led the visit and explained the peculiar two-million years old paleoecosystem preserved at the paleontological site named Fonelas P-1.

The trip continued with the visit to some of the most outstanding geosites of the Guadix-Baza Quaternary sedimentary basin. Francisco Juan García Tortosa (University of Jaén) explained the travertines at Baños de Alicún de las Torres, related with a thermal spring, as well as the angular unconformity at Gorafe, which separates the vertical Cretaceous marine carbonate layers from the horizontal Quaternary continental deposits.

As a result of the semiarid climate and the entrenchment of the fluvial network in the Quaternary sediments of the Guadix-Baza Basin, the landscape displays typical badland erosional landforms. The viewpoints of Don Diego and El Negratín are magnificent places to observe and enjoy this iconic landscapes and the variety of colours of the continental Plio-Quaternary sediments. Another interesting regional landmark is Jabalcón Mount, a residual relief of Jurassic carbonates that rises 500 m above the Quaternary alluvial piedmont surface or “bajada”, similar to an inselberg.

In addition to its proximity to the city of Granada, the region has many other tourist attractions, such as a rich archaeological, historical and artistic heritage, and the unique cave houses used for lodging.

The members of the Geoheritage Commission of the SGE enjoyed a magnificent day in the field and had the opportunity to appreciate the high interest of the geopark project of Granada. The executive committee of the Spanish Geoheritage Commission wants to express its full support to the geopark project initiative and thanks the warm welcome provided by the geopark’s promoters and the local community. More information on the geopark proposal may be found at http://www.geoparquedegranada.com/
On October 12-13 2018, the International Scientific Conference “Geoparks and Modern Society” took place in Belogradchik, Bulgaria. It was dedicated to the 20th anniversary of the UNESCO Geopark Initiative, whose principles were first originally announced at the ProGEO 1998 meeting in Belogradchik. This scientific forum was organized by the Aspiring Geopark Belogradchik Rocks, the Belogradchik Municipality, and the University of Mining and Geology “St. Ivan Rilski” of Sofia, with the support of the Ministry of Environment and Water of Bulgaria and the Bulgarian National Commission for UNESCO.

In a year with so many geoconservation activities, representatives of 4 continents gathered in Belogradchik to exchange experiences on the conservation of geological heritage, its use for tourism purposes, and its growing importance for the economy of underdeveloped regions through geotourism and other forms of sustainable tourism (cultural, rural and ecotourism).

Belogradchik rocks are a famous natural feature, emblematic for the Bulgarian geology. They are composed of Lower Triassic conglomerates and sandstones widely known as “Buntsandstein facies”. Recently, the rocks became the majestic backstage of the summer festival of the Sofia Opera and Ballet “Opera of the Peaks” (Tosca, Turandot, Swan's Lake, Mamma Mia), performed at the open air, inside the Belogradchik fortress. Unfortunately, Bulgarian geological heritage is still hidden for the world, mainly due to poor coordination between state institutions and lack of support for local initiatives.

The conference was opened by Boris Nikolov, mayor of Belogradchik town, who wished the delegates a pleasant stay under the red rocks. He emphasized Belogradchik’s century-old experience in the preservation of the geological heritage, and its sustainable use for tourism. Alexandru Andrassanu, mentor of the geopark, outlined the priorities of this important activity and wished a successful work to the conference participants. Dimitar Sinnyovsky made a short review of the early history of the UNESCO Geopark Initiative between October 1997 and June 2001, based on ProGEO archival documents.

Participants visited the Medieval Belogradchik Fortress and the ancient Roman Stronghold built on the unreachable higher part of the rocks that are the emblematic tourist attraction of the area. Participants became acquainted with the typical local flora and fauna displayed in the Natural Museum, and with the exceptional geological diversity of the Western Balkan. This is represented by rock samples of all types and ages, from Precambrian to Recent in the new Geological Museum, created by students and professors of the University of Mining and Geology in the new Geopark building near the fortress. Here, the ancient and medieval history of the town was presented.
Field excursions were devoted to the remarkable geological and cultural diversity of the area, which can rarely be seen in a single geopark. The participants visited two magnificent caves (Kozarnika and Magura). At the entrance of Kozarnika Cave, which was the shelter of the earliest European citizens, the Mylankovich cyclicity was demonstrated, recorded in epicontinental Upper Jurassic limestone layers. In Magura Cave, the participants had the opportunity to see the famous Paleolithic wall paintings, which are part of a UNESCO cultural World Heritage Site. Here, they tasted fragrant local wines aging in one of the cave cellars at a temperature of 12°C. After lunch with Danube “white fish” in a boat on the Great European River near the district town Vidin, the medieval fortress Baba Vida was visited. This fortress was used by various garrisons from Roman times to the 19th century.

During the post-conference fieldtrip, the participants were acquainted with the geological history of the West Balkan and took a piece of it to their homeland: cummulative gabro of the Precambrian ophiolitic complex, metadiorite from the oldest metamorphic unit in Bulgaria, Ordovician quartz-keratophyre and Jurassic limestone of “ammonitico rosso” facies. Finally, the beautiful Venetsa cave, adapted for tourism through European funding in 2015, was visited. The time was too short to visit all the geological sites available, so some of the remote outcrops representing key events of the Earth history, such as the K/T boundary iridium layer, were shown only in the geopark museum.

Government jobs on geoheritage and geoparks offered at the Geological Survey of Spain

Government jobs directly related with geoheritage are very rarely offered around the world. That is why it may be important to know that this specific type of jobs are increasingly being demanded by different sectors in society, and slowly but gradually being offered by public administrations at different levels. At the same time, it is important to realize that a knowledge base has been building during these last few decades and is currently required for these positions. A specialist on geoheritage is nowadays assumed to understand and properly use the terminology and basic concepts relating to “the five geos” (geoheritage, geodiversity, geoconservation, geoparks and geotourism). This is particularly true for public servant positions opening in national geological surveys, as has been happening during the last decades at IGME, the Spanish Government’s public research institution acting as the geological survey of Spain.

The Geological Heritage and Mining Heritage Administrative Unit of IGME was formally created within IGME’s Department of Geological Resources in 2006, as a result of a protracted history of increasing geoconservation work developed within IGME since the early 1970s. Two positions were offered at IGME in 2006 and 2007 under the title “Geodiversity, geological and mining heritage, and science communication”. One of them was for a research officer position, which was obtained by Luis Carcavilla, and the other one was for a technical officer position, which was obtained by Juana Vegas. The economic crisis of year 2007 was the excuse for strong budget cuts in subsequent years, which only recently seem to be overcome. As a result of this slight increase of the availability of funds, a technical officer position opened in 2017 under the title “Mapping of geoheritage”, which was obtained by Javier Luengo, and another one has been recently announced (November 2018) under the title “Geological heritage and geoparks”. At the same time, during this last 10 years, this Unit has incorporated two temporary (2-3 years) posts, and several training posts for university graduates resulting in 5 M.Sc. theses and 3 Ph.D. theses. Result from this trend, the current status includes 5 full-time specialists on geological heritage and 2 full-time specialists on mining heritage.
The aforementioned latest post that was recently published ("Geological heritage and geoparks") is currently undergoing the proficiency phase, which includes compulsory exams to verify the compliance of candidates with the level of knowledge demanded for the post. The 60 themes listed in the public call for this position represent a comprehensive review of the knowledge required for this specific post and are thus herewith listed:

1. Natural diversity, biodiversity and geodiversity: concepts, ecosystem and geosystem services, and relations amongst them.
2. Geological heritage as a discipline: background, concepts, significance, relevance and value.
4. Legal framework for nature conservation in Spain: historical background, Law 42/2007 on Natural Heritage and its amendment by Law 33/2015, legal references to geological heritage, other legal protection figures that apply to geological heritage.
5. Legal instruments for the inventory and management of natural heritage within Law 42/2007, the National Inventory of Natural Heritage, the National Inventory of Geological Sites of Interest, and the National Strategy for Natural Heritage.
9. Legislation on protected natural areas developed by Spanish Regional Governments. Categories and legal protection figures that may be applied to geological heritage.
10. Consideration of paleontological geoheritage by the national Law 16/1985 on Historical Heritage. Legal protection figures that may be applied to paleontological heritage under the national law.
11. Consideration of paleontological geoheritage by legislation on historical and archeological heritage developed by Spanish Regional Governments. Legal protection figures that may be applied to paleontological heritage under the regional laws.
12. Industrial heritage and mining heritage in the national Law 16/1985 on Historical Heritage, and in regional legislation on historical and archeological heritage. Legal protection figures that may be applied to mining heritage.
14. Urban legislation and territorial planning in the conservation of geological heritage and mining heritage.
15. Geological domains (national geological frameworks) considered in the National Inventory of Geological Sites of Interest (IELIG).
17. Geology and geodiversity of Spain (II). Alpine ranges: the Pyrenees, the Bethics and the Iberian Cordilleras.
20. Geology and geodiversity of Spain (V). Quaternary of the Iberian Peninsula.
22. Resolutions of the IUCN (International Union for the Conservation of Nature) regarding geological heritage. Procedure for their approval and development.
24. Statutes and operational guidelines of the International Geoscience and Geoparks Programme of UNESCO.
29. Procedure for the declaration of UNESCO Global Geoparks, and for the modification of their area. Tasks assigned to the National UNESCO Global Geoparks Committee, and the National Commission for UNESCO.
34. Geological heritage of international relevance in UNESCO Global Geoparks located on the Canary Islands.

36. Spanish UNESCO Global Geoparks and their role in the development of scientific research.

37. Initiatives for sustainable development through the use of geological heritage in territories of UNESCO Global Geoparks.

38. Administration and management bodies of geological heritage in Spain.

39. Institutions and scientific societies dedicated to geological heritage and mining heritage at the national and international level.

40. Methodology and development by IGME of the Spanish Inventory of Geological Sites of Interest.

41. Regional and local inventories of geological heritage. Regional geoconservation strategies.

42. The role of scale and type of reference unit (natural, administrative) in geoheritage studies.

43. Criteria for the evaluation of geological sites of interest. Scientific, educational and touristic value. Types of interest. Local, regional, national and international relevance.

44. Specific criteria for the assessment and management of moveable geological heritage in collections and museums.

45. Fragility and vulnerability of geological sites of interest. Criteria for the assessment of the susceptibility to natural degradation of geological sites of interest.

46. Criteria for the assessment of the susceptibility to degradation due to anthropic activity on geological sites of interest. Risk of degradation.

47. Geotourism: Definitions, types and models. International examples and Spanish examples.


49. Models for the use and management of geological heritage. International experiences and relevant examples.

50. Geoconservation: Main lines of work, best practice examples, geoconservation plans.

51. Geoindicators and monitoring of active geological processes towards the conservation of geological heritage.

52. Geological maps: Contents, legends and symbology for public general use, cross sections and geological columns, mapping reports, and Spanish cartography.

53. Maps of geological heritage: Criteria and representation methods, web map viewer for the Spanish Inventory of Geological Sites of Interest; types of representative elements, legends and representation geometries.

54. The database of the Spanish Inventory of Geological Sites of Interest: basic data model, type of data, tables and data fields.

55. The program «Watch over a rock»: Background and procedures incorporated into the Spanish Inventory of Sites of Geological Interest.

56. Industrial archaeology: Mining, historical and metallurgical heritage. Elements forming part of historical mining heritage.

57. Spanish historical mining heritage: large mining districts, relevant historical periods of Spanish mining.

58. Integration of geological heritage and mining heritage in environmental impact assessment.

59. Techniques for public outreach on geological heritage and mining heritage. Communication with the media and channelling of the message. Use of resources to attract the attention from the public.

60. Methodologies and techniques for heritage interpretation and its application towards the interpretation of geological heritage.

Apart from the specific issues related with national circumstances (Spanish geology, legislation, initiatives, history, etc.), it is obvious from the above that there is already a knowledge base on geoconservation that has been building during the last few decades. This is not only in relation with geoheritage (inventories, assessment, mapping, management, communication, protection), but also with geodiversity (statistics, assessment, mapping), geotourism (strategies, planning, monitoring) and geoparks (proposals, development, evaluation). The objective of this brief note is to contribute towards this trend globally, hopefully to be used by those persons and institutions in countries wanting to increase and improve their activity in the field of geoconservation, so that, more sooner than later, it will be assumed by academic and research institutions, educational programs, administrations at all levels, and society in general.
International Scientific Congress
20th Congress of the International Union for Quaternary Research

by: ProGEO
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The 20th Congress of the International Union for Quaternary Research (INQUA) 2019 will take place in Dublin (Ireland), 25 - 31 July 2019. The INQUA 2019 includes a session on ‘Valuing the Quaternary: Nature Conservation and Geoheritage’.

See: http://www.inqua2019.org/
The closing date for abstracts is 9 January 2019.

National Meeting
13th National Meeting of the Spanish Geoheritage Commission

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See: https://www.museosdetenerife.org/mnh-museo-de-la-naturaleza-y-el-hombre/evento/5155
The Geological Society of Spain is an institutional member of ProGEO and of IUCN. The cost of registration for ProGEO members is reduced to 60 euros.
The closing date for abstracts is 28 February 2019.

Deadline next issue of ProGEO NEWS
February 27th, 2019
Please send contributions to ProGEO NEWS. Members are interested in things that happen all over the world, your experiences, activities, science, geosites, geoconservation and geotourism efforts!

ProGEO NEWS are available in the ProGEO site (under publications) www.progeo.ngo

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Editor: João Rocha  joaorocha@uc.pt

Please send your contributions (unformatted word file 500 – 2000 words). Photographs, maps and figures should be sent as separated files (preferentially not included in the word file).

If longer texts are needed, please contact the editor.

ProGEO: European Association for the Conservation of the Geological Heritage.
President: Lars Erikstad  Executive Secretary: Enrique Díaz Martínez  Treasurer: Sven Lundqvist.

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