



Pillow lava on the Reykjanes peninsula. Photo: Lars Erikstad

The VIII International ProGEO Symposium 2015 - Geoconservation strategies in a changing world

The symposium was held in Reykjavik, Iceland in the beginning of September. Some 80 people participated in a scientific program of two days and many also came along for the pre- and post-excursions. The theme of the symposium was “Geoheritage strategies in a changing world” followed up with more practical themes such as “How to secure the integrity of geosites under threat”, “How to incorporate geological heritage in EIA”, “What is sustainable use of a geosite?” and “Is mining and quarrying compatible with geoconservation?”. In addition to two key-notes, 26 presentations were given as

oral presentation directly linked to these themes and 25 posters with even wider perspectives were shown and also given a 5 minutes presentation each.

The term “changing world” was both linked to changes in the world’s natural systems such as climate change etc., but also changes in people’s perception of nature, nature management strategies and politics etc.

The symposium was opened with an address from the President of Iceland, Ólafur Ragnar Grímsson. He pointed out our perspective of nature in western culture and its strong links to creation in religion. This can give the impression of a static nature, but in Iceland it is well demonstrated that the natural processes are highly dynamic. The creation of natural phenomenon is like an open book as can be seen in the Holuhraun eruption, an example that natural processes is an ongoing force and sometimes very dramatic.



President of Iceland, Ólafur Ragnar Grímsson giving his address speech. Photo: Kjartan Birgisson

The president pointed out that man believes that he can control and govern nature but in fact nature outmaneuvers man and man depends on nature. This difference can be viewed as a barrier between science and people when we talk about our place in nature.

In Iceland there is a saying: "Landscape is worth nothing unless it has a name" that has influenced people's view of the land. Up to 20 – 30 years ago people's experience of landscape value was through literature, especially poems. Gradually the understanding that landscape can have value – even if it has no name - has become more prominent. There is a need to bridge the gaps between cultural and scientific perspectives. We must also keep in mind lack of knowledge and need for research. For example, there is a deficiency in our knowledge of the natural features in the oceans. We must not forget the oceans! We need to see all nature as a whole.

Our understanding of value and how we should manage and conserve nature, changes. This can be seen in art and an example is where modern landscape painters change the perspective from large landscape views into

the very small, like a moss formation on lava rocks, detailed structures often ignored etc. Together with a scientific understanding, it affects how we assess pieces of nature as unique.

Management of nature contains many challenges. For example, tourism can be appreciated as it gives people an opportunity to get acquainted with nature and new places. Tourism in Iceland has increased rapidly over the last years and is increasingly important for the Icelandic economy. However, tourism can also be a threat to nature. A dialog between science and politics is extremely important in all heritage strategies in planning for sustainability.

Jón Geir Pétursson, Director General of the Department of Land and Natural Heritage, at the Ministry for the Environment and Natural Resources, underlined in his speech that geodiversity is an essential part of nature. This is nowhere better seen than in Iceland. Our understanding of geodiversity is however too weak and geodiversity is better understood as a part of a holistic understanding of nature and thus as a part of nature management. He pointed out that the geo-element is on the political agenda. Tourism is increasing in Iceland and people are coming to experience nature and especially the geodiversity. He emphasized that this places geoheritage in Iceland in the mainstream of politics and management both viewed as an economic resource as well as challenges to keep the development sustainable.

ProGEO president José Brilha underlined the theme of the symposium and the challenge it represents. During the last decade, the recognition of the importance of geoconservation is increasing in many countries and inside international institutions. We should not be too modest and say that ProGEO and all its members are playing a decisive role in this change. The increase of the scientific knowledge on geoconservation and the training of young people, particularly in post-graduation studies, are essential to enhance geoconservation at national and international levels. However, much more needs to be done. The status of geoconservation in our countries is very different. ProGEO should be able to help the countries where geoheritage is not yet on the political agenda and should also campaign with other partners to demand a European policy on geoconservation.

Roger Crofts, Professor and a member of the IUCN Geoheritage group and former leader of IUCN commission on protected areas, presented a key-note speech titled "Putting geoheritage conservation on all agendas" which followed up the same thoughts underlining the importance of geoconservation to be viewed in a bigger picture.



*Roger Crofts delivered his key-note speech via Skype.
Photo: Kjartan Birgisson*

He dwelled on three key questions: “*Why is biodiversity ahead and why does geodiversity not figure alongside it as integral part of the nature conservation agenda?*”, “*Why is geoheritage low on international agenda?*” and “*Why is geoheritage conservation low on the local political agendas and why is there not more public support?*” He stressed the importance of working geodiversity and geoheritage into mainstream nature conservation strategies such as ecosystem services, landscape politics, international and national nature conservation programs as well as local awareness.

It is necessary to adapt a variety of perspectives and use language to interest, inspire and encourage laypeople as well as managers and politicians. All three questions were linked to the four main themes of the conference providing a link with overall strategies and practical geoconservation work.

The second keynote of the conference was given by Snorri Baldursson the Chair of Landvernd, the Icelandic Environment Association. His theme was “The central highlands of Iceland – exceptional and priceless”. This large area, the interior of Iceland, has traditionally been quite difficult to access and is even so today as road conditions place a limit on visits, at least compared with European standards.

He emphasized that the pressure on the land has, increased considerably over the last years. This pressure is linked to large hydroelectric dams and plants built in the area and under planning. In the highlands. The geology is so important for the landscape that many places could be called geological landscapes. It also has a pristine character, which is very vulnerable to all man made

infrastructure. In the low-lying areas, sheep grazing is important but on higher grounds pastures are sparse. Soil erosion is an issue in several places.

Energy development is a more industrial threat to these unique landscapes as building of dams, roads, power lines and pylons introduce new landscape elements in the characteristic and open landscape

At the round table debate, the opening theme was put into discussions from different perspectives. Patricia deWever informed that the IUGS task group on geoheritage may be transformed into a commission. This will be clarified within some months and will affect the possibilities to work with geoheritage worldwide. Eirini Theodosiou underlined that a changing world affects all nature conservation, cultural heritage management et c. New priorities emerge in times of war, economic crisis etc. In an economic crisis it's important to link geoconservation to job opportunities.

We must adapt to the changes in society and we need to work with young people with new ideas. In Russia Marina Vdovets informed that there are 2000 geosites with a status of regional importance, and that they have no legislative protection. The complexity and diversity of sites and management systems are challenging. Awareness is extremely important and visitor centers, almost as miniature geoparks, are tested to help in this situation.



From the poster area. Photo: Kjartan Birgisson

John Gordon drew attention to a bigger picture including the connection with people and culture and integration with a wider nature conservation agenda. Focus on stakeholders, joint meetings with biodiversity groups and integrating geoh heritage in EU directives is part of this. We must develop language that works in different settings, towards politicians, towards the public as well as for different sciences. IUCN is an important organization that should be included in these strategies.

Herdis Helga Schopka pointed out that official structures such as ministries and agencies are downsized. Geodiversity is also frequently misinterpreted as being stable, not vulnerable and not under threat – in other words, that geoh heritage resources are virtually unlimited. She pointed out the need for more information on geodiversity and geoh heritage, but funds for the needed research are lacking. We also have challenges with legislation and local perception where local planning independence is important. Outside demands for better land-use policies etc. can be viewed as a threat for this local autonomy. Enrique Díaz Martínez underlined the importance of national institutions such as the geological surveys and in a European setting EuroGeoSurveys which has an agreement of cooperation with ProGEO. To develop this cooperation will be of high strategic importance for the future.

The conclusion is that geodiversity and geoconservation calls for a diversity of strategies on different levels and covering a wide variety of nature and management systems. It is a challenge to keep focus. We need to establish ourselves in the mainstream of nature conservation, landscape strategies and land use planning as well as to increase our dialog with the public as well as politicians.

As the last item on the symposium agenda, the symposium agreed on a declaration focusing on these challenges - the Reykjavik Declaration.

A trip to Reykjanes

The pre-symposium excursion went to the Reykjanes peninsula southwest of Reykjavik. This is a highly volcanically active area where the Mid-Atlantic ridge comes ashore in southwest Iceland. Moreover, we had a presentation about the newly established Geopark: Reykjanes Geopark during lunch break. Several of the interpretation stops on the excursion were geosites within the geopark. One of the geosites is “the bridge between continents”, that is a footbridge over a fissure that provides evidence of the presence of a diverging plate margin. The bridge illustrates the theme of the park that is the link to the Mid Atlantic ridge.

We visited hydrothermal areas, fissures and an excellent locality of pillow lava in an active stone quarry. It was, however, the outer tip of the peninsula, which gave the strongest impression. In strong wind along the rough coast, young eroding volcanoes were demonstrated together with the deposits linked to the eruption, found on land, and a dyke representing the spreading zone in an actively eroding cliff where the Reykjanes ridge comes ashore.



*The outer tip of the Reykjanes peninsula demonstrating active coastal processes as well as volcanic rocks linked to the active spreading zone belonging to the Mid-Atlantic ridge. In the foreground a monument of the extinct Great Auk (*Pinguinus impennis*) in its rightful habitat. Photo: Lars Erikstad*



A New poster from the Reykjanes Geopark at the bridge between continents. Photo: Lars Erikstad



The Reykjanes ridge coming ashore. Photo: Lars Erikstad

Crossing the volcanic zones of Iceland

With reference to Snorri Baldurson keynote speech the participants of the post-symposium excursion were enthusiastic on a sunny Friday morning to head to the highlands including stops at Þingvellir and Geysir.

The excursion route was through parts of the central highlands crossing the volcanic zones of Iceland.

After visiting the top geological and touristic geosites of Þingvellir and Geysir the tour headed to the interior. There is a heavy tourist pressure at Þingvellir and Geysir which is foreseen to increase in the near future. Managing these areas in order to keep their conservation value intact will be a significant challenge.

Further afield from Þingvellir and Geysir the number of tourists decreased considerably. The road to the highlands through Þjórsárdalur was surprisingly good, the reason being that it is the main route to the large hydroelectric developments in the southern highlands. The power plants are partly built underground, but dammed reservoirs, powerlines and pylons together with the road testify to the major development in the area.



Sheep driven home after summer grazing season in the highlands. Photo: Lars Erikstad



The interior has an overall pristine character even in places crossed by roads. The landscape is dominated by volcanic features and gives great geological and geomorphological impressions. Photo: Lars Erikstad



*Veidivötn crater lakes and rows of craters is a landscape of extraordinary geodiversity and beauty. The crater lakes and wetlands add significantly to the biodiversity in the area.
Photo: Lars Erikstad*



Relaxing in the Landmannalaugar pool. Photo: Lars Erikstad

The debate refers to how much development should be allowed and which areas should be developed and which areas are to be protected. This debate must get its inputs scientifically in a multidisciplinary setting combining geo- and biodiversity and work is going on with inventories and investigations to support the planning process.

Before heading to the lowland areas via Eldgjá the participants had the opportunity to enjoy and relax in a natural hot pool in Landmannalaugar.

The excursion passed through the western part of Vatnajökull National Park on its way to visit the first Geopark in Iceland – Katla geopark. This geopark was presented at the lunch break in the village Vik.



The traverse through these areas was impressive and gave an added input to the discussions at the symposium on geoconservation, geodiversity and geoheritage as well as the Reykjavík declaration.

Information panel in Eldgjá volcanic canyon belonging to the 934 AD eruption, which produced some 18km³ of lava covering an area 800 km². Photo: Lars Erikstad

DECLARATION OF REYKJAVÍK

Accepting that geoh heritage is an intrinsic part of natural heritage and geodiversity is an integral part of natural diversity, the participants in the 8th International ProGEO Symposium, 'Geoconservation Strategies in a Changing World', held at Reykjavík, 9-10 September 2015:

Recognise

- the intrinsic values of geodiversity and geoh heritage, and their wider values for science, education, culture and ecosystem support;
- the need to protect geodiversity and geoh heritage as part of nature conservation;
- the fundamental links of geodiversity and geoh heritage with biodiversity, cultural heritage and landscape;
- the ecosystem services that geodiversity delivers for nature and the benefits geoh heritage provides for people;
- the need for geodiversity management to address the challenges faced by society such as climate change, natural hazards, sustainable use of resources, biodiversity loss and environmental degradation; and
- the duties of national governments to implement IUCN resolutions concerning geodiversity and geoh heritage¹.

Recommend that

- geoh heritage should be conserved for its own values, and all IUCN protected area management categories have a role to play in the conservation of these values;
- geodiversity and geoh heritage should be fully integrated into the selection, management and monitoring of all protected area categories as part of a holistic ecosystem approach that recognises the value of both geodiversity and biodiversity processes in nature conservation;
- in the face of human pressures and climate change, geoconservation guiding principles and geodiversity-informed strategies for nature management are essential to ensure benefits for people, particularly in protected areas and geoparks;
- geoh heritage inventories based on clear criteria, and accounting for geodiversity and geoh heritage sites already lost, should be the starting point for geoconservation activities; this includes assessment of values, vulnerability and potential uses, and provides a secure basis for conservation of significant, unique and representative sites and elements at different administrative (local, national, international) levels;
- the values of geoh heritage should be communicated using appropriate messages, means and language for different audiences, and geoh heritage interpretation should engage directly with people's experience and cultural heritage;
- the geoconservation community should contribute actively to integrating geodiversity and geoh heritage into nature conservation strategies and related initiatives such as natural capital evaluation, revision of EU Directives, and development of sustainability goals;
- the inclusion of geoconservation policies in national and local legislation and plans, namely on land-use planning and environmental impact assessment, is actively pursued; and
- geoconservation concepts are integrated at all levels of the educational system and there is a stronger recognition of geoconservation as a geoscience in the academic and scientific environment.

¹ In particular IUCN Resolution 4.040 (Conservation of geodiversity and geological heritage) and IUCN Resolution 5.048 (Valuing and conserving Geoh heritage within the IUCN Programme 2013-2016)

ProGEO General Assembly, Reykjavik 10.9.14

Agenda:

1. Reports from the Executive Secretary, President and Treasurer
2. Adjustments of the ProGEO articles
3. Elections
4. ProGEO strategy document
5. Any other matters

A document containing the reports from the president, executive secretary and treasurer was distributed to all members in June. This document also contained the suggestions for changes in ProGEO articles, election documents for president election as well as for general (elected members to the council as well as the ProGEO strategy document.

1:

The distributed reports was shortly referred and discussed supplemented with a detailed overview over the financial situation given by the treasurer. All reports were approved by the general assembly.

2:

The need for changes and updates of the ProGEO Articles was shortly presented with focus on objective and function. The distributed documents was presented showing both the suggested new articles as well as an overview with old and new articles and the objectives for the suggestions on the changes. It is a complex document that was elaborated by the Executive Committee (EC) at first, and after agreement, it was sent to the Council this winter and to all members two months ago. Amendments was a long process. The purpose of the amendments is to try to simplify, to define clearly responsibilities, to remove rules that cannot be followed and in a such way avoid administrative problems.

Some questions follow in respect to the main changes done in the Articles. Some examples of the changes are the role of Council, members elected of the Council, and what we mean by National ProGEO Representative, who are members, changes for the Election Committee, rules about membership, founder members, etc. Some of these changes were discussed in Bari, but then not included formally in the articles.

Articles amendments were approved with a unanimous open vote.

3.

The Election Committee recommended one candidate as **President**: José Brilha. José was elected for the first time in Bari 3 years ago. 21 postal votes for the reelection of the President was received and the general Assembly gave unanimous vote for the President.

General Elected members to the Council, after recommendations from the Election Committee are: F. Bairaktari representative for Kosovo and P. Begovic representative for Herzegovina (already Galiba Sijaric is representative for Bosnia). This was approved by the General assembly.

Marina Vdovets was elected chair of the election committee for the next period. The first task to be to compile suggestion for rules how the committee shall work.

4.

The strategy document was included in the general assembly papers sent to all members in June. It focus on getting new members, communication, working groups, activity in regional groups, ProGEO news, website etc. Recruitment should be a very serious task as new blood is needed for several issues both among members as well as the elected members of executive committee etc. (for example President and executive secretary). It is good that although ProGEO is a European Association, has members outside Europe. We are also interested in cooperation with other Organizations such IUCN, IUGS, etc. We try to improve communication with these, a quite good example is the expansion of our influence to IUCN, also to EuroGeoSurveys.

The general assembly suggested including the main conference results into the strategy document. This includes action points such as:

- Sharing information of best practice in securing the integrity of geosites under threat
- Follow up agreement of understanding with the Eurogeosurvey to increase awareness of Geoheritage and promoting geoconservation within the activities of the Geological surveys of Europe
- Take part in the European Fitness check of the habitat and bird directives of EU to introduce geodiversity and Geoheritage within existing EU environmental directives
- Develop principles and best practice examples to be used in EIA and supporting European directives on environmental impact assessments
- Following up experiences and best practices in develop cooperation with mining and quarrying industries to secure Geoheritage and raise awareness for geoconservation as an integrated part of industrial activities

- Develop our work as an IUCN member to follow up IUCN resolutions on geodiversity and Geoheritage and participate and support the Geoheritage group within the commission on protected areas
- Follow up our affiliation with IUGS in promoting geoconservation in the worldwide geological community
- Increase cooperation with the geopark movement as an integrated activity on disseminating the relevance and importance of geodiversity for the society and the need for active management of geodiversity on all scales including inventories of geosites and securing their conservation.

This will be included in the document as a result of the conference.

5.

Next Conference suggestions was dependent on capacities in a couple of countries. The executive committee was given accept to clarify within the next half year.



The Landmannalaugar hot spring area. Photo: Lars Erikstad



Earth Heritage, the UK's geological and landscape conservation magazine, is available in downloadable electronic format at www.earthheritage.org.uk. The magazine showcases geodiversity conservation and promotional activities and is published twice a year, in late winter and late summer. Back issues are also available.

Deadline next issue of ProGEO NEWS: December 10th. 2015

Please do not forget to send contributions to ProGEO NEWS. Members are interested in things that happen all over the world, your experiences, geosites, everyday geotopes and landscapes, geoconservation and geotourism efforts! ProGEO news is published on the internet

www.progeo.se

Please send your contributions 500 – 2000 words with photographs, maps and figures clearly marked as a ProGEO NEWS contribution to:

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If longer texts are needed, please contact the editor

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ProGEO NEWS produced with support from the Norwegian directorate for Nature Management