



*A specimen of *Diplacanthus crassissimus* found at Hugh Miller's collecting locality in Cromarty, one of the specimens used in a workshop for pupils from Cromarty Primary School on the subject of fossils held on the occasion on the launch of the Scottish Fossil Code. © Scottish Natural Heritage*

The Scottish Fossil Code

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After two years of preparation, involving a public consultation, the Scottish Fossil Code was launched on April 11th 2008 by the Scottish Government Environment Minister in Cromarty, the birthplace of Hugh Miller. Probably the first national code of its kind, the Scottish Fossil Code aims primarily to help conserve the fossil heritage of Scotland.

Scotland has a remarkably rich geodiversity that spans nearly 3 billion years of Earth's history. Part of this 'Earth heritage' is the record of the development and evolution of life on Earth in the form of fossils. The fossil heritage exists in the natural environment, and importantly is also preserved in museums and private collections. It comprises an irreplaceable and finite resource that has uses in science, education and recreation. This element of Scotland's Earth heritage is vulnerable to abuse and damage and therefore requires a degree of safeguard and management to ensure its survival for future generations.

The Nature Conservation (Scotland) Act 2004 included provision for Scottish Natural Heritage to prepare the Scottish Fossil Code. The Code,



The fossil Code and accompanying leaflet. © Scottish Natural Heritage.

produced with assistance from palaeontological researchers, land managers, collectors and others with an interest in Scotland's fossil heritage, provides advice on best practice in the collection, identification, conservation and storage of fossil specimens found in Scotland. The Code aims to enhance public interest in the fossil heritage of Scotland and promote responsible use of this resource for scientific, educational and recreational purposes.

Fossil collecting is an essential activity that provides the basic material and data for the science of palaeontology. It is hoped that following the Code will increase the personal interest and satisfaction that can be gained from forming a fossil collection; result in new finds to add to our record of past life and environments on planet Earth; and help conserve the fossil heritage of Scotland.

The Code may be viewed and downloaded from www.snh.org.uk/fossilcode. Alternatively to receive a paper copy contact:

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The essentials of the Scottish Fossil Code:

- Seek permission - You are acting within the law if you obtain permission to extract, collect and retain fossils.
- Access responsibly - Consult the Scottish Outdoor Access Code prior to accessing land. Be aware that there are restrictions on access and collecting at some locations protected by statute.
- Collect responsibly - Exercise restraint in the amount collected and the equipment used. Be careful not to damage fossils and the fossil resource. Record details of both the location and the rocks from which fossils are collected.
- Seek advice - If you find an exceptional or unusual fossil do not try to extract it; but seek advice from an expert. Also seek help to identify fossils or dispose of an old collection.
- Label and look after - Collected specimens should be labelled and taken good care of.
- Donate - If you are considering donating a fossil or collection choose an Accredited museum, or one local to the collection area.



IGC 2008

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The international geological congress was arranged by the Nordic countries in Oslo August 6-14th 2008. The congress gathered about 6000 scientists. As always the event displayed a huge diversity of geological activities and scientific development within the broad field of geosciences.

Among the disciplinary symposia a group of four symposia was of particular interest for ProGEO. These were labled under the heading Geoheritage, Education and Society. ProGEO was a part of the planning for this symposia cluster and had the main responsibility (José Brilha) together with IAG for one of them.

The four symposia were:

- **General contributions to geoheritage and society** Antony J. Reedman, Chris Woodley Stuart, Jiang Janjun, Pasquale Li Puma, Afia Akhtar (EGN, AGID, GGN)
- **Earth heritage: Science, education and capacity building** Peter Bobrowsky, Robert Missotten, Zhao Xun (IUGS, UNESCO, GGN)
- **Geosites and landscape - conservation and management strategies** Jose Brilha, Emmanuel Reynard (ProGEO, IAG)
- **Geoparks and geotourism** Nickolaos Zouros, Patrick McKeever (EGN)

The program and abstracts can be found on <http://www.33igc.org>

A large program of field trips was also arranged. Two of these were of special geoheritage and geotourism interest (to two Norwegian geoparks, see reports below). Several of the other field trips were also of great geoheritage relevance. Among these field trip 31 (UNESCO fjords – from Nærøyfjord to Geirangerfjord), 102 (Gardnos Impact Structure) and 104 (Classical fossil localities in the Oslo area). The field trip program and pdf files of relevant field guides can be found on the IGC website.



Gea Norvegica: a European Geopark founded on geodiversity

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Fourteen participants from Japan, South Korea, Italy, Russia, Austria, Finland, Norway and the UK took part in this pre-33IGC field excursion to Scandinavia's only Geopark, Gea Norvegica. Situated c.100km south-west of Oslo, it covers some 3000km² across 3 counties and 8 municipalities. Named after an 1838 publication by B.M. Keilhau that gave the first thorough description of the geology of the area, the geopark became a member of the European and Global Geoparks Network in 2006.

Some geoparks are centred on a single geological element, e.g. Lesvos Petrified Forest Geopark in Greece and Vulkaneifel Geopark in Germany, but Gea Norveiga unashamedly promotes itself as having a "unique geodiversity in an old, rifted continent". The "extreme geodiversity" of the area includes:

- Deep orogenic environments;
- Rift environments;
- Ductile deformation: folds and mylonites;
- Faults and fractures;
- Sediments of many different origins;
- Glacial deposits and landforms;
- Volcanics, plutons, dykes, sills, laccoliths, pegmatites;
- Metamorphic rocks in orogens and contact aureoles;
- Metasomatic rocks and hydrothermal vein deposits;
- Weathering and soils;
- A wide range of minerals and fossils;
- Many different geological resources (gravel, minerals, rocks).

This huge geodiversity provides opportunities to demonstrate how geology influences biodiversity, settlement, agriculture, communications and cultural aspects, and the geopark philosophy is therefore to show the links between humans, environment, culture, society and geology, in close accordance with the general philosophy of the European Geopark Network.

The 3-day field excursion provided an outline of the geodiversity and a glimpse of these relationships. After our coach passed the entrance sign to the geopark, we were met by Sven Dahlgren, the



Geopark Manager and driving force behind its initiation. The first stop was at Kjærra where Henrik Heyer explained how he was able to recognise and map up to 40 different types of rhomb porphyry lavas within the Oslo Rift, and Mona Holte described how the upper limit of arable land in the Lågendalen valley corresponds to the glacioisostatic marine limit at c. 175m above sea level. After a cabin lunch of moose soup and salmon, we had a demonstration of the traditional salmon fishing techniques around the Kjærra waterfalls.

Next stop was at the Larvik museum where there is an interesting exhibit explaining the origin, types and uses of larvikite. The final stop was at Mølen, where a section of the Younger Dryas end moraine has been washed by the sea, leaving a series of cobble ridges and spreads on which Iron Age burial cairns were constructed. The site is a protected one and Egil Soglo explained his role as one of 70 inspectors of protected sites in Norway. A display of the range of erratic cobbles has been constructed together with some information panels. Finally, Sven Dahlgren described the nearby volcanic sequence of lavas and pyroclastic layers, but a sudden rain shower drove us back to our coach.

Day 2 began with a visit to the Rognstranda site where spectacularly banded Precambrian gneiss is overlain non-conformably by Cambrian and Ordovician sediments. For me, the highlight of the excursion was to see the beautiful gneissic banding abraded by glacial erosion into smoothed whalebacks and p-forms. It is at such spectacular sites that the case for geoconservation can easily be made to any doubters in other disciplines. The site also has a series of well constructed information panels.

This was followed by visits to two mines/quarries, first to the Norcem limestone mine at Brevik where the coach descended through tunnels to 190m below sea level under the local fjord. Then on to the larvikite quarries at Tveidalen where the intricacies of quarrying and cutting the stone were explained. The blue schiller effect is displayed best in a single direction and this is marked on the blocks, most of which are exported for use as a decorative stone both externally and internally as well as for gravestones, sculpture, etc. Indeed, larvikite was recently elected as Norway's national rock!

The day ended with a rather rainy boat trip on Langesundsford where we visited the small but

famous island of Låven where the nepheline syenite pegmatite contains nearly 50 different mineral species and is the type locality for aegerine, lävenite, leucophanite, mosandrite, catapleiite and astrophyllite. As a protected site, mineral collection is strictly forbidden. Towards the head of the fjord, the group also saw the type locality for thorium and thorite.

Day 3 began with a boat trip from Skien up the Telemark canal and onto Lake Norsjø where we came ashore for a climb to Mikaelshula cave developed in weathered gneisses. Further up the lake we disembarked at Ulefoss and had lunch with the mayor and local geology group at the Øvre Verket cultural centre.

In the afternoon we first visited the nearby famous Fen Carbonatite Complex with its magmatic limestones first described by Brøgger in 1921. Localities near the coast were visited where rare rock varieties including søvite were examined. The trip ended with two cultural visits, first to the Henrik Ibsen Museum near Skien where the landscape that influenced some of Ibsen's work was described and where we were treated to a performance of parts of an Ibsen play and poem. Then on to Århus where locals have constructed a replica Iron Age house in which we were provided with a traditional and memorable dinner of meats, fish and vegetables.

This was an excellent excursion exemplifying exactly what a geopark should be about by displaying the links between geodiversity, biodiversity, society and culture and involving local communities in promoting their important geological resources with the aim of sustainable economic development. I congratulate Sven Dahlgren and his enthusiastic team and I recommend a visit as soon as possible.



Photo 1: Egersund coastal town

Magma Geopark - The Rogaland Anorthosite Province an aspiring UNESCO geopark.

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I started the trip in Stavanger, a city and municipality in the county of Rogaland, SW Norway. Stavanger is the 4th largest city in Norway and commonly referred to as the Petroleum Capital of Norway. Airport is located 14 km from the city centre, in the municipality of Sola. Stavanger and its region, along with Liverpool, United Kingdom, is the European Capital of Culture for 2008.

Pål Thjømøe, Magma Geopark Project (MGP) manager and one of the excursion leaders, brought me together with other participants after one hour drive southeastwards, to Egersund, a coastal town (photo 1) in the municipality of Eigersund in the county of Rogaland. Egersund has one of the best natural harbors in Norway, and used to be the largest harbor in Norway when measured in quantity of fish brought in each year. Several internationally known companies have divisions here. Most of the industry is related to the sea and to boats. Central Egersund houses are some of the best preserved wood buildings in Norway (photo 2). They are built in late Empire style, and most of the buildings are protected by law.

This same evening we met with Brian Robins, professor of Bergen University in Norway and Richard Wilson, professor of Aarhus University in Denmark our leaders and instructors during the excursion. Pål, Richard and Brian hosted our



Photo 2: Wooden houses in Egersund

multinational (Sweden, Finland, Australia, Norway, California, and Greece) 15 group members, transported us with a 16-seater minibus to numerous interesting localities and made efforts for us to feel at home. I take the opportunity to thank deeply all of them.

The excursion area covered mostly by Rogaland Anorthosite Province (RAP), has been proposed as an UNESCO geopark (see map). The Geopark is named Magma because Rogaland Anorthosite Province consisted of intrusive magmatic rocks covers more than 50% of the surface area.



Map of the geopark area in SW Norway

There are hundreds of small valleys, more than 6.000 lakes and several important rivers inside the Geopark. The Bjerkreim River is one of the best for salmon-fishing in Norway and is protected by law. The highest mountains are in the north where summits are above 900 meters.

The landscape represents an ancient peneplain, a more or less flat surface that slopes gently down to the coast. In the west the slope gradually reaches sea level at the coast (photo 3), whereas in the east there are steep coastal cliffs. This old peneplain has been deeply incised by rivers and glaciers, giving the hilly topography of the present times. During the Pleistocene, Rogaland was repeatedly covered by ice during glacial advances. During the advances, loose-lying material was scoured away. When the glaciers retreated, huge volumes of melt water flowed across the area, deepening existing valleys, eroding new watercourses and depositing material in low-lying areas. The landscape is dominated by bare, rounded, rocky hills where crystalline rocks form the surface. Since intrusion of the anorthosites a thickness of ~20 km of rocks has been removed, involving uplift and erosion at an average rate of ~0.02 mm/year.

The Geopark territory has large areas with very little or no plants since the anorthosites are very poor in essential nutrients, thus are suitable only for sheep grazing, which predominates comparing to agricultural use that covers only 6,1 % of the total land area. The natural vegetation, mainly in areas with glacial and river deposits consists of heather, juniper, marshlands and small birch forests. Mining also has been important in the area.

The total population within the Geopark is around 32.000, 68% of which live in towns and villages with abundant open spaces all around. The area can easily be reached by car, train, ship or plane. Roads that are especially suited for cycling are marked throughout the area, while the main tourist activity takes place in the spring and summer.

RAP and its metamorphic envelope provide the geological basis, but the Geopark boundaries follow the administrative borders of 5 municipalities: Flekkefjord in Vest-Agder County its eastern part, Bjerkreim, Eigersund, Lund and Sokndal in Rogaland County together with Dalane district in this same county.

The Rogaland Anorthosite Province that forms the most important part of the Magma Geopark includes severely deformed and metamorphosed gneisses, which have been intruded by late proterozoic anorthosite massifs and the largest layered intrusion in Western Europe, the Bjerkreim-Sokndal Intrusion. There is a long history of mining and the area contains the largest ilmenite mine in Europe. The bare, rounded, rocky landscape in the area is considered to be unique for Europe (photo 3).



Photo 3: The Egersund-Ogna Anorthosite in Eigerøy, gives rise to a characteristic landscape that is dominated by bare, rounded, rocky hills. The peneplain extends down to sea level

The landscape was strongly influenced by the Ice Age and many glacial features are well preserved, including, several elongated ridge-shaped moraine deposits, chatter marks (Ice movement features) (photo 4), “roche moutonnée” with glacial striations, end moraines, the St. Olav’s Orm serpent protected esker, one of the many moraine features in the area (photo 5), many erratic blocks scattered across the landscape (photo 6), glacial lakes, pot holes scoured by running water far above existing water courses, fjords, and many rock falls.

The field trip gave us a general introduction to the Rogaland Anorthosite Province and included visits to several of the Magma geosites and geopark localities. Some of the localities involved walking for up to 2-3 km in fairly rough terrain, mostly under rain. Apart from visiting a quite interesting geological and geomorphological area, discussions and initiatives in respect to geopark concept since the area is being prepared to become member of the UNESCO geoparks network, took place.

A more detailed geological history of the area, unveiled by the geosites and the numerous studies, refer to igneous rocks belonging to the Rogaland Anorthosite Province, which were intruded into gneisses of the Sveconorwegian orogenic belt in southern Norway, generally correlated with the Grenvillian belt of Laurentia. Both belts formed during a polyphase orogenic event between 1.25 and 0.90 Ga, at the transition between the Meso- and Neoproterozoic. They are generally depicted as the product of collision between an unknown plate and the margin of the Fennoscandian and Laurentian shields respectively.

The Rogaland Anorthosite province comprises three major anorthosite massifs (Egersund-Ogna-(photo 7), Norway’s largest layered intrusion (Bjerkreim-Sokndal-(photo 8), Ana Sira and Haland-Helleren), two smaller anorthosite bodies, several broadly mangeritic (= hypersthene monzonite) intrusions, charnockites, and many minor intrusions of jotunite (= hypersthene monzonorite). The emplacement of the Rogaland anorthosite complex is estimated to have taken place at 931 ± 3 Ma and represents a surprisingly short igneous event (<10 m.y.), at a depth of ~16-20 km. Contact metamorphism influenced gneisses that had previously reached granulite facies regional metamorphism and produced very high temperature mineral assemblages in the inner aureole. Due to the geological history, there is a long history of exploitation of iron-titanium ores in the province



Photo 4: Chatter marks on a “roche moutonnée”



Photo 5: St. Olav’s serpent esker



Photo 6: Glacial erratic



Photo 7: Eigerøy lighthouse is located on massive anorthosite.

within the Geopark area, containing the largest active titanium mine (photo 9) in Europe at Tellnes, extracted from ilmenite. Numerous Fe-Ti deposits of economic or sub-economic grade occur in the Rogaland Anorthosite Province. They include the already mentioned world-class deposit of Tellnes, discovered in 1954 and operative since 1960, which is the second most important ilmenite deposit in crystalline rocks after the Lake Tio deposit, Allard Lake district, Quebec.

The Storgangen deposit, which closed in 1964, is another famous mining site. Total production at the two deposits exceeds 20 million tons of ilmenite. I presume that environmental problems connected to this huge exploitation activity are present in the area. The old ilmenite Blåfjell mine, active from 1863 to 1876, produced some 90,000 tons of high quality ore. The ore is associated with very coarse-grained norite. The locally high concentrations of ore and its uneven distribution meant that ilmenite was extracted from at least 8 mines in the Blåfjell area. Four of these mines (the Platform, Under, Over and Top),

have their entrances on the northern slope of Blåfjell (photo 10).

Geopark and geotourism rationale

The magma geopark has its own physiognomy and identity due to its geology and geomorphology. The Rogaland Anorthosite Province includes the largest area of anorthosites in Europe and the largest layered intrusion in Western Europe. It also contains the world's largest igneous Fe-Ti deposit. A good number of geoscientists have known this area for many years (there are more than 320 scientific geological publications from the area). The Universities of Liege (Belgium), Aarhus (Denmark) and Bergen in Norway have carried out geological studies in the area since 1937 and have regular contacts with the Geopark staff. There is also a cooperation and regular contact with the Geological Survey of Norway, the Geological Society of Norway, the Gea Norvegica Geopark and other institutions. The dissemination of the properly interpreted

scientific knowledge and experience to geotourists from all over the world is a challenging issue.

A number of 89 geosites have been identified and registered within the Geopark. Some of these sites are considered as of national, international and even world-class significance. Several of the names used in the nomenclature for rocks belonging to the anorthosite – charnockite family originally came from Norway. For example, mangerite is named after Manger near Bergen and jotunite after Jotunheim.

The term norite, now used for plutonic igneous rocks consisting dominantly of plagioclase feldspar and orthopyroxene, is from Norway itself (“Norge” in Norwegian) and was first used by Esmark in 1823 for some Rogaland rocks in the MGP area. Anorthosite massifs are rare on a global scale. 58 of these are regarded as “geopark localities” (geosites of interest to the general public and not only to a geologist), some of which already have information panels, trails, car-parking, a landowner agreement etc. and several are in progress or in the planning stage.

Geopark localities have been classified by their regional, national or international interest, use (geotourism, education and science), protection status, availability (restrictions), threats and other information. Five Geopark localities have information panels and geotour guide pamphlets, in both Norwegian and English, produced by Magma Geopark and are in use by schools, geotourists, local inhabitants etc. All panels and pamphlets contain information as to how you should behave in the area. There are also many viewpoints from which geological landscapes or other geological features can be observed and some localities under development that are of more archaeological and cultural value, along with strong connections to geology. Additionally one can experience town and outdoor life.

Museums of the area cooperate in the geopark project; Outdoor organizations also, namely Dalane Open Air Council for the planning of new Geopark localities and the maintenance of those already established, and companies in several domains (brewery, media, exploration and event, town development, tourism development, outdoor exploration and event companies, overnight lodging companies etc.).

In March 2008 a joint-stock company specifically established to meet the requirements for a European Geopark owned by the municipalities and counties. This organization has close relations to the regional business development department in Dalane and the local Tourism development company for South

Rogaland. The board of Magma Geopark has 30 about members from the municipalities and the counties and a project manager who is a geologist. There are also six working groups for different themes (education, localities, business development, climate, art, documentation center) and an office in the center of Egersund.

Both the municipalities and the counties have made decisions to contribute to the management of the company, for Magma Geopark to have a sustainable economic structure to help further development of the Geopark.

An interpretation Center is planned in the old Jøssingfjord power plant beginning 2009. Jøssingfjord Center as a whole will cover gradually ~1.000 – 1.500 m². This will be a modern documentation centre for the geology, mining and industrial history of the region and also an arena for concerts, education, scientific work and exciting exhibitions for all ages. Smaller centers are also planned in the Lund municipality and in Orsdalen that will be connected to the Jøssingfjord Centre and the regional museums. A “Geokiosk” also in Jøssingfjord with daily guided tours in the Jøssingfjord area and to the Geopark localities Hellersheia and Jossingfjord is planned.

The MGP region is only partly an established tourist area, but it has a rather well developed infrastructure and a growing number of tourist and accommodation facilities. The regions of Stavanger to the north and Kristiansand to the south receive many visitors. Some of the geosites are already popular tourist attractions, but visitor pressure is certainly not above an acceptable level. In Rogaland County 15% of the area is protected by law but there is a need for even more geoconservation. Legal contracts are made between landowner and the municipality (in case of private properties), normally lasting for ten years or even longer.

The localities that are protected according to the acts relating to nature conservation and cultural heritage are strongly protected and the sites have signs in Norwegian, English and German that clearly state their status. This protection includes: destruction or removal of parts of geological heritage is prohibited; sampling is not allowed; hammering, blasting, digging etc. are prohibited; and the use of a grill or open fire is forbidden.

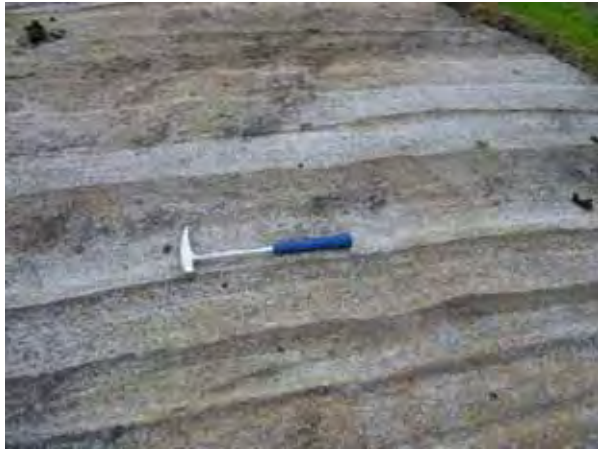


Photo 8: Bjerkreim-Sokndal Layered Series.

The Magma geopark project has been up and running since the autumn of 2005, and there are already positive effects of the work. An important issue is the increasing local awareness of the geology and the natural surroundings, which favors geoconservation. Media are interested for the subject while schools at a variety of levels have a new interest for the scientific subjects, particularly geology. A local brewery has created Magma Brown Ale, and the event company "Experience Dalane" reports an increasing interest for trips and information about the geological heritage of the area.

All above mentioned point out that Magma Geopark project will play a positive role on geoconservation, while positive economic impact relevant to new jobs (guides and hosts etc), yearly overnight stays, increasing of hotels, shops, galleries, restaurants etc., will also be achieved. The whole planning will be outlined in the Magma geopark Master Plan.

I wish success to the project and I think I have pendings with Magma geopark to visit again and drink another glass of Magma Brown Ale produced by the local brewery Dalane Bryggerhus especially for the geopark, like we did the other day all participants in the excursion (photo 30). I hope we meet again.

Reference list

- Excursion Guidebook
- Full geological description of the Magma Geopark area manual.
- Geopark localities and a bicycle geo-trail tour pamphlets
- The website of MGP:
<http://www.magmageopark.com>



- Internet pages and personal notes

Photo 9: Tellnes active mine. The shape of the open pit follows that of the orebody. The walls consist of anorthosite belonging to the Ana Sira massif. The orebody is cut by two major basaltic dykes. On 16.8.08 the famous singer Katie Melua gave a concert there. The mineral ilmenite (FeTiO_3) is an important raw material for the production of titanium dioxide (TiO_2). While ilmenite is black, titanium dioxide is white. It is mainly used as pigment in paint, plastic and paper, but also as an ingredient in cosmetic products including suntan lotion and make up, as well as in medicine (where it is used in many pills) and in some food. Only a small proportion of titanium production (~5%) is converted to titanium metal.



Photo 10: The entrance to the lowest mine (Platform) is at 110 m, at the same level as the lake and the road and the entrance to Under mine is at 138 m, almost directly above Platform mine. The entrance to Over mine is at 152 m. The most instructive is the top mine at ~228 m.



A natural shelter to protect from raining Antony, Amalie and Richard at Hellersheia top (Magma geopark)

From the President:

(On the ProGEO General assembly in October W.A.P. Wimbledon was elected new president)

Dear friends and colleagues,

It is a pleasure to write my first message to you as the new president of our splendid association. Firstly, it presents me with an opportunity to thank our colleagues in ProGEO Croatia who organised a splendid meeting and field excursions. It is my pleasure to thank particularly Ljerka and Tihomir Marjanac, who have worked tirelessly for the association.

This is an update for those of you who could not be present in Croatia, on Rab Island. Some key decisions were made at the council meeting, and it is important to relate those, in particular, to you as soon as possible.

Firstly, there is a newly elected committee, as follows:

- Gunnel Ransed (Sweden)
- Irimi Theodossiou-Drandaki (Greece) (second secretary)
- Gerardo Brancucci (Italy)
- Jose Brilha (Portugal)

- Lars Erikstad (Norway) (executive secretary)
- Sven Lundqvist (Sweden) (treasurer)
- Dusan Mijovic (Serbia)
- Radoslav Nakov (Bulgaria)
- Rein Raudsep (Estonia)
- Jan Urban (Poland).

I ask you to give maximum support to our new team. I wish Lars Erikstad much success in his new role.

The committee proposed and the council confirmed the first Honorary Members of ProGEO. It is a great pleasure to record this fact, as the two members were our past presidents Dr Carl Erik Johansson (Sweden) and Prof. Todor Todorov (Bulgaria). The proposal and the decision reflected our respect for these two gentlemen and the contribution they have made to our association.

At Rab, the council decided that the next international symposium, the 6th International Symposium on the Geological Heritage, will take place in the Ruhr, Germany in late May-early June 2010. This follows on months of contacts with German colleagues, and a formal written invitation from the Geoheritage Section of the German Geological Society. That

invitation was accepted with thanks by the ProGEO Council. As a follow-up in coming months, I am delegated by the executive committee and council to visit Germany and continue, as soon as possible, a dialogue with German colleagues over the detailed arrangements for the meeting. The General Assembly of members agreed to have its next meeting in the context of the Ruhr meeting,

Thirdly, the start of publication of our new Geoheritage journal will be in 2009. This partnership with the publisher Springer Verlag offers the hope of great progress in our work of conserving European (and global) geo(morpho)logical heritage. Just today, I received an e-mail from the new President of the International Union of Geological Sciences (IUGS) in which he says "I send you my congratulations for the contract signed between ProGEO and Springer Verlag agreeing to launch Geoheritage. The launching of this journal is a very important event, especially considering the number and relevance of participating partners."

It is important to let you know that Prof. Jose Brilha will be the lead editor of our journal. I ask all who have ideas for papers in the journal, or any ideas relating to the journal, to discuss this with him. It is key also to spread the word about the journal (there is link on the ProGEO website), and I ask all to promote the idea of ProGEO membership and an automatic subscription to the journal (see below). ProGEO members can get the journal at an incredibly cheap and wonderful rate, in these days of very expensive journals.

We have a great opportunity in front of ProGEO where Geoheritage is concerned, in partnership with the consortium of organisations and individuals that we have developed.

The ProGEO Council meeting decided at Rab to take account of this new development, and that the membership fees for ProGEO will change.

Therefore, in future, there will be three possibilities, and the yearly subscription rates will be as follows:

- 1) **ProGEO Individual Membership, without the journal (unchanged) 25 Euros**
- 2) **ProGEO Individual Membership, including the journal subscription 50 Euros**
- 3) **ProGEO Institutional Membership, including the journal subscription 185 Euros**

Thus, those who pay a subscription to ProGEO's treasurer under categories 2) and 3) above will each year automatically receive, by post, four parts of the journal Geoheritage. The journal provides us with an opportunity to make ProGEO grow. I hope you will use this opportunity in your country.

Bill Wimbledon
ProGEO President

Deadline for the next issue of ProGEO NEWS: 10.12. 2008

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