



No.4

<http://www.sgu.se/hotell/progeo/>

2001



*Photo 1. View to Bonne Bay from the window of Tony Berger's house, close to Discovery Centre of Gros Morne National Park. A peaceful morning of 11<sup>th</sup> September, 2001.*



## Canada and US

### **Introduction of ProGEO for geoscientists of national parks of Canada and United States**

The International Workshop **Geoinicators for Ecosystem Monitoring in Parks and Protected Areas**, organised by the Geoinicators Initiative (co-directors J.Satkunas and T.Berger) of the International Union of Geological Sciences, was held at the Discovery Centre, Gros Morne National Park,

Western Newfoundland, September 10-14, 2001.

Some 25 scientists from the US National Park Service, Parks Canada System, Geological Society of America, Geological Surveys of Canada, US, Newfoundland and other organisations, interested in monitoring of rapid geological change (<100 years) took part in this workshop.

The purpose of the workshop was to discuss ways in which geoinicators of geological change can be applied in a wide range of natural settings, and to provide guidelines for the establishment of new monitoring efforts.



*Photo 2. Green Point - the global stratotype for the Cambro-Ordovician boundary,*

The importance of geological heritage in the US and Canada Parks systems and the lack of geological awareness was exemplified by many presentations and discussions during the workshop.

Two days field trips, led by Dr Tony Berger, were organised in the Gross Morne National park, one of Canada's most spectacular national parks, which has been established actually due to its geological values. The park now is included in UNESCO World Heritage List.

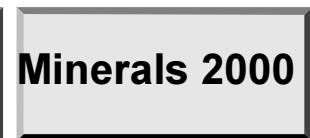
During the field excursions we got introduced with the mantle section of the Bay of Islands Ophiolite Complex in the Tablelands area, dynamic geological processes, massive rock sag above Bonne Bay, intertidal platform and bedrock exposures at Green Point, now the site for the global stratotype for the Cambro-Ordovician boundary, coastal wetlands to the mouth of Western Brook Pond, the famous Cow Head conglomerate and other geological features.

The workshop gave an excellent opportunity to introduce and promote ProGEO for the society of geoscientists of US and Canada's national parks and other organisations. It is important that ProGEO activities are becoming known wider and related closer with activities of national parks systems in other parts of the world and IUGS commissions like Geological Sciences for Environmental Planning (COGEOENVIRONMENT).

A full Report (elaborated by David Liverman, New-

foundland Geological Survey, co-chair of the workshop), and more information about the geoinicators is located on the website: <http://www.lgt.lt/geoin/>

*Jonas Satkunas*

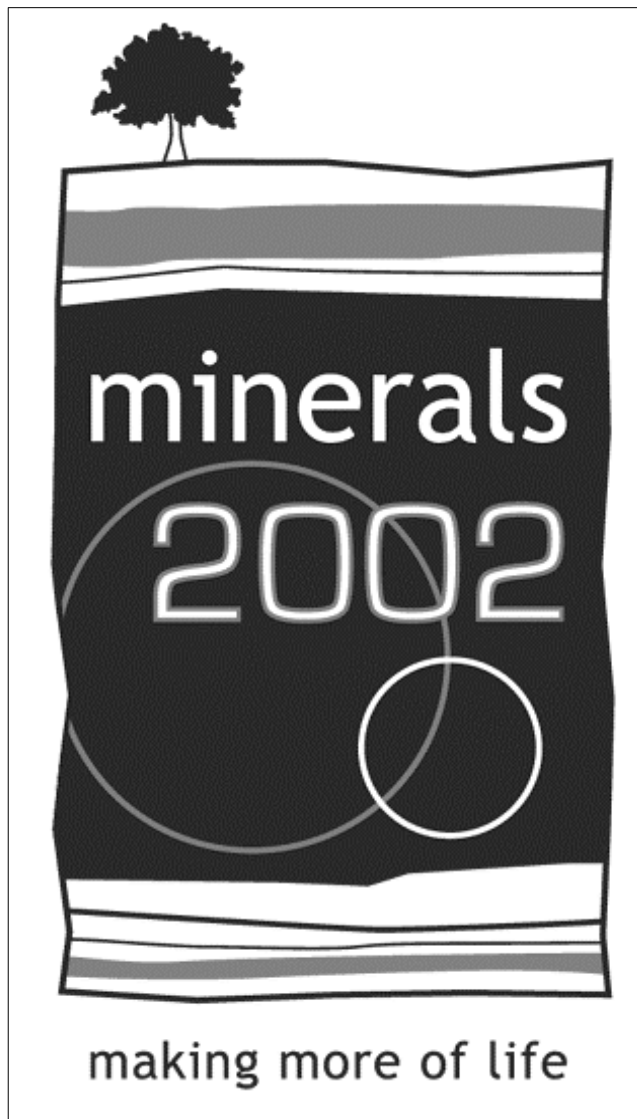


### **Explaining the role and benefits of the European minerals industry**

Readers of ProGEO will know very well the vital contribution that the mineral industry makes not only to the world economy but also to the understanding of the world's geological environment.

Since the second half of the 19th century, which saw the creation of all of the world's great national geological surveys, the search for minerals has fuelled and funded the discovery and recording of the earth's geological character. Just as human character is more than skin deep, so local character is influenced significantly by its geology and by the minerals that lie beneath its surface.

The fact is that if something cannot be grown then it probably has to be dug from the ground – unless a predecessor has been kind enough to leave behind a stockpile of virgin or previously used materials that can be reused or recycled. Minerals are the essential ingredients of civilisation. Everyone uses them –



and everyone benefits. They literally help us to make more of life.

And yet people fail to make the connection between these everyday essentials and the mines and quarries where they are produced.

That is why members of the European minerals industry are coming together for Minerals 2002; to invite people to visit working mines and quarries so that they can see, hear, feel and smell what the industry does and learn why it does it.

Rightly, everything we do in our industry requires the consent of society. But there is little chance of maintaining that consent if society doesn't understand what we do and if there is not a consensus

that supports the continuation of an indigenous minerals industry.

Sustainability is at the heart of our message.

The industry has a great story to tell about its economic contribution and environmental achievements. Conservation of resources and recycling are at the top of the agenda. We have high operating standards aimed at reducing our impact on the environment during production and we continue to improve the quality and value of our site restoration schemes, providing habitat for endangered species.

But the industry's contribution to the discovery and conservation of the geological heritage has also been significant. Through carefully planned and managed schemes, it provides the opportunity for scientists, students and enthusiasts to have access to geological information and to geological sites that would otherwise be impossible.

Most importantly, we must also explain how everybody's environment and way of life could not be sustained without the responsible production and prudent use of minerals.

Whether you work in industry, government or academia, or if you are just somebody who is enthusiastic about minerals sites and the geological heritage they have helped to preserve, there will be some way in which you can be involved in Minerals 2002. Organise a site visit, help a mineral operator who is running a public open day by volunteering to explain the geology to visitors, write a paper, give a community talk or attend a conference.

Find out more about the minerals 2002 programme by registering at [minerals2002.com](http://minerals2002.com).

You will receive regular updates by email about the programme of events.

You can also register your intention to organize an open day, give a talk to a community group or set up a link with your local school. You will then be given access to valuable support advice and informative materials that will help you plan your event.

*John Mortimer*



## Activities in Ukraina

The European Association for the Conservation of the Geological Heritage (ProGEO) works towards protection of geological heritage in Europe. by This includes integrated investigations of the surface of the Earth as our environment (i.e. stone, fossil and live Nature). Now the most important task is to compile an European Geosite inventory.

A methodology of inventory of such geological monuments is described in the Geosite project. The Ukraine are represented in ProGEO and included in its Central European working group. We work with the Geosite project and have produced a list of many important objects of Geological Heritage significant in Ukraine.

With help from the sponsor's (the concern Nadra and the Union of the Geologists of Ukraine) Andrei Ivchenko has prepared and has issued desktop a calendar showing geologic monuments of Ukraine.

### List of publications:

*W.A.P.Wimbledon, N.P.Gerasimenko, A.A.Ischenko*  
*The project Geosites - purpose, methodology, path of an intrusion in Ukraine*

*V.P.Gritsenko, N.P.Gerasimenko, A.A.Ischenko,*  
*ProGEO – European Association for the Conservation of the Geological Heritage. Will be published in the next issue of "Geological Journal" (of Ukraine) N4, 2001.*

*V.P.Gritsenko. Problems of protection of geologic environment and geological monuments of Dniester river basin. In: V International Conference "New Ideas in Earth Sciences" Vol.4, p.17 (in Russian).*





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*V. Shevchenko, M. Kourilo. Geologic monuments as tourist objects: Urgent problems of geology of Ukraine (Materials of a scientific conference of professors of geologic faculty Taras Schevchenko Kyiv National University, May 23-24, 2001 (in Ukraine)).*

*V.V. Stetsyuk. Kyiv as ecological system: a nature - human - technic-environment (will be published soon in Ukraine).*

On the Website of the Institute of fundamental studies of the Ukrainian scientific association, [www.nip.net.ua/ifd](http://www.nip.net.ua/ifd)

the geologic monuments of Ukraine, are demonstrated. In a near future a freshened page with updated lists of monuments will be presented, its address will be told complementary. Among listed objects of outstanding natural quality of Ukraine are: Kaniv state reserve, Polissia state reserve, Slovechne-Ovruch mountains, Karadag state reserve, "National fleets "Sviaty (Sacred) mountains and Podolsky Tovtry" as nominates for actuation in the Agenda of a World natural heritage.

The result has been presented is a photoalbum "Ukraine: a natural heritage". The experts of UNESCO were also involved as expertise to advise on the specified objects (March – April, 2001).

*Volodymyr Gritsenko,  
Vladislav Shumliansky &  
Volodymir Stetsyuk*



### Geological Heritage in Bashkortostan

In Prague 2000, ProGEO members became acquainted with geological sites of the Republic of Bashkortostan in the South Urals. Dr. Emir Gareev, a ProGEO member, suggested to include about 180 interesting sites into the geological heritage inventory of Bashkortostan. At present these sites are being studied and described in detail.

A book is planned in the nearest future with the description of all geological sites in the republic, and a photochrome album is to be published next year. The first List of Geosites of the republic has already been compiled and submitted for approval to the Bashkortostan Administration. Besides, some popular articles on the problem meant for a broad read-

ing audience will make it possible to improve the work on geoconservation.

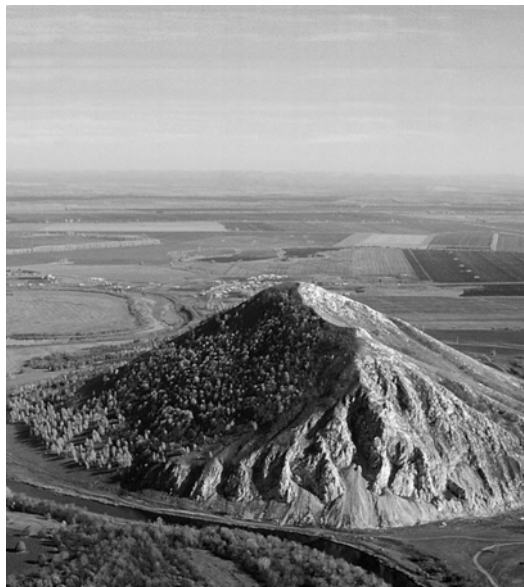
In 2001 the Ufa Branch of the Russian Academy of Sciences celebrated its 50th anniversary. To mark the event Dr. Gareev had initiated the issue of a souvenir table calendar for 2001 and 2002 illustrated with splendid colour photos of the most significant geosites in Bashkortostan.

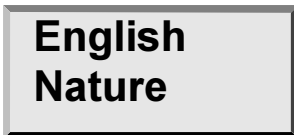
On its cover the calendar presents Yuraktau Mountain, one of the Lower Permian residual paleoreefs near the town of Sterlitamak. The mountain, with its richest marine fossils, is a real museum in the open air. There are no similar paleoreefs anywhere in the world.

The photos show: Asylykul, the greatest lake of the Ural Region; Yamantau Mountain, the highest point of 1648 meters in the South Urals, composed of Middle Riphean/Mesoproterozoic quartzitic sandstones; Narali Ridge made of rich ultrabasite complexes; Kapova Cave with Paleolithic rock painting; waterfalls, the karst precipice-type Kutuk Sumgan Cave about 10 km long and 130 m deep; the karst (Vaucluse) spring of Krasny Klyuch, one of the greatest in the world; and others.

Among the illustrations are five geological sites included in the World Heritage List on the GEOSITE Program.

*Dr. Emir Z. Gareev*





<http://www.english-nature.org.uk>

English Nature's website has recently been upgraded and revised. Please take a look. As well as lots of general information about English Nature and what we do it also has a newly added section on geological conservation detailing some of our current work.

### **New research in English Nature...**

English Nature is currently undertaking research in a number of areas including a major review of geological conservation techniques, an examination of the feasibility of Local Geodiversity Action Plans (LGAPs) - a possible equivalent to Biodiversity Action Plans (BAP) - and a closer examination of the links between geological conservation and biodiversity.

### **Reviewing geological site conservation, management and usage**

In 1990 the Nature Conservancy Council published *Earth science conservation in Great Britain - a strategy* with the accompanying appendices *A handbook of earth science conservation techniques*.

With ten years experience of the practical application of these techniques, it was felt that the time was right for reassessment. Taking the handbook as a starting point English Nature is funding a review project looking at three particular areas: firstly, safeguarding sites against damaging activities, secondly, managing sites to maintain and enhance their geological interest and thirdly, how to promote sites to support safeguard and management. Aimed at all geological conservation practitioners, the guidance will be re-published and illustrated with a range of best practice examples.

For more details please contact Colin Prosser at English Nature Tel: 01733 455213, e-mail: [colin.prosser@english-nature.org.uk](mailto:colin.prosser@english-nature.org.uk)

### **Geological conservation - what are the benefits for biodiversity?**

Here we are looking at standard geological manage-

ment techniques, such as the maintenance of natural coastal erosion or clearance of scrub and scree from rock faces and considering how these techniques can be beneficial to biodiversity, in particular, Biodiversity Action Plan species and habitats. It will also look at how geological conservation techniques can be adapted to increase biodiversity.

There are some typical associations: bare ground supports a wide variety of invertebrates and reptiles, rocky crags provide important bird roosts, while limestone floras and metallophyte plants are intimately linked to geology.

The research aims to illustrate how such links can be enhanced, will be illustrated with a range of examples drawn from a wide range of practitioners both geological and biological.

The aim is help both geologists and biologists more fully understand how management can be mutually beneficial and where opportunities can be sought to improve both 'bio' and 'geo' diversity. It is also hoped to further dispel the myth that the management of geological sites does not benefit biological sites.

For more details please contact Jonathan Larwood at English Nature Tel: 01733 455115, e-mail: [jonathan.larwood@english-nature.org.uk](mailto:jonathan.larwood@english-nature.org.uk)

### **The feasibility of Local Geodiversity Action Plans (LGAPs)**

Biodiversity Action Plans (BAPs) have been established for some years as a framework for the integrated delivery of habitat and species conservation. Importantly, BAPs provide clear objectives and targets for conservation organisations (both national and local) to work together towards the conservation of specific species and habitats. No such framework exists for geological conservation.

This third project will therefore firstly, investigate a local delivery mechanism for the integration of geological conservation - essentially a geological equivalent to a Biodiversity Action Plan - the (LGAP), secondly, consider what sorts of objectives, targets and indicators LGAPs would have in a local and national context and thirdly, consider what overall form an LGAP could take and who should be involved and responsible for their delivery.

This project is about seeking views and deliver opin-





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ions about how LGAPs could work and providing initial generic guidance to assist in establishing LGAPs. Such guidance we hope will be relevant not only in England but elsewhere in Europe as the principles should be widely applicable.

If you want to have your views included as part of this research then please log on to [www.lgap.org](http://www.lgap.org) where you will find some more background to the project and an on line questionnaire for you to fill in.

For more details please contact Jonathan Larwood at English Nature Tel: 01733 455115, e-mail: [jonathan.larwood@english-nature.org.uk](mailto:jonathan.larwood@english-nature.org.uk)

*Jonathan Larwood*



## New publication Ukraina

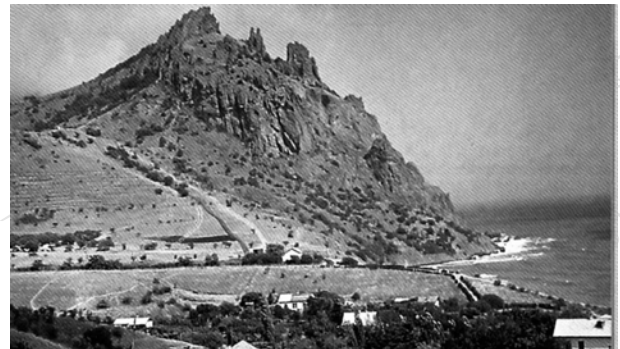
The "Atlas of maps Geology and economic minerals of Ukraine" was presented in Kyiv in October. It is issued in Ukrainian and English in the scale of 1:5 000 000.

The atlas consists of seven sections, including: maps with general data, geophysical maps, maps of structural regions, geological slice maps, lithological-facies maps, ecological and hydrogeological maps and mineralogical maps.

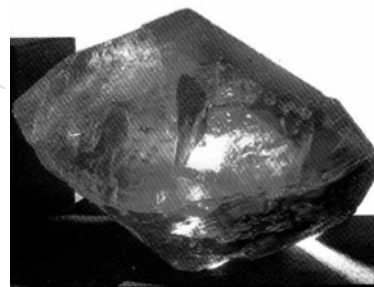
The publication is tracked by photographs and sec-

tions which demonstrates geologic pattern, minerals, including unique finds. Is figured jumbo Topaz crystal.

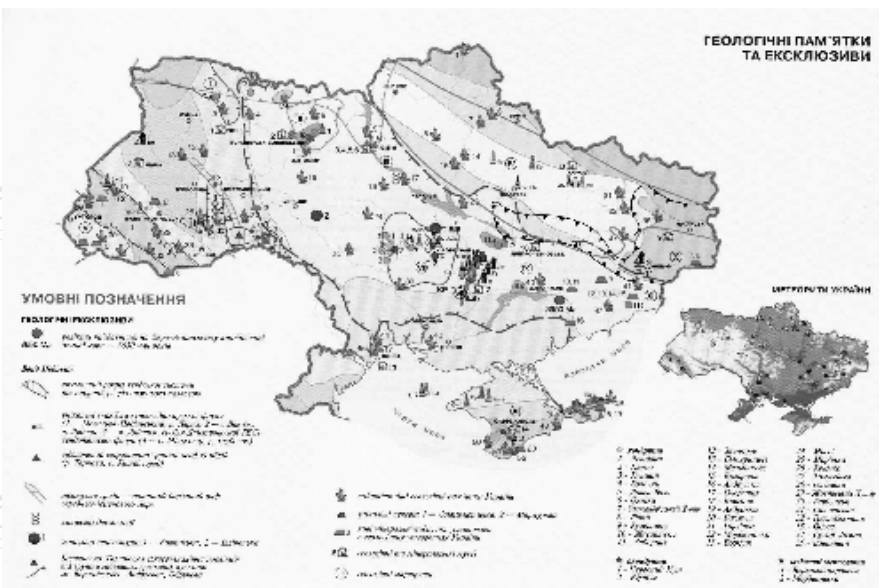
*Volodymyr Gritsenko*



*Geosite Karadag - Section of Jurassic volcano in Crimea on a southern coast of the Black sea.*



*The unique red color Topaz crystal found in mine on Volyn', had a weight about 40 kg. In the head of the crystal were visible fine Morion crystals (Black Quartz). The crystal of water alone had jeweler properties. It was stolen from the Kyiv Geological Museum.*



*Map of Geological heritage and exclusives. On this map are shown Unique Geosites: Relict of most ancient earth crust on the Eurasian continent; Vendian section of Podillia and place of finds Vendian soft body fossil and flora; Stratotype of boundary Vendian and Cambrian systems; Tovtry - a ridge of fossil reef (Middle Eocene sea; Kaniv geological dislocations; Impact structures; Places of meteorites find on Ukraine etc.*

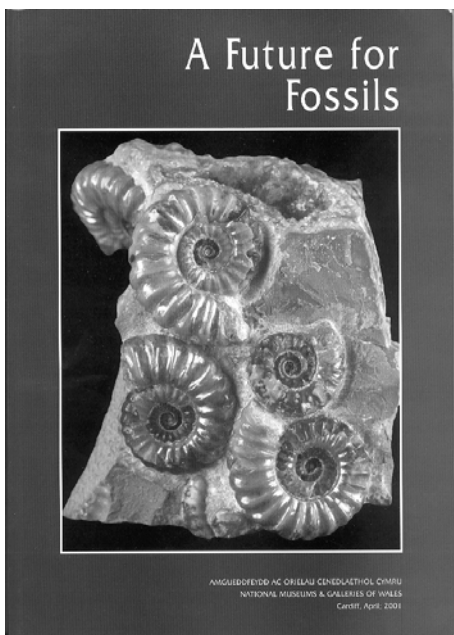


## A Future for Fossils

Edited by M.G. Bassett, A.H. King, J.G. Larwood, N. A. Parkinson and V.K. Deisler. NMW Geological Series No 19, 156pp., 76 Figs., 2001. ISBN 0 7200 0479 9  
(Price: £14.50 plus postage and packaging)

In 1998 English Nature organised a conference (hosted by the National Museum of Wales) to look at advances in the policy and practice of palaeontological site conservation. The conference volume was published earlier this year. It brings together 25 papers mainly from the UK (but also from Swedish, German and Irish contributors) that discuss attitudes and perceptions of fossil collecting and conservation, current policies on fossil collecting and, most importantly, examples of putting policy into practice. The management of tetrapod trackways, the restoration of *in situ* cave bone deposits, the coordinated collecting of insects from Carboniferous coal tips and problems of fossil site damage on Carboniferous reefs are just some of the examples covered. Also included is discussion of the innovative collecting code and fossil recording scheme of the West Dorset coast, discussion of the impact of fossil auctions as well as the use of alternatives such as fossil replicas.

A future for fossils represents an up-to-date summary of UK experience relevant to all those in-



The cover illustrates imidescent ammonites collected by David Sole

involved in fossil site conservation.

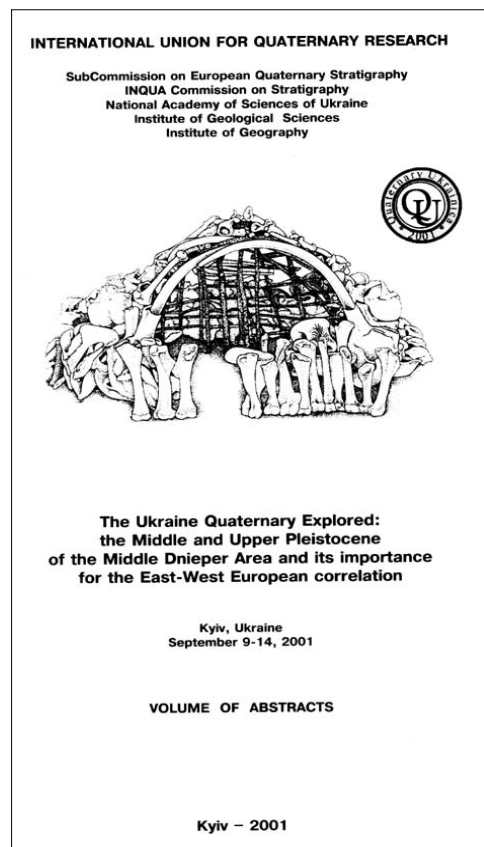
Copies are available from: Department of Geology, National Museum of Wales, Cathays Park, Cardiff CF10 3NP. Tel: +44 29 20573282, Fax: +44 29 20667332



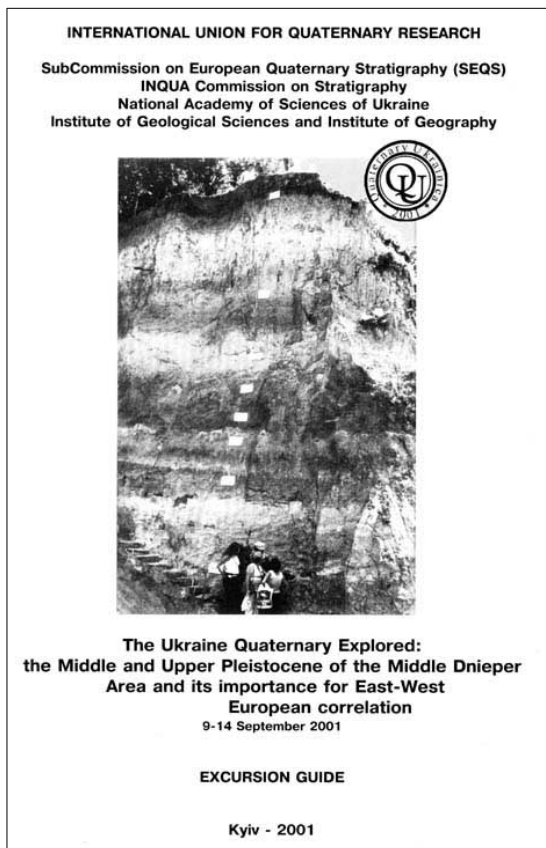
## Ukrainian meeting, SEQS

"The Ukraine Quaternary Explored: the Middle and Upper Pleistocene of the Middle Dnieper Area and its importance for East-West European correlation" was arranged in September. The meeting included meeting sessions as well as a geological excursion. The Session were held under aegis of International Union for Quaternary Research, SubCommission on European Quaternary Stratigraphy (SEQS) INQUA Commission on Stratigraphy, National Academy of Sciences of Ukraine, Institute of Geological Sciences and Institute of Geography.

Two members of the Ukrainian working group of ProGEO Zhanna Matviishina and Natalia Gera-







simenko took part in the operation of organizing committee and prepared Volume of abstracts (88 ones from 142 scientist) and Excursion Guide includes description of 8 geosites. 52 researchers from different countries of Europe (Belarus, Belgium, Czech, Denmark, Estonia, France, Germany, Hungary, Italy, The Netherlands, Latvia, Lithuania, Poland, Republic of Moldova, Romania, Russia, United Kingdom, Yugoslavia, Ukraine, America (USA, Argentina, Brazil)) attended the meeting. Among the participants was 24 scientist from Ukraine.

In the sessions the following fields of quaternary geology was reviewed: loess stratigraphy, its correlation, paleopedology, paleoclimatology, Paleolithic archaeology, minerals, geological events, neotectonics, landforms and geomorphological processes, dating methods etc.

The excursion was held on the Key sections Middle and Upper Pleistocene of the Middle Dnieper Area.

Parts of these key sections will be proposed as Geosites of European importance:

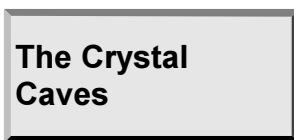
- Mezhyrich and Dobranichivka Upper Paleolithic geosites,

- Kaniv glacial dislocations geosite,
- Veazivok one of the most complete Pleistocene sequences, showed on the cover sheet of Excursion guide.

We consider this excursion in an advising process concerning relevant objects by representatives of SEQS INQUA Commission on Stratigraphy.

64 members including Thijs van Kolfschoten President SEQS and Peter Gozhik Head of organizing committee took part in the excursion. The introduced key sections received a high rating of the specialists.

*Zhanna Matviishina,  
Volodymyr Gritsenko,  
Oleksandr Taranyuk.*



**Zofia Alexandrowicz (ed.), 2000. Crystal Caves in the Wieliczka Salt Mine. Studia Naturae 46. Pol. Ac. Sci., Institute of Nature Conservation.**

The monumental Salt Mine in Wieliczka has been protected as an object of the UNESCO World Cultural and Natural Heritage since 1978 and also as the National Monument of History (1994). The mine is situated at the Carpathians thrust front in the zone of saliferous formation occurrence which belongs to the Middle Miocene (Badenian). The Crystal Caves Nature Reserve situated in the eastern part of the mine is promoted to the List of Sites of the Geological Heritage of the World.

In the monograph the interpretation of data obtained from the archives concerning the history of discovery and protection of the zone of two caves (706 m<sup>3</sup> and 1,000 m<sup>3</sup> in volume) and the results of studies of the state of caves' environment, taking into consideration the geological structure, hydrogeological conditions and technical-mining conditions of preservation.

Destruction of the primary crystalline cover of the caves was estimated on the basis of traces of excavation and the specimens which are in the Polish museums and collections abroad. Museum collections proved the existence of fissures from which



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halite crystals were taken before the caves' discovery in the years 1898-1899. A newly discovered void with walls covered with crystals testifies to the possibility of occurrence of similar forms within the geological structure, i.e. the so-called Crystal Caves' Dome.

The results of U-Th analysis of the halite crystals and of isotopic composition of the solutions sampled from the inclusions inside the crystals pointed out the secondary origin of crystals in the cavern filled with methane. The growth of relatively bigger crystals was at the cost of smaller ones during crystallization (Oswald's Law).

Monitoring of thermal-humidity features of rock medium and of the air performed in 1992-1997 show strict correlation of these parameters and their low variability in the course of a year in the zone of the caves. Human presence sharply disturbs the air humidity inside the caves. Halite crystals corrode when relative humidity of the air exceeds 75%.

The choice of the optimal ventilation air circulation in the caves' zone and application of humidity adsorbate was experimentally tested. Monitoring data served to define and accomplish active protection of the caves.



## World Heritage candidates in Ukraine

*Abstract. The first attempt to present one of the best in the East Europe Vendian, Cambrian, (Ordovician), Silurian, Devonian, Upper Cretacion, Tortonian and Sarmatian sequences, which outcropped by Dniester river valley West of Ukraine.*

This article deals with some problems of Geological Heritage protection of the Dniester river valley. The middle part of the valley was included to the register of geological monuments [1] as one of several geological objects of different kinds (for instance, stratigraphical, palaeontological, picturesque and others).

When Novodniestrivsk Hydro Power Station Dam were build using stones, sand and limes and the level of its reservoir raises about sixty meters, some objects where lost. But after eighteen years some has again outcropped by erosion.

The Ukrainian State Committee for the Nature Pro-



*The wall of the quarry near Novodniestrovsk, where the best Geosite with remains of Vendian softbody fossils were found. The section of lomozov member outcrop the best complex of such fossil in the Ukraine. We think the Geosite may be of international significance.*

Photo: Volodymyr Gritsenko



*Positiv hyporelief of Vendella sp. Gureev  
Photo: Volodymyr Gritsenko*



*Negativ epirelief. The same  
Photo: Volodymyr Gritsenko*

tection (nowadays it is the Ministry of Protection of Nature) has been concerned with many tasks linked to Geological Heritage protection. As a first step it has established special Sanitary protection zones for the reservoir banks. Next steps may be to extend the Podilian Tovtry and Medobory National Park and the Reserves in the Ternopil' region.

### Geosite of International significance

near Kitaigorod village, where the boundary deposits of the Kanilivka and Baltic series (Cambrian and Vendian contact) together with Ordovician and Lower Silurian, Upper Cretaceous and Neogene strata rest above local levels of erosion because of local uplift, dissected by the valleys of Ternava river and its tributary – the Okunets creek. After flooding the reservoir only three outcrops of the Kanilovka-Baltic boundary deposits have been conserved. This outcrops where Precambrian are in contact with Cambrian, is the best in Ukraine.

The left bank of the Ternava river, near the bridge, is the Key section of Upper Vendian with interbed-



The Cambrian with interbedding of dark-green and light-grey fine-grained quartzose sandstones and greenish-grey massive thinly bedded mudstones (4.4 m) with different ichnofossils.  
Photo: Volodymyr Gritsenko



In the Dniester river valley we have proposed many geosites. The Tsvicklevtsy village Geosite on left slope near the mouth of the Smor-trich river. The uppermost Yaruga cropped out before the building of the Novodniestrovsk power station. Now the water level rise up to the lower part of the Malinivtsy series: the Goloskov and the Shut-nivtsy subsuites of the Konovka suite and the Sokol subsuite of Tsvicklivtsy suite. It is a stratotype of this suites which are repre-

sented by dark-grey limestone coarse-flaggy and nodular, argella-ceous, with numerous remains of fossils: corals *Favosites pseudo-forbesi* Sok., stromatoporoids *Clatrodiclyon mohicanum* Nestor, trilobites *Calymene cf. Tentaculites* (Schloth.), brachiopods *Sepatrypa linguata* (Buch.), *Stegorhynchella diodontia* (Dalm.) and others. In this key section we can find two volcanic ash interbeds (bentonites M-1 and M-2).

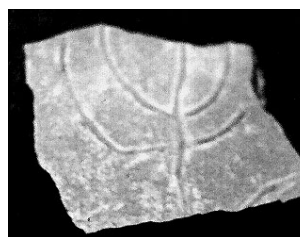
Foto: Volodymyr Gritsenko

ding of thinly bedded mudstones and fine-grained carbonat micaceous siltstones (4.5m); mudstones thinly platy, with interbeds of siltstones and sandstones, with gravel material – at the base (5m); mudstones thinly bedded, massive, compact interbedded with mudstones (5.3). In this part of section M.Gnilovskaya and Ye. Aseeva found numerous remains of *Tyrasotaenia podolica* Gnil.

At present, many of Ukrainian scientists and geologists propose to include many objects from this territory to the European list of Geological Heritage. The valley of Dniester river exposes the Vendian, Cambrian, Ordovician, Silurian, Lower Devonian key sections of East-European platform [2,3].

This key sections are well studied and described [4,5]. The valley from Yampil' village up to Ustechko village is a beautiful exposure almost without interruptions. Nowadays many stratotypes and geological sequences are covered by water in the Dniester river canyon, but still important localities are present. Moreover new exposures are created by wave action in the new "sea".

The main problem concerning Geological Heritage, is now to support the Geological projects by the National Ministry of Nature Protectio, and absent collaboration among Zoologists, Botany's, Geographers and Geologists. For example, when Geographers described the reserves and National Parks of Ukraine, they mentioned only four interesting areas of the Podolian Tovtry National Park [6]. There are nature monuments of State importance Kytaigorod outcrop (slope in the Valley of Ternava River – the



The Sample from the Khmelnitsky suite of the Baltiysky series of the Ukraine. On the surface of green sandstone, positiv hyporelief - curved trek of of "Planolites" and almost concentric treks of "Cyrcolites". Both trek kinds may be fossils of the same worm. Khmelnitsky district, near Kitaygorod village. Photo: Volodymyr Gritsenko



Geosite where outcropped Lower Devonian Dniestrovian series rocks with remains bones of "fish"- "Old red sandstone" near Ustechko village, Dniester Valley, Ukraine.

Foto: Volodymyr Gritsenko

universally well known standard of the Silurian exposure), but it is the exposure of the Uppermost Vendian, the Lower Cambrian (and the candidate for World Stratotype of its boundary), the Upper Ordovician, the Upper Cretaceous, the Tortonian and the Sarmatian too.

### Conclusions

We agree with colleagues that most important criterion for Geosite selection is their representatives. There are very many important and representative Geosites in the Ukraine. And actually problem is to choose the best from all.

Volodymyr Gritsenko

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### New museum

Five years after a request request from the directors of the yet not created museum Galina Furmanchuk and with the support of the Mayor of Netishyn I. Hladuniak, the geologists from Kyiv National Taras



There where hundreds of visitors museum per day after opening of the museum.

Both photos is the property of the museum and shown by permission of the director Galina Furmanchuck.



Shevchenko University V.Gritsenko and of a Kyiv National museum of Natural History an Academy of Sciences of Ukraine Ed. Yaroschuk, have taken part in foundation of local museum. Two displays in the Podollia and Pobuzhie were held.

*Volodymyr Gritsenko*



*Geological processes, Mineralogy, Geological history and Protection of the environment was focused in the display attracting school children as well as village citizens.*

#### Note

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**Please send contributions as unformatted text and pictures in jpeg or tiff formats!**



#### New stamps

The Nature Conservation Institute of Serbia and Jugomarka Agency for postal Securities of Belgrade decided to commemorate the European World Water Day (4th May) by issuing a new series of postage stamps. The selected representative hydrological features are also the protected geo-heritage sites. For success of the endeavor check web site ProGEO.

Dusan Mijovic



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