Voor de geoloog is "natuur"behoud immers meer dan fauna en flora, of monumenten als kerken en kastelen. Voor ons gaat het om "de Aarde" zelf als begin en einde van alle dingen. Zonder haar geen bodem, geen lucht of geen water, en dus nog minder leven. Als we dus het landschap waarin we wonen, werken en leven willen begrijpen, moeten we weten hoe het tot stand is gekomen. Zonder dat is er van enig evenwicht met of inzicht in de natuur geen sprake.
We moeten dus kunnen onderzoeken hoe de Aarde ontstaan is, hoe ze veranderd is in de loop der geologische tijden onder invloed van inwendige en uitwendige processen. De getuigenissen van haar ontstaan, van haar veranderingen, van haar eigenschappen, moeten met liefde gekoesterd en met respect behandeld worden want ze zijn eindig, niet onuitputtelijk en onvervangbaar. We moeten ze dus kunnen doorgeven aan de komende generaties in optimale staat opdat ze nog zouden kunnen getuigen tot lering en inzicht. Onze kleinkinderen moeten kunnen weten waar het drinkwater, het gas, de petroleum, de vlaamse kinderkopjes van vroeger, de bakstenen, de natuurlijke bouwstoffen, ... vandaan komen. Zij moeten weten welke processen de moeren, de duinen, de polders, de kreken, de Hoge Venen of de rivierterrassen hebben gevormd, en waarom die juist daar voorkomen en niet elders. Deze en zovele andere vragen kan je alleen beantwoorden als je de mogelijkheid hebt er te gaan naar kijken ! Wat dus betekent dat je een beleid moet voeren dat deze mogelijkheid voorziet. En dat beleid situeert zich op het vlak van de opvoeding en het onderwijs, de ruimtelijke ordening, het leefmilieu, de natuurlijke grondstoffen, de geologische wetenschap, de communicatie van de onderzoeksresultaten, de wetgeving en de administratie, .. Maar bovenal moet de politieke wil aanwezig zijn !

Although we only started to describe the problem of Earth science conservation in Belgium, we are nevertheless very proud being able to offer our audience such a high standing programme. All our speakers are specialists in their domain and they will witness of their problems and progress. We can take benefit from their experience and expertise. The BLUG also thanks all our native speakers, dealing with topics as education, legislation, administration, basic scientific principles, etc., both for the French and Flemish Communities. Their presence here is a token of their interest in our commitment. And last but not least we thank Prof. Dr. M. Galle, former Flemish Minister for the Environment, and now Member of the European Parliament for his kind cooperation. His offer to serve as a liaison officer between the BLUG and the European working group on Earth science conservation on the one hand and the European Community and the Council of Europe on the other hand, is highly appreciated.

Il m'est agréable de remercier au nom de l'UBLG et en mon propre nom les deux Sociétés Géologiques pour leur aimable coopération. Leurs présidents ou remplaçants présideront nos travaux comme témoignage de leur soutien à notre projet. J'aimerais aussi remercier la Fondation Roi Baudouin qui dès le début de nos contacts, n'a pas hésité à souscrire à notre projet initial. Le patronage de la Fondation se porte garant pour le sérieux scientifique de notre symposium et des actions qui pourraient éventuellement en découler. Je tiens aussi à remercier le Service Géologique de Belgique et l'Institut Royal des Sciences Naturelles de Belgique, pour leur support logistique. Et finalement, ce symposium n'aurait pas été possible sans l'aide financière considérable du Fonds National de la Recherche Scientifique. Il nous a permis de préparer le symposium dans les conditions les meilleures et en toute indépendance. L'Union Belgo-Luxembourgeoise des Géologues vous invite donc à prendre connaissance de l'état des choses en matière de conservation des sites géologiques à l'étranger et en Belgique, et de discuter avec nous sur son futur.

Bulletin de la Société belge de Géologie, T. 100 (3-4), 1991, pp. 249-251.
Bulletin van de Belgische Vereniging voor Geologie. Ed. 1993

THE EUROPEAN WORKING GROUP ON EARTH SCIENCE CONSERVATION

by

George P. BLACK[1]

ABSTRACT

By definition, Earth science conservation must be international but it originated, and has developed, on a national basis. However, there have been recent initiatives taken to rectify this failing and, if given the necessary support, these should provide a secure future for this part of our heritage.

1. INTRODUCTION

One of the later members of the Bonaparte family is said to have stated that "the name of Bonaparte is a manifesto in itself" - perhaps the same can be said of Earth science conservation with even more justice and, hopefully, with a greater prospect of achievement !

By definition, the Earth sciences must be international in character ; if further proof were needed this can be readily supplied from the nomenclature we employ. The use of terms such as Permian and Jurassic, Namurian and Volgian, teschenite and alnoite, kimberlite and trondjeimite - all derived from localities scattered across the globe - stresses the world-wide scope and the world-wide requirements of our science.

International cooperation is just as essential in Earth science conservation as in any of the other branches of the science - no single country is self-sufficient in the geological and geomorphological features which lie within its own boundaries. To take just one example, much effort and thought are expended on the selection of international type localities of one sort or another. For this system to be effective, such localities must be preserved for use by future workers. There is a clear need for all countries to adopt policies which will give effective protection to their most scientifically valuable features, not just for the benefit of their own Earth scientists, but for those of the world. It is to be regretted that, at present, we are far from achieving this very necessary goal.

On the other hand, in many European countries, Earth science conservation, in one form or another, not only exists, but has been practised for about one hundred years. Despite various difficulties - most often a failure of governments to understand the need to preserve landforms and rock exposures of little popular appeal - some progress has been made and hopefully, once its message is more generally understood, Earth science conservation will continue and prosper.

All human activities have some impact on nature and, towards the end of the Nineteenth Century, an increasing awareness of these impacts led to the rise of nature conservation movements in many countries. Although most of these movements were dominated by biologists, the first achievements in Earth science conservation date from this time.

2. STATE OF THE ART IN BRITAIN

In Britain, the earliest attempts at Earth science conservation date from the Nineteenth Century. In Sheffield, a group of Lepidodendron stumps, discovered during the construction of a lunatic asylum, were conserved before 1875. These stumps have since been lost but another group, the "Fossil Grove", in Glasgow has been conserved by the City's Parks Department ever since its discovery in 1887. The City of Edinburgh has conserved the "Agassiz Rock", a striated rock face where in 1840 the Swiss geologist, Agassiz, had recognised evidence for the former existence of glaciers in Scotland, over much the same period.

In Britain, Earth science conservation received no Government recognition until the early 1940's

[1]George Black Associates, 107 Andover Road, Newbury, Berkshire RG14 6JH, England.

when, as part of the planning for post-war reconstruction, committees were set up to consider practically every aspect of life that could be improved. The Nature Reserves Investigation Committee had geologists among its members and its reports decided the particular blend of science and management which was to dominate conservation in Britain until 1981.

The resultant National Parks and Access to the Countryside Act (now superseded by the Wildlife and Countryside Act of 1981) of 1949 achieved conservation through the use of planning controls administrated by the Nature Conservancy. This system worked reasonably well for geological sites, particularly the small, well-defined fossil locality, and geologists quickly became quite proficient at preventing the loss of sites through "development" and negotiating agreements, e.g. over site access, where the planning powers could not be used

A logical system for the assessment and selection of sites was devised and spread over the whole country - the inventory of sites regarded as of national importance totalling some 1,300. Cooperation was obtained from the geological societies and from geologists working for the Government, the universities, museums, schools and in industry, and a number of conferences were held to coordinate the role of those conserving the sites and those using them for teaching and research.

All this was done in isolation and strictly within national boundaries so that British Earth science conservationists were completely unaware of events beyond the Channel. The surprise appearance of three Dutch geologists at a national (i.e. British) conference held in London in 1973, however, ended our insularity at a stroke.

It only then became apparent that developments in the practice of nature conservation and, in particular, of Earth science conservation, had followed parallel paths in the Neherlands and in Britain. In both countries, the conservation movement dated from the closing years of the Nineteenth Century and the Dutch Society for the Promotion of Nature Reserves in the Netherlands has been established in 1905, anticipating its British namesake by seven years. Moreover, this first Dutch nature conservation society had from the start recognised the importance of Earth science conservation and had been able to influence the Dutch Government accordingly ; when the State established its first nature reserves in 1907, these included an inland dune area showing active aeolian processes.

3. EUROPEAN WORKING GROUP

At the time of the 1973 meeting, Earth science conservationists in both countries were engaged in the preparation of comprehensive national inventories and these will be described by later speakers.

National priorities kept those responsible for Earth science conservation in both the Netherlands and in Britain fully occupied over the succeeding years - after all, there were the national inventories to complete - and further progress in establishing European cooperation was not achieved until 1987 when wide inquiries by Dr G.P. Gonggrijp of the Netherlands revealed a widespread desire for the conservationists who had been working in their own countries in relative isolation. This led, in 1988, to the first international workshop at Leersum in the Netherlands, which was attended by twelve participants from Austria, Denmark, Finland, Great Britain, Ireland, Norway and the Netherlands. A second meeting was held in Bregenz (Austria) in 1989 and a third in Lom (Norway) in 1990 ; meanwhile the working party has been strengthened by the attendance of conservationists from Belgium, France and Switzerland.

The European Working Group on Earth science conservation was established at the 1988 Leersum meeting. In a restatement of aims, formulated after the Lom meeting on 10th June 1990, the purpose of the Group was stated to be improvement of the status of Earth-science and the protection of Earth science sites and landscapes in Europe by :

- the preparation of a coordinated international policy for Earth science conservation ;
- the holding of meetings to promote the exchange of ideas and the provision of information and advice on all matters relating to Earth science conservation ;
- the promotion of awareness of the role of Earth science conservation in the general public ;
- the documentation of European Earth science sites on a unified system ;
- the production of publications relating to Earth science conservation.

These are worthy aims and I commend them to your attention. They show that the first steps in securing a proper standard of Earth science conservation across Europe have been taken. There is still a long way to go and the help and support of all those present will be required if present hopes are to be realised. However, I am confident that these aims will be achieved when I recall that in Britain in 1951 there was only one Earth science conservationist and that in 1971 there were perhaps about twenty who could point to some recognisable and identifiable achievement. Today there are more than two hundred participants.

4. CONCLUSION

My own experience thus leads me to believe that, given suitable encouragement from Governments, academic institutions and professional organisations, there is no reason why Europe's heritage in the Earth sciences should not be conserved.