GEOLOGICA BALCANICA, 26. 1, Sofia, Mart. 1996, p. 13-14.

Progress in management for Conservation of Geotopes in Europe

Walter Krieg

9, Im Wingat Str., Bregenz, 6900 Austria

Since it is clearer and clearer, that conservation of earth-science sites is as necessary as conservation of biotopes, because they are also irretrievable documents of history and being of this planet, the shortage of appropriate laws and management of conservation becomes more sensible. Only few countries perform, although with an enviable intensity, the conservation of phenomena, which we began to call "geotopes". Already the first ProGEO excursions to this topic showed us marvellous examples, for instance in Great Britain and Scandinavia, the Netherlands, and in Hungary.

We felt that it was necessary to direct more emphasis on this kind of nature-conservation and we began to use the term "geotope" as a counterbalance to the much better known "biotope".

We, that means a group of earth-scientists, geologists and geomorphologists, who met for the first time in 1988 in the Netherlands. Citizens of 8 European countries had been there and decided to found the "European working group for the conservation of earth scientific sites". Later it was called shortly "ProGEO". That first meeting was followed in all years since by highly interesting further meetings with great excursions in Austria (1989), Norway (1990), France (1991), England (1992), Germany (1993), Hungary (1994) and Sweden/Finland (1995). The number of countries, that are represented in this working group, increased to 30.

The "European Association for the Conservation of our Geological Heritage" (the full name of ProGEO) encourages the constitution of national committees in the countries themselves (some are working already), because the geotope conservation has to work in the countries, with their laws and special situations, but with the help of the European association.

Therefore, ProGEO tried initially to develop guiding rules for a fruitful work. This concerns useful methods to select geotopes as well as the necessary management of sites. The methods should lead to a comparable systematics, although they have to stay manifold for some reasons. Starting points for definitions are probably:

- Type-localities for tectonic, stratigraphic, palaeontologic, mineralogic and geomorphologic problems,
- rarity and endangerness of phenomena,
- degree of practical possibility to preserve the site (easy accessible or not, striking or not) and chiefly durable or not.

The treatment of such rules will result in a geotope inventory first on the national scale, and later in Europe. The inventory will make a survey possible, but will also be a challenge and finally a task.

May only a site be called a geotope, which is protected by law? Of course not: To recognize a site as worthy to preserve, there is a challenge to protect it. We know that the legal status is insufficient, from all conservation articles works almost only the "natural monument", the "individual creation of nature with outstanding scientific importance". But protected monuments are very small, often nearly like dots. More extensive features of 100 m or more should become protected as a whole — and this is not easy at all.

We feel the construction of geotope-managements as extremely important. There has to exist also an administration with certain necessary tests:

- Information and education of the public by booklets, folders, etc. as well as signs and explanatory boards on the terrain,
- construction and repair of parts of important geotopes,

• cleaning of exposures, especially of walls, from gravels and sands, loess and volcanic tuff,
• supervision.

Often, especially in inactive quarries and pits, the area becomes "renaturated" mostly in aesthetic sense. Nice exposures disappear under grass or forests. Only a working management could impress the situation and held contacts with other interested parties.

These tasks may also be performed by museums of natural history, that may work as information centres or may create open-air geotope museums.

Summarizing, there is a considerable progress in development of ProGEO according to the necessity in geotope research and conservation. Nevertheless, the real work is still unsatisfactory, and such are still the connections with official international institutions. Thus, the commission of UNESCO on the "World Heritage of Geological Sites" that made a world-wide list of important sites, has up to now only pure contacts with us, and we have still no money from official international organizations. Therefore, we cannot place research orders, even nearly no own publication projects. We need much more individual and institutional members!

Nevertheless we are optimistic. We possess already a clear program, which was summarized by the "Declaration to the testimony and protection of the Earth, Digne-Les-Bains" in 1991:

1. For a long time the human beings thought to be unique. Now the day has come to see the earth as a particularity.

2. We live from the earth and the earth preserves us. Mankind depends of the earth, the earth is connecting the mankind.

3. The earth is 4,5 million years old. It is the cradle of life, yields always new and changes permanently. This process of development we owe the environment, in which we live.

4. Our past is most closely linked with the past of the earth. The origin of earth is our start also, the history of earth is ours, the future of the earth will be also ours.

5. The shape of the earth, the face, defines our environment. The environment changes all the time and distinguishes today and tomorrow. Only for a short time mankind is companion of history of the earth.

6. As a tree the history of its life bears in it, the earth preserves the traces of the past in the interior and on the surface, in the rocks and in the forms of landscapes. These are traces, which can be read and interpreted.

7. Humanity endeavoured to preserve his history and his cultural heritage. Now the time has come to keep the heritage of nature, our environment. Because earth-history is not less important as human history. Therefore we have to learn to preserve not only the earth, but also its history, which began so long before appearance. This is our true earth-scientific testimony.

8. Mankind and earth share a common destiny. We and our governments are only administrators of this heritage. We must learn to understand, that already smallest interventions into the nature may lead to changes, destruction and irretrievable loss. Whatever we do and plan, we have to be aware of the particular value and the responsibility to this heritage.