

GEOTOPE RESEARCH IN AUSTRIA: AN OVERVIEW

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Although the history of geological research in Austria dates back to the 18th century, systematic studies of the geological heritage started in 1995. The first attempts to protect geosites date from 1856 when the exotic granites of the "Leopold von Buch Denkmal" were purchased by the Society of Scientists and Doctores to protect it from quarrying activities. Within the first decades of the 20th century important geosites became protected by law. In Austria geotopes are protected by law in the nine federal states.

The aim of geotope research is a kind of "visitcard" for Austrian geology. This can only be reached by the cooperation of a nationwide network of all geologists.

This work is supported by a special project in charge of two ministeries, by the ministry of Environment, Yought and Family and by the Ministry of Science and Research. To the second one the Geological Survey of Austria belongs to.

The project has started with an evaluation of all geological monuments being protected by law. The evaluation has brought up a list of apx. 700 geological monuments. These are registered in a database which provides also topographic data (coordinates) and geological information (stratigraphy and tectonic units). Additionally literature and some recent photos are documented.

In the last three years this work made evident, that there are only a few many monuments which are not of pure scientific interest. Natural monuments are part of nature therefore there are many relationships to other scientific disciplines. Out of this there is not only a scientific approach, but also a public interest.

➤ The importance for biology

There are many monuments showing in an excellent way the interactions of geology and biology. From this point of view the terms "biogeotope" and "geobiotope" were poposed to show the close relationship between the biosphere and the geosphere. As a consequence of this arises a new chance to cooperate with biologists. This new challenge allows new ways for understanding the various connections between geology and biology.

➤ The importance for customs

Some of the natural monuments are protected because of some mythological or ethnological importance. So we find a "Devils Wall", some "Devil stones" and so an. These places have a long local tradition and from this point of view they are very important. So this rather traditional aspect, closley linked with customs, is one of the new chances for geotopes.

➤ The importance for architecture, sculptures and buildings

Some quarries turned out to be very important for the origin of famous sculptures and buildings. The most famous is the cathedral of St. Stephans in the center of Vienna. The quarries are used since the Romans have been in Austria. The Miocene Leitha limestone was widely used in the late 19th century and is even now very important for architecture.

These above mentioned relationships are new chances for the poularity and the protection of geotopes. As the evaluation of already protected geological monuments is now finished, the next step of the project will be to list up further important sites which are worth beeing protected. This second part of geotope evaluation should be finished in 2000.