

7.2. Legislative cave conservation in Austria: Experiences and results

Hubert TRIMMEL

Abstract

On June 28, 1928, the Austrian Parliament agreed a Federal Law concerning the protection of caves, one of the first laws in the world dedicated especially to the protection of geo-scientific phenomena. This established new dimensions of protection and preservation of Austrian caves. The most important of the criteria for declaration of a protected cave was its value for natural science. This meant that scientific studies and speleological research were vital in establishing the conservation measures. Between 1928 and 1938 and from 1945 to 1974, some 177 caves or cave areas in Austria were declared a "protected natural monument".

Since 1975, measures for the protection and preservation of caves have become regionalized. The regions ("Länder") follow their own policies in their legislative decisions but, in general, protection of caves, of the surroundings of the cave entrances and of karstic phenomena connected with caves is now a field of special legislation.

The economic development of alpine regions through tourism now makes the protection of major karst regions more important than the protection of single caves. The existing measures of cave protection form a sound basis for the active development of more extensive protected karst areas.

The Federal Law of 1928 concerning the protection of caves was supplemented by a series of decrees in the following year. One of these decrees concerned conservation-orientated rules for commercial caves and the education of cave guides; another, a scheme for continuous permanent documentation of protected caves. Scientific research as a basis for all conservation measures was undertaken before 1938 by an Institute of Speleology, and after 1945 by a Speleological Department in the Federal Bureau for the Protection of Monuments.

This was one of the first laws in the world dedicated especially and exclusively to the protection of geo-scientific phenomena. At this time the law established new dimensions of protection and preservation. The most important of the criteria for the declaration of a protected cave was its value for natural science. This meant that it was possible to declare a cave a "protected natural monument" not only because of its prehistoric or palaeontological importance, but also because of geological structures, important sediment layers or ice formations. In recognition of the relationship between the ecological development of cave chambers and conditions at the surface, the law also made it possible to protect the surroundings of the cave entrance and related karst-features at the surface. So, this law agreed 65 years ago, creates a very modern impression.

Between 1928 and 1938 and from 1945 up to 1974, in Austria, 177 caves and cave areas have been given the status "protected natural monument". In the first instance, all important show caves have been protected and the first steps have been taken to resolve the conflict between natural environment and tourism in caves. Since the Second World War, many newly discovered cave systems have been protected in collaboration with caves and caving societies. Most of the known cave systems have been explored since 1945, and it was very important to limit human influence in these systems before undertaking possible complex scientific documentation. Today, the total number of

registered caves in the central documentation system is nearly 11 000 - an important potential for future research. But this number is increasing relatively rapidly. In this situation it is more important that cavers have a proper understanding of the problems of protection than that a sound law exists.

Historically, experience with the Austrian "cave protection law" has been good. Success has been possible mainly for the following reasons:

The law has been administered by objective scientific institutions - in general well-accepted by the public and led (or regularly advised) by speleologists.

Permanent collaboration with the cave clubs by these institutions and federal authorities has guaranteed good information and documentation as well as educational measures for the cavers.

Caving is not a mass sport in Austria, and access and descent in caves, especially in the high-alpine regions, are often very difficult.

In practice, the situation regarding the protection of caves has changed for several reasons and in several ways.

First, measures for the preservation of caves by law have been regionalized. Now, the regions ("Länder") follow their own policies in their legislative decisions. In many regions, protection of caves and of karst phenomena connected with caves is now the field of special legislation; in other regions, cave protection is now part of the general legislation for the protection of nature. In many cases, problems arise because the law is administered by local or regional authorities without any knowledge of important geo-scientific factors and often more or less in response to local economic influences.

Second, the economic development of alpine regions, especially through tourism in both summer (mountaineering by funiculars) and winter (skiing) necessitates the protection of major karst regions including all the accessible caves. An important aspect of this need to protect regional karst landscapes is the protection of karst waters: nearly 50% of the Austrian population is supplied with drinking water from karst springs, and it seems likely that "karst water protection" will complement the planned creation of national parks in the karstic Limestone Alps.

Thus, existing measures for cave protection in Austria form a sound basis for the active development of more extensive protected karst areas.