



# FEDERATION SPELEOLOGIQUE EUROPEENNE

## EuroSpeleo Protection Label 2017 European Cave Protection Commission



### Project Renaturation Sagtümpel (Karstic Spring)

### Summary 2016 - 2017

Robert Seebacher / Verein für Höhlenkunde  
in Obersteier (VHO), ARGE Sagtümpel



MIT UNTERSTÜTZUNG VON BUND, LAND UND EUROPÄISCHER UNION



**Organizer (name):** Verein für Höhlenkunde in Obersteier (Speleological Society in Obersteier)

**Website address:** <http://www.hoehle.at/wordpress/forschung/projekt-tauplitzalm-tiefenbach/>

**Contact Person (name and e-mail address):** Robert Seebacher, [hoehle@tele2.at](mailto:hoehle@tele2.at)

**Project name:** Project Renaturation Sagtümpel (Karstic Spring)

**Dates:** From 1<sup>st</sup> May 2016 - To 22<sup>nd</sup> October 2017

**Location, region:** Tauplitz Greith, 8983 Bad Mitterndorf, AUSTRIA

## Project objectives:

The Verein für Höhlenkunde in Obersteier (Speleological Society in Obersteier) works on the speleological exploration and documentation of the Tauplitzalm / Tiefenbach area. In the frame this project the renaturation of the Sagtümpel was initiated (Project Renaturation Sagtümpel). The Sagtümpel is one of the vaclusian giant karst springs, which are rarely found in Austria.. This karst spring is developed in ice-age sediments and conglomerates (Nagelfluh), which is unique in Austria. Underneath this is probably a thin layer of Dachstein lime stone, which is deposited on a water-impermeable rock layers (probably Werfen layers).

The karst spring had a length of 27 m in the original state with a width of 14 m. The depth should have been at least between 8 m and 10 m. This depth, which is very large in relation to the ground surface, is unusual and gave the source lake a particularly impressive and mystical appearance due to the mostly very clear water.

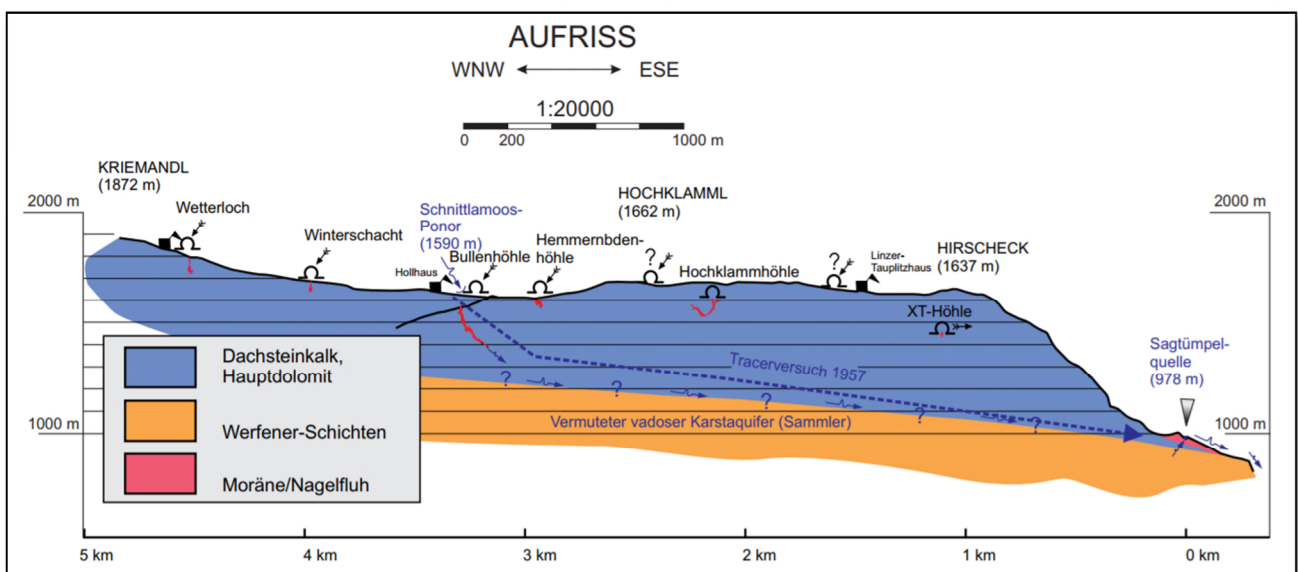


Fig 1: Vertical section of the project area - with the location of the Sagtümpel. Drawing: R. Seebacher



Fig 2: Initial situation of the Sagtümpel - the dilapidated drinking water complex. Photo: R. Seebacher

It is not without a reason that a legend about an aquarius, who was supposed to have inhabited the pool, was built. Because of the location and nature of the prominent karst spring, it can be assumed that this was even an ancient celtic cult place. The first known, direct written mentions of the Sagtümpel took place in the year 1897.

By long-term measurements of the hydrographic service of the state of Styria, a water flow between approx. 0.5 l/s and 10.5 m<sup>3</sup>/s could be determined. The average water flow is about 300 l/s. The catchment basin covers an area of about 6 - 7 km<sup>2</sup> and mainly affects the plateau of the Tauplitzalm with heights up to 1760 m. Several big cave were explored in this area. These results in conjunction with the geological conditions suggest further attention to the existence of an extensive, air-filled cave system under the catchment basin. In 1975 the Sagtümpel (karstic spring) was added to the drinking water supply and sealed with concrete. Since the water was not longer used, the complex dilapidated more and more.

The renaturation of the destroyed karstic spring was initiated by Speleological Society in Obersteier - the 27 m x 14 m large and 10 m deep karstic spring should be restored as it was in the past. Through the renaturation an interesting excursion destination in the nature emerges. Furthermore, the Sagtümpel is a resurgence of a still unexplored cave system and of scientific interest.

## Activities:

- Mai 2016: Project preparation - authorities approval, acceptance as LEADER-Project (Liaison Entre Actions de Développement de l'Économie Rurale).
- October 2016: Project start - beginning of the renaturation works, deconstruction of the old drinking water complex, forming the outflow of the spring pot, detail work around the karstic spring, setting up a theme trail about karst and water, karst springs, geology, caves and amphibians.
- July 2017: Project application for the EuroSpeleo Protection Label 2017.
- August 2017: The project was awarded with the EuroSpeleo Protection Label 2017.
- October 2017: Conclusion of the project - the original condition of the Sagtümpel karstic spring was restored - the project aims are fulfilled. 22<sup>nd</sup> October 2017 - the official opening ceremony of the Sagtümpel spring took place.

In parallel the project was and will be presented in numerous local newspapers and in the local television, e.g. Kleine Zeitung, Alpenpost - Zeitung des Steirischen Salzkammergutes, ARF - Ausseer Regional-Fernsehen,... Serveal project presentations were held and will be done in the future e.g. Municipality Bad Mitterndorf, LEADER-Commission, Austrian Speleological Association, Hydrological department in Styria, .....

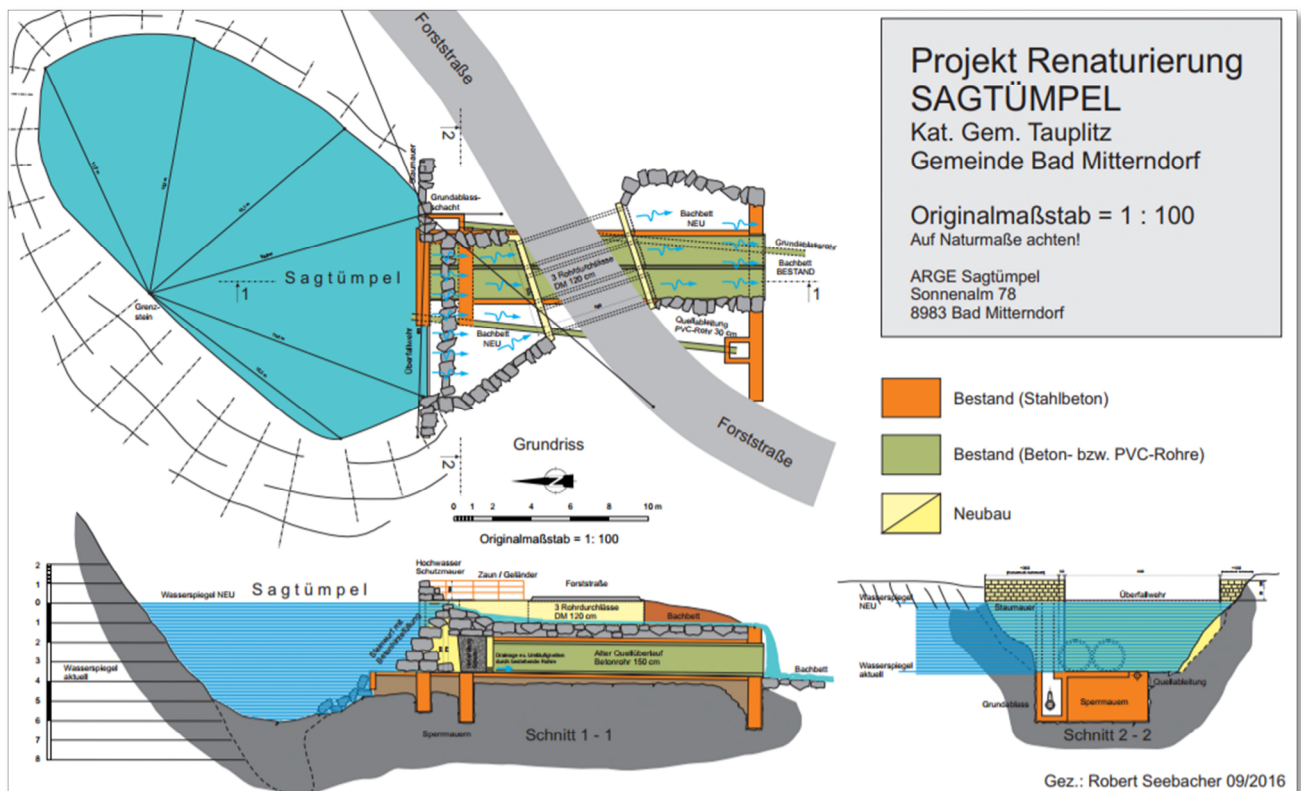


Fig 3: Renaturation plan Sagtümpel. Drawing: R. Seebacher



Fig 4: Start of the deconstruction work. Photo: R. Seebacher



Fig 5: The spring pot is laid open. Photo: R. Seebacher



Fig 6: Forming the outflow of the spring pot. Photo: R. Seebacher

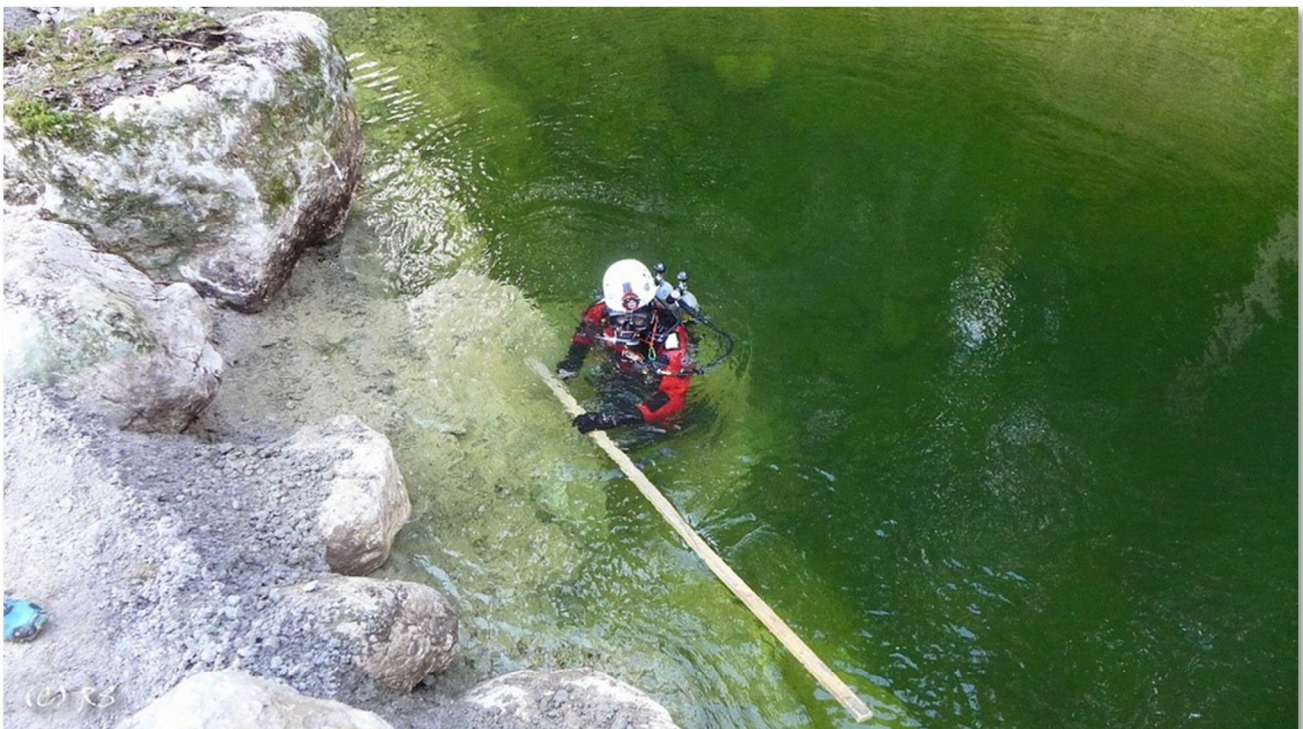


Fig 7: Control dive in the spring pot. Photo: A. Seebacher



Fig 8: Winter view of the Sagtümpel. Photo: R. Seebacher



Fig 9: Bird's eye view of the Sagtümpel - January 2017. Photo: M. Kreutzer



Fig. 10: Night view of the Sagtümpel - illuminated with 3 Scurion lamps - February 2017. Photo: R. Seebacher



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## Expected results:

The aim of project was the complete evacuation of the old drinking water complex and to restore the typical character of the steeply walled and deep spring pot. The environment of the spring with the natural stream of the Sagtümpel beck and the Tauplitz waterfall deserves a revaluation and would yield numerous positive effects. The periodic spring overflow of the Tiefenbach and the important amphibian occurrence offer an interesting area for naturalistic observations. Hiking trails, benches and presentation boards are implemented. Creation of a theme trail, karst and water, karst springs, geology, caves, amphibians. A further use of the water is possible because of the integration into the remained water pipeline.

Nature conservation organizations welcome the renaturation and dismantling of landscapes, which are strongly influenced by human activities. This project creates a teaching example, which could serve as a model for further projects throughout Austria and Europe. The area Sagtümpel, Sagtümpelbach and Tauplitz waterfall could thus be a worthwhile destination for cave and nature excursions and guided tours.

The spring pot, developed in glacial conglomerates, is unique in Austria and offers various fields of activity for various branches of science. Studies of geology, hydrology, as well as the fauna and flora of the spring is now possible again without restriction.



Fig. 11: Sagtümpel - part of the theme trail, karst and water, karst springs, geology, caves. Photo: E. Geyer



Fig. 12: Sagtümpel - 1973, original situation before the drinking water complex was built.  
Photo: B. Krauthausen



Fig. 13: Sagtümpel - 2017, after the renaturation. Photo: R. Seebacher

## Target groups:

Speleologists, scientists from different disciplines as geology, hydrology and biology, students, as well visitors and tourists from near and far.



Fig. 14: 22<sup>nd</sup> October 2017- opening ceremony - Sagtümpel. Photo: E. Geyer



Fig. 15: 22<sup>nd</sup> October 2017 - ribbon cut - official opening of the Sagtümpel. Photo: E. Geyer



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## Partners:

- a. Speleological Society in Obersteier: idea, concept, working plan and accompaniment during the realization by the society members,
- b. Municipality Bad Mitterndorf: Project support
- c. European Commission Agriculture and Rural Development Rural Development: Project support,
- d. ARGE Sagtümpel,
- e. Forest Cooperative Tauplitz,
- f. Nature Conservation Association Styria,
- g. Natural History Museum Vienna,
- h. Tourism Association Ausseerland,
- i. Hiking Association Tauplitz.

**Official language of the project:** German

**Dissemination languages:** German, English

**Amount of the total project budget (euros):** 78.845 Euro - this project was supported by the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management, the Federal State of Styria and the European Union.

**EuroSpeleo Protection Label 2017:** 16<sup>th</sup> September 2017 - the handing-over of the ESPL 2017 took place at the 11<sup>th</sup> EuroSpeleo Forum in Ferrières, Belgium.

