

ISTITUTO ITALIANO DI SPELEOLOGIA

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To whom it may concern

Bologna, October 1st 2024

Subject: Environmental protection on the Hartz anhydrite and gypsum karst areas

Dear colleagues,

For my research on evaporite karst phenomena of our planet, I had the opportunity to pay a visit to the sulphate karst area of South Hartz many years ago. It is certainly a very interesting and important karst area on a global level.

The hosted caves are of high scientific interest and amongst the largest most spectacular gypsum/anhydrite caves in the world (mainly for the presence of some very rare speleothems as the gypsum leathers and ashes, which are up to present described only from caves in that area). The deep karst is also important for its peculiar ecosystem, which hosts several endemic species. Furthermore, over the last 4 years, during the preparation of the Italian dossier for the inscription of the karst phenomena of the evaporites of the Northern Apennines in the UNESCO WH list, I have carried out a detailed bibliographic survey of the 10 areas with sulphate karst most important in our planet. Obviously the evaporitic karst area of South Hartz was among these areas and in my humble opinion it could also aspire to become a new WH in the future.

Up to now numerous gypsum quarries and mines have already irreversibly altered the naturalness of a wide part of the sulphate outcrops of the South Hartz. Only in the federal state of Saxony-Anhalt is the gypsum karst still in pristine condition. This area has therefore been designated as the 'Südharz Karst Landscape Biosphere Reserve' by the German federal state Saxony-Anhalt – so far it is the only biosphere reserve in the world in a sulfate karst!

Given the scientific importance and peculiarity of this karst, I consider essential that the currently existing environmental protection be maintained, and possibly strengthened.

This safeguard is obviously incompatible with the carrying out of boreholes, which evidently have the aim of exploring the possibility of opening gypsum mines within this area.

Therefore, my Institute fully agree with the request of the German Speleological Federation (VdHK), summarized as:

- The state of Saxony-Anhalt must recognize and accept its responsibility for the internationally significant gypsum karst landscape in the South Harz and protect it accordingly. Protected areas must be respected, whether under German legislation or the European Natura 2000 directive.
- The state of Saxony-Anhalt should not allow any further destruction of the gypsum karst, not only because of the adverse impacts on biotopes and geotopes but because it will impede future development of the region as a tourist destination.
- The state should instead promote future- and climate-oriented plants and companies that produce alternatives to building plaster. Such building materials made from renewable materials such as plant fibers and recycled minerals have been on the market for a long time.

Professor Paolo Forti
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