

Report on the Cambridge University Caving Club 2018 Expedition in the Totes Gebirge, Austria.

The CUCC expedition this year ran for six weeks from the 4th of July to the 18th of August, during which a considerable amount of effort was made to extend the Schwarzmooskogel cave system in the Totes Gebirge region of the Austrian Alps in the Upper Styria region. In addition to this, prospecting and recording of new cave was also made as well as enlarging the surveyed extent of other caves so far not connected to the SMK system. At present, we now believe the SMK to be the second longest in Austria in terms of total surveyed length following the efforts of this expedition.

In terms of prior organisation, much of this was led by the joint leaders Ruairidh Macleod and Haydon Saunders, though in addition Tom Crossley took a very active role in financial planning and management as treasurer, Rachel Turnbull organised the training weekend, Rob Watson helped organise gear facilities and Wookey contributed to facilitating electrical requirements and also gained sponsorship from 18650, as well as organising “nerding sessions” for preparation around survey software.

A further significant aspect of the preparation this year was the implementation of large solar panels for charging at the top camp at Steinbruckenohhle bivy. These were sourced and the system set up by Haydon at a cost of ~£800, which is currently being arranged to be split across future expeditions also benefiting from its use.



Carrying the new large solar panels up to top camp. Photo by Becka Lawson.

Chris Densham also facilitated the borrowing and almost successful use of a System Nicola for communication between the surface and deep camps in Tunnockschacht and Balkonhoehle caves (this was mostly one way from the surface due to a broken microphone).

This year some 40 expedition members were present, over half of whom were university students, of university student age or had recently completed university study. For a significant number, this was also their first expedition and much focus went into training and supervision both at the training weekend in the UK and while in Austria, and although this did not fully eliminate some issues of miscommunication, overall the expedition ran very smoothly and there were no significant injuries or accidents.

The primary pushing fronts were leads in deep Tunnockschacht (Beckoning Silence and the newly discovered Radio Silence), Balkonhoehle, Fischgesicht Hoehle and the newly discovered Heimkommen Hoehle (Homecoming). Homecoming was discovered early in the expedition by Dickon Morris and Jon Arne Toft and was rapidly surveyed to some 1.6km by the end of the expedition, with a substantial drafting main rift development still going and requiring further bolting.

The most significant discoveries came from Balkonhoehle where around 5.2km of new cave system was discovered including new connections with Tunnocks close to the level of Camp Kraken at Anathemusa and also at Champagne on Ice in mid-level Tunnocks, and significant new discoveries such as the Mongol Rally pitch of around 200m depth and the huge, horizontal phreas of Grand Prix. This was to a large extent due to the significant efforts of George Breley and Becka Lawson.

Very impressive phreatic developments were also found in Fischgesicht, particularly a large development tending northeast towards the main Schwarzmooskogel system that could be potentially significant as a route to connect in.

Overall an estimated 7km of cave has been discovered and surveyed this year, a very considerable result, with the SMK system itself also further enlarged. The survey below compares the extent of new discovery year-on-year, with this year's discoveries in blue.

This year was the 35th anniversary of the expedition being based from Bad Aussee, and we have been very lucky to enjoy very good relations with the local town and authorities. To celebrate this a dinner was arranged by the Gasthof Staud'nwirt whose camping facilities have provided our base camp for many years, and the local Burgomeister joined us in festivities. Additionally, a barbecue night was held (as well as mutual caver exchange trips) with the German caving club Arge Grabenstetten that also explores close by, and this proved very successful.

Following the expedition, a number of members also attended the Eurospeleo conference which took place in Ebensee, and Ruairidh presented the results of the expedition this year while Wookey gave a presentation more broadly on the history of the expedition; excursions to the SMK system were also organised and led by members for conference attendees. Ruairidh has also submitted an abstract for presentation of the expedition results at Hidden Earth this year.

Survey of the extent of SMK system comparing extent year-on year.  
Thanks to Katey Bender for making this in QGIS.

