## C.U.C.C. Expedition Report 2019

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### 1 Introduction

This year marks the 41st Expedition by the C.U.C.C. to the Totes Gebirge. This year's Expo had to face several challenges.

Even before we began, we had two significant issues:

- Firstly, a drop in numbers; last year we had c. 40 members and this year, c. 20.
- Secondly, a skewed distribution of members across the proposed six-week expedition, favouring the first half.

Regrettably, the combination of these two things meant that we had to reduce the time period of our expedition first from six to five weeks, then five to four, and finally from four to three.

The expedition was further way-laid by the discovery that our top camp was filled with snow.



Figure 1: Philip Sargent by the snow filling Traungold Höhle where our top camp is located

However, we were not to be deterred and managed to make major progress in two out of the three proposed objectives (Balkonhöhle and Heimkommen Höhle), and minor progress in the third (Fischgesicht Höhle Glücklich Schmetterling Höhle).

Over the three weeks of the expedition, we surveyed approximately 2km of cave, mainly in Balkon-höhle (1.3km) and Heimkommen Höhle (0.6km).

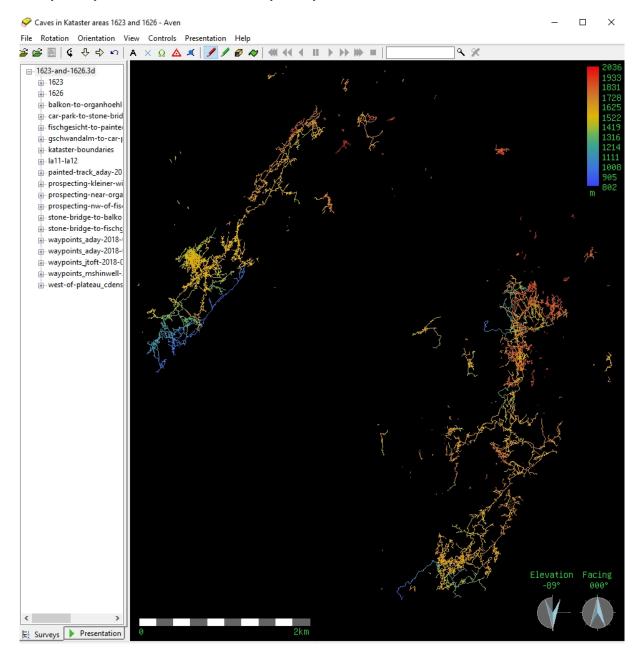


Figure 2: The current extent of survey data for the Schwartzmooskogel system (bottom right) and the Schoenberg system (top left). Our new caves, Homecoming (T-shaped central cave) and Fishface/Happy Butterfly (between Homecoming and the main SMK system) are located at key positions for connecting these two systems, both of which are over 130km long and deeper than 1000m.

## 2 Balkonhöhle (Balcony)

Balcony continues to be a highlight of the expedition, with leads being pushed both deep (with trips to -600m) and shallow. "Medusa's Maze," "Myopia," and "Northern Powerhouse" in the Pitstop area were prominent features of this year's trips, with many leads being pushed and few being killed. Other findings in Balcony included "Wheresthemilk," "Drunk Drivers," and "Custard Cavalry."

Meanwhile, in shallow Balcony, a vertical lead up an aven led to the discovery of "\" (or "The Backslash"). This lead continues up a fairly vertical stream-way ("8mm Pitch") straight towards the surface as well as opening up into a large phreatic continuation that travels down in the direction of the bottom of the entrance series.

A total of 1328m was surveyed in Balcony this year. In addition, considerable effort was spent in removing all of the rope in the cave, almost all of which had been left in situ in 2018, for cleaning and conservation purposes.

## 3 Heimkommen Höhle (Home-Coming)

This cave, which was found only last year, continues to grow at a fantastic pace. It extended to 2275m by the end of this expedition (approx. 600m of which was discovered this year). The effort here was concentrated in the level of phreas at the furthest extent of the pushing in 2018, as well as re-rigging of the entrance series to accommodate trade-route traffic.

Home-Coming had the advantage at the beginning of the expedition of being accessible directly from the car-park and of having a snow-free entrance, making it the focus of much of the first half (while top camp was being dug out and made habitable).

"Propane Nightmares" (a small phreatic tube above the bottom of the entrance series) was surveyed, picking up 200m in one trip and was left with excellent, open leads when the expedition ended.

Additionally, we pushed the major lead in Second Coming, the drafty vadose rift that cuts straight through horizontally and heads off in the direction of the main Schwartzmooskogel (SMK) system. This was slow going due to the traverse requiring bolting as we went but it was left with lots of promise that it keeps going and, exciting, may provide a link to extend the SMK system significantly to the west.

# 4 Fischgesicht Höhle (Fish-Face) &

## Glüklich Schmetterling Höhle (Happy Butterfly)

Unfortunately, the deep snow this year mean that direct access to Fish-Face was impossible until late in the Expedition and no progress could be made here.

The team who had been intending to push Fish-Face concentrated their efforts instead on Happy Butterfly, a nearby entrance, hoping to break through into Fish-Face. We found and followed several leads, but unfortunately did not make the connection.

#### 5 Conservation

Considerable effort was made this year to remove gear that was unlikely to be used in the near future in order to leave minimal impact on the landscape. Some stores that had been left at a secondary surface camp at Organhoehle in previous years were removed from the cave entrance and taken off the plateau. In addition, all of the rope in Balcony that had been left rigged in 2018 was removed along with the material (tent, sleeping mats, etc) that had been left at an underground camp in Balcony in the Little Boy Chamber.

### 6 Cavelink and Thanks

C.U.C.C. would like to take this opportunity to thank the G.P.F. for their generous sponsorship of a Cavelink system this year. We also managed to raise additional funds from older members of C.U.C.C. to cover the remaining costs of the Cavelink so the financial impact on this year's expedition members was not too great.

Unfortunately, because of the reduced length of the expedition and our difficulty in setting up at the start of the expedition due to the unusually heavy snowfall this year, we were unable to test the Cavelink in anger as we did not set up an underground camp at any point. However, the Cavelink system was tested at Base Camp and was found to work well. We intend to use it properly underground next year.

The continued generosity of the G.P.F. in funding our expedition to Austria is greatly appreciated by the C.U.C.C. and all expedition members.