#### Weisseck, July 2019, Fluorite

In July 2009 I was with Harry and Hans at the Weisseck to work on the ice cleft. Due to the large amount of ice in the cleft, we couldn't do very much. So Harry and I decided to use the time to look for new fluorite sites. In general, there are few visible signs on the Weisseck: no fluorite veins in the rock that could provide possible clues.

We had been searching down a steep rock gutter for a long time when we decided to look up the next rock gutter again. In fact, we soon found smaller and smaller pieces of fluorite in the rock rubble. We slowly searched our way up the rock gutter - further isolated finds of pieces of fluorite confirmed that we were on the right path. In front of a small rock nose, the pieces of fluorite became more common. I started digging in front of the small rock face. The fluorites clearly came from this place. I discovered the inconspicuous remains of a fluorite vein in the rock. According to the shape of the rock and the fluorite vein, a crystallized cavity had probably been here a long time ago. The crystals, however, had all been destroyed by the frost and the weather. I could only salvage some unusable fluorite shards. I continued my search over the one and a half meter high rock. There I noticed a transverse gap that was about 1 cm wide and pulled vertically into the floor. My 70 cm long cleft hook disappeared completely in the gap. What I particularly liked was that I could move the hook back and forth. For me that was the hint that the gap inside was much wider. I called Harry, who was looking about 10 meters above me to show him the gap. He also thought that this was a good sign. Since we didn't have a chisel and hammer with us and it was getting late, we decided to visit this place again on our next trip.



Searching for fluorites in a steep gutter

A week later we were there again. Hans was also there this time. It only took a few blows with a fist and chisel, because the weathered limestone was easy to work on so that you could look inside. It was a remarkable cavity that was filled with loose rock almost to the ceiling. The first stones were taken out of the cleft in lying position out at the front. An hour later I was already sitting in the still narrow cavity and handed the boulders out to Harry and Hans. The cavity spread downward and pulled slightly obliquely back into the mountain. It took another hour until I found the much-awaited indication that confirmed I was where I wanted to be: a light, transparent, blue-green fluorite piece of good quality with a size of about 3 cm. After this find, we considered how to proceed. Since we were working intensively on the ice cleft at this point and this site looked like a larger construction site, we decided to close the new find carefully. We wanted to work on it in peace when we had enough time for it. The cleft was closed in July 2009.

At that time we had no idea that we would work intensively on the ice cleft until 2016. The following two years we had to work on clefts in other areas, and so our discovery was to remain closed for exactly ten years. During those years, I repeatedly looked at the covered-up cleft and found with reassurance that no other collector had noticed it.

July 2019 was to be the time to reveal whether the cleft possessed good fluorites or not. Five of us were to join forces (Harry, Anton, Hans, Michael, and me), but finding a date for a trip up a mountain for five mineral collectors at times seemed as difficult as the actual expedition. On the agreed upon day bad weather was predicted, with rain and snow falling at an altitude of 2000 meters. But why allow a bad forecast stop five eager collectors? We started very early in the morning and soon discovered that no one else thought of climbing the mountain that dismal day. After about two and a half hours, we reached the site. The wind whipped our faces and the drizzle turned more and more into snowfall. We immediately started working - standing around was not possible due to the cold.



Toni, Michael and Harry at work in front of the cleft (Photo: Hans Lasshofer)

We opened the cleft. Anton and I took turns working in the cavity. Later Harry also worked in there. We handed out the larger pieces of rock, while the finer rubble was collected in a bucket and passed through the narrow hole. The work went well. After an hour, due to the depth of the hole, a rope had to be used.



Toni working in the cavity (Photo: Hans Lasshofer)

After about 3 hours of intensive work, the first useful fluorite was found. This was an urgently needed motivation boost, since the snowfall had increased and an icy wind was blowing. We froze terribly. It was a little more pleasant in the cavity, but afterwards it was much colder than outdoors because we were sweating at work in the chasm.

I changed the work with Toni and Harry at relatively short intervals, so that we could keep up the high pace of work at the cleft. The change was not without problems because the vertical entry was so narrow that you had to stretch both arms up to get through with your upper body. At the same time, the legs were hanging freely in the air at this moment, as the gap spread downwards all directions. Only when your shoulder was over the entrance, was it possible to find some sparse support with your feet on the side. In short: coming out of the rift was always very tiring. After we got out we were completely exhausted.



Maneuvering through a rather exhausting exit (Photo: Hans Lasshofer)



That day we reached a depth of two and a half meters. We were able to recover a few very nice hand-size pieces and countless small specimens and single crystals.



Freshly recovered fluorite (Photo: Hans Lasshofer)



Smaller finds in the snow, for the first time in daylight (Photo: Hans Lasshofer)

The fluorites we found are very transparent. The color is reminiscent of aquamarine, with some pieces tending more towards bluish and others more towards greenish. There is no colored zonal structure. A few of the fluorites however show an attractive violet color on the edges. With an edge length of up to 3.5 cm the heavily parquetted surfaces are high-gloss to satin-gloss. Dissolved fluorites have also been found, some with high-gloss etching pits. Some fluorites are so strongly dissolved that no crystal form can be seen anymore. What is unusual about this cleft is that not a single calcite was found - calcite is always present in all other finds at the Weisseck.



Maybe the most beautiful piece from this find: fluorite on lime matrix,  $10.5 \times 9 \times 5.3 \text{ cm}$ 

During the second tour, Harry, Michael, Hans, Werner, and I were out in better weather. The work in the cleft continued to a depth of approximately four meters. Unfortunately, the finds decreased rapidly and only a few fluorites could be found. In addition, the gap narrowed relatively quickly down to a narrow gap. Therefore the work was stopped and the hole was closed again.

All the collectors involved in this divide are members of the "Lungauer Stoafexn". Even if the great find ultimately failed to materialize, everyone came home with some nice specimens. We are all delighted over adding a new color to our fluorite collections!



Fluorite with purple edge coloring, 4.7 x 4.4 x 2.8 cm



The same piece from a different perspective

# B L U E



Transparent fluorite with an edge length of 3 cm, 9.5 x 9 x 6.8 cm



Strong, dissolved fluorite, 3.3 x 2.5 x 2 cm