

Jiří Kříž and his research in Carnic Alps

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For many students from Prague, including Jiří Kříž, visiting the Carnic Alps was a long-held dream. The classical Barrandian area contains fossil-rich rocks from the Palaeozoic era that strikingly resemble those found in the Carnic Alps. This similarity naturally sparked an interest in comparing and investigating the two regions more closely.

The first opportunity arose during the “Prague Spring” in the late 1960’s. Jiří Kříž and Karel Drábek from the Czech Geological Survey, along with Jožka Michalík and Jaroslav Marek from Charles University in Prague, seized the chance to travel abroad. They made their inaugural trip to the Carnic Alps from August 16 to 26, 1969. From 1982, graptolite specialist Petr Štorch joined the group, forming a quartet of dedicated researchers.

After an arduous journey, they finally reached the Plöckenhaus in the central Carnic Alps. With very little Western currency, they brought ample provisions for their stay. Fritz Gressel, grandfather of the current Plöckenhaus owner, generously provided them with free accommodation in a tourist home. This rustic lodging featured bunk beds and a small channel that water flowed beneath its holey wooden floor when it rained. His wife, Aurelia, ensured the young men were well-fed. Their expedition began with heavy rain, offering little hope for quick improvement. However, as is often the case, the situation changed within hours. The next morning dawned with a bright blue sky and sunshine, bathing the Cellon mountain in a brilliant, colourful display.



Jiří Kříž searching for bivalves at section Rauchkofelboden near Lak Wolayer in the upper Silurian limestone of Kok Formation (Carnic Alps, year 1997). Archive of H.P. Schönlaub.

Later that morning, they immediately set off for the Cellon avalanche gully. Fortunately, the gully was snow-free at that time, making the entire Ordovician and Silurian limestone sequence accessible. The geologists wasted no time, meticulously searching layer by layer for fossils in the upper Silurian, collecting a substantial amount of material over the following days.

On August 21st, they hiked via the Untere Valentinalm to Valentintörl. Their progress was halted by too much snow, making the uncharacteristic ascent too difficult, forcing them back to the Plöckenhaus. Upon their return, the group was invited to a delicious dinner, a poignant remembrance of August 21, 1968, the day Czechoslovakia was occupied by Russian troops.

The following day, the four returned to Lake Wolayersee to conduct bed-by-bed sampling of the Silurian profiles. Even then, they noted the striking resemblance between the rocks of this period and those found near Prague. For Jiří Kříž, a specialist in Silurian bivalves, the close relationship between these faunas was particularly evident. After that they return to home not only with a wealth of experiences but also laden with fossil-bearing rocks.

Since those initial expeditions, Jiří Kříž has made several return visits to the Carnic Alps. These research stays have led to the publication of five papers and a monograph on shells in the region. Vladimír Havlíček has published a paper on brachiopods, drawing faunistic comparisons between the Prague surroundings, the Carnic Alps, and Sardinia, while Jan Pašava has reported on the geochemistry of black shales from the Silurian and Devonian periods.

These international collaborations, supported by the Austrian Ministry of Science and the Geological Survey of Austria in Vienna, yielded significant, previously unknown insights into the Carnic Alps. Jiří Kříž collaborated with the author on projects in the Silurian and early Devonian periods within the Cellon avalanche gully, the Ordovician on Hoher Trieb mountain, the Silurian Kok and Devonian Rauchkofel formations on Rauchkofelboden, and other localities near Lake Wolayer. Their shared scientific endeavors, along with mutual visits to the former Czechoslovakia and its Geological Survey (Ústřední Ústav Geologický) in Prague, where Jiří Kříž worked and researched for decades, forged a close friendship.

Whenever we ventured into the mountains to known and new palaeontological sites, our days stretched long. The enthusiasm for the impressive landscape and the fossils we found was boundless, and their yield was always highly rewarding. Countless samples found their way into their backpacks, were initially sorted and identified in their quarters, or transported back to Prague for detailed examination. These efforts soon culminated in scientific publications, documenting what could only be described as successful expeditions. This not only expanded their own publication records but also enhanced the international reputation of the Carnic Alps within geological circles. Such endeavors created a ripple effect, ultimately leading to the Carnic Alps becoming a highly attractive “playground” for both domestic and foreign geologists and palaeontologists. Jiří Kříž, Petr Štorch, and their colleagues played a pivotal role in this transformation.

Today, geological and palaeontological research is fragmented into countless disciplines, which greatly fosters specialization while simultaneously necessitating cross-border cooperation. Austria has taken a pioneering role in this regard, as the country relies on specialists from other nations due to a shortage of domestic experts, leveraging their expertise for national progress in the Earth Sciences. Jiří Kříž made significant contributions to this collaborative spirit.

I had the privilege of meeting Jiří on several occasions, in Austria, the former Czechoslovakia, and abroad in countries like France, Sardinia, England, Ireland, and the US. We shared many fond memories, not only in science but also over food and drinks. Whenever we met in Prague, we would visit one of the many underground beer pubs, accompanied by his friends from the Geological Survey and the Academy of Sciences. His last visit to the Carnic Alps was in the 1990's. He cherished the mountains, the local culture, and the beauty and generosity of my homeland. In Prague, I deeply appreciated his and his family's hospitality both in the city and in the field. Jiří's attitude and scientific achievements left a profound impression on me and will never be forgotten. A particularly significant milestone was achieved by Jiří in 1995 when he and his Prague colleagues organized a meeting of the Silurian Subcommittee in Prague, which included a field trip to several important sections in the Barrandian.

My last contact with Jiří was at the end of 2020 when I asked him to send a short personal reflection on his experiences in the Carnic Alps for my volume on the geological heritage of the Carnic Alps, published in 2021 by the Naturwissenschaftliche Verein für Kärnten in Klagenfurt. The part of the text above is included in that volume, originally written in German.