# **Imperial College Migovec 1999**

# **Interim Report**

by Jim Evans

### **Summary**

The 1999 Imperial College expedition to Migovec was another successful trip surveying a further 1.5 km of cave passage making the Migovec system 10.87km long and 970m deep. In addition to the cave exploration a successful hydrological study was carried out, tracing the course of the rivers within the cave.

### **Exploration**

The expedition had a higher proportion of novices than in previous years and consequently it was important to limit the scope of the exploration in the interests of safety and in order to provide a suitable introduction to alpine caving techniques. Consequently the many unexplored shafts along the large phreatic passage of Level 2 (around -250m) provided as an excellent platform for this years work.

#### Paradiso

The first lead to be explored was the shaft 'Arian5' which cuts through Level 2 just south of where the aven of faulty towers comes in. Arian5 was found to be a 30m shaft to a boulder floor which led into the side of a huge void. On closer inspection of the boulder pile at the head of Arian5 a more direct route was found to this void via a 15m pitch leading to the head of what was subsequently found to be a 70m shaft and became known as 'Paradiso'. The bottom of Paradiso led directly to a constricted meander, but following a climb up a spacious rift was found which immediately led to the head of another pitch. This pitch (The Shaft of Ill Repute) was characterised by sharp protruding rock on its walls, and required careful rigging. After around 30m a river joined the shaft making the obvious way down unpleasantly wet and potentially dangerous in flood conditions. Swinging over to a ledge before the waterfall gave access a large dry pitch, which was initially thought to be a dry route down the same pitch but was subsequently found to be a completely separate pot. At the foot of this spacious 70m pitch an initially tight rift led to around 100m of large horizontal passage. A small hole in the floor of this passage led to 30m pitch (Bear Necessities). The foot of this pitch led immediately to another pitch which remains undescended as a tantalising lead for the next expedition to the system.

#### Skalar

The large shaft cutting through Exhibition Road at its top end was finally descended in 1999. Skalar was found to be 30m deep and led immediately into an awkward rift which after a short traverse opened out into a 15m pitch (Asterix). The bottom of this pitch soon broke out into a large 75m shaft, Obelix. The bottom of Obelix is a wide rift passage with an obvious pitch continuation which remains undescended and a lead for subsequent exploration.

### Re-surveying the Hidrant

Another aspect of the work in the Migovec System involves re surveying known parts of system explored by the Slovenians cavers in the early eighties but for which survey data has been lost. The Hidrant, a dry area off the bottom of Ta Mokr was the last area requiring re-surveying and this was completed in 1999. Climbing about 50m up the boulder slope from the foot of Ta Mokr the Hidrant starts as a short climb down followed by a traverse over a blind 5m pitch. A short rift then follows which leads on to two consecutive 10m pitches and then a 40m pitch into a chamber. In the corner of this chamber a narrow fissure leads straight into the head of the next pitch (Gauntlets gulf),a 50m pitch, initially narrow, but which opens out into a sizeable shaft 10m from its head. Swinging over a few metres from the bottom of the shaft a short pitch in the boulders leads to a small crawling passage and after a few metres to the head of the last pitch. The final pitch starts with an awkward take off leading to a steep boulder slope for the first few metres and then dropping into a vertical shaft for the last 30m. The bottom of the shaft is a steep and precarious boulder slope with a continuation through the boulders which was considered too unstable for further progression,

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although it has been pushed down a to -547m previously by the Slovenians. As well as surveying this pitch series a number of extra bolts were placed to enable safe rigging and some short side passages were found and explored.

### Others areas in the system

Around 100m of rift passage, Spiney Norman, was explored and surveyed off the bottom of one of the entrance pitches (Brezno Strahov), the area is believed to have been visited by South Wales cavers in the early 1980's.

Zebra passage, a rift at the western end of NCB passage was pushed through a constriction to a wide undefended shaft, Leki Pot. Aid climbing techniques were used to climb a 20m shaft (Ghengas Khan't) between Mig country and Titanic in Level 2. The head of the pitch led immediately to a 15m pitch down with no obvious continuation, but climbing up from the initial pitch head led to a further aven requiring more bolt climbing to progress.

### **Dye Tracing**

Optical brightener was placed in the river at the bottom of Exhibition Road (at Bikini Carwash) and detectors were then placed in the three likely resurgence rivers: In the Tolminka river to the west of the cave, the Zadlascisa to the south east and the Slap Savica to the North East (see figure 1). A positive connection was made with the Savice waterfall, but not to the other two rivers. This result must be verified in future tests but if proved correct then the prospects for further horizontal development in the cave are very exciting.

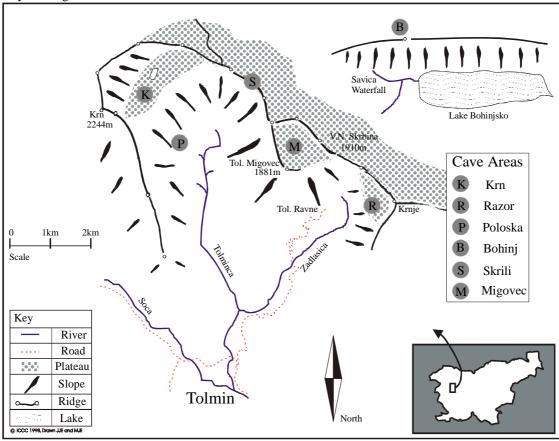


Figure 1 Schematic map showing the location of the rivers in relation to the Migovec Plateau.

### Conclusion

Much useful exploration work was carried out in 1999. Additionally the trip provided valuable expedition experience for the four first year undergraduates present. Many exciting leads in the system give a strong incentive for a future expedition to the Migovec system.

### **Expedition members:**

Edward Austin, Thomas Ayles, Bruce Drinkwater, James Evans, Jan Evetts, Andrej Fratnik (JSPDT), Alva Gosson, Clewin Griffiths, Faye Hartley, Henry Hunt-Grubbe, James Hooper, Paul Huggins, Andrew Jurd, Iain McKenna, Clive Orrock, Hugh Penney, Mike Rogerson, Ben Young (ULSA).

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## **Supporting Companies**

### - Hardware

Pico (Laptop Computer), Marlec Eng. Co. Ltd. (Solar Panels)

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Westmill Foods Ltd (Flour), Van den Bergh Ltd, Whitworths (dried fruit and pulses).