

IMPERIAL COLLEGE



Migovec '96

APPROVED BY THE ROYAL GEOGRAPHICAL SOCIETY AND IMPERIAL COLLEGE EXPLORATION BOARD

Interim Report

SUMMARY

The third ICC/ JSPDT Slovenia expedition arrived safely back in London on the 25th of August after what has been the most successful trip so far. As in the previous year, all six weeks of the expedition were spent on the high alpine plateau which providing logistics are carefully planned, has been found to be the most effective approach. The expedition concentrated on Torn T-shirt cave (M18) in which many leads had been found in the latter part of the previous year's expedition. With extensive use of an underground camp, at -130m, 2.3 km of large passage were discovered and surveyed. Horizontal passage of this scale has not previously been discovered in the Julian Alps. Additionally the cave was connected with the two other main caves of the plateau, M2 (-350m) and M16 (-547m), making an impressive overall system. The cave currently has many open leads and around 20 undescended shafts.

In parallel with the cave exploration scientific studies were carried out to determine the chemical composition of the water in the caves and the course of the underground rivers.

Plans are already underway for Slovenia '97.

INTRODUCTION

A base camp was set up on the Migovec plateau (1800m) which is located 3 hours walk from the nearest road. A small farming village called Tolminski Ravne (900m) is located at the head of this road. The inhabitants of this village, numbering no more than 20, are becoming accustomed to the sudden influx of 'Angloski' cavers during July and August. Good relations have blossomed and their help has proved invaluable. The equipment and food, largely powdered or dehydrated, was carried in rucksacks from Tolminski Ravne to the top camp on Migovec. Re-hydration of food and cavers requires large amounts of water which has posed a problem in the past. Water collection is a major consideration in most caving areas as most of the water drains directly into the caves. This year water proved less difficult to obtain as the weather was unusually wet. Rain water was collected on tarpaulins which fed into a large barrel. During dry spells an emergency supply was collected by an additional barrel under a melting snow plug.

Torn T-shirt Cave (M18) was discovered by expedition members in 1994 and pushed in 1995 to -240m. Many leads were left unexplored. The entrance of the cave lies on the Eastern edge of the Migovec Plateau at around 1830m. The entrance series of the cave is narrow and strenuous with several squeezes, pitches and short freeclimbs. At a depth of -120m the nature of the cave changes, the tortuous, narrow passage breaks into a large 5m diameter horizontal gallery which stretches for 250m. This is a very old fossil passage which means that it is totally dry. A three person underground camp was set up here during Slovenia '95 in order to minimize trips through the arduous entrance series.

EXPLORATION

On the first exploration trip of the '96 expedition the Imperial College cavers were joined by Andrej Fratnik (one of the local cavers). The goal of this trip was to bottom 'Godzilla', a huge vertical shaft which had been discovered the previous year. On descending the pitch Andrej recognised it to be part of a cave which the Slovenians had explored in 1979 called M2 (-350m) and the cave instantly became a 'system'.

Extensive use of the underground camp in the first four weeks was rewarded by rapid expansion of the cave both horizontally and vertically. New horizontal passage was found by bolting across several large shafts. The scale of the new finds increased with a second level of horizontal passage which included a huge gallery 30m wide in some places, 'Exhibition Road', and a breathtaking 60m shaft 'Mig Country'.

The cave survey was plotted regularly using a laptop computer at the top camp. This enabled progress to be monitored continuously and provided a 3d image of the cave instantly. Using this data it was concluded that the cave could connect with M16 (-547m), another Slovenian cave explored in 1983. On the eighth of August, groups went into M16 and Torn T-shirt to the areas where the caves were closest. The M16 team found a promising horizontal passage via a previously unnoticed 10 meter climb. The passage was draughting strongly and was very reminiscent of passage found in Torn T-shirt in which the camp had been set up. Within 100 metres a vocal and visual connection was made between the two caves but a large pit still separated the two parties. On the following trip 'Gladiator Traverse' was rigged to provide a relatively easy entrance to the deepest known parts of the system.

Altogether 2.3 km of cave has been surveyed and there are many promising leads at every level, including around 20 undescended pitches. The JSPDT will be continuing exploration on Migovec

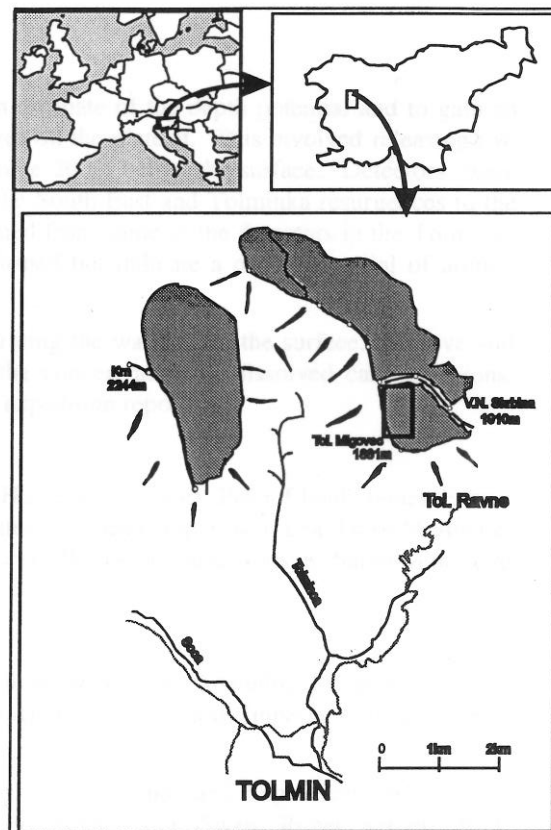


Figure 1 Location of Migovec Plateau

throughout the Autumn and the ICCC is planning to return in mid-July of 1997 to further explore the system.

SCIENTIFIC STUDIES

Dye tracing tests were carried out in order to obtain an estimate of the depth potential and to gain an understanding of the water drainage patterns of the caves on the plateau. This involved releasing two litres of optical brightener into a wet region of M16 some 200m below the surface. Detectors were placed in the Zadlascica and Jelovscek resurgences to the South East and Tolminka resurgences to the West of the plateau. Faintly positive results were obtained from some of the detectors in the Tolminka but not in Zadlascica river. These results must be confirmed but indicate a depth potential of around 1400m.

The rate of cave formation was also investigated by titrating the water from the surface, the cave and the possible resurgences against a weak acid to find the concentration of dissolved carbonate ions. Interpreted results from this study will appear in the full expedition report.

EXPEDITION MEMBERS

Stu Adler, Andy Atkinson, Colm Carrol, Janet Cotter-Howells (Science), Peter Eland, James Evans, Mark Evans, Andrej Fratnik, Simon Gabescek, Peter Hambly, James Hooper, Rob Lea, Dave Mountain, Iain McKenna, Christian Roberts, Millicent Smythe, Jackie Wiersma, Dave Wilson, Sarah Wingrove (Leader), Tim Wright.

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John Harrison, Clive Orrock, Tony Waltham, Alan Speight (YSS), Andy and Angie Cave (BEC), Bob Schroter, Don Adlington, Richard Hermitage, Sarah Freedman, Alan Swan, Roger Serpell, Rick Halliwell, Wookey.

Hewlett Packard (Laptop Computer), Trimble Navigation (Global Positioning System).

Direct Food (Sosmix and Burger mix), Fox's Biscuits (Rocky, Classic and assorted chocolate bars), Spring Fine Foods (Flapjacks), Whitworths (Dried fruit, Dried Onions, Rice, Dried Veg, Pasta) Westmill foods Ltd (Flour), Katsouris Bros (Pulses), St Ivel (Spreads), International Distillers and Vintners Ltd (Smirnoff Vodka), Tetley T- Bags, Van den Bergh Ltd.

FURTHER INFORMATION

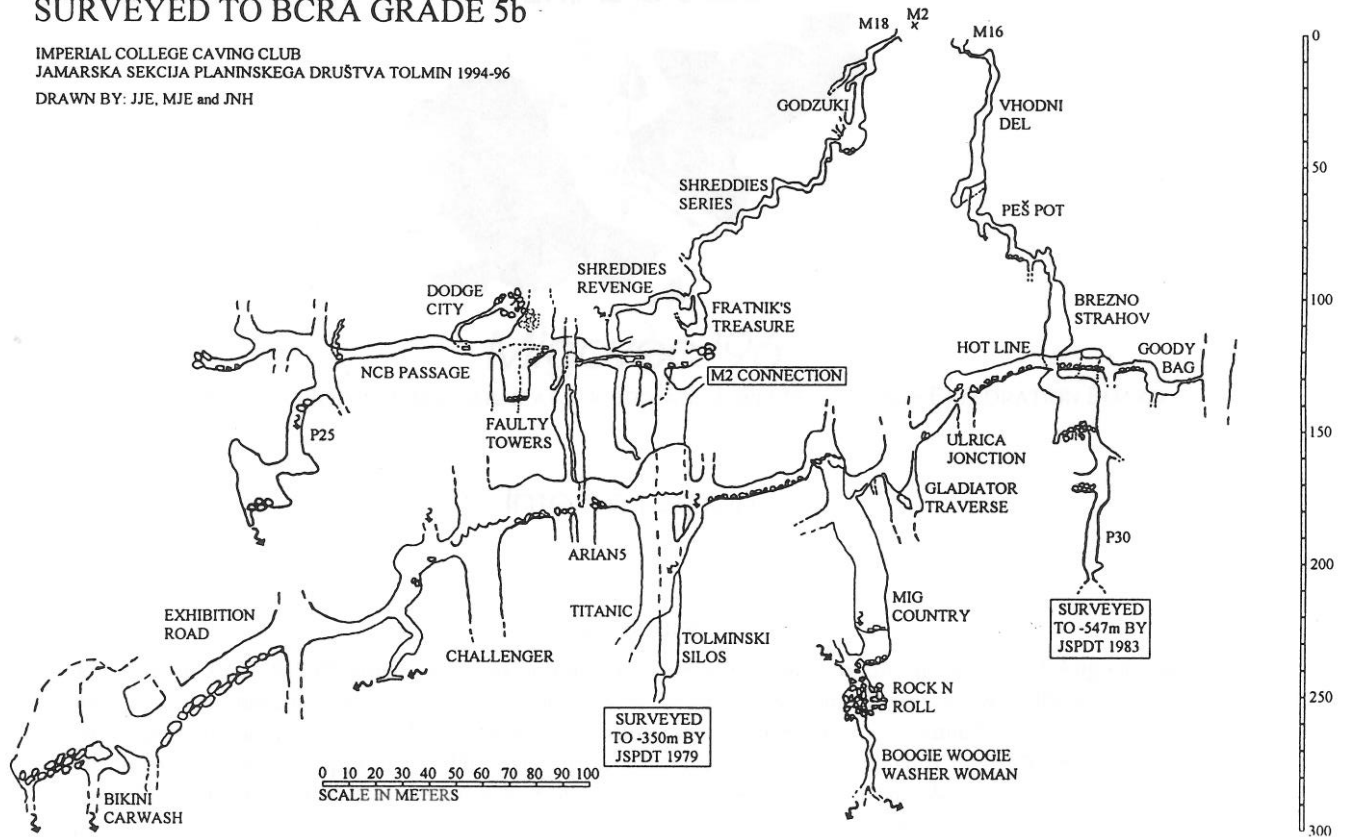
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SISTEM MIGOVEC

OBČINA TOLMIN, JULIJSKIH ALP, SLOVENIJA

ALTITUDE 1850m, SURVEYED DEPTH 281m (1996)
 SURVEYED TO BCRA GRADE 5b

IMPERIAL COLLEGE CAVING CLUB
 JAMARSKA SEKCIJA PLANINSKEGA DRUŠTVA TOLMIN 1994-96
 DRAWN BY: JJE, MJE and JNH



WEST-EAST PROJECTION

