# The Hollow Mountain

Exploring the deep caves of Tolminski Migovec, Slovenia 1974 – 2006



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Cover design by Jarvist Frost, with help from innumerable ICCC & JSPDT members. The panorama across the top is the view of the peaks from Tolminski Migovec, taken by Jarvist Frost in October 2006. The photograph on the back page was taken by Dave Wilson in 2004 near the termination of Gardeners' World cave. Line survey prepared using Survex.

### Abstract

This report documents the cave exploration on the Migovec Plateau, near Tolmin in the Julian Alps, Slovenia between 1974 and 2006. Between 1974 and 1985 exploration was carried out by members of the Caving Section of the Tolmin alpine club (JSPDT) and 17 cave entrances were logged. There were two major finds in this period: firstly M2 (Kavkna Jama), a tight rift cave which was pushed to -350m between 1974 and 1978 and included the impressive 120m shaft 'Silos'; and secondly, M16, which was pushed to -547m between the years of 1982 and 1985 and included the huge chamber of Galactica.

These caves were ranked amongst the deepest caves in Yugoslavia (as it then was). After 1985, exploration stopped on the Migovec plateau until the Imperial College Caving Club (ICCC) started a series of summer expeditions working with the JSPDT from 1994 to 2006. Minor discoveries were made in 1994 including the discovery of M18 (Torn T-Shirt cave), pushed to a depth of 78m. 1995 saw M18 pushed through some tight rift into significant horizontal development (NCB passage) followed in 1996 by a major breakthrough when M18 was connected to M2 and M16 to create the Migovec System. This included some impressive horizontal passageway: Mig Country, Hotline, Level Two and Exhibition Road. In the following three years (1997-1999) the system was pushed to a depth of -970m (in three separate sumps) to a total length of 11.3 km. The System is now in the top 10 deepest and longest caves in Slovenia.

In 2000, following some surface digging, a new cave, named Gardeners' World (GW), or Vrtnarija in Slovene, was broken into through some tight squeezes and pushed down to a depth of -393m. 2001 saw GW pushed down to -550m with an impressive horizontal gallery 'Friendship Gallery' discovered at the end of the expedition. After a gap in 2002, 2003 saw GW pushed down a large pitch to an extensive amount of horizontal cave, taking the cave to a length of 3.5 km and a depth of 747m, which was further pushed to -800m and 4.5 km in 2004. In parallel with GW exploration, another cave was found by the JSPDT in the winter of 2000 named Primadona which has to date been pushed to a depth of 597m and length of 2.6km. 2005 and 2006 concentrated on surface exploration. In addition to the three major caves on the plateau, numerous smaller caves have been discovered and mapped. There remains many challenges for the future on Migovec; there are undoubtedly more deep caves and large passages under the plateau. The connection between the Migovec System and the other two major caves (Gardeners World and Primadona) remains to be found.

Jim Evans

### **Quote Unquote**

"Exploration is the physical expression of the Intellectual Passion. And I tell you, if you have the desire for knowledge and the power to give it physical expression, go out and explore. If you are a brave man you will do nothing: if you are fearful you may do much, for none but cowards have need to prove their bravery. Some will tell you that you are mad, and nearly all will say, "What is the use?" For we are a nation of shopkeepers and no shopkeeper will look at research which does not promise him a financial return within a year. And so you will sledge nearly alone, but those with whom you sledge will not be shopkeepers: that is worth a good deal. If you march your Winter Journeys you will have your reward, so long as all you want is a penguin's egg."

Extract from Apsley Cherry Garrard's book, "The Worst Journey in the World," based on Scott's ill-fated polar adventures at the beginning of the 20th century.

"... And so you will cave nearly alone, but those with whom you cave will not be shopkeepers: that is worth a good deal. If you venture deep below Migovec you will have your reward, so long as all you desire is to illuminate the darkness within." lain McKenna, Migovec caver.

"A wise man can see more from the bottom of a well than a fool can from a mountain top." Anon.

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### **EDITORIAL**

George Leigh Mallory famously retorted, "Because it's there." The main motivation behind the adventures in this journal is better summed up by "Because it might be there," or, if you're talking about solid rock, "Because it might not be there..."

Fortunately the discoveries under Migovec proved better than anyone dared hope thanks to a combination of true cooperation, persistence, optimism and luck. Just as importantly, deep friendships have been formed, a new generation of cavers has evolved to the highest level of the sport, no major injuries have (fortunately) occurred and great fun has been had.

Most books and reports on caving and mountaineering either aim to relate the facts of what was achieved or they aim to tell a story, to describe what it was like for one or several of the individuals involved. This publication aims for both, and thus what follows is a deliberate mix of surveys and silly cartoons, science and nonsense, tales of exploration and stories of curries and visits to the pit... I'm eternally grateful to everyone who has contributed (sometimes without realising it!) and hope that any errors or the lack of acknowledgement in places are forgiven.

Long may good caving, genuine exploration and great times continue and long may Imperial College Caving Club (ICCC) and the Jamarska Sekcija PD Tolmin (JSPDT) remain as fine caving clubs dedicated to the true spirit of speleology and adventure.

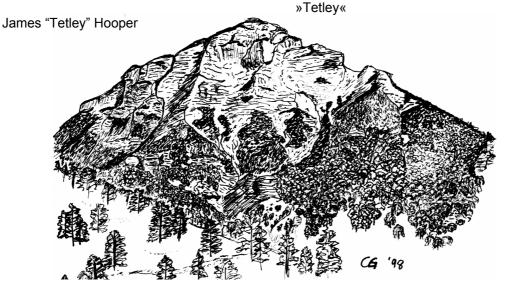
#### UREDNIK

Georg Leigh Mallory je ob vprašanju »Zakaj« strumno odgovoril »Zato, ker je tam«. Glavna motivacija, ki se skriva v člankih tega poročila bi lažje strnili v besedah »Ker je mogoče tam« ali če govorimo o trdni skali »Ker mogoče ni tam...

Na srečo so raziskovanja v Migovecu potrdila obstoj podzemnega sistema jam in brezen, katerega si nihče ni upal zamišljati. Vse to je posledica kombinacije resničnega sodelovanja, vztrajnosti, optimizma in sreče. Ravno tako je pomembno, da se je razvilo resnično prijateljstvo, nova generacija jamarjev na najvišjem nivoju športa, ter da ni bilo nobenih hujših nesreč in da smo vsi udeleženi pri tem užili polno zadovoljstva.

Večina knjig in poročil o jamarstvu ali alpinizmu prikazuje opravljene dosežke, ali opisuje dogodivščine, z namenom da bi prikazala kako je bilo za sodelujoče. Ta publikacija skuša predstaviti oboje, tako da je vsebina premišljena mešanica načrtov, šal, znanosti in neumnosti, zgodb o raziskovanju, omakah in obiskih brezen... Sam sem nadvse hvaležen vsem, ki so kakorkoli (morda nezavedujoč se) prispevali k tem poročilu in upam da bodo oprostili slučajnim napakam.

Naj živi pravo jamarstvo, izvirno raziskovanje ter dobra volja. In naj še dolgo ICCC in JSPDT ostaneta kluba, ki se predajata pravemu duhu jamarstva in pustolovščin.

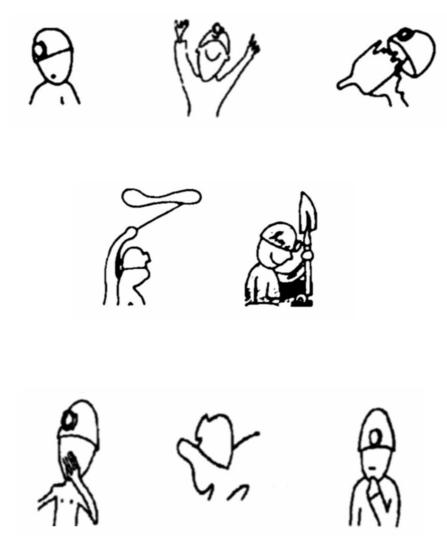


Drawing of the South Face of Migovec by Clewin Griffith

## **Migovec Hall of Fame**

## **Slovenians**

Tadej Beguš Bratuž Brane Jana Čarga Andrej Constantini Leban Damijan Alfonz Fischione Andrej Fratnik Simon Gaberšček Mišo Gaberšček Andrej Gosar Kocič Ilijada Andželič Jure-Yeti Andrej Kenda Franc Malečkar Žetko Matjaž Vladi Mavri Kos Metod Gregor Pintar Marina Pintar Milan Podpečan Robert Rehar Božo Remškar Dejan Ristič Andrej Rutar Milko Rutar Srečko Ožek Jarc Stane Breška Stanko Rok Stopar Tomaž Tivadar Andrej Tomažinčič Rejec Zdenko Miran Zobec Lesjak Zoran



Andreja Fratnik, Iztok Možir, Aljoša Bončina, Erik Bončina, Uroš Tomažinčič, Samo Rutar, Špela Leban, and others...



#### **Aliens**

Thomas Ayles - 99, 00 (leader), 04

Colm Carroll "Cumf Meister" - 96, 97, 98, 00, 03

Janet Cotter - 96, 98, 03, 04, 05

Bruce Drinkwater "Dr. Vodka" - 98, 99, 00

Jim Evans - 94r (leader), 94 (leader), 95r (leader), 95, 96, 97, 98, 99, 00, 01, 03, 04

Mark Evans - 94, 95 (leader), 96, 97, 98, 00, 01, 03, 04

Jan Evetts "Jesus" - 97, 98 (leader), 99, 00, 03, 04 Jarvist Frost "Jarv" - 04, 05, 06r

Alva Gossan "Troll"- 95, 97, 99

Clewin Griffith - 97, 98, 99, 00, 01, 03 (leader), 04 (leader), 05

Pete Hambly - 95, 96, 03, 04

James Hooper "Tetley" - 96, 97, 98, 99, 00, 01, 03, 04, 05, 06r

Helen Jones - 00, 01, 04, 05 Paul Huggins "Huggy" - 97, 98, 99

Andrew Jurd "Shaggy" - 99, 00, 01 (leader), 03, 04, 05

Pete Jurd - 00, 01, 03

Rob Lea "Blob" - 94, 96, 97

Martin M<sup>c</sup>Gowan - 98, 00, 01, 03, 04, 05

lain M<sup>c</sup>Kenna "Eebs" - 94, 95r, 96, 97, 98, 99, 01, 05 Ben Ogborne - 98, (99 leader "in absentia"), 00, 01, 04

Clive Orrock - 94, 98, 99

Hugh Penney - 97, 98, 99, 00, 01, 04 Mike Rogerson "Goaty" - 97, 99, 00, 04 Jackie Wiersma /Evans- 94, 95, 96, 98, 01 Dave Wilson - 96, 97, 98, 01, 03, 04, 05 Tim Wright "Shed" - 96, 97, 98, 00, 03, 04, 05

Sarah Wingrove "Scuz" - 94, 95, 96 (leader), 97, 98

Richard Venn "Rik" - 03, 04, 05

Stu Adler - 94, 96

Richard Anderson "Chard" - 94, 95r

Andy Atkinson "Trousers" - 96

Ed Austin - 99, 01 Kathryn Atherton - 98 Malcolm Barr - 94 Flo Babolat - 97

Paula Beeston - 01 Tom Bending - 03

Chris Birkhead - 94 Helen Birkhead - 94

Claire Bradley - 94 Phil Brooks - 98

Cecile Chabot - 98 Tim Comer - 04

Frank Cooke - 94 Pippa Crosby - 04

Brian Cullen - 03 Pete Eland "CVPete" - 95, 96

John Evans - 94

Megan Evans - 01 (Age: 10 months)

Pete Evans - 94, 95

"Broken" Chris Franklin - 05

Hilary Greaves - 00 Moritz Günther - 03 Fay Hartley - 99

Tony Hayden "Tonx" - 94, 95

Gavin Hayman - 94

'r' denotes a recce

Herman Hertz - 94

Stefan Holmgren - 00 Adrian Hooper - 01 Henry Hunt-Grubbe - 99

Ben Johnson - 00 Joanna King - 05 Marcin Kowalski - 05 Harry Lock - 94r, 94

Oliver Mann - 95, 97 (leader) Sandeep Mavadia - 05 Gary McGhee - 04

Dave Mountain "DM", - 94, 96 Gerardo Ocaña-Fuentes - 05

Ceri Owen - 01 Martin Pattenden - 00 Stephan Pier - 98

Michael Playford "Mick" - 97 Andy Radcliffe "Radders" - 94r, 94

Chris Roberts "Sos" - 96 James Roberts - 03

Chris Rogers - 04, 05 (leader)

Andy Sewell - 05 Maria Simon - 94 Milli Smythe - 96 Jos Visconti - 95r, 95 Paul Wilcox "Cox" - 95

Anthony Woods "Pants" - 95, 97

Ben Young - 99

Cartoons by Sarah Wingrove















### **Foreword**

"You see the first notch on the right hand side of Migovec's face?" asked Zoran. "You must pass over there when going from Razor. Then you'll arrive at the plateau and you'll find us camping." Older members of JSPDT were already on Migovec on that sunny October day in 1974 when a group of youngsters set off to join them. Four of us headed off from Razor, where we'd been dropped off in my father's jeep, and started carrying heavy rucksacks containing equipment and supplies for three days.

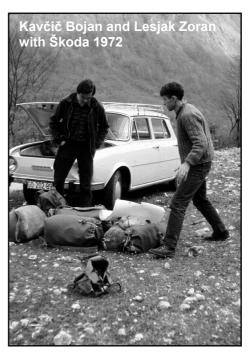
We traversed across the face of Migovec as we'd been advised to take the mule track. Arriving at the Shepherds' huts (Kal), we missed the correct path and ended up following the lower path all the way to Kuk. Eventually we realised that we'd have to go straight up. So we climbed up onto the far side of the plateau and crossed the moon-like landscape to meet the others after a whole day of walking. But we survived and lived long enough to sit round the camp fire. The white light of the Milky Way, the wind whispering over the plateau, the moon calmly sailing between the clouds, the bright lights of prosperity that could be seen in the Italian plain... There are no real words to describe those nights on Migovec; exiting the caves exhausted, wet, muddy and yet satisfied, enjoying the scenery and the dry clothes and the warmth of the sleeping bags. There is definitely something enchanting in the air, otherwise we wouldn't have continued to visit that mountain in spite of the locals thinking that we were crazy, stupid and exploring a useless world.

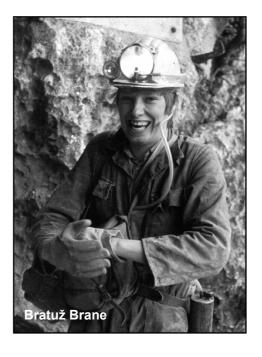
But the law of this world says that however strong you are, you'll find stronger. However beautiful you are, you'll find someone more beautiful. However crazy you are, you find those ever crazier. And so it was with the Imperial cavers. You really do need a fairly weird attitude to live for six weeks, in Stone Age conditions, on the top of a mountain. But collaboration with such people has proved to be very successful since the finds under Migovec are still going on and on.

Now I know what our initial problem was. We were aiming for the famous -1000m. This was our goal and our mistake! Our great Alpinist Nejc Zaplotnik said, "If you aim only for the top you are lost. But if you find the way that leads to your goals, you are saved and your life will have a meaning." On Migovec, we found a way that open hearted people can follow for generations.

Andrej Fratnik







### Uvod

»Ali vidiš prvo koleno na desni strani Migovca?« je vprašal Zoran. Tja morate priti iz Razorja. Nato pridete na pode, kjer boste našli kamp. Starejši člani sekcije so že bili Migovecu, na ta sončen oktobrski dan daljnega 1974, in čakali na mladino, ki naj bi se jim pridružila. Tako smo štirje začeli naš pohod s težkimi nahrbtniki z opremo in potrebščinami za tri dni s planine Razor, do koder nas je pripeljal moj oče z jeepom.

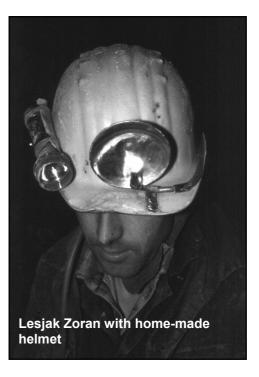
Šli smo pod Migovcem do planine Kal, saj so nam priporočili da gremo po mulatijeri. Pa smo zgrešili mulatijero in šli naprej vse dokler se ni nad nami vzpenjal tolminski Kuk. Sprevideli smo da ne bomo prišli na vrh, če jo ne uberemo naravnost navzgor. Pa smo prišli na zadnjo stran platoja in potem po lunini pokrajini do kampa in ostalih po celodnevni hoji. Vendar smo preživeli in to dovolj dolgo, da smo se posedli okoli tabornega ognja pod mesečino, kjer so sence s pomočjo naše domišlije postajale žive, čeprav so bile čez dan samo rušje in skale. Bela svetloba Mlečne ceste, veter ki je zavijal čez Migovec. luna ki je mirno plavala med oblaki, bleščeče luči svetle bodočnosti v furlanski ravnini... Ni pravih besed, da bi lahko opisal te noči ko si prišel izčrpan, moker umazan toda zadovoljen iz jame in užival to čudovito okolico, posebej pa suha čista oblačila in spalno vrečo. Bilo je nekaj magičnega v zraku teh noči, sicer ne bi vedno znova hodili na to goro, kljub temu da so nas domačini imeli za norce, ki raziskujejo nekoristni

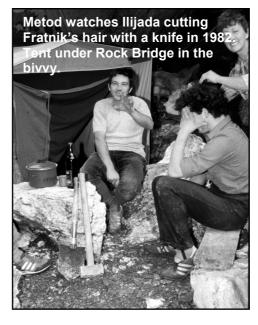
Toda zakon je na tem svetu, ki pravi: četudi si močan vedno boš našel nekoga, ki bo močnejši. Četudi si lep, vedno se bo našel lepši in četudi si zmešan se bo našel še večji norec. Ne samo eden, cel kup. Res moraš biti malo čuden, da šest tednov preživiš v kameni dobi na vrhu hriba. Toda sodelovanje med takimi ljudmi se je izkazalo za velik uspeh saj gre sistem Mig naprej brez konca.

Zdaj vidim, kaj je bilo narobe. Gnali smo se za slavno globino - 1000. To je bil cilj. Narobe! Naš veliki alpinist Nejc Zaplotnik je dejal, če skušaš doseči cilj si izgubljen, ko ga dosežeš, ostaneš prazen. Toda če najdeš pot med temi cilji si rešen in tvoje življenje bo imelo smisel. V Migovcu smo našli pot, kateri lahko sledijo generacije ljudi z odprtim srcem.

Andrej Fratnik





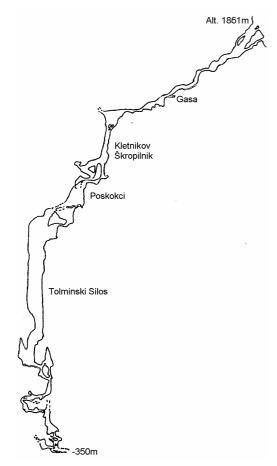


## Early Exploration on Migovec by JSPDT (1974-1984)

Exploration of the caves on Migovec by the JSPDT first started in 1974. The main members of the club who were responsible for this were Zoran Lesjak, Brane Bratuž, Stanko Breška and Fischione Alfonz. The following year, several other members joined and began taking part in the exploration trips. These included myself (Andrej Fratnik), Andrej Rutar, Andrej Kenda and later Andrej Tomažinčič, Dejan Ristič, Kos Metod, Jarc Stane, Kočic Ilijada and others.

### M2 Kavkna Jama

Tolminski Migovec, Slovenia Surveyed by JSPDT (pre 1994) Location 540504/512393 Altitude 1861m





Initially, exploration centred around M2, named 'Kavkna Jama' meaning 'Jackdaw Cave' after the birds which used to roost in the entrance. The exploration of M2 was carried out between 1974 and 1978 using mostly SRT. We used a fairly standard 'frog rig,' but had to handmake our own jammers and descenders and carbide lamps (weighing 3Kg without water or carbide!) Exploration of this cave would have been impossible using only ladders, which is what most of the other cavers of the day were using. In fact the bulk of cave exploration at that time was in the lowland Karst regions where caves are spacious and long rather than being tight and deep. When the big pitch, Tolminski Silos, was found, M2 became one of the deepest caves in Slovenia at that time.

M2 has two entrances, a large vertical hole and a small crawling passage below it. Usually the crawling entrance is used except for winter exploration where abseiling into the vertical entrance from an ice axe belay is necessary. There follows a large amount of very tight and sharp passage with several short ladder pitches. Silos is the main pitch in the cave; measuring about 100m deep, it's a very large impressive shaft.

Surprisingly the cave passage closes down immediately after Silos pitch and there are three extremely tight squeezes in quick succession. These squeezes are separated by small pitches making it necessary to remove and then replace your SRT equipment many times. To allow exploration beyond these squeezes, we started camping at the bottom of Silos.

One of these squeezes was enlarged using WWI explosives which had been 'rescued' from an unexploded mortar shell. The chemical (called 'Ekrizit' in German) has a distinctive odour and a very strong yellow colour which dyes everything that touches it. I remember squeezing through the newly enlarged passage whilst wearing my best white woollen thermals. If they existed today they would still have large yellow stains all over them. The termination of exploration in M2 was yet another tight and very sharp squeeze but the potential is still there!

During one exploration trip, I got so badly stuck in one of the squeezes that the others had to haul me out like a corpse by my feet. I also remember the trip when we started bolting down Silos. The first man had gone down halfway and run out of rope at a ledge so he swung onto it take a closer look. He shouted up for the next man to take care as the rope was too short but he evidently did not hear. The next man followed but as he was abseiling he felt the unknotted end of the rope slip through his fingers. But, instead of falling 60m to the bottom and certain death, he stopped dead. Unbelievably, the metal ring (which was lightly crimped to the end of the rope for marking) had stuck between the bobbins of his descender! He was not a happy man and I suspect he got off that rope in a hurry. From the top of the pitch all I could hear was the shouting and swearing...

Surveying in those days was done using an old and bulky army compass and a homemade clinometer. This consisted of a protractor and swinging arm with a weight on the bottom. Many of us still consider the new Suunto surveying equipment as no easier to use than these crude instruments!

Most of the exploration was done at weekends where we would walk up from Tolmin on Friday evening and go directly to the cave; my personal record for this walk was three hours. We usually wouldn't come out again until Sunday afternoon or evening. When we could get transport we usually chose to go to Razor and walk up the eastern side of Migovec as this is shorter than from Ravne. Neither the Razor nor Ravne roads had tarmac at that time.

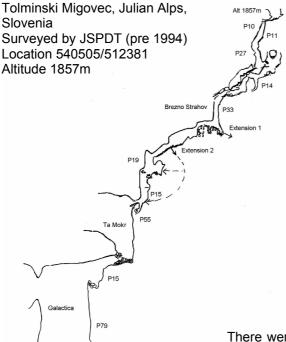


During the month of October in both 1976 and 1977 there was a period of stable weather so we made one week camps on Migovec mostly for the exploration of M2. At first we camped on the "English Grass" until a storm destroyed the tent. Then we used a bivvy which nicknamed 'Pueblo' which isn't far from the entrance of M1. There was a good supply of water here but the constant dripping made it difficult to sleep. We later moved up to the new bivvy under the rock arch.





# M16 Extended Elevation to Galactica Chamber



The next significant discovery on Migovec was M16 in 1982. This cave was originally pushed to -100m through a very tight entrance series. At the bottom of a series of pitches there is a blind chamber. After satisfying ourselves that the downward leads were impassable, one member spotted a possible continuation 5m above the floor. There was a promising looking flake and we spent several hours trying to lasso it. After we had all given up hope we decided to have one last try before going out and writing the cave Obviously this attempt was successful and the rest of the continuation was found.

In 1983 the entrance was enlarged with more WWI explosives. The cave was explored using modern Petzl SRT equipment and Bluewater rope which was given to us by the English caver Allan Richardson (South Wales CC).

There were several significant occurrences during the exploration of M16. The pitch 'Brezno Strahov' meaning 'ghost pitch' was named when a group of three cavers ascended it. Each caver in turn stood on a large flake to pass the rebelay. When the third man stood on the flake it slid down the pitch, coming to rest exactly where they had been standing.

Again, at -547m, M16 was one of the deepest caves in Slovenia and was unusual in that it was in the mountains not the lowland karst.

Exploration on Migovec halted in 1985. From then, we went back to concentrating on Mala Boka with better explosives.

Andrej Fratnik



"Between 1985 and 1993, a French Team of cavers visited M16, resurveying part of the cave as they went. In 1989, a team of SWCC cavers, led by Roddy McLachlan, also visited Migovec. No major extensions were found by either of these teams, however."

James Hooper

## A postcard from Fratnik: From Swinsto to Slovenia

When Mark and I joined Imperial College Caving Club in October 1991, an eventful summer tour had just returned from Monte Canin, straddling the Italian and Slovenian border. The main objective of this trip had been to visit the deep caves on the Italian side of the border, in particular, the Gortani entrance to the Complesso Col Delle Erbe (-935m) and the Abbisso Modonutti-Savoia (-800m). Although members of the club had successfully bottomed these caves, the trips were not uneventful. Herman had fallen 8 metres into a sump at -892m and had taken 28 hours to struggle out - with one good arm, mild hypothermia and recurring double vision. Another close call occurred when a sudden thunderstorm caused a group to wait for 8 hours at -550m until the water levels on the pitches subsided. The caves were undoubtedly dangerous, born out by the fact that they all seemed to be named after dead Italian cavers.

During this tour, a number of people became interested in the exploration potential of the Slovenian side of the Julian Alps. Thus the last week of the trip was spent in (very) newly independent Slovenia, investigating the area and taking advantage of the favourable exchange rate. On paper the potential looked excellent. Monte Canin illustrated this perfectly. The Italian side of Canin had many caves over 600m in depth and had been explored for the previous twenty or so years. The Slovenian side (named Kanin), on the other hand, had only two: Črnelsko brezno (-1198m) and Skalarjevo brezno (-911m). Italians and Slovenians had explored these very recently. Consequently, Pete Hambly, Alva Gosson and Harry Lock would always be very keen on Slovenia whenever the subject of planning an expedition came up at a club meeting or in the pub.

"While caving in Italy we started to hear stories of a land to the east of the Julian Alps. A land where the women were dark and mysterious the liquor strong, the food delicious and diverse, and above all, the exchange rate favourable. With such a description, Slovenia seemed a paradise compared with a rather bleak NE Italy, dominated by the terrible scars of ski routes. Before long, more and more of our time was spent sampling the touristy areas of this recently war-torn land."

Alva Gosson, 1991

We had just joined the club, though, and there were too many things to learn before we could think seriously about expeditions. The first trip that made me think, 'Wow, this caving is good' was the Simpson's - Swinsto exchange: still a great favourite today. We just couldn't get enough of the Yorkshire classics - King, Penyghent and our first rigging trip in Vespers among others. Our first real challenge came in the summer, however, when the club went on a tour to the Pierre Saint Martin in the Pyrenees. Deep caving, interesting route finding, some cowboy rigging (chest tapes round dubious looking flakes etc.) and my longest caving trip to date (20 hours) taught us much about deep alpine systems.



The following year, Mark was in Hong Kong and I spent the first term in Germany. However, we still got some good caving done and managed to recruit a few keen cavers. In particular, Iain McKenna, who Mark and I knew from our undergraduate years, and both Richard Anderson "Chard" and Richard Moon who I was sharing a flat with. In the summer we went to the Vercors and bottomed Antre des Damnés(-723m) and Scialet Trisou (-232m). As we were interested in finding out about underground camping, Mark, Iain and Richard Moon set up an underground bivvy in a relatively easy environment (Fumant). By all accounts they had a very uncomfortable night, learning that if you are going to camp, it must be well organised and comfortable, otherwise you might as well just keep going.

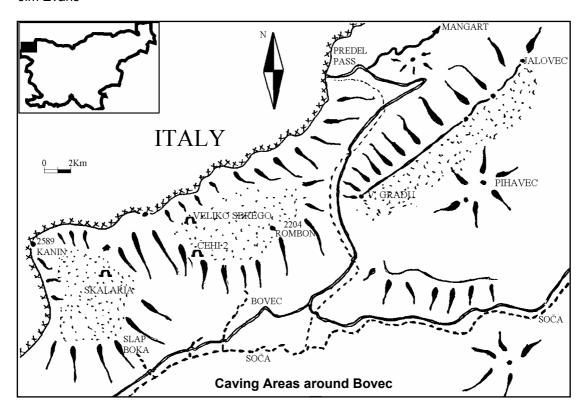
"This mighty massif (Monte Canin) sits astride the Italian and Yugoslav border to the NE of Udine. The barren and inhospitable plateau to be found at the 1700m - 2000m levels are considered some of the finest and most spectacular examples of lapies, dolines, shafts and fissures within Italy...all the deep systems are characterised by long, narrow meanders punctuated by cold well-watered shafts, and their exploration is therefore not easy."

The Underground Atlas, Middleton and Waltham

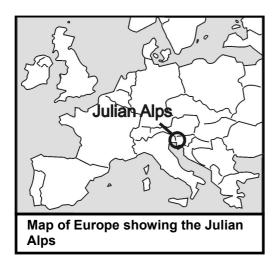
At the beginning of the 93-94 academic year, we were really beginning to get into the idea of organising a serious expedition and Slovenia was soon chosen as being the best option for a location. Mark, Harry and I began the task of literature research and writing to Slovenian and Italian cavers to try and gain permission to explore in an area. We were also very successful in gaining grants for the expedition and within a few months of putting proposals in we had £8000 pounds of sponsorship from various college sources. Gaining permission was proving to be somewhat more difficult. The letters we got back from Slovenians were often ambiguous or mistakenly indicated that they believed we wanted a paid guide to visit caves.

By the beginning of 1994, we still had no definite plan and so we decided to have a reconnaissance in May to try and meet people and organise something for the summer. I sent off letters to various people saying that we would be coming to Slovenia and would be interested in meeting them. In the end I got two responses, a letter from Gregor Pintar and a postcard from Andrej Fratnik saying simply 'You are welcome'.

### Jim Evans



# The 1994 Reconnaissance: First Contact between IC<sup>3</sup> and J.S.P.D.T.



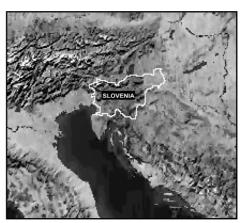
After arriving in Slovenia and briefly visiting some non-caving friends, Harry, Andy and I went to see Gregor Pintar on a Sunday evening. His letters had been a little bit ambiguous so we weren't sure exactly what to expect. Gregor's first letter said:

"It is hard to explain the present situation and specially the spirit among Slovene cavers after some big and important discoveries of Italians on the Slovene part of Kanin mountains. So nobody has a real interest for further explorations where the authors are foreigners. You chose the only possible access to Kanin - to join a Slovene club."

After informing him of our plans for a recce, Gregor replied:

"Your reconnaissance trip at the end of May is a good idea and also of great help to me. I look forward to meeting you in Slovenija. Together with a pint of lager on the table we will find out all the details you require, including some more you are even not aware now."

So this sounded reasonably promising. After giving us generous portions of Slivovic (a local spirit) and producing bottles of beer, he proceeded to describe recent events on the Kanin Plateau.



Italian cavers from CGEB (Commissione Grotte "Eugenio Boegan") had been exploring near Rombon and had been allocated an area to work in. Their most recent discovery had been Čehi 2 (-1393m) a cave originally explored by Czech cavers (hence the name) and then extended significantly by the Italians. In 1992, Dejan Ristič (JSPDT) made a solo trip to the bottom of this cave. Slovenians from a Ljubljana club (Društvo za raziskovanje jam Ljubljana) together with Dejan, also had a smaller scale operation on the plateau in the form of a two week camp every August. They were pushing Vandima at a depth of -1100m, though they were hoping it would finish soon as only two people could reach the bottom of the cave and it was very dangerous when wet.

After long discussions with Gregor, it seemed that he was not sure if we could get permission to work with his club on Kanin: we would need to ask the people in the camp at the time. This didn't really seem to be a very concrete basis for organising an expedition but it was all we had at the time.

The following day we drove over to the Julian Alps to meet up with Andrej Fratnik from the JSPDT (the caving section of the Tolmin Alpine Club). During the day we looked at possible group accommodation before meeting Andrej Fratnik, Simon Gaberšček and Dejan Ristič.

JSPDT were also involved in the exploration on the Kanin plateau, their main project at the time being the resurgence cave to Kanin, Mala Boka, which they had already pushed to +400m, bolting up pitches as they went. Then they told us about Migovec, a nearby mountain they had worked on a few years before. They now lacked the manpower to work on it but believed it had potential and said we could explore there if we wanted. It looked promising and Simon agreed to take us up the hill later in the week.

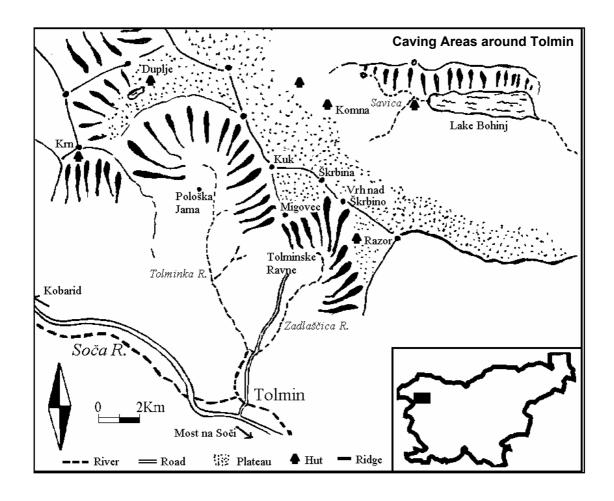
Over the following two days we walked up to the Skalaria hut, checking out the karst of the Kanin and Rombon Plateau. It looked very impressive, like a lunar landscape. We found the Veliko Sbrego entrance, rigged Italian style with a single plate and stopper knot at the top. (In 1996, this cave was pushed below -1000m by Andrej and cavers from CGEB.)

We arrived back at the car with dehydration, sunburn and blisters, with a sudden realisation of the slog it was going to be to carry caving and camping gear to the top of these mountains. The following day we checked out Mangart, further north. It had very impressive winding tunnels up the road which were built by the Italians during the Second World War. The resurgence marked on the map seemed to be fairly insignificant, a small river coming out of pebbles. As we climbed higher, we could see much evidence of surface drainage. The limestone appeared to be dolomitic, and we saw very little cave development as we walked to the summit.

We arose early on Friday morning to meet Simon, as previously planned, and drove up to the small hamlet of Tolminske Ravne, the nearest place to Migovec by road. My blisters were quite bad by this time and I struggled to keep up during the steep ascent. We were on the top of the mountain after about two and a half hours and Simon showed us two cave entrances: M1 and M16. Unfortunately we didn't pay that much attention at the time (dehydrated with only a can of Zlatorog beer to drink) and we ended up taking four days to find these caves again in the summer!

Migovec looked like it had real potential and we decided it would be a good location for an expedition. There was now a plan at last and we could hardly wait to return in a few months time.....

Jim Evans



## The Migovec Plateau: The known situation in 1994

## A brief note on the known Geology and Hydrology

The Migovec plateau, in the Triglav National Park, lies at an altitude of between 1800m and 2000m, between the peaks Tolminski Kuk (2085m) and Tolminski Migovec (1881m). It is formed of Upper Trias limestone. The plateau catchment is believed to resurge at the head and along the length of the Tolminka valley (300m), though some water may also resurges into the Zadlaščice at Tolminske Ravne (980m). Both of these rivers are tributaries to the stunningly beautiful Soča river, one of the major drains of the Julian Alps. (Incidentally, the Soča front claimed the lives of an estimated one million people during WWI and is described in Hemingway's "Farewell to Arms.") It is also possible that drainage from the plateau flows North East to the Slap Savica waterfall above Lake Bohinj. Before 1994, no sizeable underground rivers had been discovered so it had not been possible to do any further analysis on the hydrology of the area.

James Hooper

## The known Caves on Migovec in 1993.

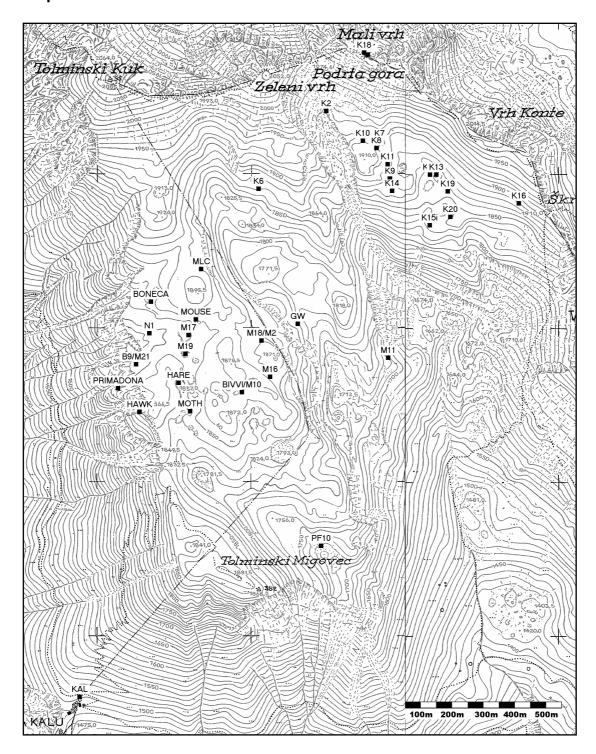
Cave	IAS Co-ordinates	Altitude (m)	Depth in 1993 (m)
M1	540502/512380	1858	-61
M2	540504/512393	1861	-350
M3	no information	no information	no information
M4	540498/512389	1864	no information
M5	no information	no information	no information
M6	540515/5123370	1854	-67
M7	540535/512329	1742	-20
M8	540533/512332	1735	-13
M9	540537/512332	1735	-19
M10	540495/512376	1870	-33
M11	540544/512389	no information	-6
M12	540523/512361	no information	-15
M13	540511/512413	no information	-15
M14	540496/512396	1867	-22
M15	540487/512395	1864	-58
M16	540505/512381	1857	-547
M17	540478/512397	1861	-50

The above table shows the names and depths of the caves known on Migovec in 1993. Only a handful of the caves M1 to M15 are really worth noting and it is difficult to understand why holes such as M11 (6m deep!) were noted, as the plateau has many similar or deeper surface holes which were not then formally recognised. The main caves explored by JSPDT were M2 and M16 (see previous articles).

Accurate co-ordinates of these caves were not known in 1993 (and so, in 1994, a significant amount of time was spent located and re-marking the caves with spray paint).

The co-ordinates and altitudes (above sea level) given in the table are the result of several years of subsequent work by ICCC, using both GPS and accurate surface survey. These IAS co-ordinates match up with co-ordinates in other parts of Slovenia and are used throughout this report. The least significant digit is 10m, so 540535 and 540537 differ by 20m.

## Map of the Plateau



This map shows the plateau together with some of the main cave entrances found up to 2006.

Most of the locations are taken from GPS readings in 2006, some omitted for brevity.

PF10, M16, M18, M17 and M19 locations derived from surface survey.

Kal is also known by IC cavers as 'The Shepherds' Huts.'