

Migovec 2000

Introduction

The year 2000 was the 7th expedition to the Migovec Plateau in Slovenia. During previous years, a large 10km+ system with a depth of nearly 1000m had been found. Most of the deep leads were found and explored to sumps during 1997 and 1998. The upper sections of the cave were explored further during the 1999 expedition.

The 2000 expedition involved exploration of the main system, the Migovec Cave, and extended leads from a depth of 300m within the system. Many large new shafts were found and explored, some dropping to 600m. The main discovery during 2000 was of the **Gardeners' World** cave. The entrance to this lies near that to the main system only about 100m away and some 50m lower. This cave was easily explored after a tight entrance down to a depth of 400m where time prevented exploration of the following pitches. The accounts given below reflect this exploration and all the other work done within the Migovec mountain and show clearly that the area still holds a huge amount of superb caving potential.

Area of Interest

The Expedition takes place near to a town called Tolmin in western Slovenia. This is amongst the Julian Alps and a nearby mountain called Migovec is our main target.

The area of most interest is the Migovec plateau (alt. 1800m approx.) which lies at the top of the mountain and is a large relatively flat area of **karst**.

To get to the plateau, a narrow twisty road (strangely always seeming to have at least one cement mixer lorry on it!) is followed to a **village** called Tolminski Ravne (alt. 980m). Here the lower camp is set up. A steep path climbing up Migovec leads to the **plateau** where the main mountain camp is.



History of the Expeditions

The Imperial College Caving Club has been going to Slovenia for the past 7 years. The area of investigation is in the Julian Alps in Slovenia. This area was identified as being very suitable for containing large and deep cave systems, with a depth potential of more than 1km. Very little was known about caves in the area and liaisons with a local caving club, the **Jamarska Seckcija Planinskega Društva Tolmin (JSPDT)** soon gave rise to the Migovec plateau being mentioned as a good base.

Aims of 2000 Expedition

Water Tracing

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The hydrology surrounding the Migovec system has been a matter of discussion throughout all of the previous expeditions. Finding the resurgence point for the system may help to indicate how the cave progresses from its deepest points that are stopped by sumps. It will therefore be important for determining areas of the system to explore further.

In previous years, water tracing has been attempted using optical brightener. Only one dubious positive trace has been detected and whether this is a positive trace or not is uncertain.

Checking this trace is important because if it is positive, then this indicates that the cave drains to the **east** and eventually into the Black Sea (about **750** miles away) and not into the nearby Adriatic to the **southwest** (only 40 miles).

### Further Exploration in System Migovec

Although the Migovec Systems has been extensively explored over the past years, a great many leads still exist. Many of these are relatively shallow in the system and have been ignored in pursuit of the much deeper leads.

During the 2000 expedition, cave camping equipment was not taken, so as to concentrate on these higher leads such as the large 'inviting' un-descended pitches dropping off the phreatic development known as Level 2. These include Paradiso, Bear Necessities, Purgatory and Obelix. Pitches dropping from a higher-level passage known as 'NCB Passage' also need to be explored.

Another area of interest is Rock and Roll. This is a particularly active boulder choke that has been slightly penetrated previously and is reported to contain "many very good leads - leading to large amounts of cave..."

The further exploration of System Migovec was intended to check a few of these leads, and hopefully extend the cave and find new leads for future expeditions.

### Exploration of Surface Leads

The plateau surrounding Migovec and its **neighbouring** mountains all contain very highly exposed **karst** features. Because of this, it is very difficult to not find new cave entrances. This presents the problem of where to begin. Many of the cave entrances found previously (many found by the first winter recce) have not been pushed or even entered and are known to contain leads. Some of these are apparently draughting enough to "put out your carbide flame...". Testing the validity of these claims was one of the expedition aims.

## Achievements of 2000 Expedition

### Introduction

Due to logistical difficulties with transport this year, most of the expedition members flew out to Venice and then travelled over to Slovenia by train. The kit was driven out via LandRover kindly **hired** to us by Martin McGowen (MM).

After a non-stop 999.9 mile drive by BJO and TA with JE kindly sleeping all the way we arrived early and after a brief sleep, met up with Andrej Fratnik (AF). He is a member of the local caving club JSPDT and has been very helpful in coordinating all of the expeditions. He also very kindly gives us some space in his central heating factory known as 'The Barracks'. Here we can sleep and store kit whilst down in Tolmin, the local town. This is incredibly useful and we are very grateful for his assistance.

Whilst waiting for the other members of the expedition, we drove to all the major resurgences in the area and installed the detectors for use with the optical brightener. These are basically plastic bags with holes in, filled with cotton wool and are nicknamed 'Zoopons'. These would be picked up at the end of the expedition and tested.

Eventually, the other members of the expedition began to filter their way into Tolmin and we all met up in the local Paradiso Bar - this was not the organised meet up point, but everyone knew we would be there!

After a 'few' beers we started to transport equipment up to the first mountain base. This is in a village known as Tolminski Ravne at an altitude of circa 980 m and is the nearest highest point reachable by road. This is normally the easy bit, with the kit then being carried by hand up to the Migovec plateau at about 1850 m altitude.

Unfortunately, whilst driving the kit up the hill, the weather began to have other ideas - very very wet ideas. We did not realise at the time that it wasn't going to stop for most of the expedition! The rain began to fill the rivers very quickly and the Tolminka in Tolmin soon became many times deeper, browner and full of bits of trees (or trees). Unfortunately, this rain began to trigger landslides up on the mountain or more precisely, across our road. The hairpin zigzagging shape of the road meant that one landslide effected the road at about 4 places.

Fortunately, we had the Landrover, so the smaller landslides could be driven over and some of the larger ones had to have boulder removed - quite scary clearing a road below a landslide whilst its still raining. Miraculously, however, we all made it up in one piece and soon after the weather began to clear up.

This rain had caused major earth and rock movement in the area and was so hard at times that flows of water were seen coming off the side of Migovec - a totally limestone mountain that's full of holes!!

Carrying the kit up the hill was less eventful and actually quite nice - with hot weather throughout. Each carry takes about 3 hours on the way up and 1½ hours on the return. This year's record was set by AJ at 1 hour 35 minutes closely followed by BJO with 1 hour 42 mins. This childish racing soon stopped after experiencing the muscle pain the day after!

Once up the mountain, the camp was set up in the now traditional bivvy that has been used during most of the expeditions. This is inside a shake hole with a convenient rock bridge. Once we were settled, the tea drinking began.....Then we started caving.....eventually.

### **Surveying of Pri-Madoni Cave**

Throughout the last year, the Slovene cavers from JSPDT have been exploring a cave known as Pri Madoni or Sokolje Brežno. The entrance to this was about 100 m down the cliff off the side of the Migovec plateau. There was an idea that they may have broken into Sajeta in the Migovec System, so the cave needed surveying to find out.

On the 7th day of the expedition, even before camp was set up fully, Jan Evetts (JE) set out with members of JSPDT (Tomaž, Taday, Nikolai and 'Small bloke with a girlfriend'). In true Slovene style this trip was undertaken at a strange time between 9pm and 10:30am the following day. The cave was described by JE to be *"An evil combination of M16 and Torn-T except more loose boulders, dodgy rigging, evil tight sharp bits, big pitches and free-climbs. The most dangerous part was getting to the entrance! 200m up a steep gully, a climb up two small cliffs and traverse across a dodgy scree slope at the top to the entrance."*

JE and Tomaž went down to -250m (taking 4hrs) and whilst the others went on to explore, they surveyed out. Although the cave was found to be still a long way from the Migovec system, a draughting east-west passage was found but not explored. This could give a connection to the main system.

After a short bout of diarrhoea, apparently not the source of the east-west draught, JE and Tomaž finished the surveying.

This cave adds a new and interesting possibility to the Migovec System and after deciding it would be worth another look, an easier route to the entrance was needed. Since it was only about 100 m below the plateau edge, JE and Colm Carroll (CC) began to bolt down to the entrance. This produced a number of interesting things. Firstly a very spacious abseil, although not too high, the cliff slopes at about 70° down to the valley floor more than 1km below giving a very airy feeling. Also on the way down, a new cave entrance was found

in a narrow rift on the edge of the cliff above Pri Madoni. This was named U-Bend cave since it was found on a bend and lies underneath the U in "Club" on the original system Migovec survey. The exploration of this cave is given below.

The leads in Pri Madoni were not explored this year, but the bolting of the route down to the entrance will be of great use in following expeditions.

### Exploration of U-Bend Cave

The entrance to this cave was found whilst bolting down to Pri Madoni. Clewin Griffith (CG) and Tom Ayles (TA) and a 5lb lump hammer began the exploration of this cave. A short ladder pitch dropped to the bottom of a tight rift that was hammered along until passable. This rift was passed eventually and found to lead to a small pitch series.

For the last trip of the expedition, JE and AJ descended these [pitches on a pushing-photographic-surveying-derigging trip](#) to find the obvious way on was probably blocked (although this is still a potential lead). The pitches were then de-rigged and on the way out JE noticed a well draughting window off the side of the first pitch about 10 m down. Although this was too tight to enter, it appears to offer a continuation to this cave.

U-Bend will probably drop into Pri Madoni, but it is hoped that in doing so, a link with the Migovec System may be made. Since it is difficult to make horizontal progress inside the mountain, dropping surface shafts may provide the desired horizontal links.

### Extensions in Main System Migovec

The main Migovec system goes down to a depth approaching 1000m. Past expeditions have tried to extend this further but with no luck. Because of all the activity at the bottom of the cave, many open leads higher up have been ignored in pursuit of deeper leads. The main aim of the 2000 expedition was to push some of these leads to create new deep leads. Most drop off the large horizontal phreatic passage known as Level 2, but some are in an upper horizontal passage originally in M18 called NCB Passage.

The first trip into the system was to re-rig the permanently rigged entrance series in M16. New 11mm was installed by CG and HG and the remaining fixed traverses were all re-rigged early in the expedition by other expedition members (AJ, AP, HG, SH).

The major new discoveries took place below a pitch known as Bear Necessities. This is below Paradiso pitch that drops off Level 2.

After Paradiso it splits into two options both reuniting at Bear Necessities. The first option, Father Shed, gives a dry descent whilst the second and aptly named Purgatory is much wetter. Unfortunately, due to a slight misunderstanding, this pitch was rigged. Stefan Holmgren (SH) and HG rigged to the bottom of the next pitch - Bear Necessities where a small hole was found leading to a blind chamber and a narrow rift led out to the next undescended pitch. This long narrow rift became known as Twisted Sisters and quickly gained a nasty reputation. HG and PJ pushed this rift to another pitch - Gloworm's Local, where a 47m rope ended a mere 5m off the floor. The lead was now strong and further trips soon followed. Colm Carroll (CC) and HG found that the bottom of Gloworm's Local became blocked, but a window to the side of the pitch gave access to another 3m pitch followed by the larger Hole in the Hill pitch. After a 60m descent, the end of the rope was in sight, but the bottom wasn't - a good reason to end a trip.

Unfortunately, this discovery coincided with the need to begin de-rigging the cave as the expedition was coming to an end. The first de-rigging trip was also to push the Hole in the Hill down to an end - this was done and the pitch was found to be blind. A brief look about yielded no obvious way on although the way on may be half way down the pitch as is often the case in the system. This area could be of further interest in future expeditions. In a cave system of so many leads, however, you have to be picky!!

These extensions took this pitch series down to a depth of [-575m](#).

Another area that was extended is the 'Asterix series'. This begins with Skalar Pitch followed by Dogmatix - a crawl. In the words of TA, "I hate cave like this. You've got to respect them for pushing it (AJ '99), but at the same time they should be shot..". Following this is the main Asterix pitch, some more choice words from TA describe it as "The pitch head of Asterix is undoubtedly the nastiest bit of cave I've encountered..". The drippy pitch Obelix follows this to the limit of exploration.

TA and CG found two un-dropped pitches at the bottom of Obelix this year and bravely chose to descend the smaller of the two finding a choice of three rifts in a clean washed chamber with an "Interesting pool formation". Two of the rifts were too small to enter and the last was free-climbed by MM to find a "nice pool"

and no way on. The remaining larger un-dropped pitch at the bottom of Obelix was left un-dropped because of JE 'misplacing' the driver. By this point, time had unluckily run out, so the series was de-rigged and a good lead remains.

Dodge City just off NCB passage also received some attention. After a tricky entrance via M18 (Torn T-Shirt) Martin Patenden (MP) and Tim Wright (TW or Shed) looked at the area. A recommendation from Tetley suggested they ignored the very loose 'left-hand' route and explored to the 'right' where a small set of passages were found. Although some were too tight, most could be seen to continue. This area could produce an important connection to **Gardeners' World** and possibly another 'Level 2' or new deep lead.

Extra dodge city stuff from Tetley  
Rock and roll information

In conclusion to this section of exploration, it is clear that there are still just as many leads in the main system at the end of this expedition as there were at the start. Each look at a new lead produces more leads in turn - some turn out to be blocked, but many could be forced to lead to new areas of the Migovec System.

### Exploration of **Gardeners' World**

The most notable discovery of the 2000 expedition was **Gardeners' World**. The entrance is obvious and lies about 50 m below the eastern side of the plateau on the edge of a very large dry valley draining to the south. Its entrance is about 100 m down the valley side from the M18 (Torn T-Shirt) entrance through which the Migovec system was originally found. **Gardeners' World** had been looked at during the original surface recce trips many years back, but a small squeeze at the bottom had been ignored in pursuit of open leads higher up on the mountain.

In 1998 it received a bit more attention and during the 2000 expedition, it was finally properly looked at. BJO and PJ made the first breakthrough near to the start of the expedition.

The nasty, tight and very spiky short crawl that had understandably stopped initial exploration was passed by BJO to reveal a short pitch of about 6m leading to a short rift. Having passed the squeeze, it was named The Oesophagus after its shape. Problems with spelling soon demanded an apt name change to The Oh-so-fag-arse.

The short rift passage quickly pinched down to a slot and to Birth Canal Pitch (5m) where a tight squeeze at the pitch head opens out into much larger cave passage. Descending down a rift of about 12m led to large passage and the top of a very loose rocky pitch. In the distance, a rift passage about 5m wide by 15m high continued into the distance. This was the end of the first trip and the cave was soon inciting interest back at camp.

The loose rocky pitch was soon gardened very heavily, in doing so changing the cave's original name from "Ben's crap lead" to a more suitable "**Gardeners' World**". The rift passage seen continuing led to an unusual split where a large wide sloping pitch dropped to the left and a tight pitch dropped to the right. There seemed to be no connection at all, and in view of their shape, they were named Laurel and Hardy.

Laurel was explored first, by PJ and HJ, leading down after 40m to an unstable chamber (Jelly Chamber) and into the awkward Urinal Series of small rifts.

Hardy was dropped soon after by BJO, MM and Tetley to reveal a sloping pitch of about 30 m to another shorter 15m pitch with a rock that looks exactly and confusingly like a tackle bag at the bottom. PJ and AJ then forced the squeeze (**Waffer** squeeze) at the bottom of Hardy into Wafer Chamber, where exploration stopped in a series of tight winding rifts. This later turned out to be directly above Pico Pot, so the black space down the small rifts may well have opened out into an 80m drop!!

After winning a game of paper-scissors-stone against AJ (due to a 'misunderstanding' of the rules), PJ descended the last pitch of the Urinal Series to see a black void open out in front of him. AJ was give the consolation prize of ironically naming it 'Pico Pot'. Speculation that this was part of the Migovec system (Titanic or Silos) was dispelled after survey data was examined using Survex.

PJ and MM began descent from what seemed to be the floor, but soon realised that it is a very big rock bridge as the wall completely leaves you dangling. A sloping wall then joins you for the rest of the descent to the floor giving a total of 63 m. Exploration at this point left the cave about 500 m long and almost 200 m deep all found within 10 days and it was still not resisting exploration.

It was at this point that we noticed that **Gardeners** World Cave was quite active when compared to the main Migovec System and has a well defined stream way. Because of the heavy rain throughout the expedition, there were a few moments when the cave approached flooding, this made some of the pitches dangerously wet, so extra care had to be taken deeper in the cave.

CG and AJ decided that the cave needed 'tidying', and in total 16 hours were spent placing back up bolts and rerigging previously rushed sections of cave. An hour's swinging in conjunction with a very slippery slope by AJ led to the discovery of a dry bypass called the Tessallator. Following this was Space Odyssey where a dry route was rigged by BJ and Teltey which avoided the water very successfully - a perfect bit of rigging except for the knot change about six feet from the floor! The floor of the pitch is covered by a layer of water that cascades down an unexplored slot in the floor, a window to one side hints at a drier route where a dropped boulder took long 5 seconds to hit the floor!

The exploration of this pitch was left to PJ and Jim Evans (JV). PJ began the rigging but was soon glad to leave it up to the experience of JE to tame this huge hole. Whilst JV bolted, PJ shivered whilst heating up a tin of sardines on his carbide flame and combining them with staple caving food - the Mars Bar - a culinary delight apparently? The faint sounds of "r o p e f r e e" filtered up from the bottom of the shaft. 67 m later, both were at the bottom and Concorde pitch was named. It is a very clean, cylindrical shape with a totally clear flat floor (apart from the two boulders dropped during exploration will they still be there in 2001?) and worth noting that two Concorde aeroplanes could be stood end on end upright and just touch the top.

The last pushing trip of the expedition took place below Concorde, where JE and Bruce Drinkwater (BD) found Alchemy pitch and then on to the final pitch, where exploration had to stop because of lack of time. The continuation can be clearly seen and during de-rigging, it was noticed that a rock took three seconds to hit the bottom of the undescended pitch, but a strange low thud was also heard some 4 seconds later again. This pitch remains an interesting mystery, but it is clear that the cave still has a great deal of potential. After military precision de-rigging it was 393 m deep with a very good lead at the bottom.

### **Dye Tracing**

Because of the continuous rain, all the rivers were regularly flooded. This meant that dye would be diluted too much to detect and besides, the floods had washed away all the detectors! Unfortunately the hydrology of the area will have to wait another year to be understood.

### **Other Work**

As is usual during the Migovec expedition, many surface leads are explored to hopefully find new areas of cave within the mountain. A current geological theory suggests that there may be a layer of impermeable material or gravel at a depth of about 1000m below the plateau surface. It is suggested that this is what is causing the sumps at the bottom of the main system. The theory also says that this layer dips down to the north, where the mountains also get higher.

This suggests that if a cave over 1000 m is to be found the north of the plateau could be the region to look in. Although many potential surface leads were found, the exploration of **Gardeners** World meant that no significant surface pushing was done.

Work further down in the dry valley that **Gardeners'** World is in, in an area known as East Pole, was briefly resumed at a promising dig known as the Hairdryer. Found by BJO in 1998, this small horizontal rift leads after a couple of metres to a hole, where a strong draught emits. Surface surveys done this year show that this point is only about 100m from the Migovec System and on about the same level to drop in. This could provide a useful second entrance at a lower level to explore an area of the mountain that still remains illusive.

### **Other Thoughts by Members of the Expedition**

Unusually this year, the expedition was very wet and where it is normally difficult to get enough water from rain, we never got anywhere near to melting snow this year. This led to lots of entries into the logbook that were done during thunderstorms and the freezing cold.

Tom Ayles after we discovered that there were heat waves in the Mediterranean

*"This clearly proves the pleasure-pain principle: those who take siestas get sun, we get pissed on..."*

Ben Ogborne with a typical logbook entry

*"Today it rained ..."*

Pete Jurd after too long on Migovec

*"My lighter has just been slated and usurped. I feel for it, but life goes on ... It makes a change from the eternal thoughts of cold and rain..."*

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### **Expedition Members (no particular order)**

Tom Ayles (TA) - Expedition Leader

Andy Jurd (AJ) - Expedition Treasurer

Jan Evetts (JE), Ben Ogborne (BJO), Ben Johnson (BJ), Peter Jurd (PJ), Colm Carroll (CC), Helen Jones (HJ), James Hooper (Tetley or JH), Martin McGowan (MM), Clewin Griffith (CG), Mike Rogerson (MR or Goaty), Stefan Holmgren (SH), Hilary Greaves (HG), Martin Pattenden (MP), Hugh Penny (HP), Tim Wright (TW or Shed), Jim Evans (JV), Mark Evans (ME), Bruce Drinkwater (BD).

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