

IMPERIAL COLLEGE



Slovenia '94

Preliminary Report

Authors- J.J. Evans and M.J. Evans

Patron- Dr A.C Waltham

A Project with the Caving section of the Tolmin Alpine Club (JSPDT)

Acknowledgements

We would like to thank the following organisations for their financial support:

The Imperial College Exploration Board
The Harlington Gravel Trust
Imperial College Trust
The Rectors Trust
Imperial College Union Transport
The old Centralians Trust

For equipment and food:

Spring Foods
Cotswold Camping
Imperial College Exploration Stores
Caving Supplies
Imperial College Medical Centre
Powerbar Inc.
Mulu Stores (G.P.F)
CUCC (Survex)

We would also like to thank the following individuals

Dr. AC Waltham
Dr. Sarah Freedman
Roger Serpel
Dr. John Harrison
Prof. R Schroter
Don Adlington
Richard Hermitage
Ric Halliwell
Andrea Fratnik
Simon Gaberscek
Gregor Pintar
Robert Lee (Snr)

Summary

In the Summer of 1994, cavers from Imperial College worked with local cavers from the Tolmin Alpine Club on a six week expedition on the Migovec Plateau.

The expedition was successful in discovering three new systems M18, M19 and White Shiver as well as extending a number of known caves. Additionally younger members of the group gained valuable experience in mountaineering and cave exploration techniques. The group plans to continue its work in 1995, this preliminary report gives a brief outline of the work carried out.

Contents

1. Introduction- Caves of the Julian Alps
 - 1.1 Kanin
 - 1.2 Rombon
 - 1.3 Krn
 - 1.4 Bohinj
 - 1.5 Migovec

2. The Migovec area
 - 2.1 Geology and Hydrology
 - 2.2 Known Caves
 - 2.3 Practical Considerations of Exploration
 - 2.4 New Caves Discovered
 - 2.5 Known Caves Extended

- 3 Budget

1 Introduction- Caving in the Julian Alps

The Julian Alps are almost entirely Limestone, the main caved areas are given in Figure 1.1 (areas around Bovec) and Figure 1.2 (areas around Tolmin) and are described in the following sections

1.1 Kanin

This area is shown on Figure 1.1 and the main system is Skalaria (-911m), which is located close to the alpine hut of the same name. This cave was explored by Slovene and Italian cavers in 1989, see Progressione and Nasa Jama for a detailed account. The area is still being actively explored by Slovene cavers.

The resurgence for this area is at the waterfall 'Slap Boka' which drains into the Soca. Close to Slap Boka is a resurgence cave, Malu Boka, which is being explored by JSPDT (Tolmin), presently to an elevation of +400m, the elucid connection with Skalaria would give a 2000m deep cave.

1.2 Rombon

This area is shown in Figure 1.1, the major systems of the are Veliko Sbrago (Crnelško Brezno) -1198m explored by Italians and Slovenes, Ceci 2, (-1342m) explored by Italians (CGEB Trieste) and Vandima (-1090m) explored by Slovenes (DZRJ Ljubljana), All these caves were discovered in the last 5 years. The area is still being actively explored by Italian and Slovene cavers. (see Progressione and Nasa Jama for full reports).

1.3 Krn

This plateau can be seen on Figure 1.2, it is being actively explored by a Czeck group. The major system of the area is Vecna Labuz (-490m), eternal pleasure cave for details see the Czeck national journal Speleoforum (1984-94).

Within the Tolminka Valley, on the western side, lies Poloska Jama which is a complicated system with three entrances and a total depth of -704m. the system has a long exploration history (1924-74) including some exploration by British cavers in 1970 (Happy Wanderers, J Russum) no one is actively exploring this cave further.

1.4 Bohinj

This area is close to the Bohnjsko lake by the peak 'Prsivec' 1761m, see figure 1.2. There are two major systems here, 'Brezno Pri Gamsovi Glavici' (-773m) and 'Majska Jama' (-592m), the caves were explored by cavers from Slovenia, Czechoslovakia, and UK between 1958-80. No one is actively exploring this cave at present (see Nasa Jame and Atlas of Great Caves of the World).

1.5 Migovec

This area is the plateau between the mountains Tolminski Migovec (1881m) and Tolminski Kuk (2085m) see Figure 1.2. This was our area of exploration and is described in detail in the next chapter.

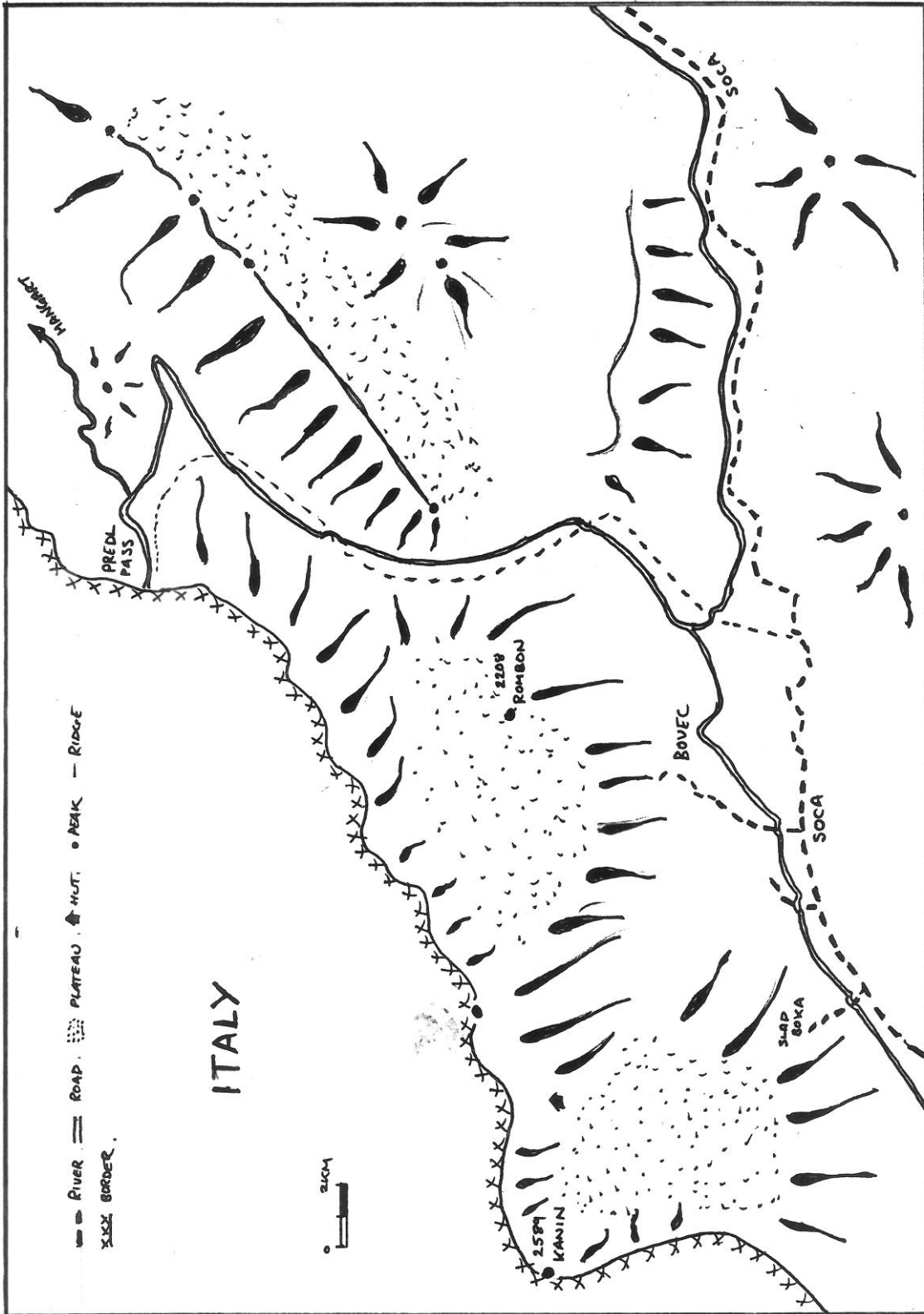


Figure 1.1 Caving Areas around Bovec

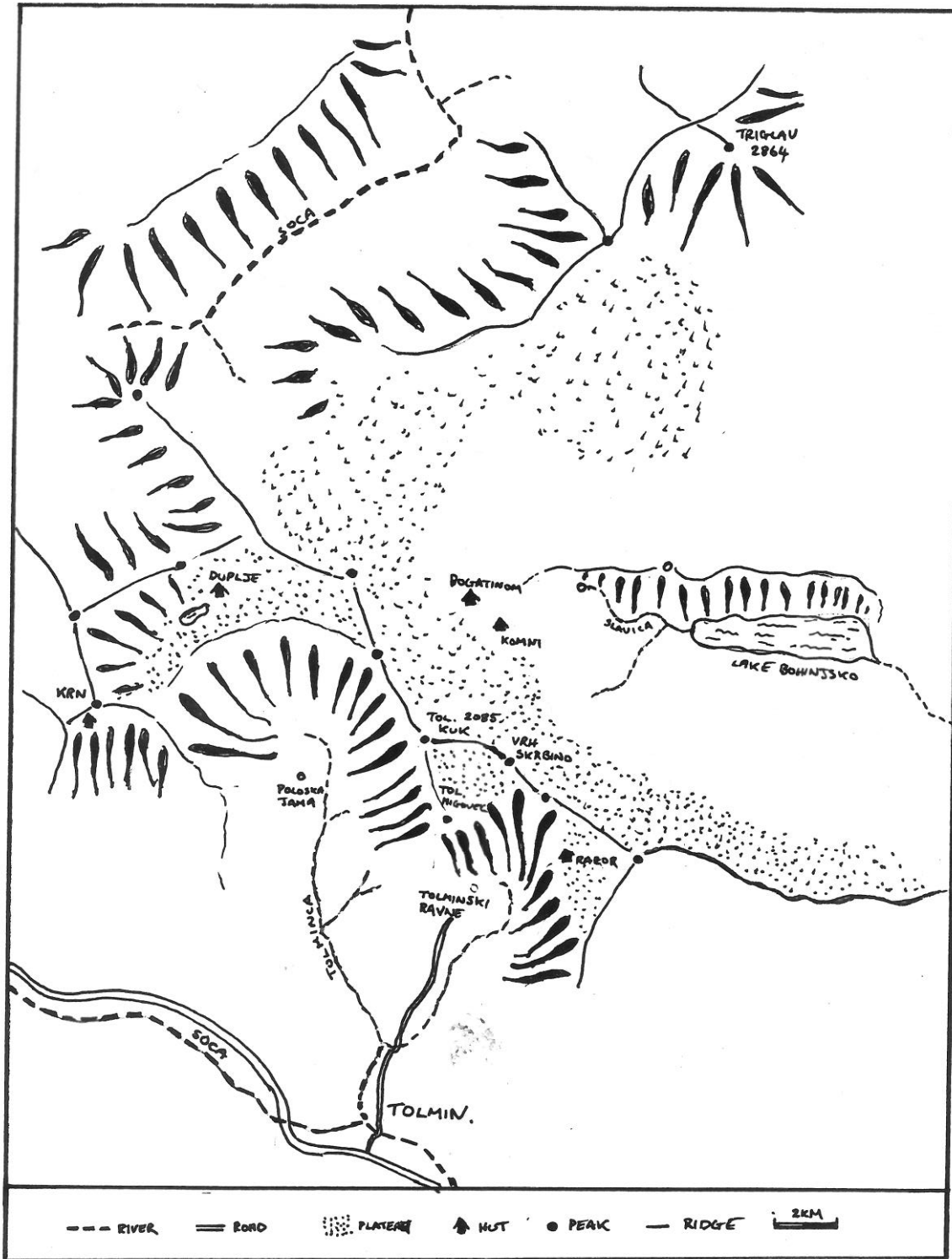


Figure 1.2 Caving Areas around Tolmin

2. The Migovec Plateau

2.1 Geology and Hydrology

The migovec plateau is at an altitude of between 1800m and 2000 between the peaks Tolminski Kuk and Tolminski Migovec, as located in Figure 2.1, it is formed of upper Triassic Limestone.

It is the catchment for water which resurges at the head of the Tolminka valley (and along its length) as well as water resurging into the Zadiascica, at Tolminski Ravne. Both of these rivers are tributaries to the Soca river, one of the major drains on the Julian Alps. It is also possible that drainage from this region ends up at the Savica river. It is not possible as yet to do any further analysis on the hydrology of the area as no significant underground river has been discovered in the area and dye tracing is therefore not possible.

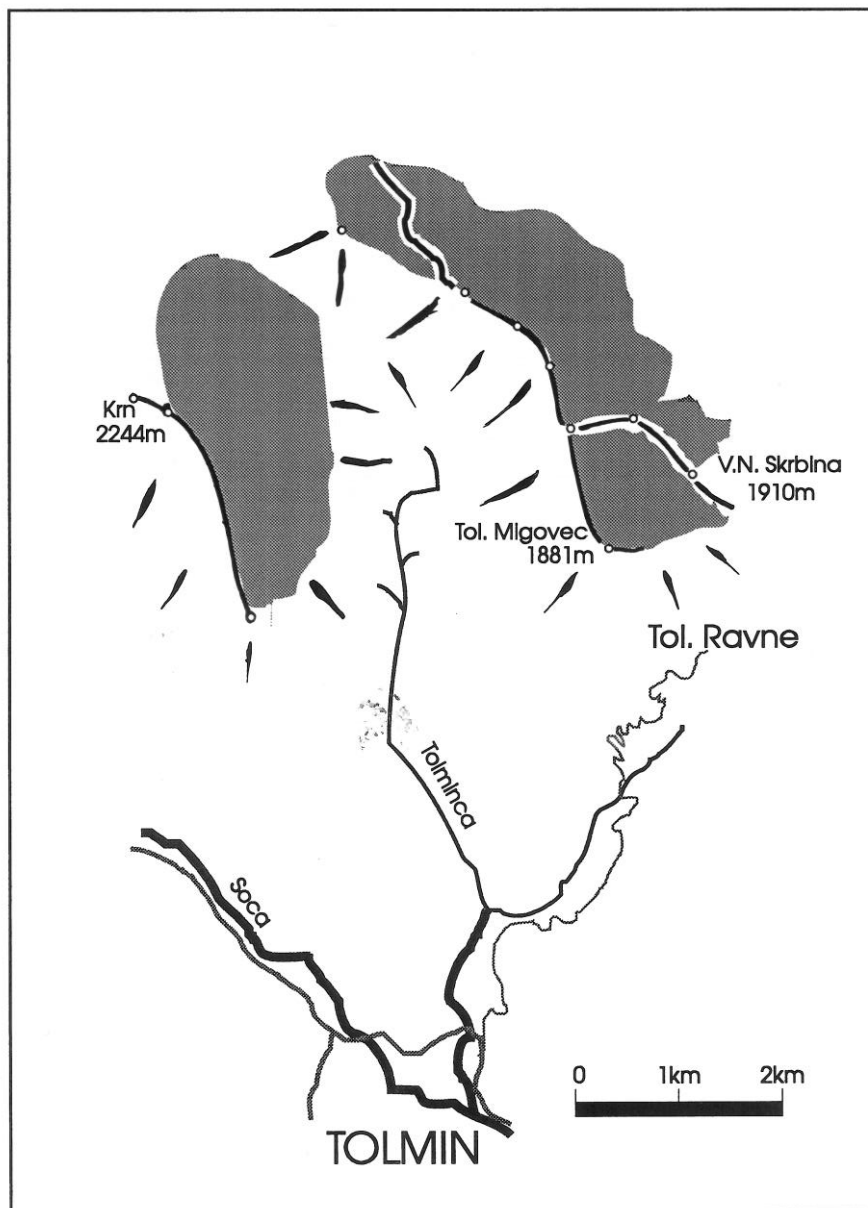


Figure 2.1 The Tolminka Valley

2.2 Known Caves

The caves of the area were explored by the Tolmin Caving Club (JSPDT) during the period 1975-89. Seventeen caves were discovered in this time and they were conveniently named M1-M17. The depths of the caves are given in Figure 2.2 and their location is given in Figure 2.5. A significant task during the expedition was locating, marking (with spray paint) and calculating the co-ordinates of the known caves.

Cave	Location(Lat/Long)	Alt(m)	Depth(m)
M1	5404 40/5123 85	1840	-61
M2	5123 98/5405 02	1800	-350
M3	lost	no information	no information
M4	lost	no information	no information
M5	lost	no information	no information
M6	5405 16/5123 77	1840	-67
M7	5405 30/5123 30	1730	-20
M8	5405 32/5123 29	1720	-13
M9	5405 38/5123 28	1700	-19
M10	5405 97/5123 97	1860	-33
M11	5404 40/5123 85	1840	-6
M12	5405 18/5123 58	1800	-15
M13	5405 07/5124 05	1810	-15
M14	5404 99/5124 10	1840	-22
M15	5404 87/5124 12	1850	-58
M16	5404 40/5123 85	1800	-547
M17	5404 87/5124 12	1850	-50

Figure 2.2 The known Migovec Caves

The two major known systems are M2 (-350m) and M16(-547m), surveys of which are given in Figure 2.3 and Figure 2.4. Neither cave contains water of any great quantity.

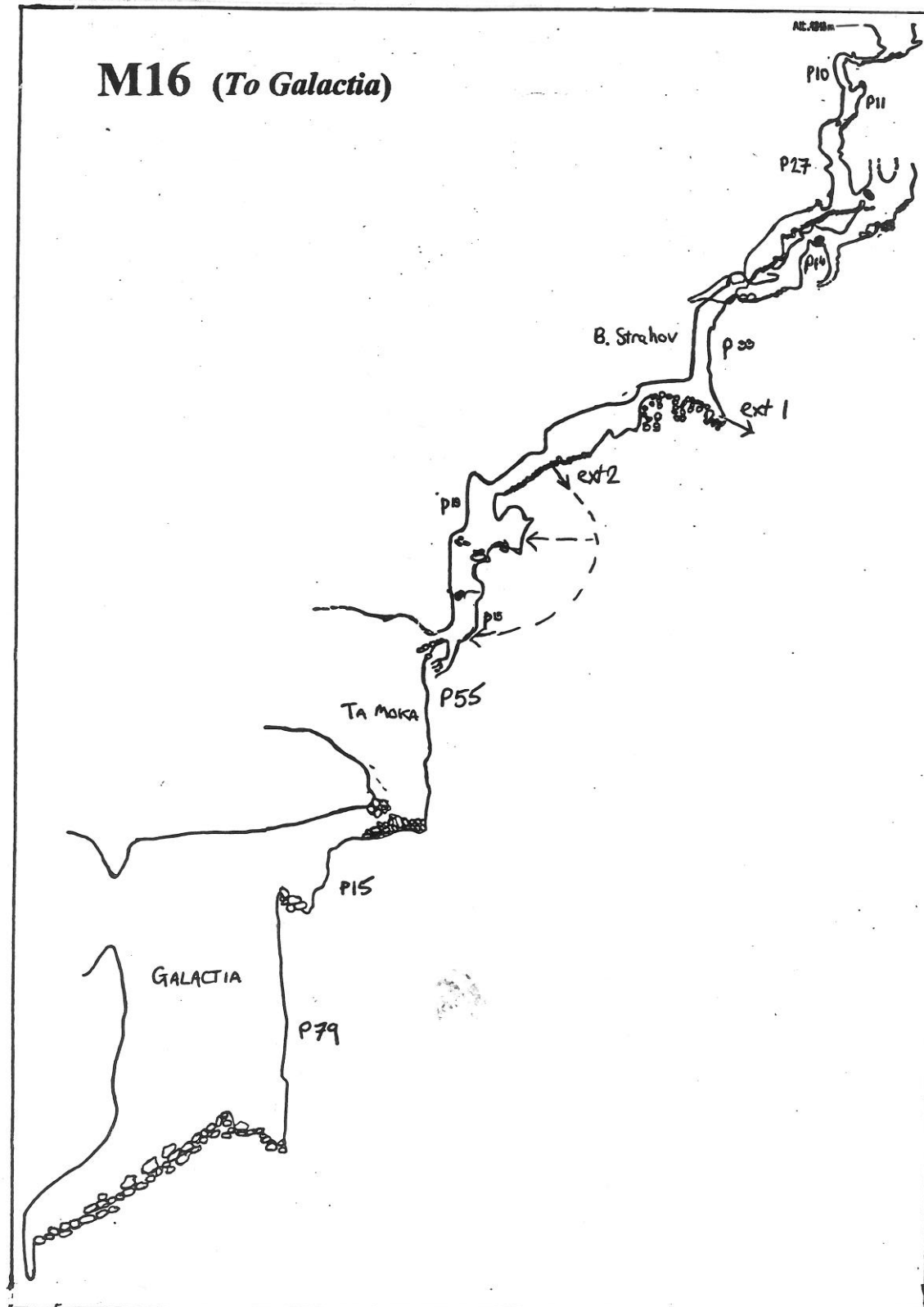


Fig 2.3 M16 To Galactia Chamber

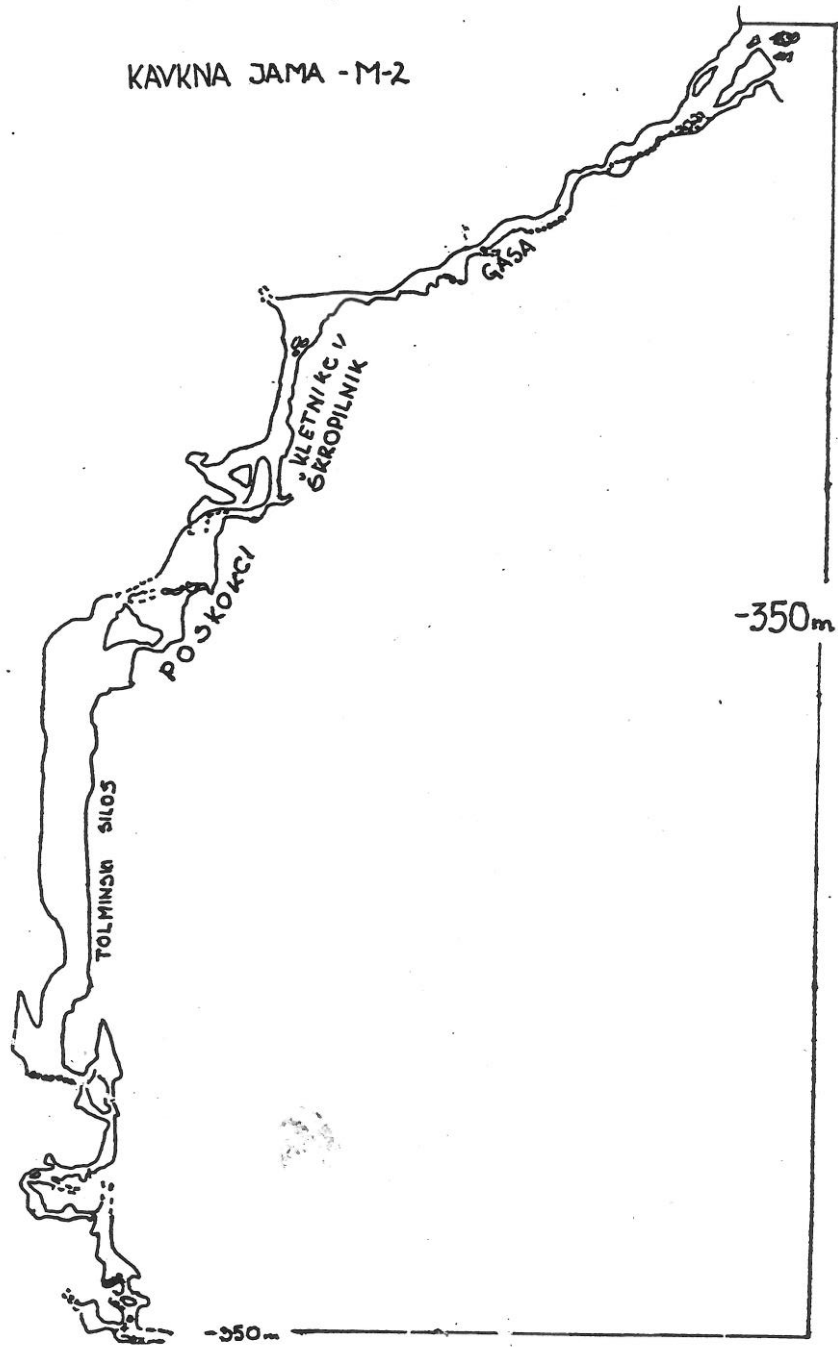


Figure 2.4 M2 Kavkna Jama (-350m)

2.3 Practical Considerations of Exploration

On arrival in Tolmin (see Figure 2.1) we contacted Andrea Fratnik of the Tolmin Caving Club (JSPD Tolmin). He had arranged accommodation for us in Tominski Ravne, a small farming village (population :40) where we made our base camp. Tolminski Ravne is situated at the base of Tol. Migovec at an altitude of 900m, close to one of the main resurgences for the plateau.

2.3.1 Base Camp- Our base camp for the entire expedition consisted of 5 rooms in a house which was rented from an elderly couple. There was also a barn for gear storage. The house was ideally situated at the beginning of the path used to climb to the migovec plateau (alt 1900m). It was possible to walk to the bivouac on the plateau in two and a half hours.

2.3.2 Bivouac- As the Migovec Plateau was the main exploration area a high level camp was also set up. A suitable natural rock shelter was suggested by Andrea Fratnik which was used during his clubs explorations. It consisted of a shallow depression with a rock bridge. There was no surface water on the plateau other than during the occasional violent electric storms and so snow was collected each morning from the deeper shafts in the vicinity and left to melt under the hot sun. Cooking was done using petrol or meths stoves.

There is no camping permitted in the Triglav national park, but we were able to negotiate with a park warden for limited permission.



2.4 New Caves Discovered

Three systems were discovered and surveyed on the expedition- M18 (Torn T-shirt Cave), M19 (B.S. Pot) and White shiver Pot, locations of which are given on figure 2.2. Surveys of two of the caves are given in figures 2.6 and 2.7.(some of the data for M19 is not yet available). Descriptions of the caves are as follows:

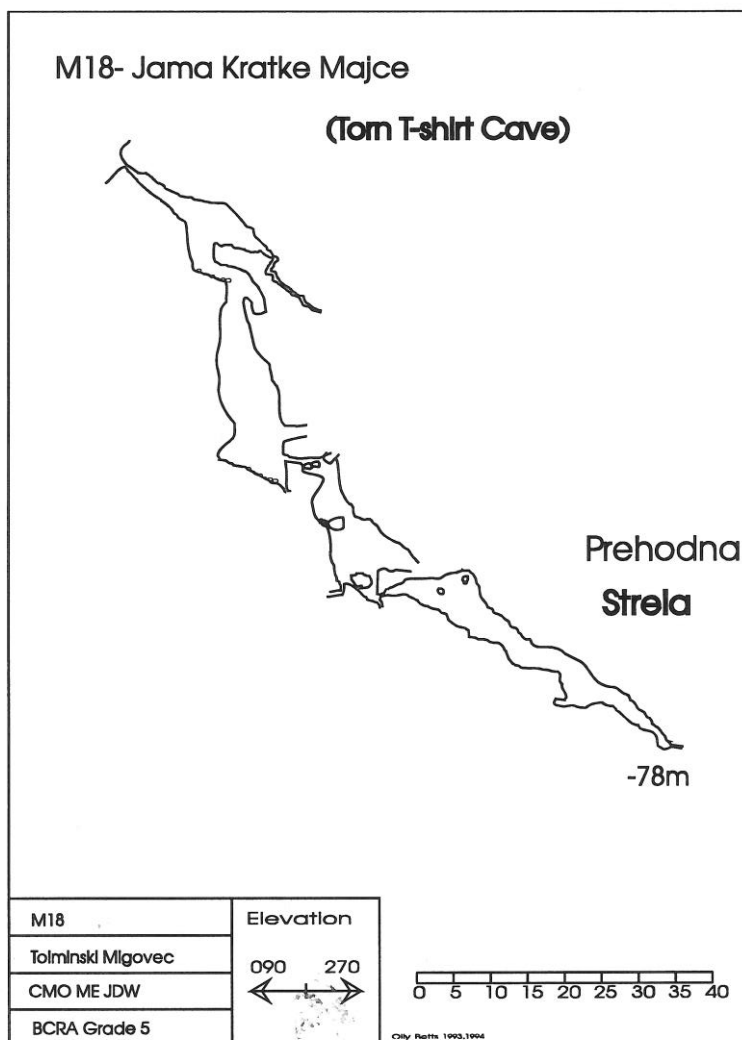


Fig. 2.6 Torn T-shirt Cave

M18 (Torn T-shirt cave) This was essentially a rift cave with a number of ways on- not all of which have been fully explored. The cave has a tight entrance which leads to an 8m climb and then a 25m pitch, at the head of this pitch there is a way on which leads to 40m of rift and becomes too tight. At the foot of the pitch a climb over boulders and a false floor leads to a further 6m climb and a 6m pitch to a chamber, at this point the cave becomes a tight rift which goes on for a further 100m until it becomes too tight. A trip to the end and back takes approximately 5 hours. The cave appears to take a significant amount of water (as was discovered during a storm) and is thought to have good potential for further exploration.

M19(BS Cave)- BS Cave is a tight extremely loose cave situated on the North of the plateau at the foot of Tolminski Kuk. (alt 1850m). The entrance is a massive shakehole of 20m diameter located 20m from M17. The shakehole is plugged with snow at -30m. Progress can be made by squeezing between the ice plug and rock wall and following the passage down. The cave was pushed to 75m at which point the walls became so unstable that further progress was impossible without shoring.

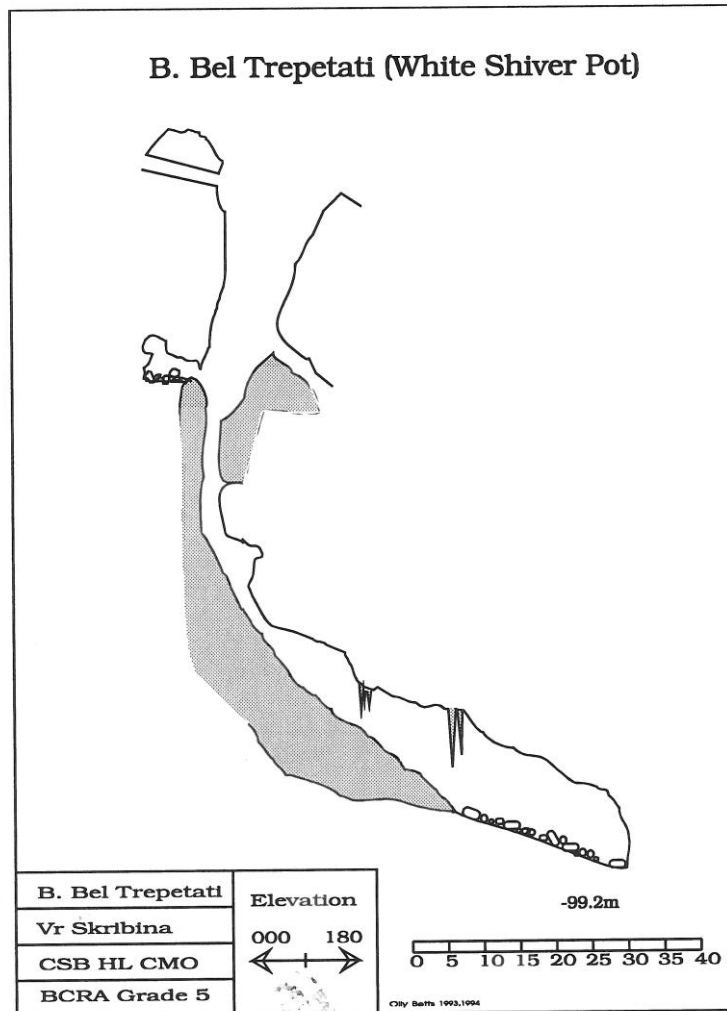


Figure 2.7 White Shiver Pot

White Shiver Pot- this is an impressive predominantly vertical cave situated in a small plateau to the North West of the Peak Vhr Nad Skrbina directly between the saddle on the ridge between V.N. Skribina and Skribino (1910m) see Figure 2.5. The ridge still bears traces of boarder markings from before the Second World War when it was the official border between Italy and the Yugoslav Republic.

The cave entrance is a shaft of some 15m diameter. A 40m free hanging pitch drops you to the inevitable snow plug. The way on continues through the snow where it has been melted by dripping water. The next 5-10m are in the ice. A short slope and another 10m pitch leads to the head of a massive snow pile which partially fills the final chamber. The chamber is 60m in diameter and 20m high. It is decorated with ice flows, frozen waterfalls and icicles. Total depth 99m.

2.5 Extensions

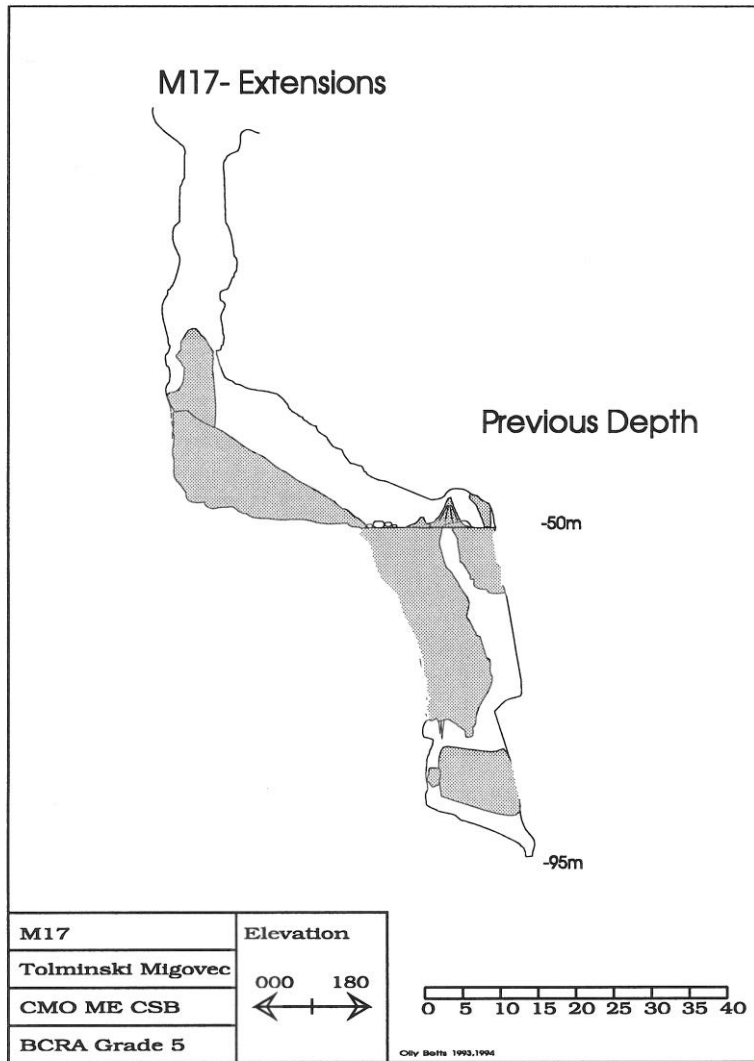


Figure 2.8 Extensions to M17 cave

M17

The cave M17 was explored and surveyed from its previous known depth of 50m to a depth of 95m (see figure 2.8). The cave is effectively an ice choked shaft which was extended through a hole in the ice.

M16

Two extensions were made in this cave at the locations shown in Figure (2.3), unfortunately there was not time to survey them. The first was a horizontal extension at the chamber "Brezno Strahov" The section of cave explored passed a very tight section for 150m of rift. At this point the cave became very dangerous because of boulders and was left for another day. The rift was not explored further because of other caves "going".

The second extension was made under a pile of boulders at the foot of a pitch. A way on was found to a rift passage which was followed for about 100m. The way on was at the bottom of the rift back in the in the opposite direction which consisted of an 8m climb followed by a

15m pitch and finally a 3m pitch. The passage leading on from here was found to join with the 60m "ta moka" pitch in the documented cave.

Additionally, a bolting platform was used to bolt 15m up a wall to a hollow in the massive "Galactica" chamber at a depth of -473m. The search was initiated by the original survey, which showed an obvious way on, but was found to be blind. It was later discovered that we had been looking in the wrong place because our head lamps were not powerful enough to illuminate the roof of this huge chamber.

3 Budget

<i>EXPENDITURE</i>	
Equipment	3517.59
Medical and Training	866.20
Transport and Insurance	3241.49
Accomadation	2176.55
Food and Consumables	1841.62
Reccy	1349.00
Total	12992

<i>INCOME</i>	
Reccy Contributions	600
Personal Contributions	5000
IC Exploration Board	2000
Harlington	2600
Rectors trust	1500
IC Trust	1000
Old Centalians	350
Total	13050

A Full Budget Breakdown is available.