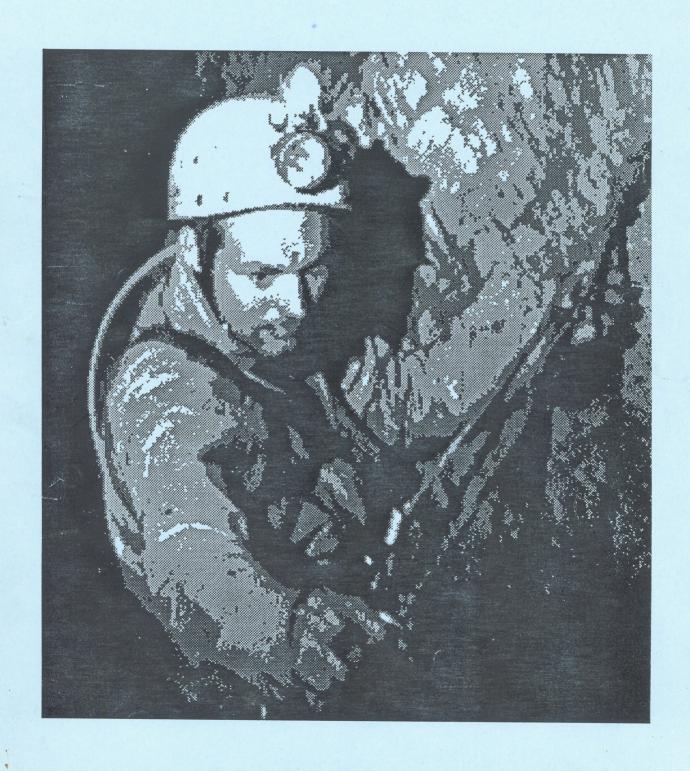
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# IMPERIAL COLLEGE CAVING CLUB

Newsletter - Spring 1988 Issue.



#### IMPERIAL COLLEGE CAVING CLUB

The club meets twice weekly, on Tuesdays in Southside Upper Lounge at 7:00 p.m., and on Wednesdays at 1:00 p.m. in the Union snack bar.Contact can be made through Imperial College Union, Prince Consort Road, London SW7 2BB (phone 01 589 5111).

#### Committee Members 1987/8

President Richard Collcott M.R.E.4

Vice-President Tim Flack E.E. P.G.

Secretary Rob Chaddock M.R.E. 2

Treasurer Dave Wilson D.o.C. P.G.

Tackle Officer Pete Hambly E.E. 2

#### Editorial

Well, this is it, the 25th year of Imperial College Caving Club.I'll leave it to Richard to describe the fortunes of the year so far in the well worn phrases of the Presidential Report, as well as in the succinct new form. Summing up previous years is the second part of Clive's excellent history of the club - if anyone missed the last issue of the newsletter I still have a few left.

Last summer saw the club head to Italy for the first time and bottom the country's deepest system. For those of you thinking of visiting the Apuan Alps, a beautiful area of World class caving, see Harry's article for a description and handy hints. This Summer the club is going to return to Italy - either to the same area or to the Maritime Alps, hopefully this will be as successful as last year. I would strongly encourage all of you who joined this year to go - it is invaluable experience as well as being a great holiday.

If there are any ex-members reading this, as hopefully there are, the drivers deposits are to be reviewed shortly and those of people who have been out of college for a year or more will be reclaimed from the Union. If anyone has any objections to this please contact Dave.

Cover: Clive Orrock in Tana dell'Uomo Selvatico, the Apuan Alps. Photo and post-processing by Dave Wilson.

#### President's Report 1987-88

The Club this year has gone from strength to strength. But seriously folks! The year started on a fairly quiet note with our first trip of the year, to the Mendips, being fairly poorly attended, especially in terms of the number of freshers present (ie. one). This was a bit disappointing as this was a key year to attract new members into the club. Mendips did see us involved with the MRO in a successful rescue, involving a venture scout leader who had gone down Swildon's with us claiming to be fully conversant with the cave. He was rescued from above Blue Pencil Passage after slipping on a traverse and hurting his shoulder. The next Fresher's trip, to South Wales, saw slightly less excitement, and slightly more freshers (three). Even our start of year slide show failed to attract many freshers, though the older members of the club, and a few freshers, certainly took advantage of this, by consuming vast amounts of cheese, wine, and cider.

Fortunately for the club this early trend was overturned as the year progressed, and our membership started to swell, especially with the influx of geologists into the club. The fact that new faces continually join has meant a year round training schedule, with most SRT training done in the Inglesport barn, though the necessity for vertical training facilities at college has been pursued with the inside of the Queen's Tower being the likely location. Socially the club has been as active as always, the traditional trips to the Three Kings, the Plough ( and videos at my place ), and the Orange Brewery being added to the usual Tuesday evening sessions in Southside and weekend sessions in the Marton Arms and New Inn whilst in Yorkshire. Also, quite predictably, when in South Wales, we made sure of a welcome in the hillsides when we next return to ( the remains of ) the Red Lion ( sounds familiar ? ).

To conclude this brief report I'd just like to wish the club every success in its forthcoming endeavours, and to thank the club and all its members past and present who have made my time in the club so enjoyable. Hope to see you all at the  $25^{\rm th}$  anniversary dinner, and lets hope that we can do some great caves this summer, and in all the summers to come.

PS. Anyone going away within the EC this summer should get (from DHSS or Dave) and send off a form Ell1 ASAP. This entitles you to certian health benefits if you fall ill abroad.

## Imperial College Caving Club President's Report

This year, the club has gone from bad to worse from strength to strength, as usual, and I feel it has completely bankrupt
horrifically disappointing been a very greatly enjoyable year as President of the club. Our Summer Tour most expensive
Spain to France was the high point of the year, giving us all the opportunity to descend ltaly drunkenness to far greater depths of limestone than is possible in Britain due to the very rank squalor
<ul> <li>☐ higher price of alcohol</li> <li>much ☐ worse geological conditions here. Our policy of training all freshers in</li> <li>☐ stricter campsite rules</li> </ul>
advanced rope techniques on the surface has been hampered by lack of facilities at IC,
but very successful nonetheless, all involved now being sufficiently competent to
undertake virtually any cave which we are likely to attempt. This Summer, we are going
☐ Spain to ☐ France for weeks of sun, fun, and spells of spectacular speleology. ☐ Italy
We held the elections for next years Exec. at our Annual Dinner Meet, and so when we
a list with some names scrawled on it sobered up we found we couldn't remember who got which post so here is we had elected a bottle of wine as President
<ul> <li>☐ those who probably got elected</li> <li>the list of ☐ educated guesses for the names</li> <li>☐ those I wanted to be elected</li> </ul>
President : Vice President :
Secretary : Treasurer :
Tackle Officer:

Yours,

( Caving Club President 19\_\_\_/\_\_)

As far as I am aware, no. 14 was the last LUCC Journal. Why it should have faltered is not clear although at this point the fortunes of ICCC, the leading London University Club, briefly waned, due at least in part to falling membership.

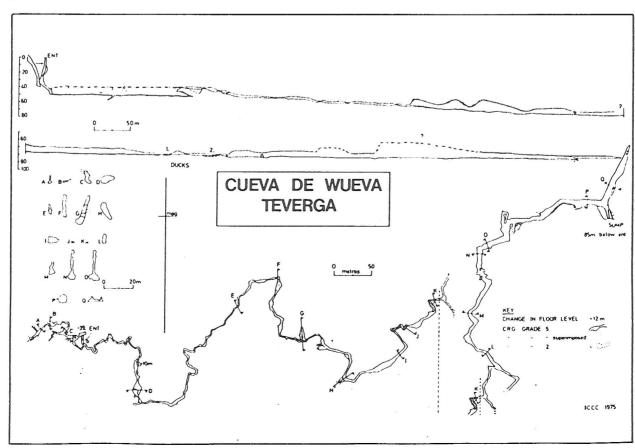
During the summer of 1973 the club was still in a healthy and active state, but in Autumn the new intake was low and coincided with many of the most active members leaving college. The club log book recording the freshers' trip (to Yorkshire) sums it up:-

"Poor turn out of freshers, only 3, even poorer turn out of past members, only Agro."

Things did not improve, even the Dinner Meet (held in March at the Star Hotel, Wells) attracted only seventeen people. Added to this were various van problems, not the least being national petrol rationing during November which forced a Yorkshire meet to be diverted to Mendip.

The start of the 1974-75 session did not bring the hoped for flood of new people, only three, and in November a Yorkshire meet was again diverted to Mendip due to lack of interest. However for the few who did go, the Friday night session in the New Inn, Priddy ended up with a clandestine, midnight trip into Swildons. Emmerging at dawn they managed to sleep off the night's excesses in the Wessex Hut - paying only day rates - one definite advantage of nocturnal caving.

However, despite the slow start, things did eventually pick up, and by the summer enthusiasm was such that a expedition set off to the Cantabrian Mountains of Spain. Led by John Millar, the 13 person group was the first to visit this particular area (80 km W. of the Picos) where their discoveries included three major caves with a total of 3 km of cave passage. Several very promosing leads were found, and so plans were made to return the following year.



The return to Britain and the start of the 1975-76 year at last saw the long-awaited increase in membership, which fate conspired to try and erradicate soon after. A Saturday morning of the November Yorkshire meet saw parties set off down sunset and Meregill. Meanwhile, on the surface, torrential rain suddenly swept the Dales. In Sunset the party of five had reached the foot of the 20m pitch when the water began to rise and they started out. Their subsequent battles against raging floods were made even more exciting as, one by one lamps failed or were lost (all were Premier carbides - no club cells as yet). They eventually emmerged safely with only one guttering carbide between them. Meanwhile down Meregill the flood pulse hit as the three man party were descending the second pitch. After desparate struggles on ladders, a near drowning and a chilly enforced nine hour wait between pitches they finally got out, the abandoned gear being recovered the next day. It was fortunate that rescue was not required as the CRO was already overstretched with nine other incidents on that very damp Saturday.

However in March the CRO's services were needed when someone fell about 5m from a stemple in Pippikin sustaining back injuries. Five hours after the hue and cry had been raised by the other person on their two man trip, he was out having escaped with no broken bones but a much bruised back and pride.

During Easter 1976 three members went to Spain to investigate an area about 100 km from the previous area, and here they discovered several hundred metres of new cave during their three week stay. Later, as planned the summer saw a return to the Cantabrian Mountains by eight members led by Nick Shaw.

On the afternoon of August 28th. Paul Romeril, Nick Towers, Derek and Mark Tringham entered the Cueva Vegalonga to explore the sump. Derek dived with enough air for about 30 minutes, intending to explore the sump for about 10 minutes and maintaining contact with the surface through the line. He maintained contact for a few minutes before this was lost. After 10 minutes had elapsed his brother, Mark prepared to enter the sump being first back up diver. Using the same line he searched the sump for 15 minutes maintaining contact with the surface through the line, and going about 30m in and 15m down. He found no trace of his brother.

At this point the flow rates in the cave noticeably started to increase and visibility in the sump became virtually zero. As a consequence further rescue attempts were prevented but a spare lamp was secured to the line and emmersed in the sump. All then evacuated the cave in high water conditions and contacted the Spanish authorities. Local cavers arrived and some Spanish cave divers were flown in by the Spanish Army. Despite poor visibility they extensivly explored the spacious sump but eventually, due to the difficulties of the sump, and considering the time that had elapsed the rescue attempt was finally called off. The expedition returned to Britain shortly after.

Derek was a very experienced caver who had caved extensivly abroad and was a respected and competant cave diver. His death was a sad loss to the club.

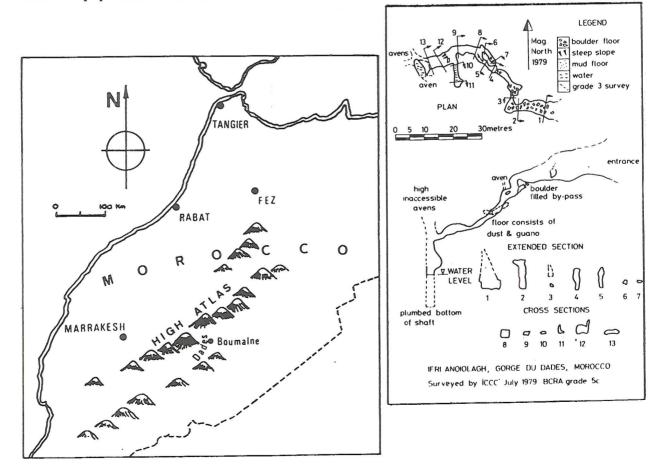
With the summer's loss casting a black shadow over things, the start of the 1976-77 year saw the club's fortunes at their lowest ebb. The active membership totalled only one - Clog - the other member having been injured in a car accident and so disinclined to take part in any physical events. An immediate, large recruitment was vital.

Thankfully freshers' activities attracted many new members and the club was pulled back from the brink. With a severe lack of experienced members the year's events were pretty chaotic but were nevertheless well attended. There were also many private trips in conjunction with other London clubs.

Numbers continued to increase in 1977 despite half the club nearly being wiped out when Clog rolled the van in Yorkshire. The only other "misshap" of the year was a Mendip trip getting snowed in at the old MCG hut for five days with little food but a barrel of beer! Particularly heavy usage throughout this and the previous year, together with a growing acceptance of SRT forced much gear to be replaced and a large quantity of new Terylene SRT rope to be bought. Also the stock of club cells (lead-acid and Nicad) was now being regularly enlarged at a rate of two new cells per year.

1978 again saw a good crop of freshers, although again some were nearly wiped out on a very wet Yorkshire meet (f\*\*k the gear boys, what about me!!!), so that now the club was again at full strength (20-30 members). In addition there was finally a more even spread of years and departments. Hopefully this would avoid some of the previous problems such as half the club leaving when Physics III graduated, or that most cavers were from RSM who usually gained employment overseas and so were unable to participate after graduating.

The highlight of the year was the summer 1979 expedition to the High Atlas Mountains of Morrocco, a venture prompted by the results of the 1971 expedition. Led by John Harrison the nine man group concentrated on the gorges of Dades and Todra North of Boumalne. Many small solution passages and rock shelters were found but no large systems. Unfortunately, more impressive were the finds of the IC S&G-based expedition to Turkey which found several 200m deep potholes in the Taurus Mountains.



With a large, active membership, trips in 1979-80 were both numerous, well-attended and diverse with trips to Devon, Portland and, at Christmas, Belgium. The Dinner Meet held in Mendip was exceptionally well attended, with four ex-presidents (two having travelled over 800 miles just to be present). Large amounts of equipment were purchased during the year, in particular the club now reckoned to have sufficient numbers of lamps to eliminate the need to hire lamps externally.

Looking back over the years covered so far, it is interesting to note the changing trends within the club; trends which largely reflect the changing attitudes in British caving as a whole.

By the mid 1960s much of underground Britain had been thoroughly explored, at least all the more obvious sites, but there was still considerable potential for individual clubs, even those removed from the caving regions, to make new discoveries. In its early days much of the clubs activities were thus centrered around original exploration in Britain. The ever present Tony W. seems to have rather dominated the club in these years and clearly fostered "speleology" as opposed to "caving" ie. not doing just "the old tourist trips". In all fairness many of the so-called tourist trips were probably very unrewarding, or at least fairly unenjoyable for many people with few wetsuits, troublesome carbide caplamps and the dubious joys of long ladder climbs up wet pitches. A Feb '67 trip down Car Pot by 4 ICCC (third time to the bottom for some) took 13 hours, and the cave still had to be completely de-laddered on another day - this sort of time scale was normal at that time.

As original home exploration became harder to achieve (viz. scaling efforts and lengthy digs) the club, in line with many in Britain, increasingly turned its attention abroad. "Expeditions" progressed from tourist trips to France towards pioneering work in remote regions of the world, as now. Simultaneously with the decline in emphasis on home exploration, and fostered by wetsuits, club cells and ultimately the acceptance of SRT/dry gear caving (although by 1980 the general standard of SRT competance was still poor) there was a rise in sport caving down progressively harder caves.

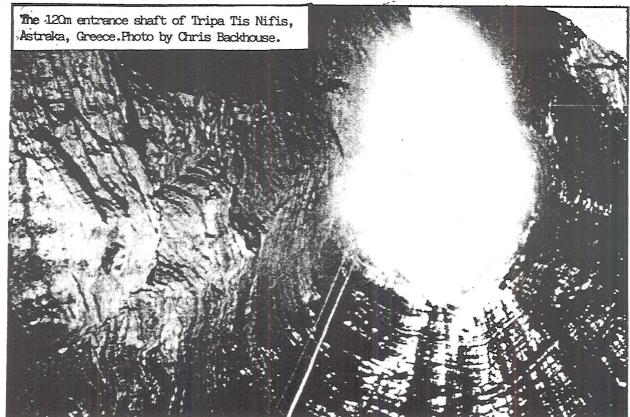
So to continue; with a large proportion of the previos year graduating numbers again dwindled in 1980-81 but it was still a reasonably active year with some hard caving done (Penyghent Pot and the like). A week tour to Belgium planned for Christmas was unfortunately abandoned through lack of interest in favour of a private Yorkshire trip. Similarly a summer tour/expedition did not materialise, although some time was spent in the Dales.

Autumn 1981 didn't attract many new faces but a large, very active group remained from the previos year. The standard of hard caving increased with deep vertical descents and the club's first free dive trip to Swildon's 9 and the Swilidon's Long Round Trip. Dry gear/SRT caving was becoming de rigeur, and, after it was proposed to mount an expedition to Astraka, Greece with its deep shafts, a SRT course was arranged at the now sadly-missed Whernside Cave and Fell Centre. Here much useful experience was gained and we were introduced to those wonderful things - cowstails! Of course, certain die-hards still maintained that rebelays could be accomplished adequately by simply crooking an arm round the belay as the descender was unclipped from the top rope. That was until the Dinner Meet when he fell down the last pitch (~10m) in Swinsto sustaining multiple fractures to the right arm and numerous cuts and bruises. He was assisted to the surface by other members of the party and the CRO was not required, although the dinner was a bit delayed.

The culmination of this very successful year was the expedition to Greece by eight members, where, despite considerable hardship and attacks by wild dogs - "Gary was bitten by a dog, by a dog,

On Tymphe moor baht 'at...."

...many new shafts were discovered and surveyed. These included the first full descent of Tripa Pago-Palati (The Ice Palace) one of the few caves in the region to show any horizontal development. A descent by all expedition members was also made of the 435m deep Epos Chasm, in itself no mean undertaking for a small college club.



In 1982, as with the previous year, a large part of the club remained at college and the caving standard remained high. Whilst the ladder vs. SRT debate ranged back and forth in "Caves & Caving", ICCC was totally sold onto ropes, or even "string" after the struggles with thick, heavy Bluewater in Greece. Perhaps somewhat over confident after the mega-shafts of Astraka, during the winter of '82-83 there were a couple of close calls in deep, cold, wet Yorkshire pots (Meregill).

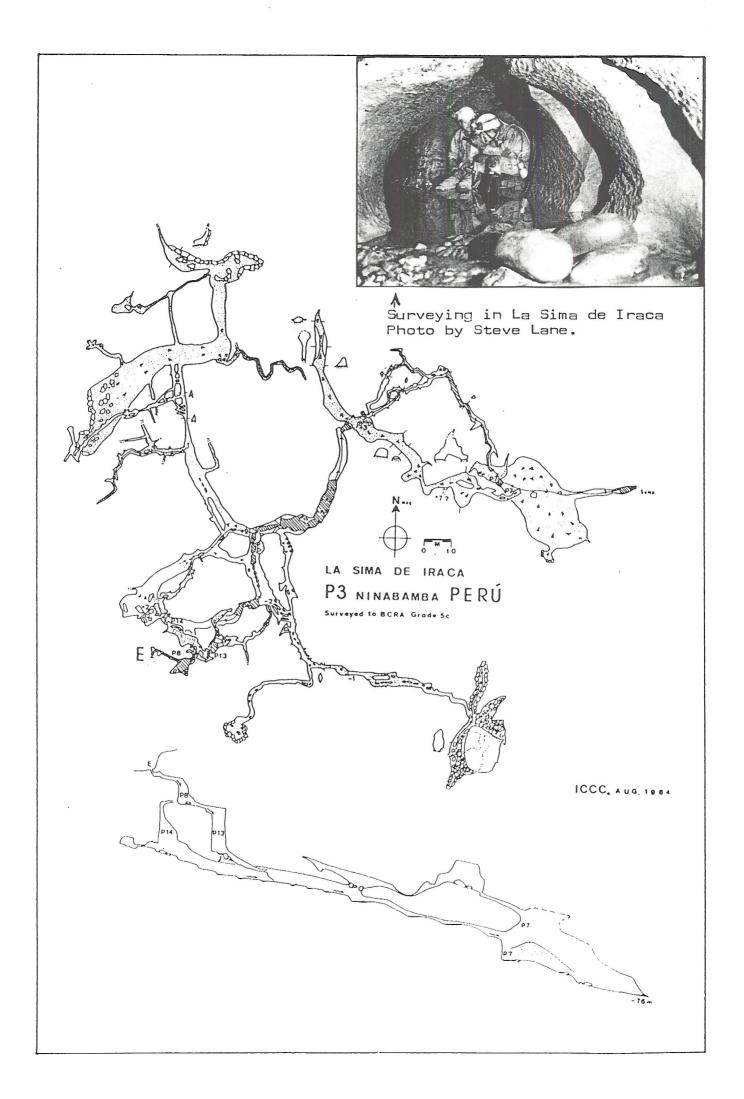
The conclusion of another year's hard caving was a trip to Vercors, France for three weeks in the summer. The descents done make an impressive list; Ramats, Fumant, Trisou, Gournier, Grotte de la Luire, Jean Noire, Malaterre, Pot du Loup, Puits St. Vincents, Trou qui Souffle, Fromagère, and so too did the number of bottles of wine that were drunk between the nine people there!

Social

With a large number of people graduating in 1983 it was vital to restock with new members, and thankfully the haul was good. Flooded with novices the standard of caving took a brief step back but quickly rallied as enthusiasm was high and rope techniques were being taught from the very start. Again a Whern side course put the finishing touches, but only at the cost of several very exasperated Whernside instructors. Also during 1983-84 the current club newsletter was started up.

With enthusiasm and competance high amongst a large active group, further swelled by ex-students, summer 1984 again saw a trip to France. This was based initially in the Vercors followed by a move across to Chartreuse for trips in the Dent de Crolles. This was followed by an eight person expedition to Peru, prompted initially by the 1972 expedition but based further north. Notable successes included the exploration and survey of Peru's longest cave (2.5 km) and several other caves associated with the main river cave system.

The Autumn 1984 intake was low but with a strong membership from the previous year enthusiasm and expertese remained high in social as well as caving activities. Hence in addition to the traditional Dinner Meet, there was also a Christmas Dinner, again delayed, this time because of the club giving assistance at a climbing incident at Malham Cove. The culmination of another very active year was a return to St. Pierrede Chartreuse and the Dent de Crolles system (still guided by the description in LUCC Journal No. 4). This was followed by a move across to Autrans, Vercors for the long-planned assault on the Gouffre Berger. In little more than a week this 1100m deep cave was rigged and derigged (addmittedly with some assistance from a group of Aussies) with 9 out of 11 members getting to the "bottom".



1985-86 was a very varied year. In February IC cavers had the unhappy task of giving assistance at a serious incident in Longwood-August. The Dinner Meet was enlivened by sudden flooding which resulted in three parties being delayed; the first briefly held up in Disappointment Pot, the second assisting another club to get out of Meregill, and the third sitting out floods in Penyghent Pot before finally emmerging safely under their own steam and with their own gear. This was the first incident involving the CRO (who were more concerned by three other more serious incidents) since 1976.

Then of course there was ITV News coverage and headlines in the Standard about a "bizarre new twist" in the so-called Missing Bride Case, when ICCC cavers were called in by Hertford CID to investigate mines and "caves" near Potters Bar.

Finally 1986 ended with another expedition; eight people going to the Canadian Rockies. Two months of bush wacking and running away from bears produced new cave finds in several different areas.

### POTHOLERS AID HUNT FOR BODY

THE DAILY TELEGRAPH THURSDAY JUNE 12,1986

Five potholers have been called in by police to search for the body of Mrs Anne Lock, 30 who disappeared 24 days ago, in the labrynth of underground wells and caverns a mile from her home.

The potholers, from Imperial College, London, yesterday carried out a feasibility study of the Swallow Holes at Brookmans Park, Hertfordshire, pending a full search.

And so we arrive at the twenty-fifth year, 1986-87. The results of the Canada expedition were presented at the BCRA conference at Manchester University, while in the spring ICCC held its own in-house "exploration symposium" slide-show. The two freshers trips (both to Yorkshire because of the SSSI problems on Mendip) attracted so many people that a third novice trip was required (S. Wales). However strangely few new people maintained their initial interest and so missed out on an excellent Christmas Dinner (at the Brass Cat, Settle) an event now firmly established on the calender. The spring term saw much caving done despite considerable van troubles, whilst the very lively Dinner Meet was for once thankfully incident free. The 1987 summer tour broke new ground with the club's first ever trip to Italy. Three weeks were spent based around the Corchia system in the Apuan Alps, and the very enjoyable trip saw everyone bottom this, Italy's deepest cave. A fine end to another years caving with Imperial College Caving Club.

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Understandably the nucleus of British Caving has always been centered in the Yorkshire Dales, and ICCC, being so far distant from Yorkshire, or indeed any caving area has always been somewhat removed from where the action is. This is probably inevitable. Nevertheless throughout its history ICCC has always been more closely allied to Yorkshire, and today when nearly every London club is established in Mendip or South Wales, IC alone in the capital has its heart in the Dales. It remains shut off from the northern caving scene and yet refuses to align itself only with southern clubs. I don't think it will ever become one of the few "Great University Clubs" - not from any failing on the part of its membership, but purely because of its geographic situation.

Backed by a "rich" college exploration board and students union (if in these days any college society can be said to be even adequatly funded) ICCC will hopefully continue to do what it does best. That is, to competantly, intelligently and sensibly introduce people to caving in all its aspects, to train them in modern caving techniques, to do hard caves in Britain and abroad, and to mount pioneering expeditions throughout the world. In addition it has never been a closed university society, but it always has, and I hope always will continue to be, open to certain non-students and in particular to its past members. Finally, though I don't see much evidence of it at present, there is no reason why, with so many intelligent scientists and engineers, we, or at least individuals can make their mark doing good speleology as well as the "old tourist trips". Anyway, whatever happens in the forthcoming years, I'll look forward to reading about it in another 25 years.

#### Summer Tour '88

This summer, the club is going for a three week tour to the continent, probably to either the Maritime Alps or Apuan Alps, both these regions being in North-West Italy. Any comment on the proposed destination would be appreciated. The cost of the trip, liable to be in the region of £200-250, will include all travel, campsite fees, food, wine, medical and rescue insurance, and carbide (for those among us who have progressed to full gear self-sufficiency); all you need to bring in addition is spending money. Transport will be by Union van. We will be camping for the duration, and cooking virtually all meals ourselves. A few important points follow.

- a) A deposit of £50 is required per person, preferably by mid-May, to enable me to book ferry tickets without personal financial risk. The remainder of the cost is required about two or three weeks before departure.
- b) All people are expected to bring <u>all</u> necessary caving gear with them, either their own, or borrowed gear sorted out **well in advance**. People asking for loan of SRT kits, helmets, etc. on or after the day of our departure will not be recieved sympathetically. All 'Club Gear' borrowed by members is their responsibility througout the tour tackle officers (and ex-tackle officers) want a holiday as well.
- c) Anyone using Club electric lighting is expected to ensure the state of charge of their lamps themselves. Anyone taking carbide lamps should ensure they take ample spare supplies underground. All carbide users are advised that it is much easier buying spare jets, prickers, bottles, etc. in Inglesport before leaving Britain. It is advisable for all people to carry some form of backup lighting with them (eg. Teknalite or equivalent), given the potential duration of many of the trips.
- d) Due to the self-catering nature of the tour, everyone should bring cup, plate or mess-tin, knife, fork, spoon, etc.
- e) I will be ordering the cash used to finance the trip from NatWest, and so anyone desiring the appropriate currency for personal use can sort that out through me as well. The rates from the NatWest are quite good, with a small fixed charge per order, and no commission.
- f) The proposed dates of the trip are from Wednesday the 29<sup>th</sup> of June, (packing the van during the day and leaving in the early evening) and returning approximately 21 days later. The Wednesday departure is to enable people to go home for a couple of days after the end of term, and also to ensure that we get settled in and provisioned before the weekend.

#### CAVING IN THE APUAN ALPS OF NORTHWEST ITALY

The Apuan Alps form a compact area, about  $250 \, \mathrm{km}^2$ , of Tuscany (Fig.1). Above forested valleys rise impressive steep-sided mountains of metamorphosed limestone, with the dominant feature being the quarries that extract the famous Carrara and Massa marbles. For the speleologist, however, the interest lies in the concentration of deep, world-class caves...

#### Antro del Corchia

Beneath Monte Corchia (1677m), is the principal system, composed of the Abisso Claudo Fighiera, the Abisso Radolfo Farolfi, and the Antro del Corchia (Fig.2). They combine to form a network with four main entrances, and 45km of varied passage, that consists essentially of fossil high levels, and streamways lower down. (Ref. 1 contains the comprehensive guide to the Corchia system).

#### Exploration

The potential of this mountain was first realised in the midnineteenth century, and the cave explored to -590m in 1934, from the Buca d'Eolo entrance. Renewed exploration in 1960 by groups from Milan and Bologna reached the bottom at -871m, at that time the world's second deepest cave, behind the Gouffre Berger (Ref.3). From 1967 to 1969, British cavers pushed a lead that enabled the 1971 linking of Buca d'Eolo with Buca del Serpente, providing a second entrance to the Antro del Corchia (Refs.4,5). 1981 saw the connection of the Abisso Fighiera with the Abisso Farolfi. In 1983, pushing upwards from the Antro del Corchia established the 'Valinor' section, which then broke through into the lower reaches of the Abisso Fighiera-Farolfi, resulting in, at -1210m, the deepest cave in Italy, and the ninth deepest in the world (in 1986).

#### Practical considerations

A successful trip to the bottom of Corchia will normally be preceded by several visits route-finding and pitch-rigging. Many traverses, and much of the lower reaches of this system, may be found with ropes already in place, and if these are used to save time, the anchors and rigging employed will provide an 'interesting experience' for innocent young British speleos, used to caving in post-Elliot Yorkshire. The easiest way to the bottom is via the Serpente entrance, with fairly straightforward rigging, and back out the same way. For the full -1210m descent,

the Abisso Fighiera must be rigged, and here it becomes more complicated, since in traversing the Fighiera-Corchia connection, a number of pitches must be scaled, usually using in-situ gear of exceptionally dubious ancestry, and advice from local cavers is very valuable. A popular through trip is from Buca d'Eolo to Buca del Serpente.

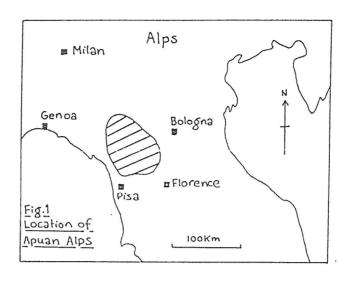
The village of Levigliani (Fig.2) is probably the best place to base an exploration of the Corchia system. Camping should be negotiated locally, since land, and particularly water, supplies, are at a premium. Visits can be made down to Pietrasanta for supplies. There is a simple refuge shelter, the 'Bivaco Lusa-Lanzoni', on the summit of Monte Corchia, close to the Entrance of the Abisso Fighiera.

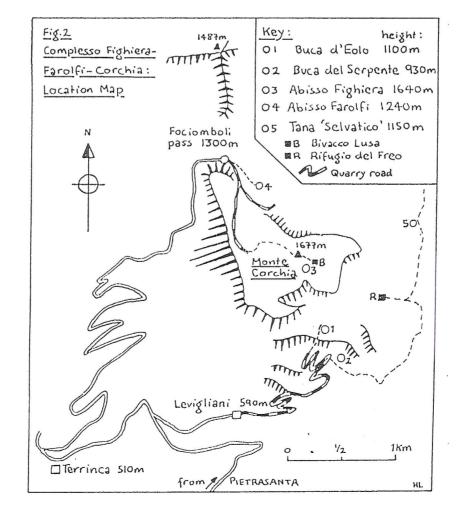
As always, initially making contact with local cavers is encouraged. There are several groups of active cavers, who are generally happy to provide information and advice, point you in the direction of the best trips, and maybe even accompany you. Roads to the high villages are generally good, but beyond deteriorate to gravelled roads serving the quarries. Marble quarrying is the main industry and local employer. When driving on the quarry roads, one must negotiate precipitous edges and hairpin bends, and, on weekdays, must be prepaird to meet lorries, transporting massive blocks of marble, coming the other way! These roads have the advantage of taking you to within thirty minutes walk of any of the four entarnces.

For rest and relaxation between caving trips, there is an extensive network of footpath tours ( as long as you don't ask 'H' for directions ), the nearby beaches of the Italian Riviera, or a 'culture trip' to Pisa, Lucca or Florence.

#### Getting there, etc.

Realistically, it is a two day drive to this area from London, unless you want to miss out on all the French countryside, pay motorway tolls all the way, and burn down at full speed, maximising your depletion of petrol (about 2-50/gal in Italy) and money. Using French N-roads, a fairly direct route is via Dijon, Geneva, Chamonix, Mont Blanc tunnel, Genova, thence on the coast road to Pietrasanta.





#### Other Recommended Trips

Abisso dello Gnomo (-815m), Alto di Sella. Steeply descending passage to -200m, followed by a series of pitches to a sump. Italy's seventh deepest cave. (Ref.6)

Abisso Gerardo Bagnulo (-655m), Monte Pelato. Essentially vertical, including pitches of 84m and a free-hanging 105m, down to lakes and a sump.

Abisso Attilio Guaglio (-650m), Alto di Sella.

Tana dell'Uomo Selvatico (-280m), Monte Corchia. An enjoyable introductory cave, the 'Bull Pot' of the Apuane.

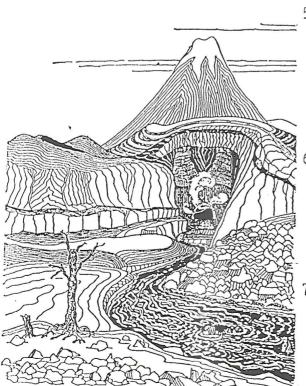
#### Further information

- 1. 'Abissi Delle Alpi Apuane: Guida Speleologica' M.Silvelli, M.Vianelli, publ. Societa Speleolgica Italiana, 1982. Essential. Descriptions and surveys of selected caves. Unfortunately predates the 1983 Fighiera connection; these details were recently published in a new journal 'Tuscany Speleology'.
- 'Apuan Alps: Footpaths and shelters Map', 1:25,000. Available locally.
- 3. 'Antro del Corchia', Craven Pothole Club Journ. (1962) v.3,no.2,pp104-109 A history of exploration.
- 4. 'British Speleological Expedition to the Apuan Alps' D.S.Sinclair (1967) BSA Bull.no.77,pp15-21.
- 5. 'Antro del Corchia Breakthrough' D.S.Sinclair (1970) BSA Bull.no.84,pp.1-3.
- 6. 'Abisso dello Gnomo' M.Silvelli (1985) in 'Sottoterra' Revista di Speleologia del Gruppo Speleologico Bolognese del CAI, no.71 (Aug.1985).

Harry Lock, Imperial Coll. CC.

Can you name these fictional troglodytic characters. In which books do they appear, and who are the authors ?

- 1. Who lived in a hole.... "Not a nasty, dirty wet hole, filled with the ends of worms and an oozy smell, nor yet a dry bare sandy hole with nothing in it to sit down on or to eat."
- 2. Who were shipwrecked on an island, and discovered a cave:
  "The vaulted roof was covered with stalactites, while many formed stately pillars, which seemed as though supporting the roof. The floor was strewn with fine snow white earth, with a smooth soapy feeling, which I felt convinced was fuller's earth."
- 3. Who dreamed of the place:
  "Where Alph, the sacred river, ran
  Through caverns measureless to man
  Down to a sunless sea...."
- 4. Who had a dig going:
  "So he scraped and scratched and scrabbled and scrooged, and then he scrooged again and scrabbled and scratched and scraped, working busily with his little paws, and muttering to himself, "Up we go!" till at last, pop! his snout came out into the sunlight, and he found himself rolling in the warm grass of a great meadow."



- 5. Who discovered a big underground pitch:
  "Down, down, down. Would the fall never come to an end! "I wonder how many miles I've fallen by this time," she said aloud, "I must be getting somewhere near the centre of the earth. Let me see; that would be four thousand miles down, I think."...."
- 6. Who saw the resurgence (left):

  "Lying behind a rock they could look out and see the dark cavernous opening in a great cliff wall between the arms of the Mountain. Out of it the waters of the Running River sprang, and out of it too there came a steam and a dark smoke."
- 7. Who left Ghormenghast to join the Under River people..."....a habitation under the earth...under the river; a kingdom of outcasts; the mendicants; the plotters; a secret world with a roof that leaked eternally."
- 8. Who lived in a cave with Friday.



- 9. Who...."....was at one end of the largest burrow he had ever been in; sandy, warm and dry, with a hard bare floor. There were several tree roots running across the roof and it was these that supported the unusual span. There were a great number of rabbits in the place."
- 10. Who found a very deep system (left):
  "...."Nine times 125 feet gives a depth
  of 1,125 feet."
  "Absolutely approat."

"Absolutely correct."

"Well?"

"Well, according to my observations we have reached a depth of 10,000 feet below sea level."

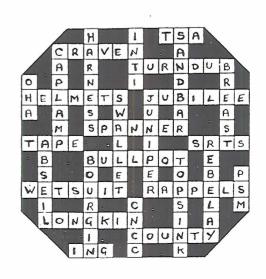
"Impossible!"

"Perfectly possible, or else figures aren't figures anymore!"

The Professor's figures were correct. We had already gone 6000 feet beyond the greatest depth hitherto reached by man, as in the mines of Kitzbuhel in the Tyrol and Wurttenburg in Bohemia."

Caves feature greatly in Greek Mythology:

- 11. Who, calling himself "no-man" was imprisoned by Polyphemus in a cave.....
  "The cave, tho' large, was dark; the dismal floor
  Was pav'd with mangled limbs and putrid gore.
  Our monstrous host, of more than human size,
  Erects his head, and stares within the skies;
  Bellowing his voice, and horrid in his hue."
- 12. Who lived in a Greek cave accompanied by her two sisters with whom she shared a single eye and a single tooth, each using them in turns.
- 13. Who was born in the Dictaean Cave in Crete to keep him hidden from his father Kronos, who was in the habit of eating his children. The baby was then entrusted to the Nymphs, and concealed in the nearby Idaean Cave.
- 14. Who ate too much underground and had to be rescued by a small boy, a rabbit, a piglet, a kangaroo and a donkey.
- 15. Who led who into the Caverns of Kôr, to the flame of eternal youth via a tricky traverse over a very big drop:
  "Beneath us stretched hundreds upon hundreds of feet of emptiness that gradually grew darker, till at last it was absolutely black, and at what depth it ended is more than I can guess."



Solution to crossword in issue No. 8.

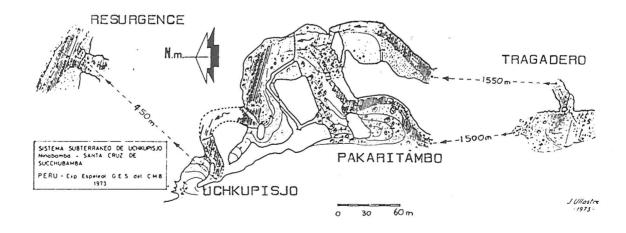
The Hydrology of the Uchkupisjo River Cave, Ninabamba, Peru. (The prospects for further discoveries).

#### Introduction

The caves at Ninabamba in N. Peru are at present the longest continuous cave system in the country [2.4 km.], and are associated with several other as yet unconnected caves totalling a further 2 km of passage. Despite a long history of exploration over nearly two centuries, there are still big blanks on the map, with potential for the various parts to be linked up and much more passage to be found.

#### History of Exploration

- 1802 The naturalist Alexander von Humboldt explored the entrance chambers down to an underground river.
- 1868 The Italio-Peruvian explorer Antonio Raimondi got little further but speculated that the underground stream could be more than 5 km long.
- 1973 The first true caving expedition, by Spanish cavers found the system in flood, which curtailed much exploration. However they established the location of the constituent parts of the system:



- 1977 Another group of Spanish cavers found conditions very dry and did a lot of exploration/surveying. BUT they Published only in an obscure language (Catalan) in a local club journal, and failed to respond to repeated enquires. Hence their work was partially duplicated by IC.
- 1984 Imperial College Caving Club in ignorance of the 1977 expedition completed a full resurvey of the system including several major extensions. Ic also discovered and surveyed 4 tributary cave systems between the sink (Tragadero) and the main Pakaritambo-Uchkupisjo system.

#### Comparison of Hydrological Observations

The two surveys (Spanish 1977 and IC 1984) show good overall agreement except at one point. In the canal section at the bottom of Uchkupisjo the direction of the river as it flows on to the resurgence differs by 180° between the two surveys — clearly a compass error by someone. The error is most likely to be by the Spanish (honest!) since the known continuation of this passage if continued on the Spanish bearing would come very close to intersecting with other known passage.

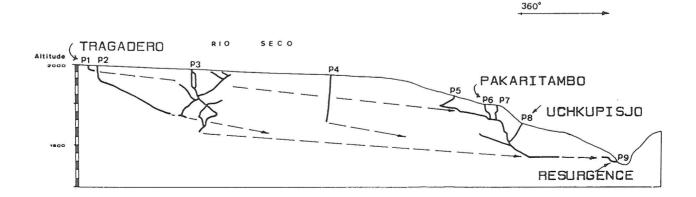
As regards water flow, several points came to light from IC observations made at a time of moderate river flow:

- (1) The main river flow within Pakaritambo-Uchkupisjo was only about half that entering the sink (Tragadero) or leaving the resurgence.
- (2) Tributary cave systems between Tragadero and the main system all sump much deeper than the level of the big rising sump in upstream Pakaritambo which presumably carries water direct from the sink. (P2 only 20m from the main river sink immediately drops down a 22m. pitch and actually passes under the main river).
- (3) The level of the canal section in the bottom of Uchkupisjo is about the same as the resurgence, while the tributary caves are slightly higher, but not much considering that they are 1½ 2 km away.

In consequence it was thought that the drainage was:

South-North Projected Elevation of the Rio Seco Valley from Sink (P1) to Resurgence (P9),

showing the relative positions and depths of caves. NB. Vertical scale is 3x horizontal.



This situation is supported by information recently obtained from the 1977 Spanish expedition report:

FIGURE 3: COMPARISON OF OBSERVATIONS (SPANISH 1977 & ICCC 1984) July 1977 Low water conditions. TRUE NORTH Pakaritambo Uchkupisjo 100 m. August 1984 Moderately high water conditions. Pakaritambo Uchkupisjo CMO 1987

Visiting the system in low water conditions the Spanish 1977 expedition recorded the following observations:

- (1) No water issued from the main "rising" in Pakaritambo on the contrary the flow was reversed since it was draining the flow from P5.
- (2) The lower canal sections in Uchkupisjo remained full despite negligible flow into them from known cave, (The only flow was from the two small sumps in a side passage which is probably just leakage through blocks from the cave above one day the loop to Uchkupisjo will probably be short-cut by a big waterfall here just inside the big Pakaritambo entrance.

The situations in moderately high, and low water conditions are compared in figure 3, which is based on the ICCC survey with some additional information provided by the Spanish survey.

#### Conclusions

- (1) The "rising" sump in Pakaritambo is a major flood overflow and as such should connect to the elusive underground
  river between Pakaritambo and Tragadero. The Spanish thought
  that this passage sumped a short way in but they don't
  appear to have pushed it to the end to confirm this. If it
  was sumped, it may well be quite short and limited to where
  the passage turns up dip. The connection with the main river
  should be a long way off since the depths of the tributary
  caves tend to indicate that the main flow is a lot deeper.
  In dry conditions this passage could continue open for a
  long way. In moderately wet conditions it definitely sumps.
- (2) The canal section was also thought by the Spanish to be sumped but again they didn't pursue it far and it is known (IC '84) to continue open for at least another 200 250 m with no sign of sumping, indeed it probably continues wide open through to the top of the waterfall just visible at the back of the resurgence cave. To the limit of downstream exploration, no connection has been made with the main river flow from Tragadero unless it leaks in unnoticed underwater.
- (3) Virtually all passage surveyed so far is not part of the main river passage but only a high water overflow. What happens to all that water thundering into Tragadero? Does it sump just 60m in and about 30m above open passage in P2? The Spanish thought so but they've been wrong before.

In short the system would provide a superb dye-test project with the potential for big discoveries - pity its so far away!

#### CAVE WARS

#### Episode 7

Our brave heros face a daunting challenge, to destroy the Empire battle station OFD 4 before it destroys the rebel base , however due to a slight mix up on the financial front only second hand fighters are available for the task.....

"This is Flight Captain Faddock, OFD 4 will be within range of the rebel base within 42 minutes, all rebel pilots to launch stations"

With the sudden realisation that they faced their doom , the once slack and lazy rebel pilots assembled in record time - only 6 minutes slower than the training manual quoted.

Again the speakers throughout the base boomed into life.

"This is Flight Captain Faddock again, only 31 minutes till OFD 4 blasts us to tiny little pieces of space dust."

"Cheery guy" thought Simon as he and Malcy boarded KLO Falcon to make their cowardly escape to a new way of life working for the great Clam in the land of Grolsch and porn films. As they went Simon sang his favourite ditty "He who runs away, gets to run away another day."

"Grrrrrrr" said Malcy who had been to the land of plenty before.

Meanwhile Harry strapped himself into one of the best looking Petzl X wing fighters, whilst FX2 was lowered in behind him.

"Wee ker plunk no chance sunshine zap bee boo wez gonna get it bad ker pow thump"

"OK FX2,let's not be quite so optimistic shall we,these fighters aren't that bad" put in Harry while slapping his arm rest reassuringly. The arm rest fell off in a fairly unreassuring manner.

"Wee da click doubt we"ll take off ner ker plump zap"

"Shut it silicon features snapped Harry, not too amused at his grim predicament.

The rebel fighters were assembled on the launch pad, over fifty of them, an impressive if somewhat unreliable force, before they left they were addressed by the rebel leader Ar-jay-cee.

"Go forth brave warriors, though you face an almost impossible task, you will succeed. May the Farce be with you."

"Farce, ha" mumbled Ensign Perv Hamblex as he adjusted his harness "I knew I shouldn't have deserted from the Empire's cruiser, "Chuck After Four". At least their suspender belts fitted. Besides, we stand less chance than a butterfly in steam a turbine."

As Hamblex finished moaning, KLO Falcon took off under the expert control of Simon Solo, only causing "slight" structural damage to a near fire tender unit.

"Whoops, sorry about that you dumb suckers, but I doubt you'll be needing it in a few minutes anyway" chuckled Simon to himself. Pity that Princess Sarah didn't want to go with him, but there was a whole universe of good looking chicks out there, surely he could con one of them. Well, he was going to stay alive a bit longer to find out, that was for sure.

"27 minutes before Vapourisation City, Arizona. Let's get those tubs into space guys". Faddock's voice of doom commenced the rebel lift off.

Harry took a last look at the brave faces of his fellow rebel pilots, wearing their shiny yellow and red rebel PVC uniforms with great pride.

"Fer dop dead meat rap ker poweee" chimed FX2 reading his thoughts adroitly.

One by one the rebels launched into space, though several fighters stubbornly refused to deny gravity's sweet embrace (i.e. their engines failed).

"Wouldn't happen in the old days' moaned Hamblex, some what concerned when his fighter had the audacity to actually work. "Lucky I've got comprehensive life assurance" he quirked to himself.

Nearly 40 fighters formed up above the planet En-Pee-Cee, splitting into four attack squadrons they headed towards the menacing OFD 4.

Red squadron was led by Colonel Plorrock and Major Harrison, who had both been rebel leaders in their youth and had returned to continue the struggle. Also in Red squadron were Harry with FX2, Pim Tack and Fark Spinnel who had all fought before. The rest of Red squadron were almost total novices - brave (dumb) and young. Their only combat experience was in the rebel fighter simulator, known as "The Barn".

As the four squadrons approached OFD 4,a message came through from the rebel base.

"OK guys, Faddock again. 19 minutes to do your stuff or else its the pearly gates for us. Let's really sock to 'em!"

"Look sharp troopers, enemy fighters from sector six" noticed Harrison.

"This is Green leader, my men will intercept."

The three remaining squadrons continued while Green leader and his changed course to engage the incoming fighters. As the distance was closed on OFD 4, the sounds of battle could be heard as Green team took on the best of the Empire's fighters.

Blaam, booom, baam, zap, baaaaaam!

"This is Green 3 I'm hit, I'm hit aaaaargh!!!"

"Green 4 watch out behind you, oh no green 5 is gone ,they're allover us .This is Green leader-I've been hit bad but I think I'm OK."

The last message ended with an explosion and then the crackle of static.

"This is Blue leader , my squadron is dropping back to engage (qulp) the remaining Empire fighters. See you back at base."

"Whop, plinf you'll be lucky zip, veer, fink."

"Cut it metal brain, keep yourself alert or we'll all be spare parts soon " chided Harry who was not happy at leaving Blue sqadron, but knew the rebels had to send their best at OFD 4. The fact that the rebel's best probably couldn't deal with a rhino on heat did nothing for his bleak outlook on the forthcoming battle. Then a calm voice sounded in his head.

<<Don't worry Harry, the Farce is with you my son, you are destined to win, the forces of light will truimph over evil.>>

But the voice of his mentor OB1 Laneobe was of little comfort as OFD 4 came into scanner range, and it's true size became apparent.

<<It's OK for you Laneobe, you're already dead and I don't figure on joining you just yet>> thought Harry wildly.

<<You will see, the Farce is strong in you. The months spent in contemplation amoung the lonely mountains have nurtured it.>>

Leaving OB1 and Harry , a strange dilemma had become apparent in the cockpit of KLO Falcon as it speeds to safety.

"Grrrrrr!!" said Malcy.

"Look you 7 foot excuse for a scraggy teddy bear, one of our engines has burnt out .We're flying on half power" shrieked Simon for the third time.

"Grrrrrrr!!" said Malcy.

"No, it wasn't my fault, I told you not to fill the fuel tanks with Formula Clam. I've flown with chimps more reliable than you" bridled Simon.

Their argument continued as they hastily changed course back to the rebel base, Simon hoping to get there, make repairs and leave before the awesome power of OFD 4 destroyed the only active rebel base in the sector.

Whilst our heros rush towards almost certain doom with the heart wrenching courage and conviction which only an ITV miniseries can successfully mimic, only one place seemed in an optimistic mood - the control room of OFD 4 where Emperor Jimbo, that spectre from the past, waited to annihilate the planet En-Pee-Cee.

"16 minutes till the planet is within our line of fire oh Mighty One." snivelled the Empire's meanest (and shortest) hair dresser, Dirkfed.

"Thank you Dirkfed, you odious toad." boomed Jimbo, his voice carrying tremendous authority. "Have you anything to report Daft Raider?" he continued.

Raider telekinetically threw Dirkfed from their presence before speaking.

"Rebel fighters are approaching OFD4, Evil One.I have launched 3 squadrons to intercept. Some however have got through and I go now to lead the Cawthorne Death Squad to crush the few that dare to threaten us, oh Dark Master of the Farce."

"Good Daft, see that you destroy them all, as I sense a strange disturbance in the Farce nearby."

Will Harry and the rebels destroy OFD 4 and save the planet En-Pee-Cee, or will the evil Jimbo have his wicked way ?.Find out in what must surely be the final episode of this tale of fear, courage, love, greed and downright stupidity - only in the next ICCC newsletter.

Because this edition's caving crossword is a bit cryptic, and some of the clues rather painfully contrived, I'm offering £2 to the first most complete entry submitted before end of term.

#### Across:

- 4. Farrer's village applauds bacon. (7)
- 7. Water and clay a sticky problem. (3,3)
- 9. Pull gear behind in women's clothing. (4)
- 10. A sticky situation underground, whether you are or the patch hasn't. (5)
- 12. Shortened way into GG. (3)
- 13. Big hole, or is this just a red herring? (5,3)
- 14. Sounds like a fish might use it to breathe when diving to Bullpot. (6)
- 16. Cave somewhere in old Ingleborough. (3,3)
- 18. Unlucky hall in the Berger. (8)
- 20. An upwardly mobile device? (8)
- 24. Mixed sports for wiry types. (6)
- 27. French helmets. (6)
- 28. Classic make of rope sack. (5,3)
- 29. You ail we hear? Beer might solve your problem. (3)
- 30. Single event in 24 across. (5)
- 32. Unusual list gives a pot in Simpsons. (4)
- 33. Ruins by dumped mine wastes. (6)
- 34. Bump guards and lamp supports. (7)

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#### Down:

- 1. Confused wild son of Mendip. (7)
- 2. They only do if you don't squeeze their handles. (5)
- 3. Works with compass and clino'. (8)
- 5. I enter the pot and take nothing out. (3)
- 6. A secure point for the rigger to rig his rope. (6)
- 8. Links rope to hanger by post to London south. (8)
- 9. Large depression, ditto line enclosed. (6)
- 11. Game to wedge across rift. (6)
- 15. Like Charlie, Canadian has "C" first. (4)
- 17. Another chap in a Scottish valley. (4)
- 19. Felix the French caver sounds like a brass instrument without one. (6)
- 20. From Lancaster Hole the rest ends in a sixth of a pint. (8)
- 22. Vehicular pot finds civil defence officer in bed. (3,2)
- 23. Thixatropic stalactites? Fossil stal' perhaps. (3-5)
- 25. Decline to replace detonator in rubbish filled dig. (6)
- 26. Stinging pots in Yorks and Derbys. (6)
- 29. An American soldier in time finds a popular Welsh cave. (5)
- 31. Hi! It's your fun-sized cave salamader as usual! (3)