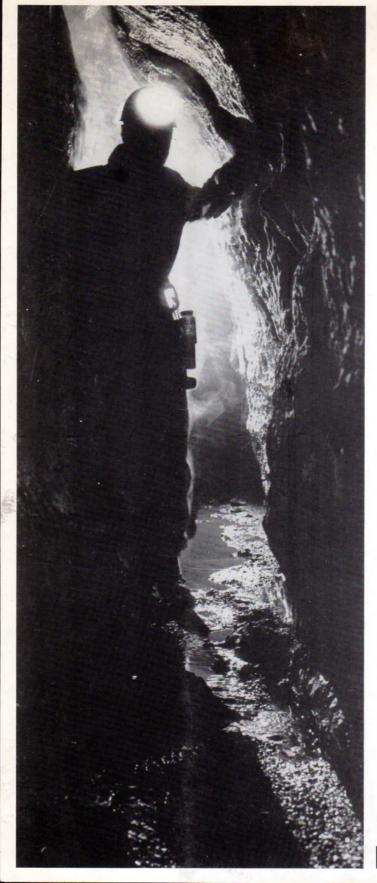
MUSS



JOURNAL NUMBER 10

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MANCHESTER UNIVERSITY SPELEOLOGICAL SOC	IETY
Journal No. 10 September	1981: and to somerange off somis
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J. Corrin, S. H. Foster, L.D. J. Mills and P. Smith

Editorial

Well, here at last is MUSS No. 10. Three years have now elapsed since the appearance of our last journal, but the intervening time has not been one of procrastination. Three more summers have been spent in Matienzo, and although the hoped for connections in the Four Valley System have not yet materialised, major discoveries have been made elsewhere. This summer saw a typical example of 'sod's law' coming into play. After a lot of work went into producing the latest Transactions, with an up-to-date account of Matienzo underground, Matienzo's answer -to reveal a major new system which, if connected to Reñada, threatens to become a rival to Uzueka for the title of the longest cave in the Matienzo area. More and more clubs are finding the attractions of Northern Spain irresistible, with expedition members now being drawn from all over the country.

1979 saw a visit by a small group to Austria, with useful work being carried out on the Steinerness Meer; an account has been published in BCRA Transactions Vol.7, No.1, March 1980. Also, in 1980 and this year, expeditions have been to the Pyrenees-Atlantique of France to sample some of the large, vertical systems to be found there, and to attempt to extend them.

We have also been active in Yorkshire. The last two years have seen the discovery of several new caves in the Penyghent Gill area, and concerted digging in Resurrection Pot on Ingleborough has achieved a depth of over 180ft., although the 'caverns measureless' are still proving to be illusive.

Finally, the close of 1980 saw Juan Corrin moving on to take up the reins of 'Caves and Caving'. Juan had edited the journal since 1974, and in that time, produced the last three issues as well as the MUSS '21st. Birthday' magazine. Many thanks Juan.

L.D.J.Mills and S.H.Foster

In addition to the authors of the articles listed overleaf, contributions were received from the following:-

Surveys

P.Berrie, J.Corrin, P.Devine, A.V.Fifield, S.H.Foster and P.Smith

Appendix A. Matienzo Expedition Report, 1981

Photography

J.Corrin, S.H.Foster, L.D.J.Mills and P.Smith

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MATIENZO EXPEDITIONS 1979-80

Introduction

Since MUSS No.9 appeared in 1978, two more expeditions have been to and returned from the valleys and caves of the Matienzo area. This year, a further visit was made over Easter by a small group who found that they could stand no longer the "tinto-deprivation" forced upon them since the summer by their geographical circumstances.

As regards our discoveries, the figures speak for themselves: Sixty-three completely new caves explored; four others that, although known to the Spaniards, were new to us; twenty-seven sites found but left unexplored due to lack of time; seven digs and extensions in a number of caves already known to us -a real potholer's holiday! The total number of known caves in the Matienzo area is now around the 250 mark*and it is quite probable that other significant discoveries will be made by the 1981 expedition. The area looked at during our visits covers about 60sq.km and conceals over 45km of cave passage. By way of comparison, the "Ingleborough Area" of the "Northern Caves Series" covers about 80sq.km and includes about 50km of passage. Matienzo is now one of the prime caving areas of Europe!

Of the British Expedition's discoveries, it is not intended to describe each find or extension in detail as this has been done elsewhere. Instead, the highlights of our discoveries and their bearing on the future of cave exploration in the area will be outlined.

* Now over 300 -see Appendix A.

make Umeka a shorter trip. P

The Four Valley System

mOS swood flush ent ni eate

above stream level but his light bud gone out. I climbed up to give

In 1979, we were lucky enough to obtain a set of speleophones and a series of 1:5000 maps. These were invaluable in checking the accuracy of the Four Valley System survey. The 'phones were first used at the end of the Gorilla Walk, about 2km into Cueva Uzueka. Contact with the surface was quickly established, proving an error of less than 20m. The more exacting test was made when two memorable hours were spent on a hillside near Carcavueszo in pouring rain, thrashing through gorse bushes. Contact here was established just five minutes before the transmission time was supposed to end. The underground team were at Rocky Horror, 130m below and 7km into the cave. The survey was found accurate to within about 30m(an error of less than 100 when considered over the surveyed 7km).

By adjusting our surveys to the aerial maps, we found that the upstream end of Cueva Llueva was 400m from the end of Uzueka. Efforts were made to extend Uzueka beyond Rocky Horror and some progress was made. Barry Davies wrote about the final trip of the 1979 expedition in the log book:

a 750m long bypass to most of the

"...set off at 1.30p.m. after the statutory beer in Riano bar and made good time to the Astradome. After the customary period of 'oohing' and 'aahing', we set off for the end. Armageddon boulder choke provided some entertainment for a while and then it was all plain sailing to Shrimp Bone Inlet. (The ladder at Armageddon was still in good condition after two years). Rocky Horror proved to be the most difficult part of the trip and could definitely do with taping, as we probably wasted two hours here.

"On reaching the previous end and pushing straight on and to the left, we were unable to locate a

way on. However, Pete found a draughting passage on the right-hand side. The stream was reached here, but it disappeared into a draughting choke which proved impassable. However, a slot in the left-hand wall above stream level led into a small chamber and then down a hole back to the stream. While Pete pushed on down the small stream passage, I turned left and followed a large passage in a loop back to the previously mentioned encounter with the stream.

"Where one drops down through the hole, there is a choke with a draught vanishing straight up which could possibly lead into a downstream continuation. Also, I found an old phreatic tube with a Cueva Llueva in seperate attempts howling draught heading back towards to continue the push upstream. Phil the main passage. I stopped at a Papard dived in the sump finding choke since I was low on light, but the way on still open, and the it looked passable and could lead second group looked around in the into a continuation of the main large fault chamber 200m from the passage ... "

Two attempts were made to make Uzueka a shorter trip. Fuente las Varas Pot on the hill above Uzueka was pushed to an 'impossible' draughting hole, and inside Uzueka, a 750m long bypass to most of the Armageddon boulder choke was discovered. The following account by Tony Fifield makes it clear that the cave has not been made any easier....

"...starting from the '95 inlet', the passage is clearly of vadose origin but after about 50m, there are signs of some phreatic development when the caver is forced to climb up into an elliptical tube with the stream flowing through a narrow but deep trench.

"About 150m into the bypass, a small inlet is encountered accounting for most of the flow back towards the main passage. From hereon, perhaps the most interesting point about the passage, the bypass begins gradually to drop in level with all subsequent inlets flowing towards Armageddon.

"As the level drops, the cross-section of the passage begins to change, becoming increasingly

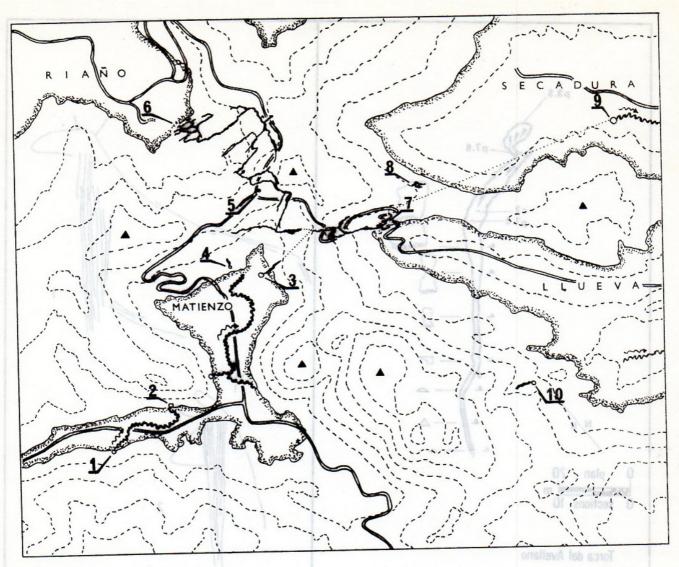
phreatic, and setting the trend for the remainder of the trip to Armageddon. The caver finds himself wading through an almost static canal with knee-deep mud. All the surfaces of the passage are covered with an abundance of mud indicating that it spends a fair percentage of its time completely submerged. At one point, perhaps 100m from Armageddon, a small chamber is encountered conveniently bypassing a sump. Returning to the canal via a muddy tube, the passage begins slowly to ascend until a 5m climb is made up into the boulders of Armageddon..."

> Towards the end of the 1979 expedition, two teams went into sump. Barry Davies writes:

"...Patrick had free-climbed to a ledge in the fault about 20m above stream level but his light had gone out. I climbed up to give him some support and when he had climbed down, I traversed to the right of the ledge to an immense jammed boulder. An easy climb up this led to another jammed 'Herbert' which looked decidedly unstable. Six metres above this was a large, inviting black hole with the draught screaming into it. To the left of the block was solid wall about 2m high to a solid ledge, but having no bolts, the climb had to be left for another day ... "

This passage is heading in the direction of the end of Uzueka. Barry continues....

"...returning down the climb, we went to look at a passage that Howard and I had seen earlier. We erected the scaling pole and Howard ascended into a nice little passage which he reladdered in an easier place. The entire team then climbed up to push. After half an hour, we found a way up into a large chamber again on a fault. At one end was a high aven, once more with the

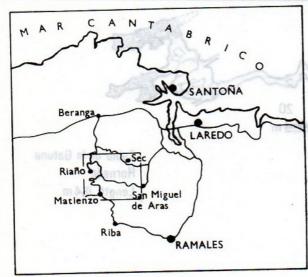


Matienzo Area Map

Most of the caves in the area have been omitted

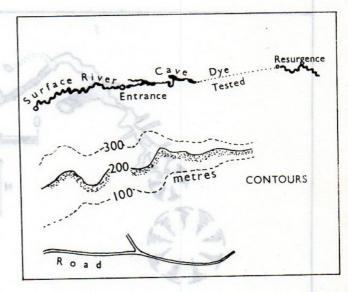
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- I Reñada
- 2 Cueva del Agua
- 3 Carcavueszo
- 4 Emboscados
- 5 F.L.V. Pot
- 6 Uzueka
- 7 Llueva
- 8 Cellaron
- 9 Los Boyones
- 10 Cobrantes

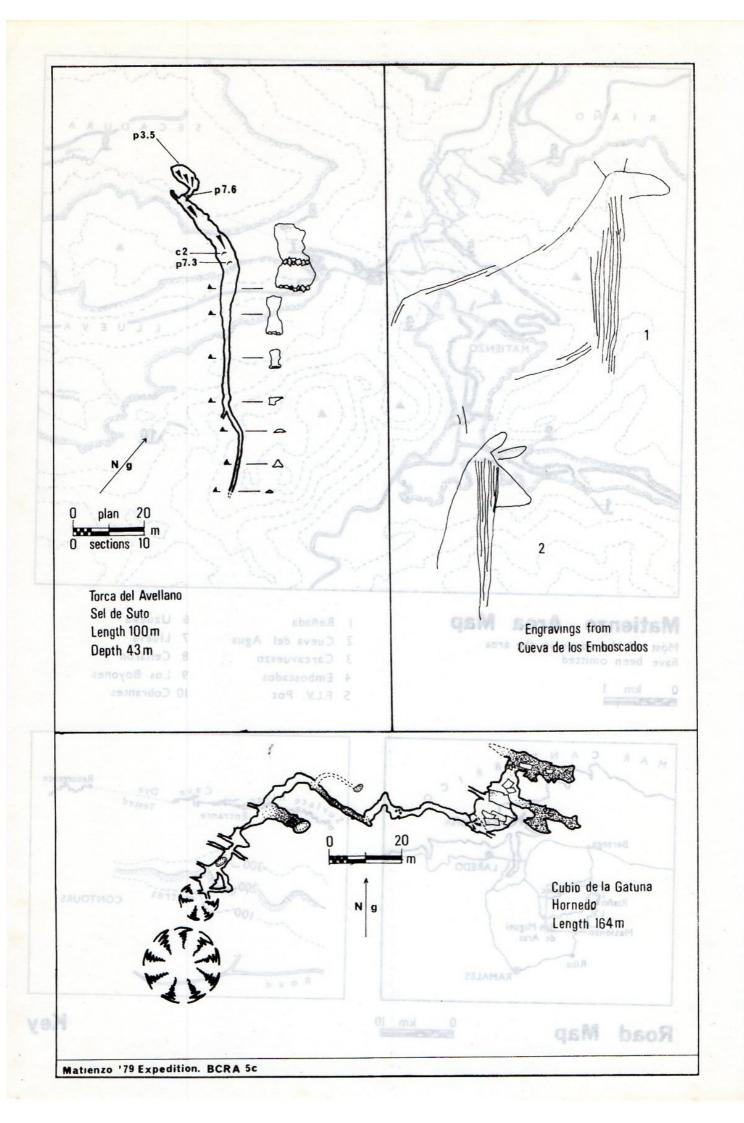


Road Map





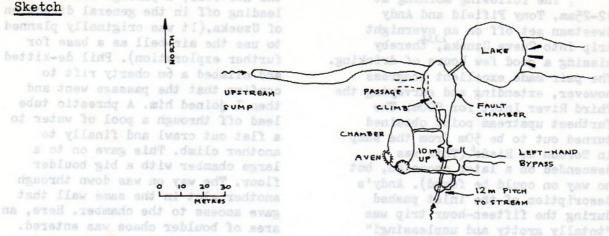
Key



draught whipping upwards, but it would probably be a more difficult climb than that in the main chamber. At the bottom of a pile of large

and both divers passed the sump without incident, At the far side of blocks from the aven, we found some dumped carbide and footprints which we followed back into the main passage near the fault chamber ...

the air-bell, a passage was noticed



By the end of our visit that year, our hopes were high for a link to be forged between Cueva Uzueka and Cueva Llueva. Somewhere between the ends of the two caves, the water from Carcavueszo enters, together with its attendant unknown passage. It was felt that Cueva Cellaron, downstream of, and about 130m above Llueva, could be of significance. The lowest point of this 107m deep pot, first entered in 1978, is only about 40m above the Llueva stream

After squeezing around, up and down

On our return to Matienzo in 1980. attention was first concentrated on Cueva Llueva^{2,3,4}Pat Devine and Pete Smith started the bolt climb on the western wall of the fault chamber looked at the year before. This part of the cave is just 200m from the upstream sump and after two trips to here, the pair managed to gain a little ground on the high point established the year before, making the climb a little safer for those who followed later.

Matienzo valley, and in particular Cueva de los Emboscados, was the scene of the next attempted breakthrough. The cave is thought to have drained the depression in the past. Speleophones were taken in to

the choke at the end in an attempt to fix this point on the surface. The phones did not work however. It later transpired that the Americans had had their hands on them, causing a minor fault. Nevertheless, a team on the surface managed to locate a number of interesting possibilities near the fault that cuts off the end of Emboscados. One of these was subsequently dug to a 10m pitch which choked. A second find, a large winter stream sink draughting strongly, could prove interesting in the future. On this same day (6th August), 'Squirrel' Wood, John, Gordon Strefford and Pete descended two shafts to the west of Fuente las Varas. Needless to say, both choked at -25m and -45m respectively.

On the same day, Barry Bayles,

Two days later, a visit was made to the ridge between Llueva and Secadura to descend a small pit in the deepest point in Cueva Cellaron. Unfortunately, this turned out to be only 14m deep and choked with calcite. However, the trip proved memorable in that we were able to obtain decent photos of the 50m wide passage and for our discovery of a small but very well decorated extension at the top of a steep, very slippery slope in the NW side

of the cave. Here, Julie Mundie caused a minor diversion on the way down the slope when she missed Pete Smith's carefully cut steps and did a very good impression of a come-to-

grief ski-jumper.

The following morning at 12-25am, Tony Fifield and Andy Sweetman set off on an overnight trip into Cueva Uzueka, thereby missing a good few hours of drinking. The pair made excellent progress however, extending and surveying the Third River Inlet for 800m. The furthest upstream point obtained turned out to be 50m from the sump in Torcon de Riaño. (This was descended on a later occasion, but no way on could be found). Andy's description of the inlet pushed during the fifteen-hour trip was "totally grotty and unpleasing!"

On the same day, Barry Davies, Steve Foster, Gail Searby, 'Grov' and Paul Gelling finally completed the climb in Cueva Llueva, ending up about 60m above the stream, but with the draught lost and no sign of the

passage.

On the 11th August, Gordon and Squirrel descended a couple of shafts high up above the head of the Secadura valley. These had been pointed out to Pete by J.C.Fernandez-Ruiz, there being a possibility that water from here drains into the Four Valley System. One shaft choked after 30m although the other might still go with the help of a stemple.

Following a dive by Phil
Papard and Fred Winstanley, the next
day was something of a milestone in
the exploration of Llueva. In 1977,
Geoff Yeadon(KCC,CDG) had dived the
upstream sump but had been unable to
find a way on through the boulders.
Acting as 'sherpas' for divers Phil
and Fred were Squirrel, Gordon,
Barry, Frank Addis, Julie, Dave,
Paul and Dave Howard. Fred takes up
the story with his log book account
of the first dive of the expedition:

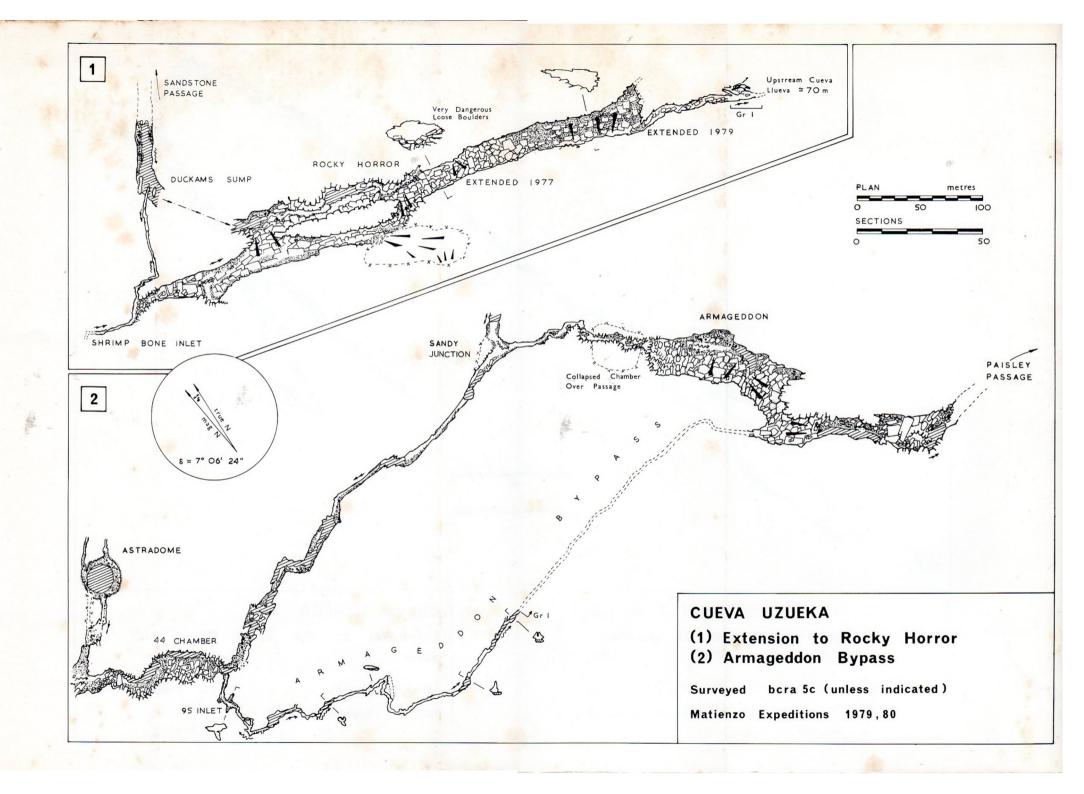
"...after a fairly easy carry in, Phil and I kitted up and arrived at the sump where Phil impressed everyone present by stripping down the second stage of his valve

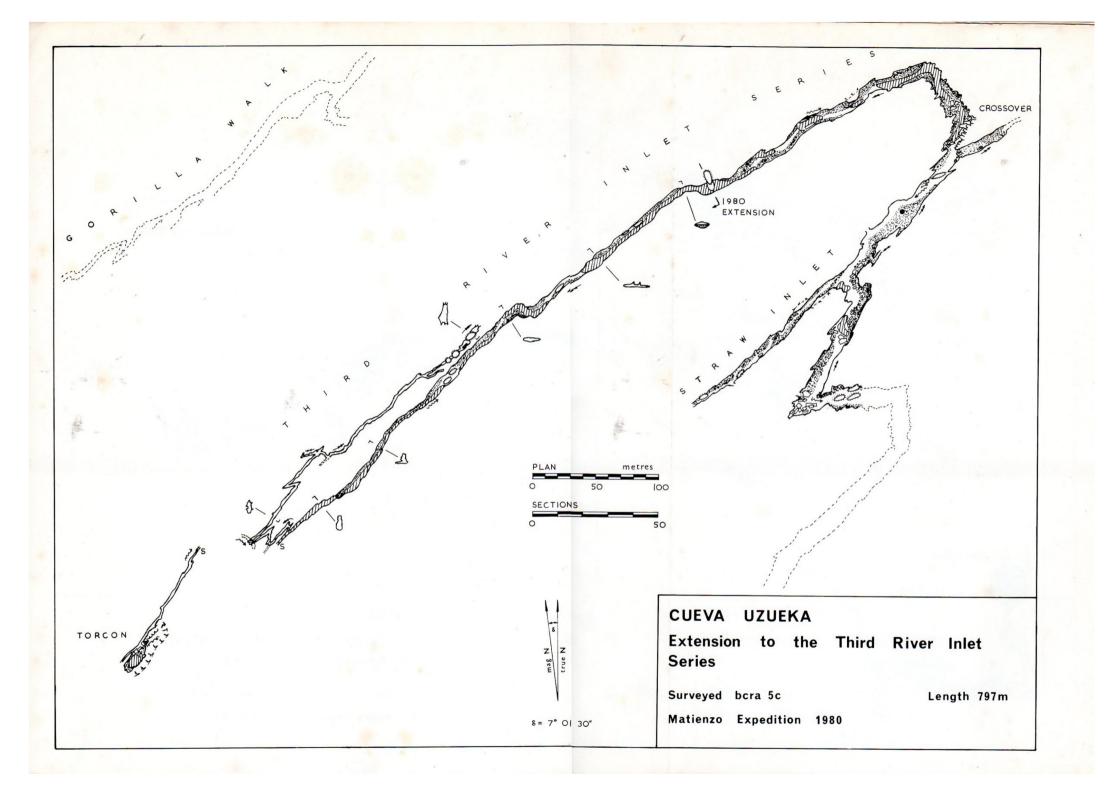
immediately prior to diving. Phil set off first to locate the air-bell he had found on a previous visit. Having done this, he returned for me and both divers passed the sump without incident. At the far side of the air-bell, a passage was noticed leading off in the general direction of Uzueka. (It was originally planned to use the air-bell as a base for further exploration). Phil de-kitted and climbed a 6m cherty rift to confirm that the passage went and then I joined him. A phreatic tube lead off through a pool of water to a flat out crawl and finally to another climb. This gave on to a large chamber with a big boulder floor. The way on was down through another slot in the same wall that gave access to the chamber. Here, an area of boulder chaos was entered. After squeezing around, up and down through boulders, both divers began to feel heat exhaustion coming on. This wasn't surprising as both had been exploring in full diving wetsuits and were having to pussy-foot about in wet-socks.

"The return trip was not so easily made as one boulder climb looks much like another. It had just got to the stage where we were wandering who would come and rescue us when the way back was found. Diving line was used to help on the climb down to the air bell, and an uneventful return dive was made.

"The limit of exploration was in boulders from where the sounds of a distant stream could be heard. It seemed to both divers that this must be the way to Uzueka, and I was so chuffed, I came out singing 'Glory, glory, Fred's a hero.' Bottles and fins were left in, and an exhausting return trip was made."

Much talk ensued that evening in the bar, some of it connected with the fact that only divers were going to have a chance of pushing the connection with Uzueka. So on the 14th August, Barry, Roz, Jill and Tony Williams attacked the cascades just below the upstream sump with a sledgehammer and pickare, only to find that the rock





composing the cascades 'seems to be the only decent piece in the place', and was 'totally indestructible.' At the same time, a four-man diving team(Squirrel, Fred, Phil and Ron Taylor), passed the 30m long sump and tried to force a way through at the end. In Cueva Uzueka, Pete, Tony, Paul and Juan pushed the terminal boulder choke for a few metres and then either sat around whistling at the Llueva team(who couldn't hear), or tried to push various other grots. No connection was made.

On the same day, Grov, Gail and Dave Howard extended and surveyed Cueva Cellaron.

Any hopes that we may have had for the river sink in Matienzo. Cueva de Carcavueszo, were finally dispelled when Paul, Squirrel and Phil had a trip to try and enter any high level passages. As one of the team said:

"These passages only exist in Phil's mind. This became apparent

after hours of climbing over greasy boulders into impossible dreams."

The same day, Louise, Gail, Dave, Gordon and Tony had a photographic trip to the Gorilla Walk in Uzueka, and found about 200m of passage in the phreatic series not far from the '75 crawl. This was later surveyed.

On the 18th August, a large party entered Cueva Llueva in an attempt to push various holes noticed on previous visits although these came to nothing. The highlight of this trip was Phil's solo dive through to the upstream extension in order to survey!

Our final trip into Cueva Uzueka was made on 20th August when a team comprising Frank, Juan, Tony, Gail, Gordon, Andrew and Grov spent fifteen hours photographing out of the cave from Rocky Horror. Tony nobley led the team on its journey into the cave although he'd only had three hours sleep the night before.

only formations seen in the cave. A

to Renada has produced another short

Prospects for the Four Valley System

With the ends of Uzueka and Llueva now only 170m apart, our hopes are still very high for a connection between the two caves. The 1981 expedition will use whistles, smoke-pellets etc., in an attempt to forge a link through the choke. With luck, a three-way speleophone link will be established between the two ends and the surface. On the Llueva-Secadura ridge, there is still some hope for extension and discovery. In Matienzo itself, various digs still remain to be pushed and there are still a number of undescended shafts on the ridges that separate the valleys. much dmile of fastolline at agor

Other work in the area

down some boulders into a short

ento a steeply sloping rubble-beap. This soon leads to a short scramble

Although the connection of the caves of the Four Valley System was the main subject of our attention(and has been since 1975), a great deal of exploration and discovery was carried out in other areas around the Matienzo depression.

Fresnedo o von aldo apazasa trode

This hole, near a low point in the depression, was discovered in 1978 and could well be the back entrance to Solviejo in Secadura.

Frank Addis writes:
"In 1978, a large, dry sink entrance was noted; about 3m wide and 1m high, this sloped away over

a boulder floor with a strong draught emerging. This year (1979), the team was soon crawling about in a maze of fox-shit, boulders and flood debris with the draught disappearing up a short sandy climb in the roof. This proved to be one of the many sandy holes and the team soon became separated with occasional shouts of: 'I can see your light I think but where are you?'

"The way on was eventually found by pulling aside a few boulders behind which the draught was disappearing. Squeezing up into a hading rift passage immediately led to a roomy walking-sized passage and visions of eternal glory. This dead straight passage soon emerged into a roomy mud-coated phreatic maze with several short clean-washed shafts leading down to an impenetrable bedding. Clambering about in the roof of the maze revealed another chamber above the phreatic zone, and contained the

ramp down through boulders led to another small series of choked passages. Attempts to regain the lost draught failed, so the return journey was started. After passing the squeeze and crawling along a sandy passage, wondering where the exit could be, daylight was seen in the roof of a loose shaft. This was reached by an easy traverse over yet another sandy passage. The shaft was soon climbed amidst a hail of pebbles and soil, bringing the explorers out into the middle of a bramble-filled shakehole surrounded by eucalyptus trees. This was a short distance from the original entrance and provided a much easier method of entering the cave, especially if a ladder is used!

"Thus ends the sum total of underground exploration in the Fresnedo valley which so far, is certainly the least promising area looked at."

No survey was attempted, but the strong draught means that this maze will have to be looked at again.

Cubio de la Reñada^{5,6,7}

above the supposed continuation of trees has a fence around it, having a length in excess of 100m at its far side. and a depth of some 43m. Frank writes:

only formations seen in the cave. A

"The search for a back door to Renada has produced another short but interesting cave. The considerable distance between this and Renada entrance suggests that some radio-location work is required in order to cut down the area being searched.

"Torca del Avellano is best reached by poking about at the end of the Sel de Suto road and toiling up the track through the trees until a large meadow is seen. This is obtained by a process of junglebashing. Crossing the meadow and ignoring a large shakehole full of trees and fallen blocks, a dry valley is seen with one or two

stalleq-adoma , meltainv eau iliw nettibegxe In 1979, three new pots high isolated trees. one of the nearest Renada were explored. Torca del guaranteeing the presence of a shaft, Avellano was the most significant, which in fact proved to be 8.6m deep

> "Five metres of ladder or rope is sufficient to climb down onto a steeply sloping rubble-heap. This soon leads to a short scramble down some boulders into a short section of old vadose passage, which immediately leads to the head of a 7.6m pitch. The explorer lands in a wide, steeply inclined bedding with a short section of blind passage reached through a slot in the floor. Strolling down the bedding leads to another pitch of 7.3m in black limestone, landing in a roomy but short passage. This now continues as a series of lowering passages running down-dip to the inevitable flat-out crawl with a powerful inward draught.

"The crawl was subsequently

With the ends of Uzueka and Llueva now only 170m apart, our

pushed along a series of cross joints and through various interesting squeezes to terminate in a tight, low pool with four centimetres of airspace and a strong draught.

Salamander Pot, a short distance from Avellano, was explored in two trips. The first pushed the pot 'via 5m and 3m pitches to boulders through which could be seen a walking-sized passage. A lumphammer will guarantee easy access to spacious caverns'. The second trip reported that they 'cleared sufficient debris and calcite to squeeze through to the walking-sized passage only to find an immediate, impassable boulder-choke'.

Torca del Omoplato, the third of the pots above Reñada, was partially dug to give a cave of 25m depth. The tight passage at the bottom proved impassable however, and offers no hope for a continuation.

Work on Reñada itself was resumed in 1980, with the cave being entered three times. On the first trip, Pat, Steve Foster, Steve Bell and Dave Evans went to look at a 20m pitch next to Ghost Lake. Nothing new was found and Dave slipped, badly gashing his leg which required a couple of stitches. The second trip was primarily photographic and the third was for the divers to eye-up the potential of Reñada II for the future. Fred recounts the trip with typical CDG aplomb!

"...a fairly easy carry was made to the sump where Squirrel decided that things had got too much the night before and wasn't going to dive. Phil and Fred kitted up slowly but finally both were ready. Phil belayed the line and the two dived together. Cold water seeped over their bodies. Icy slithers stung them like slowly skewering knives. The world went silent apart from the rhythmic rattle of exhausted air. Slowly, they made their way forward and down, each silhouetted by the light of their own aqua-flashes. Over to their left, buried deep in silt, lay the line left in by Phil

the year before. Their progress was slow and cautious despite the crystal clear visibility, Phil laying the line and Fred following close behind. The roof dipped deeper and deeper, finally reaching its low point and then rising again, back towards the safety of air on the other side of the sump.

"Phil belayed the line, both dekitted and set off into Renada II. A scramble over boulders led us past a massive run-in on the right and back to the stream again. The passage now consisted of deep swirlpools which had to be swum against the current. The passage divided and to the left was a similar streamway leading to a sump. Straight on was a climb up through boulders into a huge, dry passageway, this finally landing in a very large dry swirlpool. A passage off to the left soon closed down and the point where the water used to sink also proved to be impassable. Both choke in easily diggable sand however. A climb up the far wall and a scramble up a boulder slope led us to an outward draughting hole through poised boulders. Various attempts were made on this hole until Fred managed to squeeze through into a chamber beyond. A quick recce revealed that there were three possible ways on, but as the water for the carbide lamps had almost run out, and with only one aqua-flash as an emergency light, it was decided to return.

"The rope was left at the streamway junction to assist on future climbs, and the crowbar was taken out."

The area around Alisas to the west of Reñada has always been thought to be a possible drain into the cave and so a couple of trips were made to investigate some very well hidden shafts. Four were descended, the deepest proving to be 34m. Two of them draughted inwards strongly at the bottom. A fifth shaft of about 15m remains to be descended.

Once more, the source of the Reñada stream has proved to be as elusive as ever.

Cueva Cobrantes

This cave, situated at the head of the San Miguel valley, and with an average cross-section measuring some 30m x 30m, was the scene of a scaling trip. Twelve cavers with nine poles spent six

"Phil belayed the line, both

Cubio de la Gatuna

Situated near Hornedo, and probably well away from any connection with Cueva Uzueka, this cave was explored and surveyed in two trips.

The entrance chamber leads into a series of loose cross-jointed passages, which were pushed into a low, sandy crawl. This was followed through a length of finely decorated

pool. A passage off to the left soon closed down and the point where the water used to sink also proved to be

Fuente de la Cuvia de la salassami

The longest 'new' cave of the 1980 expedition, Fuente de la Cuvia is entered above and to one side of a small resurgence to the west of the Uzueka entrance. It is probable that the resurgence water finds its way through the clay of the valley floor and ultimately into Uzueka itself. It was established on our return to England that JC had entered the cave in 1975, but that any significance the cave may have had was lost in the excitement caused by the discoveries then being made in Uzueka. Tony Fifield recounts the events of the first two trips made into the cave this year:

"...after 100m, found stream coming out of cave entrance. About 20m around corner, met a cold patch and thus found a hole with an icy gale coming out of it. Did surface survey from Riano church and then Andy went down. Followed passage for about 150m via crawl and rift to large chamber with ways on. Got lost coming out. Total length looked at about 300m. Go back tomorrow....

"Andy and Tony over to Riaño and underground by 2pm. The two pushable passages connect eventually

hours scaling and climbing at every conceivable site at the end of the cave, but to no avail. Bolting was discounted because of the thick layers of mud under calcite that covers much of the wall at the end.

pushed along a series of cross joints

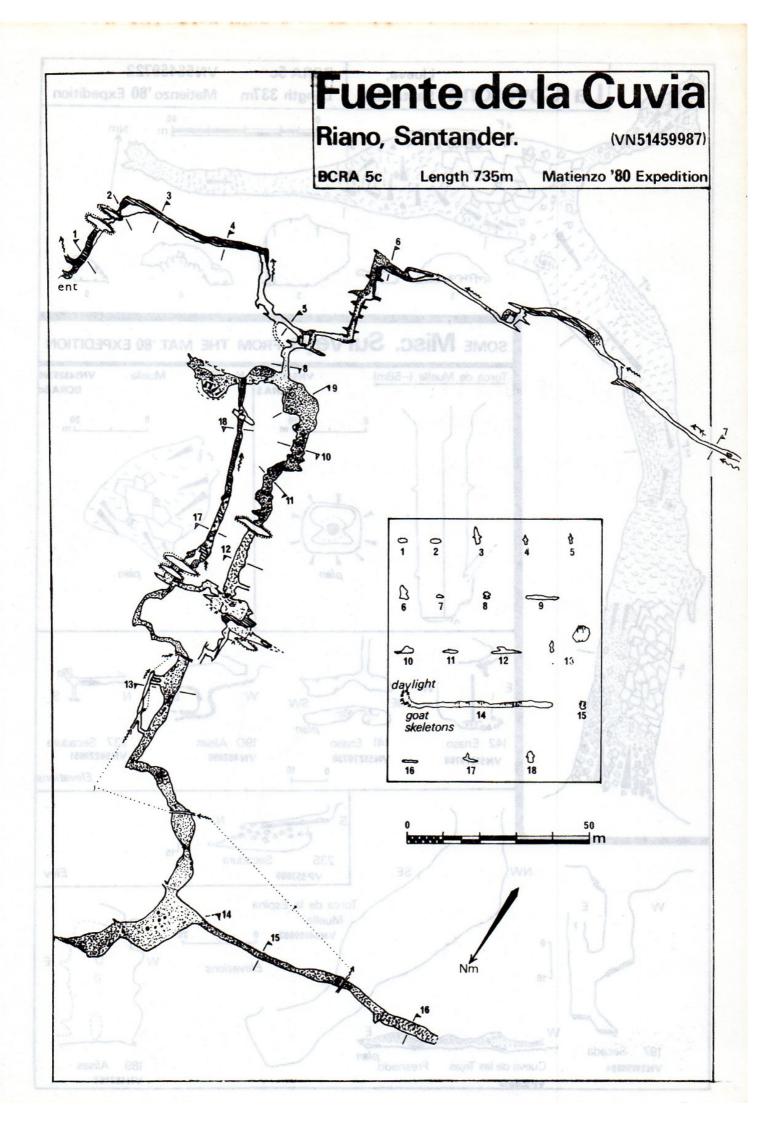
passage. The cave ended when two large chambers were discovered, the only way on being down through a collection of nasty holes in the floor. One of the holes was found to be 19m deep and was aptly described as'tight, muddy, horrible and sharp, with small rat-holes at the bottom and no draught.' The total length surveyed was 164m.

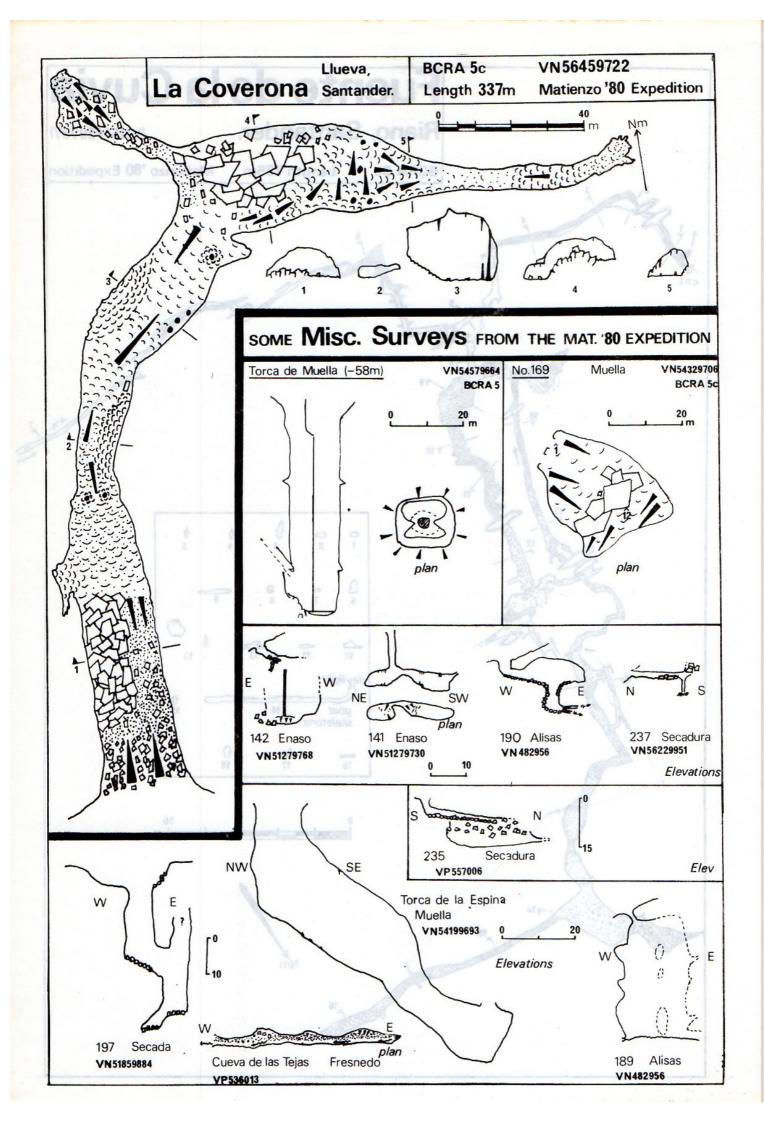
in ox-bow, via much calcited chamber -lots of stal everywhere. One of the left routes, following draught and stream, continues for some way up low section of passage to a calcite blockage which might be passable. Draught continues. Cave needs lots of pushing parties and surveyors..."

Work on Renada Itself was

Pete, Juan and Frank went in the day after and Frank wrote:

"...went to push draughting passage that was blocked and pretty boring. Surveyed back towards the entrance. Went to look at large, muddy chamber nearby -rather boring; went along nice straight stream passage leading into 'grottoes' previously seen by Tobo. Gasp! Lovely stal all over the place, with flowstone and gour pools in profusion. Climbed over mudbank at end of this lot into low streamway and soon emerged into easy walking passage with even better decorations. Chamber at far end full of goat skeletons -about a hundred of them beneath an upwards sloping rift containing warm air at the top and a chink of daylight. A local told us that a man used to keep goats up on the hill forty-five years ago and





that the shaft had been blocked then. A good bull-shit day, with the discovery of about 100m of well decorated passage with around 10 stal, less a few that got in the

draughting body-sized shaft.

way..."

Two additional trips were necessary to complete the survey and to photograph the cave. The total length explored was 735m.

The Shafts of Muela and Mullir

had been investigated on these mountains to the east and south-east of Matienzo. It is thought that water drains down to the Nacimiento del Río Clarion in San Miguel. With the aid of our 1:5000 maps(contours every 5m), which were duplicated and given out to search-parties, a thorough "locate and explore" exercise was carried out on the shafts in about one-third of an estimated 8sq.km area. Many people were involved in searching or exploring, including Pat, who spent many an hour on his own at the start of the expedition locating shafts. Also, a small group from Portsmouth Nacimiento del Rio Clarion.

In previous years, a few holes Polytechnic spent some 228 man-hours at the end of the expedition looking at and descending the shafts of thirty-three depressions. Their biggest find was '212', an uninterrupted shaft which choked at a depth of about 150m. Descriptions of these finds are detailed in ref.1.

> This area still has a great deal to offer. Five or six square kilometres are waiting to be searched, and an abandoned stream passage entered this year(which choked) gives hope of finding some sort of old, integrated cave passage leading down to the ancient resurgence of Cobrantes, above the

Other discoveries in the area

Help from the locals has conversations with them have often led to the discovery of new caves. Pete's talks with the geologist J.C.Fernandez-Guiterez and with Spanish cavers have also brought new entrances to our notice. One such cave is La Coverona, high up on the south side of the valley of Llueva. Despite its modest 345m length, the entrance is of a similar size to that of Cobrantes, and the up-hill slog to the hole is well worth the effort. Pete and Juan surveyed and photographed this large and, in places, well decorated remnant in a couple of hours. One tripod, one camera, four electronic flash-guns, three 'slave' units, a compass, clinometer and tape and two people make for high speed, with complete exploration and documentation being achieved in one trip! EZUM ,oznelfam of molfibegx3 1-f gg 8.eW Ismreol

The divers were active in always been much appreciated, and Sifon Claro, the presumed resurgence for Cueva de Solviejo. Although they feel that a return trip might be of value, they discovered that the size claimed for the submerged passage after a dive in 1977 was more than slightly exaggerated!8 Fred also suffered one of the extremely rare 'sour' episodes that can occur. His bottle was stolen from the boot of his car whilst he had walked 300m away to view a dive. The police later found the bottle and said that it had been taken by a group of kids. The only other shock came while we were being taken to some shafts by one of the locals in Secadura. He'd already taken us to another hole earlier on in the afternoon and had offered to show us where the 'deep' ones were. The farmer was met on the way however, and he told us to turn the car around and f... off! A little bit of England.

Digging was also undertaken by a number of people, notably the Bolton Speleo Club whose 'Royal Signals' dig at Cueva de Tablons took just three days to degenerate into an unstable place unfit for human digging, though still

draughting strongly. Another dig of note was undertaken by Barry, Lank and 'Buddha' Yeadon in a hole discovered above Carcavueszo by JC. Progress halted when digging became very awkward in a strongly draughting body-sized shaft.

The Shafts of Muela and Mullir

J.C.Fernandez-Guiterez and with

Future Exploration in the Matienzo Area well a sensey suclivery of

Prospects for the future remain excellent although now, cavers have to work rather harder for each mile discovered. Still, there is always the bar and the beach, the donkey meals and the hay-making, the football matches and the bar, the camp fires and the bar.....

This Easter, a small group visited Matienzo and in the course of a week, descended a pitch in La Cuevuca, a cave largely explored and surveyed by members of the GEM(see page 13), and visited Ogarrio to assess the potential of this largely unexplored area adjacent the Rio Ason. Three large streams were found emerging from the hillside, but the two resurgences investigated were plainly accessible only to the likes of Phil Papard and Fred Winstanley. A number of higher dry entrances were discovered, and the caves behind explored, but in the main part these were fairly short. However, the volume of water resurging points to the presence of a fairly big system draining the hills between San Miguel and Ogarrio. The third and most easterly resurgence was not investigated as the water from here is used to supply the villages of Valle and Lastras via a small purification plant.

A day spent prospecting the limestone mountains south of Miera was aborted when our Spanish hire car got stuck in a snow-drift a short distance from Portillo de la Lunada (1350m).

During the course of our explorations around Ogarrio, we naturally took refreshment from time to time in Bar Tomas. It is warming to note that in these days of two-figure inflation, the 'dueña' is still able to supply a slap-up meal(two helpings of steak) for no more than 400pts. per head.

Acknowledgments

value, they discovered that the size

Thanks are due to the Ghar Parau Committee for administering the Sports Council grants over the two years that this report covers. Thanks are also due to the caving authorities in Spain who granted the permission for our explorations. And it goes without saying that the interest and hospitality shown by the villagers always makes our annual sojourn on their 'doorsteps' most enjoyable.

References

e snal ts by Almost all of our speleological knowledge of the Matienzo depression and its immediate surroundings is to be found in BCRA Transactions, Vol.8, No.2.

ere bein

offered to show us where the 'deep' Text References:

- (1) Corrin, J., Smith, P., Matienzo Underground, BCRA Transactions, V.8, No.2(1981)
 - (2) Cope, J., et al, The 1976 Expedition to Matienzo, MUSS Journal No.8 pp 1-18.

(3) Corrin, J., et al, Matienzo 1978, MUSS Journal No.9 pp 4-19.

4) Addis, F., et al, Matienzo 1979, MUSS Journal No.10 pp 1-3

Anon., The 1974 British Expedition Report. 32pp.

(6) Anon., Matienzo 1975. 40pp.

(7) Fernandez-Guiterez, J.C., et al, La Depresión Cerrada de Matienzo, Caudernos de Espeleología 2, 107pp.

(8) Anon., Spain 1977, KCC Journal No.9 pp19-20.

year past a flow-stone blockage to two pitches where exploration stopped dug to lack of tackle. The most stable of these pitches was

ladder, Anyway, enough said, An introduction to CEM's activities

Other Pertinent References:

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Ullastre-Martorell. J., Aportación al Conocimiento Morfokarstico de la Depresión de Matienzo, Caudernos de Espeleología 8,pp 63-90. erhaps their largest find so far, La Cuevuca, was pushed this

descended this Easter

inglesas, decidimos un peque La Cubija. "My spanish must have improved. Last year, I asked for two beers and got an orange!" (1975 Matienzo Report) bebidas y alimentos.

GRUPO DE ESPELEOLOGIA DE MATIENZO

Anons, The 1974 British Expedition Reportation

During our visits to Matienzo, some of us have occasionally wandered at the apparent lack of interest displayed by the locals with regard to their subterranean environment. Doubtless they in their turn have wandered why 'los ingleses locos' travel nearly a thousand miles across Europe only to disappear into the ground, appearing hours later dirty, wet and tired. Well, this last year has seen the emergence of a local caving group, the 'Grupo de Espeleología de Matienzo'. Encouraged by Pete Smith, the GEM has made a number of discoveries in its own right. Perhaps their largest find so far, La Cuevuca, was pushed this year past a flow-stone blockage to two pitches where exploration stopped due to lack of tackle. The most stable of these pitches was descended this Easter when the English arrived with the much needed ladder. Anyway, enough said. An introduction to GEM's activities follows below, given by Fernando Borrajo....

Addis, F., et al, Matienzo 1979, MUSS

Las Actividades del Grupo de Espeleología de Matienzo

Después de las exploraciones espeleológicas llevadas a cabo en un principio por la SESS, más tarde por un grupo Barcelonés y finalmente por numerosas expediciones inglesas, decidimos un pequeño grupo de nativos buscar nuevas oquedades, aun no exploradas, y realizar un pequeño estudio de sus situaciones, formas y dimensiones.

El objeto pues de nuestras exploraciones ha sido una mezcla entre aventura, deporte e investigación, aportando un grano de arena más a esa ya gran acumulación de estudios.

Pete translates....

Following the speleological exploration carried out, first by the SESS, later by a group from Barcelona and finally by numerous English expeditions, a small group of locals decided to look for new, unexplored holes, and produce a small study of their situations, forms and dimensions.

Thus, the object of our explorations has been a mixture of adventure, sport and research, adding a further grain of sand to what is already a large accumulation of studies.

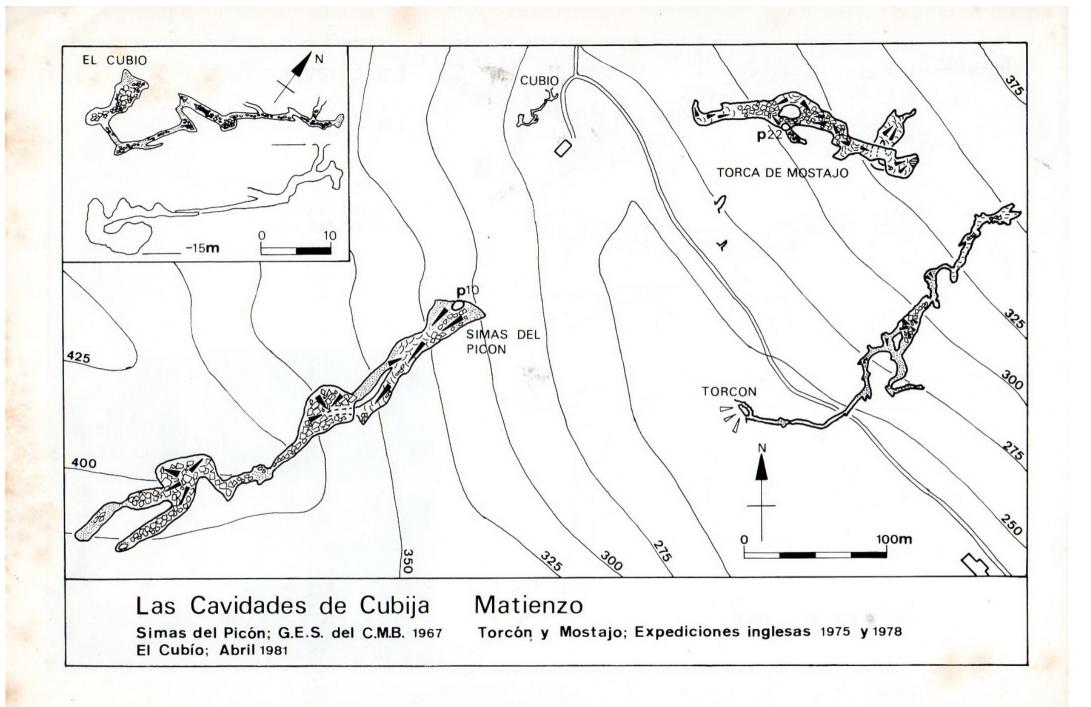
Cubio de Cubija

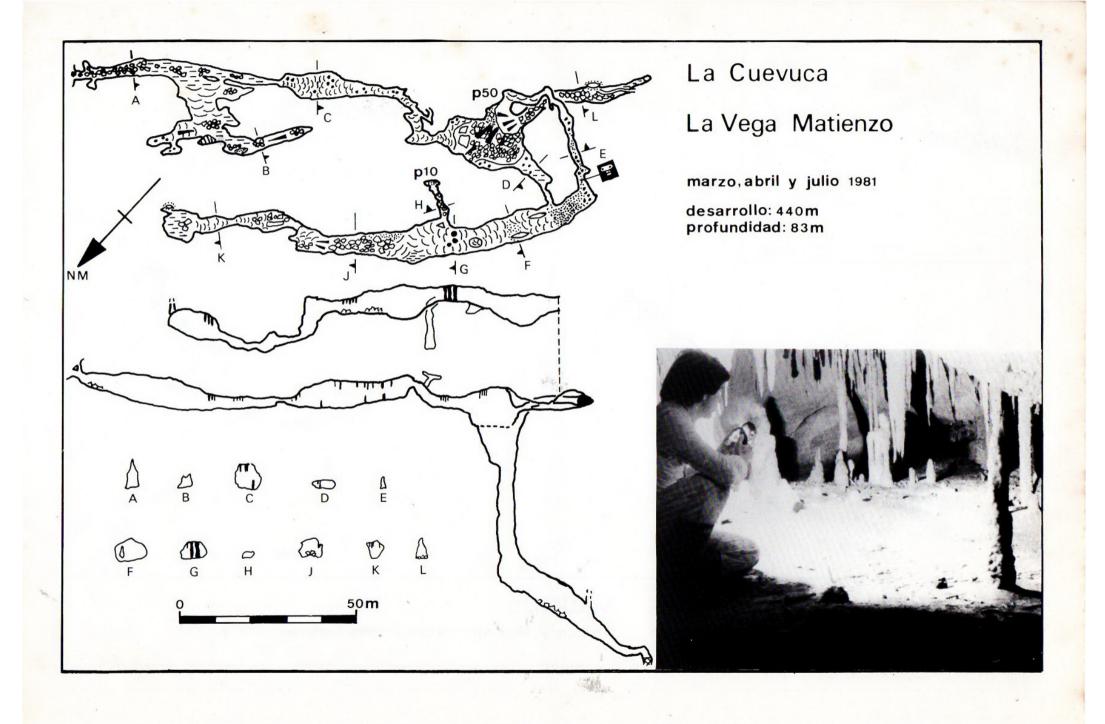
This cave is one of several situated in and around La Cubija. Fernando writes...

"Está situado en la depresión de Cubija, a unos 260m de altitud, detrás de la segunda casa.

"Fue el primer objetivo en nuestra labor de encontrar cuevas carentes de un estudio. Debido a su posición pensamos que podría tener comunicación con sus vecinas, simas del Picón o Torca del Mostajo. La cueva es sumidero de aguas torrenciales y a su entrada se deja sentir un aire frío(de ahí el nombre Cubío significa 'lugar fresco') que el vecindario usa para conservar bebidas y alimentos.

"La entreda es estrecha, y desciende hasta una primera galería





que vuelve a descender unos tres metros. Enseguida la galería se reduce de tamaño, apenas llega a un metro en su parte más ancha, con gran cantidad de guijarros y piedras sueltas. El paso se va haciendo cada vez más penoso, hasta que se alcanza la galería final, de mayor altura y comodidad. De repente se llega al

Pete translates....

This is situated in the depression of Cubija, about 260m above sea-level, behind the second house in the valley.

It was the first objective in our effort to find caves which hadn't been studied. Due to its position, we thought it might have a connection with its neighbours, Simas del Picón and Torca del Mostajo. The cave is a sink for floodwater and a cold draught can be felt at the entrance(hence the name cubio='cool place'), used by the locals to preserve drinks and food.

The entrance is narrow and drops to a first passage, which

La Cuevuca medol of seols molificado

This cave had been visited by Lank and Buddha back in 1975, and we were shown it by J.C.Fernandez in 1979. The following summer, we found the chamber on the far side of the squeeze, but it was only during the last Christmas holidays that Mino climbed the flowstone wall at the end of the chamber, and revealed the way to the larger chambers and passages beyond.

The entrance is on the southside of La Vega, roughly opposite Cueva del Agua. It's a small entrance to the right of a group of trees, near to another small cave -Cueva del Haya- the sink of a tiny stream.

The first chamber is well-known(all the formations have been smashed). A smaller passage from the bottom corner of the chamber quickly climbs up to a choke, while the way on is in another passage directly

borde de un pequeño pozo de unos cuatro metros, que da a una sala de mayores dimensiones que el resto de la cueva, pero sin salida, excepto un reducido agujero, en el que todavía se siente la corriente de aire.

"Para bajar el mencionado pozo es necesaria una cuerda.

descends a further three metres. The passage then quickly gets smaller in size, hardly reaching a metre at its widest, with a large quantity of pebbles and loose stones. The going gets more and more difficult until you reach the final passage, which is higher and more confortable. Suddenly you come to the top of a small pitch, some four metres deep, which drops into a chamber of larger proportions than the rest of the cave, but with no way out, except for a tiny hole where the draught can still be felt.

A rope is needed for the forementioned pitch.

opposite the entrance. It leads to the squeeze, which immediately opens up into a well decorated chamber. The gour floor is especially fine -particularly in winter, when they fill with water- although the trampling of feet might quickly destroy it.

A climb of about four metres up flowstone, using the stal for handholds, leads to a small hole and a slope down to a three-metre high passage. This opens into a large chamber, with a scramble over boulders. On the left now is an undescended pitch, and the loose boulders all round the sides make it an extremely unsafe and uninviting proposition. Instead, straight ahead you can climb up over boulders to a low passage and a crawl through to another large passage.

To the right this slopes down, and up again, to some large columns.

A further slippery descent leads to a small passage on the right, which concludes in a blind ten-metre pitch. The main passage also contains a pitch, but this can be by-passed by a climb on the left. After another couple of chambers, the end is reached, disappointingly only fifty metres from the entrance. The cave has turned full circle and is now once again very close to the surface.

To the left of the last mentioned crawl, a superbly decorated passage gradually gets smaller and smaller until a squeeze drops down

you reach the final passage, which

Cueva de Lara-Lennon

We were told of this cave by Mariano, who had visited it many years ago. Given his instructions, we were able to locate it fairly easily. Its small entrance lies at the base of a small limestone scar, under the large overhang of Cueva Coberruyo.

Inside, a slope leads down to a fairly well decorated chamber, with another slope on the left, to a smaller chamber and more formations—many of which had unfortunately been broken. From here, a crawl ends in a further small passage and choke.

On the right of the entrance chamber there is another small slope

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seriem ruol tuoda lo dmilo-

to the head of a pitch. This was descended during MUSS's Easter expedition -it entails technical difficulties beyond the modest capacities of the GEM- and appears to be some fifty metres deep, with a stream flowing into a sump and another unexplored passage in the opposite direction.

This is where exploration has stopped; until the 1981 British expedition. Meanwhile, La Cuevuca has undoubtedly been GEM's best find so far; it has everything -chambers, formations, pitches- and it is still going.

to a very low bedding-plane, while half way down the slope, a body sized squeeze opens into a small chamber full of columns and flowstone.

The cave's name is owed to its exploration the week after John Lennon's death, while Lara, a Cantabrian name, can only be explained by the cave's location.

So this is a small cave, getting its interest mostly from its position, close to Coberruyo and Patatal. The latter was another cave surveyed by the GEM, including two side-chambers and a second entrance, which were not included in the old MUSS survey.

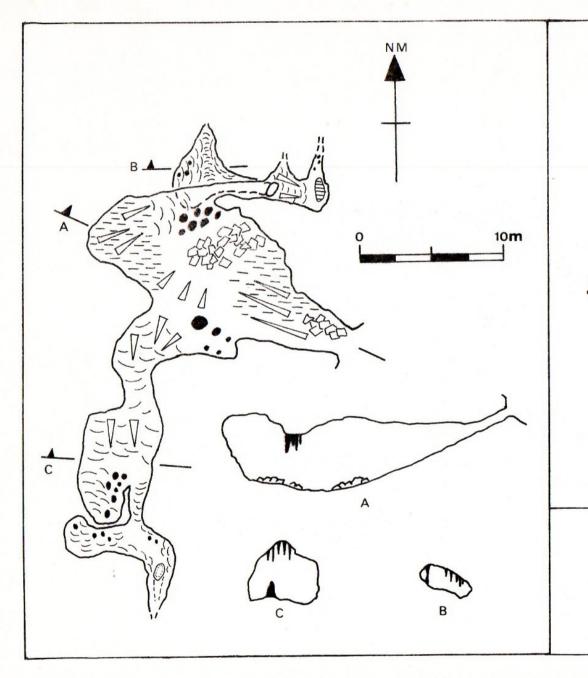
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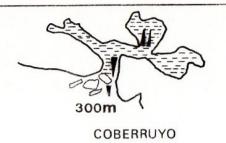
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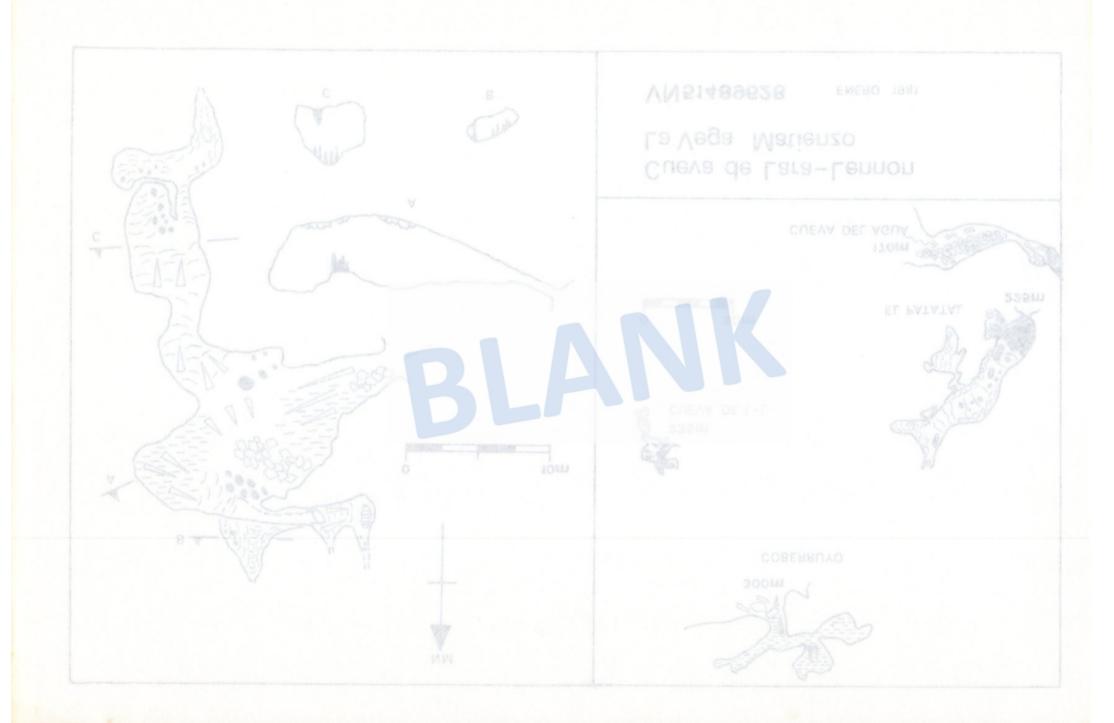




Cueva de Lara-Lennon La Vega Matienzo

VN51489628

ENERO 1981



Introduction

fore coming back, one of

The '81 Expedition was the most successful for a number of years, with 5.2km of new cave passage discovered in over fifty new caves. Over half of this length was in one cave, now the deepest in the depression.

First, the Four Valley

System. By the end of last year's expedition, Cueva Llueva and Cueva Uzueka were 170m apart. A smoke test was carried out early on this summer by setting off two smoke flares in the boulder choke at the end of Uzueka. At the same time, four divers(John Palmer, Phil Papard, John Thorp and Fred Winstanley), were amongst the boulders upstream of the Llueva sump....

"...John and Fred made a thorough search of the large chamber and a small calcited passage was looked at, but soon choked. They then sat around waiting for 6.15 and the smoke to arrive. Phil was amazed to find that the diving line he had put through the boulders last year for route finding had been torn to pieces, presumably by floods.

"Lugger in the meantime had started to climb upwards through the boulders, and had found a walking sized passage. He returned for the others, and again diving line was laid to help route finding on the return. Walking sized passage led off to a climb between a couple of boulders into a huge passage with a few holes in the floor. At this point, John said that he could smell cordite.

"Boulders were dropped through various holes in the floor with lots of crashing and booming resulting. A climb down was found into a rift. This was explored in gathering gloom as the air became thick with smoke. The rift petered out and a blundering return was made; some difficulty was encountered in visibility that was

down to five metres or less. Once back in the chamber, the air was almost clear and an uneventful return to the sherpas was made. The diving team had been away for five hours..."

On the return visit, six days later....

"...beyond the sump, Phil and Fred started to survey as John ferried gear to drop down one of the holes in the large chamber. On arriving there, the surveying was abandoned and we went off exploring. On the right-hand side of the passage, looking in, a climb down led to a three metre pitch with a large phreatic passage leading off. This was stomped through, but unfortunately ended in a boulder choke after only 40m or so. Various squeezes were entered and eventually a squeeze through a boulder squeeze led to a squeeze. Further squeezing led to a squeeze up followed by a squeeze to the left and another squeeze. Beyond this squeeze, a squeeze down led to a squeeze into a squeeze. Various squeezes led off and finally, a squeeze was found into a chamber. Here a draught was noticed issuing from a very tight squeeze. Fred and John managed to get through. A stream had been heard previously, in a squeeze, and this now sounded very close.

"Eventually, John managed a squeeze where the draught was absolutely whistling through. Unfortunately, the way on was absolutely choked with boulders.

"Finally, everyone was absolutely pissed-off with squeezes and boulders and a quick exit was made, the whole system being detackled..."

The two caves are now an estimated 70m apart. At one point in the Llueva extensions, the draught was noticed blowing away from the explorers, presumably towards the river sink of Carcavueszo.

Further work on the Four Valley System disclosed a number of loose and muddy shafts in the Fuente las Varas area, Torca de Balcabosa and Torca de Coterón being the deepest(see surveys). Near to Chestnut Hole in Riaño, a 25m deep, two-pitch pot was descended to a choke while just west of the

resurgence at Secadura, three caves were entered, two after digging. All were short, but with their strong draughts, hold some promise. The ridge between Secadura and Llueva was looked at, nothing being found apart from Cueva del Palomar a short but large fossil remnant. A couple of days before coming back, one of the draughting shakeholes near to Cueva Llueva was observed to have collapsed revealing a crawl to a 5m, then 4m climb down to a rift which led to a too tight stream passage emitting a howling gale.

The La Vega(western) arm of the depression received a great deal of attention this year. Work started with the surveying of Cuevuca which at Easter, had been lengthened to 441m and deepened to 84m, ending at a sump at the bottom of a 60m pitch (see article, page 13). A systematic search was made of a number of entrances seen from the road, these at the base of a bedding on the southern side of the valley. Most were short but one, 30m long, was a finely decorated phreatic tube which became too low. Another from its 7m diameter entrance led to 72m of large passage which with a draught, still has possibilities.

Cueva-Cubio de la Reñada received some attention. The divers passed the upstream sump to try to explore beyond the 1980 limits. This was accomplished with about 200m of new passage explored, mostly of walking size. Nothing of any real promise was found however. A couple of trips saw the exploration of another new section in Reñada now named Bootlace Passage (see survey).

Julie Mundy and Pete Smith had climbed up to the right of the main passage between Mega Hall and Ghost Lake on the 1980 diving trip in Reñada. Encouraged by a large black hole up ahead, they returned this year, again coinciding with the dive.

The climb up to the black

hole appeared too difficult so instead, they turned their attention to a short pitch on the right. It dropped into a high rift passage, with the rumble of a river audible in the distance. Frank even did up Julie's bootlaces in his hurry to find the glory that lay before them. Traversing round some pits in the floor, they reached the top of a pitch, with another large passage out of reach opposite them.

ner by setting off two smok

On the return visit, they found the pitch to be 17m deep, meeting the river emerging from a sump and disappearing into another, even wider and deeper. Smaller passages, both upstream and downstream, failed to provide any way on.

Back in the rift passage,
Steve and Sue found a climb through
boulders into a massive chamber,
presumably the original black hole
seen the year before. Steve carried
on climbing to an enormous chamber
where he lost sight of the roof.

Just before they started their trip out, they found part of the river passage. Between the main passage in Reñada and the upstream sump in Bootlace Passage, this still remains completely unexplored.

This new discovery is important in that it indicates a totally new direction for the active river passages. The downstream sump in Bootlace Passage is heading away from the resurgence. Next year's

explorations in Coterón and Reñada might be able to determine the actual water course.

The gem of La Vega turned out to be a shaft over 900m from the Renada entrance and 180m above it. Named Torca de Coterón(not to be confused with the Coterón near Fuente las Varas), the entrance is on Beralta and was discovered by Pete during one of his winter rambles. Exploration began in the normal 'it's bound to choke' manner. Paul Gelling on the first descent found himself dangling above a large chamber at the end of the rope. On the second trip, he explored about 200m of passage and wrote:

"...now needs surveying and photographing; also a good chance of the passages being pushed further."

Seventy-six man-trips later, and at about 200m deep and 3.5km of passage surveyed, the cave still has about eight undescended pits and many unpushed passages. The depth has been surveyed to -213m, but allowing for survey error, the more realistic figure is likely to be about -200m. This makes it the deepest cave in the depression. Various survey checks will be undertaken next year. This deep point, with ponded, running water, is very close to a sump in Renada, and a large passage 80m above has an undescended 60m pitch which is also very likely to connect. The main phreatic level in the cave, at an altitude of around 220m, corresponds very well to the level of Emboscados, Cofresnedo, and some of the old passage in Renada. The survey which accompanies the following description is obviously much reduced. It is not intended to publish a full, detailed survey until the cave has been connected with Renada and levels have been accurately determined.

Torca de Coterón, at an altitude of 366m, has a surveyed length of 3482m and depth of about 200m.

The entrance is high up behind the La Vega bar. The only sign of the shaft on the climb up the hill, is a cloud of steam that can be seen a hundred metres away on a warm day. This is associated with the powerful wind that blows up the shaft. (see photograph).

Seven ladders are required for the pitch, although the vertical element after the entrance slope is only 45m. Ten metres above the floor, the entrance rift breaks into the roof of a chamber floored with breccia. (see photograph). The line of the entrance joint continues up a well decorated calcite slope until flat-out crawling is necessary to where a calcite choke occurs 70m from the base of the ladder. A roaring sound can be heard at this point; it has been radio-located, and a mine-dig started for a bottom entrance.

The way into the cave is down through the Portals(where the passage narrows to 5m), and then walking along a gentle downhill slope of gour and drip pools, some with cave pearls. After 55m, the floor levels out at a junction. A large passage continues up to the right over calcite to end, after a few slithers up and down, at a large boulder choke on the right and a 60m undescended pitch on the left. The boulder choke has been pushed, but no way through exists. This 200m long passage contains an undescended pit of about 10m. middle vd bedoses

Back at the junction, the left-hand passage starts as a scramble down boulders to a pop-up into a 20m high, 15m wide passage. Back over the hole, a climb up leads back over the main passage, rejoining it just before the junction. Straight on, a climb up calcite and then down a sandy ramp leads to a massive boulder-floored rift, and past an undescended pitch on the left. The slope descends steeply to the head of the second pitch which drops down the side of the rift and lands on its lower continuation. The total pitch depth is 20m, although the final vertical drop is 13m.

From the bottom of the pitch, a scramble down boulders leads to a

short climb down and, via a further scramble and a steeply descending sandy slope, to the Edge of the World. The sandy floor ends abruptly at the lip of a superb 30m diameter chamber. Ten metres down, and in the centre of the chamber, a jumble of boulders hides a number of shafts -one of which has been descended for about 30m between the rocks to a choke. Above the chamber is a high aven.

The Edge of the World(depth -about 140m below the entrance) is one of the focal points of the cave. No less than four passages are known to radiate from it(apart from the entrance passage). The first of these is to the right of the entry to the chamber.

A clamber through boulders drops into a 15m wide, 10m high passage which heads off under the boulder slopes already traversed. The passage is essentially horizontal for its 400m length, although there is a climb up where calcite starts to close in the passage. The further reaches(called Marvin's Marvels) are very well decorated with stal curtains almost closing off the way on in a couple of places. The floor of the passage rises up to a calcite choke at the end.

The second passage sets off from the back of the chamber, and is reached by climbing up a steep sandy slope with a stoop to the right into a large rift floored with boulders. A climb up these leads to a small boulder choke 40m above the Edge of the world. A scramble through breaks into the continuation of the rift, with a short section of small passage at the bottom leading to another large chamber. From its highest point, a 4m diameter tube drops, after 20m, into a grotto from where a 4m climb is made into a crawl which has not been pushed to a conclusion. This whole area needs a proper going over.

The third passage is best reached by setting off along the forth and turning right just after a 10m undescended pit. The walking-sized passage acts as a safer route

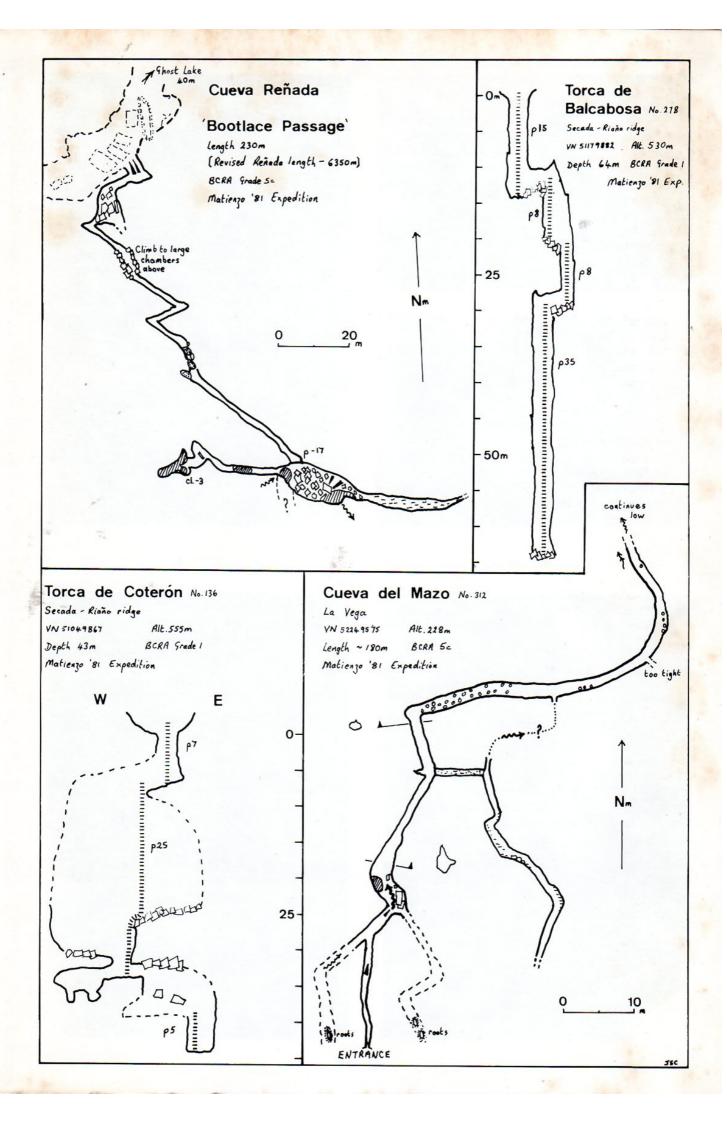
around the Edge of the World to the passages just described.

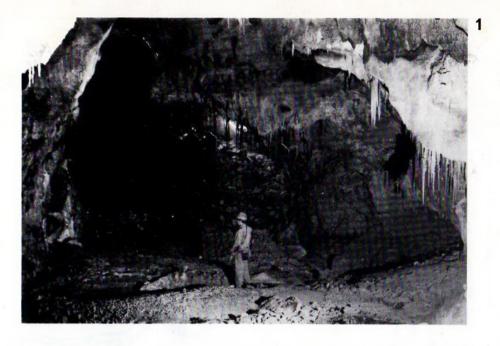
The route to the further reaches is through the forth passage. It is again essentially level, and for most of its length, it measures some 10m x 10m. The floor is very dry, with a covering of very old calcite, sand, limestone debris, water-worn sandstone cobbles, gypsum flower remains and some spongy white material. In a few places, where less debris has accumulated from the roof and sides, the phreatic tube still shows its original potholed floor. One hundred metres on, there is a short scramble down through a windy hole and, after a further 40m, an inlet is reached on the right. Of this, 278m of passage has been surveyed in a veritable 3D maze. The passage varies in size from flat-out crawling to 7m high and 5m wide. there are still a number of possibilities for pushing.

Twenty metres of walking later, another junction is reached at a rubble-floored chamber. The Reñada Series carries on straight ahead, past an unpushed inlet after 70m, and another inlet after a further 70m, all of it in big passage. This second inlet leads to the deepest part of the cave and will be described later. After 100m, a set of orange and white formations is passed and 50m further on, the passage on the left narrows to the head of an undescended 10 m pitch. To the right...

through chossy crawl into a big chamber with pitch(5.5m). Slight draught at pitch, with 45° chute at bottom to a hole. Chamber beneath has masses of gypsum formations. Further short pitch into a third chamber with a calcite chute sloping upwards. Chamber curves down into forth chamber with mud formations and a conical depression with a choke at the bottom. Impossible to pass. Back at choke crawl, inlet passage explored for 50m -still going."

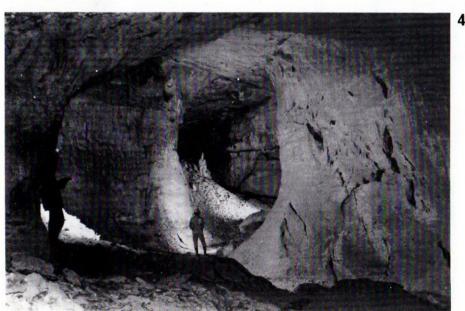
The 3m high slit that leads to the deepest section of the cave starts off from the Renada branch at

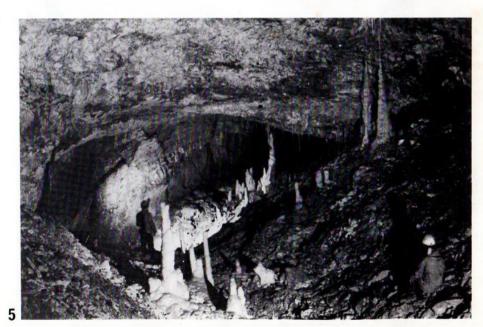












Station 62. This can be followed for about 100m in a walking sized phreatic tube to a junction where the passage enlarges. To the left, the passage continues past holes in the floor on each side -on the left down a large, low area of collapse with no way on noticed, and on the right to a small sandy rift not pushed to any conclusion.

The main passage leads straight on, via an awkward move over a hole in the floor, to the Edge of the Universe -a pitch in a very large aven with an estimated depth of 60m, but as yet undescended. Twenty metres back in the main passage, there is a pitch on the left of about 15m to a large ledge with a small unpushed rift leading off. From the ledge, a further 12m is climbed to the floor of a passage. The passage degenerates into a narrow meandering canyon until a pitch of 15m is met. From its foot, a chamber is gained with pitches at both ends. Descending the 15m pitch on the left leads to a sandy passage ending below the right-hand pitch. From here, a climb down through boulders leads to a choked inlet, and a blocked way on. At the base of the left-hand pitch and 10m forward, an 8m blind shaft has been descended under a boulder on the right. Immediately forward of this is a low, short crawl under the left-hand wall to a chamber with a 14m pitch in the floor. At the base, a scramble over boulders enters a

large passage containing a small stream and large mud banks. This sinks about 30m further on under the right-hand wall, into a small phreatic passage with deep pools and an unpushed duck. Straight ahead from where the water sinks is an inlet which can be followed over boulders to an aven.

At the rubble-floored chamber where the Remada Series starts, a passage up to the left is the beginning of the Codisera Series. The phreatic passage continues in similar style for some 300m, roughly south-east, with a short crawl, until a pitch is reached with water falling down an aven. In fact this pitch can be bypassed and from its base, there are several blind pots and other short passages. One of these comes to another pitch, again with water. This is 12m deep, but only a short length of small stream passage can be explored, at a depth of about 190m below the entrance. The bypass to the third pitch connects with a smaller meandering passage with some superb gypsum formations, like candy-floss, on the walls. A difficult steep slope remains unclimbed. This is one of the better possibilities in this series as there appears to be a 'stomper' leading off at the top.

Coterón is bound to become one of the classics of the area and next year should see the connection with Renada. At the moment, there are 10km of passage in the two caves -watch out Uzueka!

Yorkshire caving was found in C

ni svib re duck yans na skam

- Photographs: 1) First large passage in Toad in the Hole.
- (J.S.Corrin) 2) Head of the 50m pitch into Torca de Coterón, La Vega. The effects of the powerful draught can be seen in the flapping of Tony's tracksuit jacket and the steam, top left. roof, Downstream becomes low,
 - bus diges are 3) Base of the first pitch. The foot odd at sticks is remark
 - 4) Part of the main drag in the Renada Series of Coterón.
 - 5) Formations near the unpushed section of the Renada Series.

The head of the La Vega valley, called Seldesuto, also had a surprise in store -Toad in the Hole.

The entrance lies in a steep sided shakehole in a side valley on the northern slopes of Seldesuto. A visit early in the expedition showed that it was draughting and needed digging. On the second day of the digging, a hole was opened up large enough for Pat Devine to get down. By the end of the third, it was large enough for chief-digger Roy Mundy to enter an excellent new cave.

A handline is recommended for the shakehole -we bought one in the bar- as it is floored with loose rubble and boulders from the dig. The entrance pitch of 6m is through a slot lined with loose boulders into a small chamber. The main way on is to the right and down into a large passage. A flowstone floor slopes down to the left, past two blind pots until it starts to rise and turn to the right. (see photo). This passage ends at Maypole Pitch, six metres high. From the top, a well decorated phreatic passage leads to a junction. The smaller passage on the right reaches another pitch descended with a handline and a ladder for the last section. Now a small passage suddenly enters a

large chamber. Not particularly high, it is over 35m wide, with a smooth dried mud floor. On the right, it is superbly decorated with abundant long and pure white helictites. A rift passage leads down into a complex phreatic maze, not pushed to a conclusion. On the opposite side of the chamber, a squeeze opens into another large passage, with a massive stalagmite boss, and ending in some high gour pools.

On the left of the junction. further phreatic passage leads to another eight metre rope and ladder pitch. To the left, a passage contains avens which connect with pits in the higher passage. The main passage to the right ends in a choke, dug out to another, smaller chamber and a draughting boulder choke. which marks the present end of the cave. A low sandy crawl could provide another possible way on. Among the various side passages, a small one on the left of the chamber at the entrance rejoins the main passage near the blind pots. A traverse on the right of the chamber crosses over the main passage and ends at a choke. The cave is about 600m long so far, although this figure includes some sections that have not been surveyed.

Near the end of the expedition when Coteron and Toad had been detackled, a rude reintroduction to Yorkshire caving was found in <u>Cueva del Mazo</u> -a 180m long cave under the limestone knoll at the base of La Vega. A tight entrance gives access to a hands-and-knees or flat-out cave developed entirely on a bed of sandstone. Three inlets were pushed over mud -one still goes- the others choked with roots growing in the roof. Downstream becomes low, but a hammer at calcite in the roof will attain the continuation.

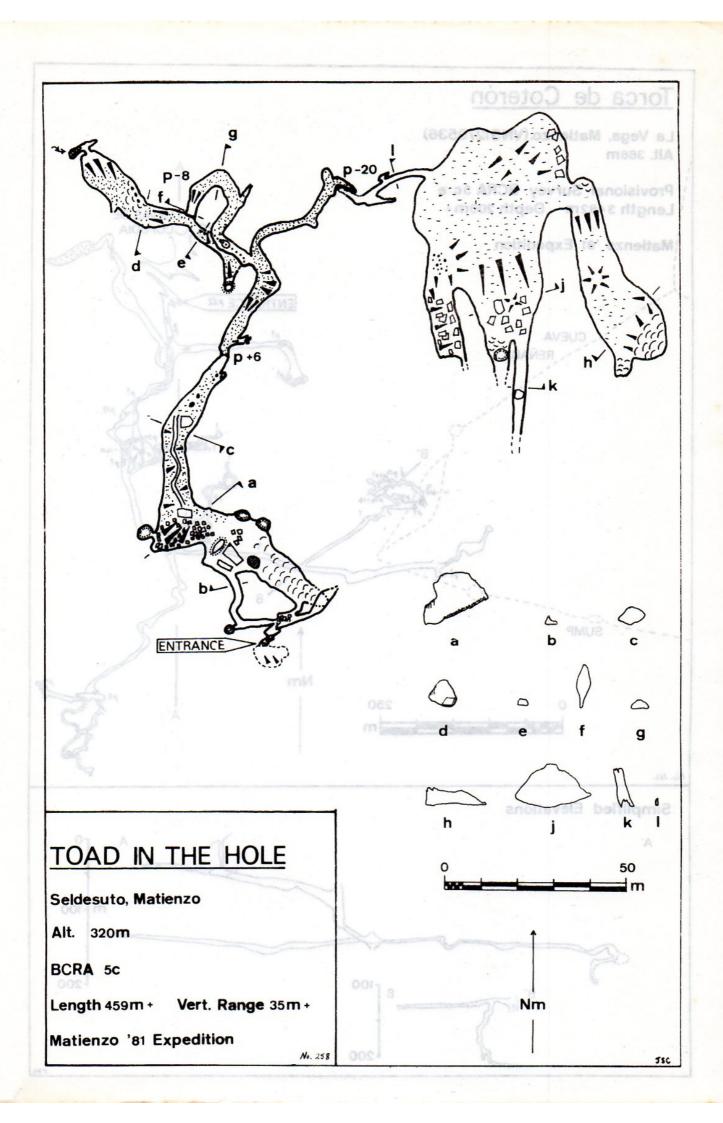
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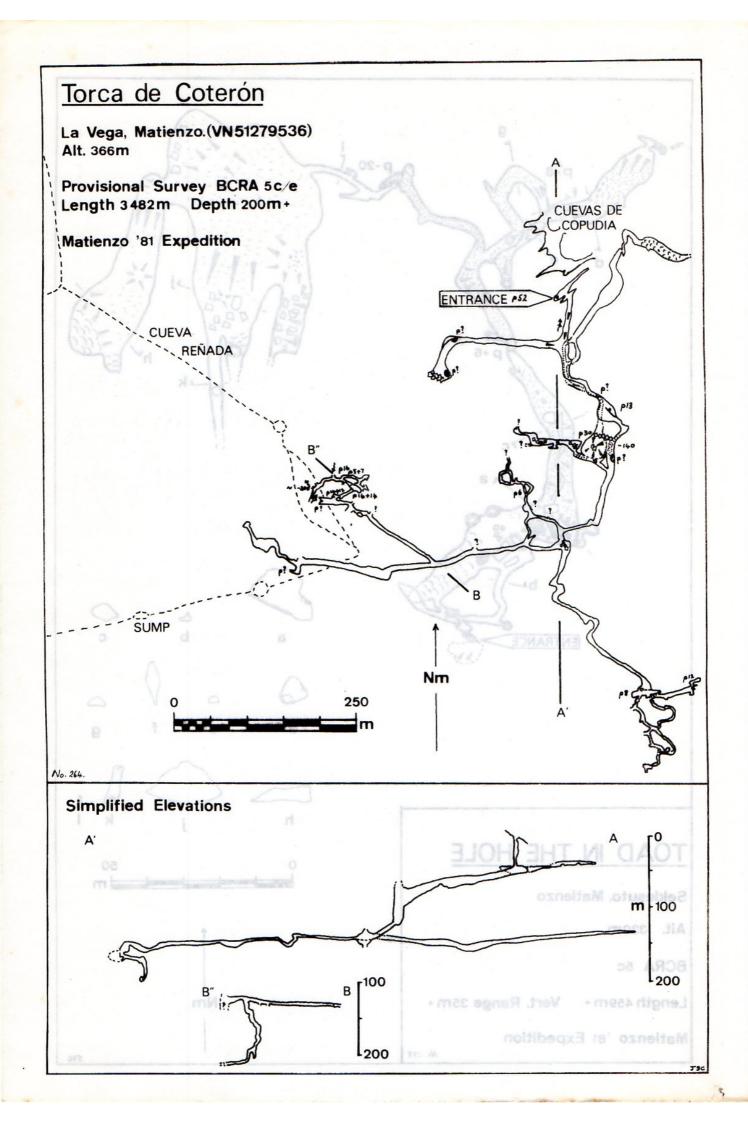
On the northern side of La Vega, opposite the entrance to Renada, a small resurgance was noticed and the cave above entered. About 50m in, a sump is met with a draught through a small hole to one side. This should make an easy duck or dive in the future.

low, short crawl under the

At San Miguel, Cueva Cobrantes was visited with the intention of using combined tactics at the end to climb the wall. This proved impossible, and a seventy-foot scaling pole(or tree, or A-frame) will be needed. In the same area, Peter Plummet sump was revisited, but its 35m depth and 100m length means that more sophisticated techniques will be required.

Finally, the shafts of Muela.





At the time of writing(27th August), only half a dozen have been descended, and a number of others have been located(including one of

about 150m depth. A small team remains in Matienzo for another week to continue the exploration of the shafts 'on the tops'.

In conclusion, a few comments should be made about this article. The article and surveys have been thrown together very quickly, and obviously, a large number of the smaller new caves and shafts have been omitted. In the near future, a revission to Matienzo Underground (BCRA Trans. 8.2) will be published detailing all the finds and extensions of this year.

Acknowledgements

To Pete Smith, whose winter walks around the area have located many of the new caves explored this year; to German and Cuca who were asleep on their feet at the end of each night, and who put up three invalids for a couple of days; to Juan Carlos for informative and thought-provoking discussions about the area; to the Caving Authorities in Spain for permission to continue our explorations; to the Ghar Parau Foundation who administered the Sports Council Grant of nearly £500; and to Bob Machin who again loaned a set of Molephones -many thanks.

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