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EXPEDITIONS 1986



Pete Seed talks to "The Duck" in Duck Passage, Carcavueso. (Photo: Andy Hall)

Matienzo '86

CONNECTIONS

The hills surrounding the Spanish Village of Matienzo are of Cretaceous limestone. Flowing across the impermeable floor of the basin is a river which comes out of the limestone at the southern end and disappears back into the ground at the northern side. The depression's two longest caves are just where you would expect to find them, behind the resurgence and beyond the sink. These two caves have not always been known - it was in the early '70s that serious pushing and exploration was started and it was only in August 1986 that the Carcavueso sink system was really opened up.

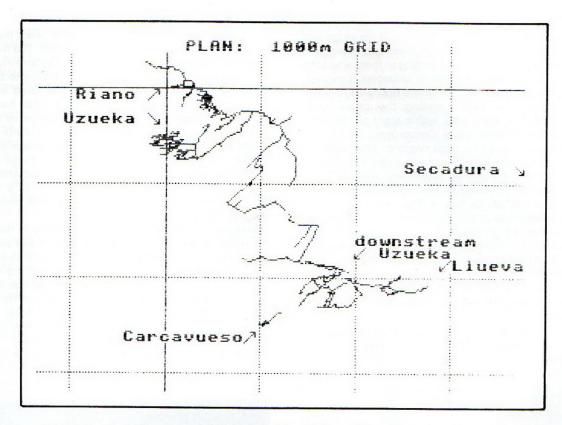
The 1986 British Expedition built on the effort of previous groups and succeeded in increasing our underground knowledge of the region. Some 7km of new passage was discovered and we connected together four caves to produce a system which is now Spain's 4th longest.

But first the cave complex at the southern end which has kept cavers occupied for years, both in the cave and above it. The top entrance to the South Vega System (Azpilicueta) lies 300m above the Vega arm of the depression and the trek can be tedious when carrying rope to tackle up the cave. Virtually all of the holes at high level appear to have a phreatic origin - Azpilicueta is an exception. It is a relatively young vadose cave which is a series of pitches separated by narrow and sometimes meandering canyons. There is a short, stream-excavated bedding section at a depth of 140m with a few formations. Downstream leads to the cave's finest feature - a 100m pitch broken by a couple of ledges. The bottom of the big pitch marks the end of the vertical section of Azpilicueta. From the bouldery chamber a number

of passages radiate. The Renada, valley entrance lies to the north, but major passage goes off to the east and to the west - where it is heading towards another major system (and hopefully a connectin). Spanish cavers have been exploring this system at Alisas and they have reached a depth of about 300m and a length of approximately 3km. This year, Giga Hall beyond sump 1 was entered via Azpilicueta and the second sump bypassed by burrowing through a choke. Disappointingly, only half a kilometre of passage was entered with another sump barring further progress towards Alisas.

The South Vega System now has a length of twenty kilometres, with four entrances. The Azpilicueta to Renada through trip is a minor classic and deeper than any such traverse in Britain: The potential to the west is superb and future efforts should be concentrated at this end of the system to link with the pot at Alisas and open up the hillside, southwards, towards Arredondo.

Seventeen years is quite a time to have a caving area laid aside by Spanish authorities for almost purely British exploration. The situation certainly wouldn't happen in Britain - there's no way Ingleborough would be left for the Spaniards to explore. It might be thought that this length of time would have been enough to finish off the area but every year something appears which firmly puts down that idea. New cave passage and entrances are often found right next to known caves. Two hundred yards from Uzueka is another entrance in trees which was missed until this year. The 3m wide, 5m high gaping aperture was discovered from inside Uzueka. So we now have another entrance to Uzueka - this one cuts out the tight squeeze before Quadraphenia but has its own disadvantages involving a spot of crawling and a hands-and-knees section through half metre deep

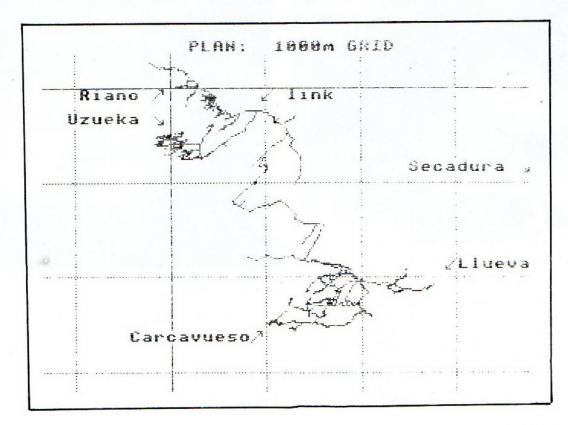


ABOVE: The Four Valleys System at the start of the 1986 expedition - four separate caves.

Whether gee-whizz technology actually helps to find caves is debatable. A video camera has been used on this and the last expedition. (A film team was into Carcavueso extension before the still photographers could get in). But computers can help the processing of survey data and its drawing up. This year a BBC micro was set up in the back room of the bar and was used to produce immediate printed line plans and projected sections from raw underground survey notes.

The surveys printed here (with grid north at the top) contain about 2000 survey points. At this scale, each square being 1km, detail is non-existant. But using the computer enables surveys to be drawn out from the same data at any scale - even life size (or greater!).

BELOW: The Four Valleys System at the end of the 1986 expedition - Cueva Riano joined to Uzueka and Carcavueso linked in 3 places to Cueva Llueva which is linked to Uzueka.



mud.

As well as underground work, exploration above ground has also been carried out. The first problem to be overcome in "shaft bashing" is finding and getting to them when the ground is covered with a mixture of brambles, creepers, trees and gorse. A timely fire just before the caving season clears the area and makes finding the caves quite straightforward. One such area, within sight of the camp and two hundred metres above Carcavueso, held half a dozen holes, one going to a tight depth of fifty metres.

Another surface search to fill in blanks in the three dimensional mazes that surround the depression involved Torca de Mostajo, another complicated cave which quite probably is going to "go big" in the future. The cave heads north along the western side of the depression. To the west and north of the cave lies territory that is incompletely trodden. The depression of Cobadal is apparently floored with sandstone that drains water towards Mostajo and Matienzo with very strongly draughting holes. This years expedition saw the opening up of a couple of these but they all, disappointingly, closed down. There will be more visits to this area in the future.



A jumble of boulders marks the usual river sink at Carcavueso. (photo: Juan Corrin)

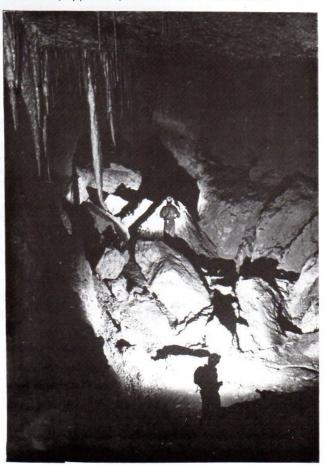
And so to the main story of the 1986 expedition - the connections in the Four Valleys System. When Lank Mills first visited the area in 1969, the only speleological hints for a world class cave was a river sinking at Carcavueso, a river resurging at Secadura, 3km to the north-east - and lots of horizontally bedded limestone in between. The straightforward objective was to enter Carcavueso and emerge at Secadura - the reality has been much more complicated and has taken 17 years to explore at least some of the possible

connections.

The major, present day hydrological links have been gradually uncovered over a number of years. The river in the Matienzo depression sinks at Carcavueso and drains into Cueva Llueva in Llueva Valley. The entrance to Llueva, a large opening filled with vegetation and lined with overhanging beds of limestone conceals a small hole which draughts strongly. It is possible that water once resurged into the valley. The cave has seen much activity over the last few years - divers have passed the upstream sump and explored a number of kilometres of old, large passage heading westwards back towards Carcavueso and Uzueka. The water in Cueva Llueva disappears into a bouldery downstream sump and is next seen in a short, underground heap of rocks at Secadura.

Matienzo, Llueva and Secadura are three of the valleys; the fourth valley is that of Riano. The two major caves here are Cueva Riano and Cueva Uzueka. Water in Cueva Riano flows westwards and resurges but facet that the Matienzo expeditions have had and we would have been satisfied with that one objective achieved. The length of the system jumped to 29km and it became possible to enter at Cueva Riano, pass into Uzueka and emerge at Llueva, perhaps 6 hours later after free diving the 7m long sump.

The link and through trip is unlikely to prove popular at present. While surveying, boulders were heard moving in the choke, apparently closing off the connection.



Arguement Passage, Carcavueso. (Photo: Andy Hall)

As often happens in caving, new faces can bring a fresh approach and enthusiasm to looking at old caves. Carcavueso was the place where the unexpected was uncovered. The river at Matienzo sinks, a short distance from the campsite, into an impenetrable mess of boulders. After heavy rain the small holes cannot drain the swollen river and so, to try to cope with the flooding problem the locals

have dug a large trench which carries the overflow a couple of hundred metres to another sink. This is a heap of decaying logs but on the bank to one side a small hole can be excavated of its annual debris deposits to eventually lead down, through draughting passage, to the underground river.

Carcavueso was first dug out and entered in the eary 1970's, and it takes little imagination to visualise these slimy-walled passages, with rubbish squashed into roof cracks, full of flood water. Andy Hall, Jim Davis and Simon Chandler on a scouting trip into the cave came across a small drop down on the right of the river which led to a tortuous and flood-prone route between boulders. They popped up into a roomy passage which was still open and going when they emerged a few hours later with the good news. The next day a large team was assembled and split into three groups to push and survey the most obvious routes. The link through to Cueva Llueva was discovered and more open routes were noted.

The passages have obviously played a major role in the drainage of the depression and the surrounding area in the past. There are signs of water flowing over sand and mudbanks - although it is unlikely that anyone will be able to see it. Water flowing at this level (about 10m above the sump) would probably mean all access being cut off in the bouldery, low level entrance grovels.

Carcavueso was eventually linked with Cueva Llueva in three places and provides a drier route to the far reaches of western Llueva which has major potential. With the cave being opened up in the latter part of the expedition, the exploration and survey were carried out hastily. There is still exploration to be undertaken in the cave and it, no doubt, has a few more surprises to unfold. It is quite likely that the relatively easty access in through Carcavueso will produce another Llueva-Uzueka link in the Trident Passage area. The two caves seem to virtually overlap on the survey!

There is no doubt that the 1986 expedition has provided a climax in a series of parallel caving explorations carried out over the last 17 years. The 32km long Four Valleys System is now an almost integrated complex of caves where it is possible to travel underground through to 3 of the depressions. The Llueva-Secadura connection to the resurgence has yet to be opened up.



Red Column Chamber, Carcavueso. (Photo: Andy Hall)

Acknowledgments

As usual, in a team effort spanning several years, no one person or expedition can claim to have done everything. Each discovery builds on work carried out years before, often by individuals not now involved. So it is that this years

major connections were achieved as a result of the searching and explorations of this and the previous expeditions.

Over the years, a great deal of generous hospitality has been shown to visiting cavers by the inhabitants of the village especially German, Cuca and their family at German's Bar. Cave entrances have been pointed out, and some joint exploration undertaken, meals have been given, football matches played (we lost this years "International" - a couple of injuries resulted in an early return to England), tasks shared and even sick beds provided for the really ill. One major facility is the camp site. The other asset to the work of the expeditions is German's Bar itself, not just for the obvious but for tables, space and electricity for computing and drawing up surveys and for charging lamps and batteries for filming and photography. Many others have helped to generate the welcoming atmospher incuding Spanish cavers who visit Matienzo giving advice and encouragement. The groups try to repay these kindnesses in some

way. A slide show of the caves and a video of last years expedition were shown to packed houses in German's and the Snows. This was the first time that many of the villagers had seen what their underground scenery was really like.

Of a more practical nature, the expeditions also carry out caving jobs that are of direct use. The only water that Matienzo and indeed other neighbouring hamlets has, comes from underground sources and so, on a number of occasions, the expeditions have laid plastic pipes into underground pools trying to reach a higher water level to provide as much head for taps as possible. This years job involved diving to recover a steel pipe from the main resurgence into the depression.

we wish to acknowledge the encouragement of the Ghar Parau Foundation which awarded Sports Council and GPF grants to a total of £635. We are also grateful to the Diputacion Regional de Cantabria and its Director, Luis Sellers Arana, who supplied the permit.

Juan Corrin



Looking north into the Matienzo depression. The sink for all water entering the basin lies at the far end just above the centre of the photo. (photo: Juan Corrin)

Immediate bibliography:

Matienzo '81 C&C 14, Nov 1981

Matienzo '82 C&C 18, Nov 1982

Matienzo '83 C&C 22, Nov 1983

Matienzo '84 C&C 26, Nov 1984

Matienzo '85 C&C 32, May 1986

These contain area maps and references to the dozens of other articles published.

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