

# Caves & Caving

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# Matienzo 85

The summer of 1985 saw dozens of cavers from Britain (and a few from Italy and Spain) converging on Matienzo. Unlike that experienced in the UK the weather was superb with only a couple of days rain over the month of expedition.

## South Vega System

The Matienzo depression is surrounded by Cretaceous limestone hills which reach 833m to the east. All water seen on the impervious floor rises from the base of the hills and flows north east to sink eventually at the northern end. Behind Comediante, the main rising at the southern end, lies Renada, a cave mainly explored a decade ago and linked with Coteron in 1982. The water rises at an impenetrable sump at the back end of Renada, some 1000m south of the entrance and its source had never been ascertained.

Early in 1985 a group of Spanish cavers started the exploration of a torca just outside our area near to Alisas, and during the summer they placed our dye in the small stream found inside. Eighteen days later (on the last day of the expedition) a positive test proved the link between this pot and the water rising at Comediante. A tourist trip with the Spaniards showed that parts of the cave were fairly grotty - "could hear boulders falling spontaneously all the time". Length is about 3km with one branch heading towards Renada and another south to Molino, a large resurgence near Arredondo. A survey has been glimpsed but the promised copy has yet to materialise.

Another pot in the South Vega System is Azpilicueta. last summer saw the extending of Azpilicueta to link with Renada at Sanatogen Passage and at Giga Hall. A push or dive at Renada's final sump will not be more accessible as sump 1 is bypassed. Also found in Azpilicueta was a major horizontal section which parallels Renada below and heads off in the general direction of Alisas.

Battery Passage in Coteron was also extended by a few hundred metres but there seems little prospect of the system going big again in this area.

The South Vega System is now 19.4km long and is very likely to be extended further in 1986.

## North Vega

The water emerging from Comediante flows through the eastern tip of Enaso inside Cueva del Agua. Up to the north west is Mostajo with its maze of smallish passage beneath a main choked trunk route. By pushing down deep from the main level in 1985 a small sump was eventually reached and free-dived to a stream passage just above valley bottom and a 70m+ high pile of mud and boulders, both of which were not fully explored. Mostajo is now 4.7km in length with a depth of 117m.

Enthusiasm for Mostajo is fairly low at present as many "extensions" have led back into known passage. An extension at the end of the high level would lead into new ground, and at one point during the summer it was thought that this new territory would be entered from outside via cave no 415. The draughting entrance drops into a chamber with exits at roof level which lead to an impressive 7m diameter tunnel, reminiscent of Mostajo. This remnant is short lived as after less than 100m it rises over boulders to end in a mess. Further exploration nearer to the entrance has added a few mainly blind pitches to bring the length to about 500m.



Andy Quinn's Foot, Lluva Extension.

## Four Valleys System

Nearly every year, the underground boulder choke in Carcaveuso, the sink for the depression, is investigated. Only about 300m of passage is known before the terminal sump is met and up amongst the boulders hopes can be easily raised: "Got sick of hammering and tried the squeeze; got stuck and had to be pulled out; icy blast of draught restored determination and hammered away another half inch. Got through this time into ascending rift with dossers held apart by the draught..."; and on another visit: "Attempted to pass choke in another part of the rift and got up into a series of higher muddy chambers above main streamway."



Lluva Extension.



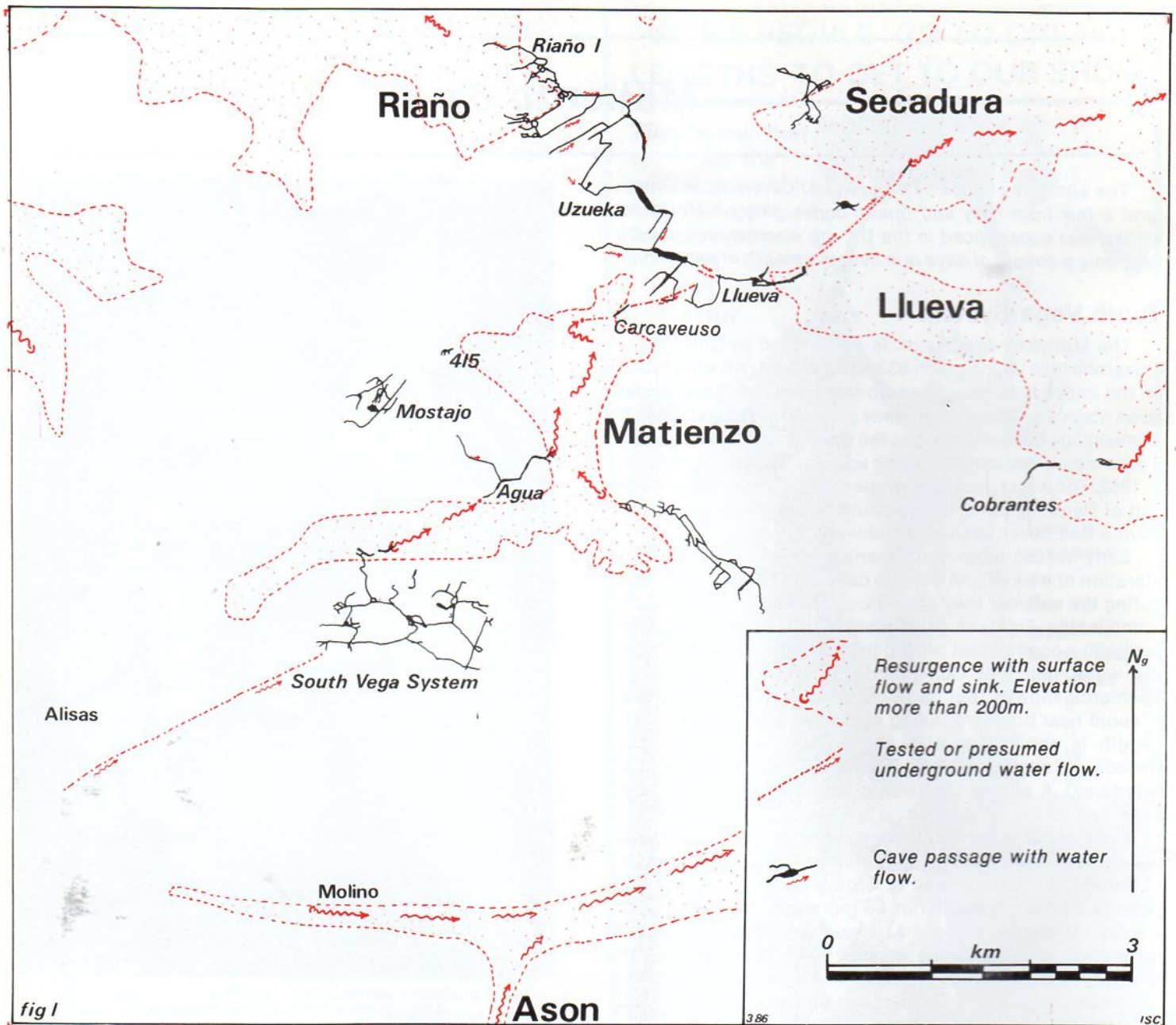


fig 1

The water in Carcaveuso meets water from Uzueka, flows through Cueva Llueva and then resurges in Secadura. The gap between Llueva and Uzueka amounts to a few dozen metres and hundreds of metres of new cave were not expected. But upstream Llueva, beyond the sump, proved to be a winner with a kilometre surveyed and more explored: "All six through the sump OK but finding the way through the boulder choke proved difficult as the line had been washed out. A climb up an aven went and after a short section of awkward passage a break-through into a ten foot diameter phreatic tube was soon found.....Exploration continued through an incredible phreatic tube to a huge (as in biggest ever seen) boulder slope. This was by-passed by climbing half way up, skirting to the right and dropping down again. A large passage full of breakdown lead onwards. The sound of the river in the distance stirred the adrenalin and had people running forward in excitement. Around a left hand bend, Carcaveuso water was met and exploration continued by climbing a downstream boulder slope. At the top of this, later found to be about 1km from the breakthrough, a halt was called. The passage, 10m wide by 5m high, with the river roaring in the distance, was left and the known cave was surveyed on the way out."

At the boulders on the following trip: "....climbed to the top of the slope to get a decent photo. Whilst posing by a

Llueva Extension.



huge dossier noticed an upwards draught. A vertical climb up of ten feet led to an obscure route through boulders. One final boulder was pushed aside to reveal blackness. Set off up a boulder slope and mud-floored passage with lots of pretties.... Down through boulders to a roaring draught felt through a passage six feet high by ten feet across. This sloped down into a phreatic tube with the sound of the river in both directions. Upstream, a short section of passage soon reached the stream. A climb down through a hole in the floor entered a phreatic maze. Various passages led to a duck and



eventually a sump. A great deal of difficulty was experienced in finding the route out of this area. A maze of identical phreatic tubes lead off everywhere, with nothing to distinguish one passage from the other. Twenty minutes of searching eventually found a route out, but not through the original route in. Exploration in this extremely confusing and draughting area would be safer with a diving line.

"Downstream a sand-filled passage was reached at the end of which a flat out crawl draughted strongly. At a junction it was decided to return to the others....Passage continued large for another two to three hundred metres of boulder scrambling to the inevitable boulder choke which was very solid and draughted very strongly. Down to the left a very tight rift had a draught whistling through it but eventually became too small."



*The Rhinoceros, Llueva Extension.*

All underground photos from colour transparencies by Phil Papard

Fig 1 sketches the relationships between the ends of Carcaveuso, Uzueka and Llueva. Since 1976 and the discovery of Cueva Llueva it has looked more and more likely that the caves in the system would be linked. Perhaps Llueva's tenth anniversary will see the passage of cavers from one valley to another.

Uzueka's 15.845km length includes a number of river inlets. It had often been thought that Second River Inlet could come from a nearby cave, Riano 1. 1985 saw the pushing of Riano 1 by a couple of kilometres: "Got to big passages at top of climb explored on 16th. At first we missed the way on and surveyed round maze and big pit and various insignificant large chambers. Finally found way on leading after various junctions to a draughting stream passage." This is now thought to be Second River Inlet in Uzueka and when linked will give Uzueka a length of more than 20.5km. "Sauntered to the end found day before and discovered big hole in floor. Poked around and thought it was about to close down (actually had to put knee down at one point!). Continued until I reached a massive cross fault and hug boulder-filled chamber. Took easy option and surveyed about 100m of 10 x 5m passage which had a floor. On way back wizzed around chamber to sandy climb up the back. When at top looked over sand cornice to big passage beyond. Recommend use of deadman belay. Lots of bits left."

Cueva Riano 1, as well as draining into Uzueka, also drains to the surface meeting daylight in a shallow resurgence with an impressive window into water behind it. Both sites were dived but nothing found.

## Muela

The only area which was not really looked at this year was the mountain area, to the east of Matienzo Muela/Mullir, with their hundreds of shafts in a sometimes confusing landscape of limestone pillars. Some of the drainage from this area must resurge just below the giant tunnel of Cobrantes. A team

# Cave Science

The Transactions of the British Cave Research Association



BCRA

**Published quarterly, containing original papers on all aspects of cave science.**

**The latest issue, Volume 12 No. 3, (distributed Jan 1986) includes**

**Karst and Caves in the Jabal Akhdar, Oman** by A. C. Waltham, R. D. Brown & T. C. Middleton

*Abstract:* The Jabal Akhdar is a spectacular anticlinal mountain range formed in a thick limestone sequence. Karst development is restricted by both the aridity of the modern climate and also the steepness of the surface slopes. The longest of the few caves known is the Hoti system, an underground flood route which provides a fine through trip nearly 5km long.

**Cave Biology on Tropical Expeditions** by Philip Chapman

*Abstract:* Tropical cave biology is still in its infancy - unknown and exciting cave faunas await discovery in suitable habitats throughout the tropics. Expeditions visiting such regions should include caver-biologists capable of reaching the more remote and biologically rewarding deep-cave environments. Inclusion of a sound biological programme can benefit an expedition financially but such programmes should be prepared and executed thoroughly or not at all. Advice is offered on collecting and preserving specimens, recording data, obtaining identifications and writing a report. The need for conservation of cave life and courtesy to the host country is stressed.

**The Blue Holes of Eastern Grand Bahama** by R. J. Palmer

*Abstract:* The Blue Holes of Eastern Grand Bahama are described, with surveys of the most significant sites, including the major cave complexes of the Zodiac Caverns and Big Creek system.

**The Effect of Anchialine Factors and Fracture Control on Cave Development below Eastern Grand Bahama** by R. J. Palmer and L. M. Heath

*Abstract:* Cave development beneath eastern Grand Bahama is closely related to the vertical position of a Ghyben-Hertzberg freshwater lens, development being additionally enhanced where major fracture zones exist parallel to the south edge of the Little Bahama Bank. Horizontal development occurs during periods of eustatic stability, and vertical development during periods of eustatic fluctuation. Collapse within the caves is progressive, encouraged by solutational activity at the mixing zone and enhanced by the removal of buoyant support of the rock during periods of eustatic exposure.

**Hydrological Observations on the Karst of Eastern Grand Bahama** by Lucy M. Heath and Robert J. Palmer

*Abstract:* Studies made on the 1984 Zodiac Project established the existence of a freshwater lens on the island of Sweeting's Cay, Grand Bahama. The paper examines the methods used to identify the lens, and examines the hydrological and structural controls on the anchialine and marine caves (Blue Holes) associated with the area.

**The Flora and Fauna of Sagittarius, an Anchialine Cave and Lake in Grand Bahama** by Sarah Cunliffe

*Abstract:* An unusual habitat with an extensive and bizarre growth of serpulid worms and a free-swimming troglobitic crustacean community has been discovered in an inland, anchialine, Pleistocene cave beneath the island of Sweeting's Cay, Grand Bahama. The cave system and its adjoining lake are isolated from the open sea, yet the lake is tidally-influenced and is typified by a prolific population of green algae, coelenterates (including representatives of the Scyphozoa and Zoantharia), gastropods and bivalve molluscs. Potential mechanisms by which the lake became colonised, the nature of the cave community and how nutrients enter the cave system are discussed.

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*Matienzo viewed from the northern end. J. Corrin.*

entered Cobrantes to pass the 30m high egg-shell-on-meringue walls that enclosed the far end of the cave. A number of days of tent-pegging the wall found the group at the top but in the footsteps of the SESS who maypoled up many years ago. Nothing new was discovered and it now seems that the only way into the giant passages in the heart of Muela must be from the shafts on the mountain.

### **Bits & Pieces**

Matienzo still throws up the unexpected. A member of the Grupo de Expeleologia Pena Historica from Madrid arrived in the bar to describe a hole they'd entered at the southern end of the valley. Two days later and the large, open (and not previously noted) entrance becomes No 531 with a depth of 144m and a traverse length of 173m.

No quite so unexpected, was the "Frenchman at 5am" routine, where a pair of earnest Frogs want the Brits to help out on a rescue. This year it was Cueto-Coventosa at the Ason where a Swiss caver fell a short distance and immobilised himself. Although very difficult to stand back and take an objective view - the bureaucracy and ineptitude that gushed from the Spanish and French organisers on the surface had to be seen to be believed. This affair could have been over in a third of the time it took. All British groups in Spain should be able to sort themselves out on minor rescues; with major ones they would be well advised not to involve any Spaniards until hospitalisation for the casualty was imminent or the organisation of the rescue was flowing smoothly. There would then be no excuse for well-meaning bunglers to interfere.

The rescue provided some good surface "footage" for the Matienzo video. In 1985 a video camera was used underground with two 100w lights to provide some record photography of the more easily accessible parts of the major caves. The filming and results were successful and "easy" - there apparently being fewer problems than when using 8mm or 16mm film. (the pitfalls and potential are to be outlined in a forthcoming BCRA Cave Photography book.)

### **Conclusions**

In 1981, Transactions 8.2 was devoted to Matienzo. After the 1986 expedition a full update with surveys will be published. The area is still revealing new passage at an average rate of about 5km per year with the potential for exciting finds just as good as ever.

*Juan Corrin.*

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