



# Matrenso

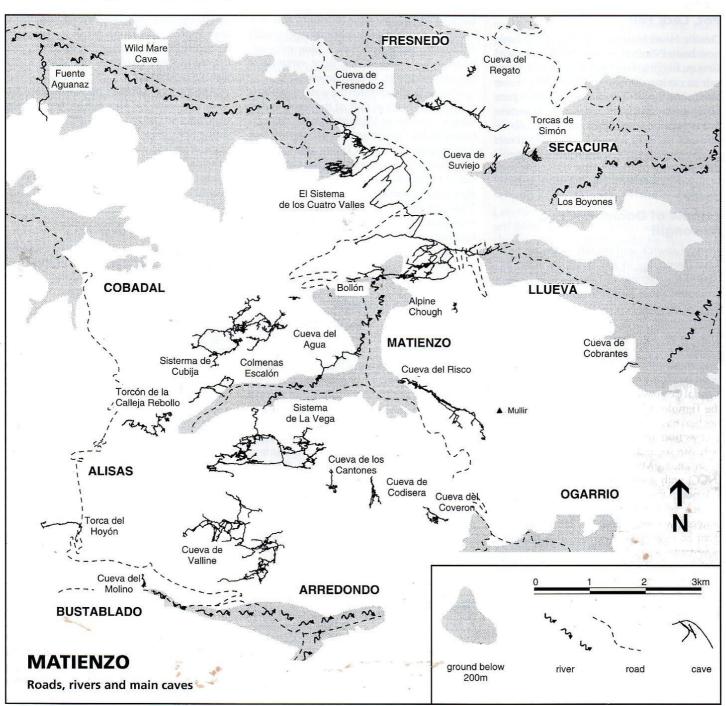
avers during the 26th year of British Speleological Expeditions to Matienzo surveyed over 4km of new cave passage, taking the total of explored cave in the area to over 200km, with about 1220 catalogued sites of speleological interest. The explorations mainly occurred during Easter, a few days in June and over a five week period in July and August.

There were no major discoveries this year, some loose ends were explored and

various leads found to explore during 1997. The main discoveries are listed in the table opposite.

# The South Vega System and Cueva Valline

These two caves, on the north and south sides of a 688m high hillside, continue to creep closer together. The systems are being jointly explored by the Matienzo and Tortosa cavers. In Cueva Valline (site+733), most



new passage in 1996 was discovered in the 'old cave' by pushing and surveying passages which had not be fully explored during the original explorations.

The upstream Rio Rioja was dived by Rupert Skorupka and continues through sump 2 to sump 3 where the passage remains inviting.

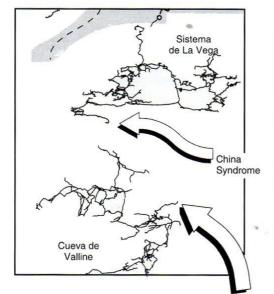
In the South Vega System (consisting of Torca Azpilicueta, Torca de Coterón, Torca de la Vera Negra and Cubio de la Reñada), explorations at Easter at the far upstream end continued during one trip in the summer to find a long streamway, The China Syndrome, which ended at a huge aven which could be bolted in the future. This point lies some 500m north of Cueva Valline and 150m below.

In Torca de la Vera Negra some pushing was carried out in the East Wanders with the intention of pushing towards Valline which is apparently on a similar level 1km to the south.

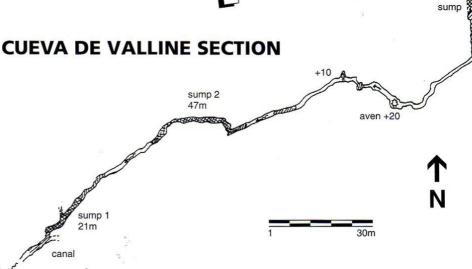
No significant progress was made. During a push up a boulder choke in Breakdown Chamber in Cubio de la Reñada, Graham Hart from Plymouth dislodged a boulder, fell and broke his leg in four places. The ups and downs in the roomy but muddy entrance series, which are normally given scarcely a thought, provided 'fun and games' for the dozen cavers it took to bring him out over eleven hours.

# The Caves of North Vega

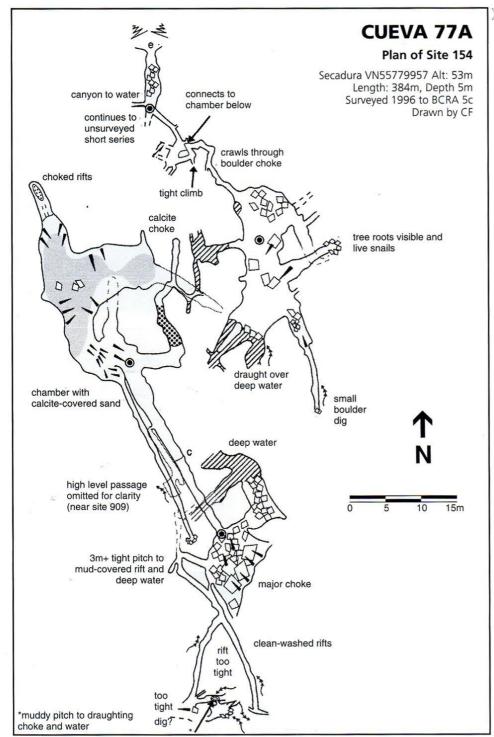
Cueva de la Morenuca (site 774) was almost doubled in length and extended to link with the Cubija System at Easter. This set of caves >>



Lengths surveyed	m	total length m
Valline (with Catalans) Sistema de Cubija South Vega System Calleja Rebollo (Toad) Cueva 77A Colmenas-Escalon Four Valleys System Site 1167 Site 491 Site 1053 Site 388 Site 1173 Site 1166 Site 763 Torca de la Helguera	1100 669 663 504 384 206 149 136 108 65 52 43 40 34 20	25191 17023 24915 5503 384 2688 40868 136 108 65 294 43 40 34 20
Total	4073	







now consists of Torca de Mostajo, Torca de Regaton and Morenuca. The nearby Torca de la Calleja Rebollo (Toad in the Hole) was extended by 500m in small passage to bring the length to 5.5km. In the Sistema de Colmenas-Escalon tidying up found just 200m of passage.

# The Four Valley System

A small amount of passage was surveyed in Cueva Hoyuca (Uzueka), near to Straw Inlet. In Secadura, a draughting cave known since the seventies, Cueva 77A, was pushed through boulders into a bouldery cave with flooded lower levels (see survey).

Although less than 400m long, this is a significant find, next to the cave behind the main resurgence for the Matienzo water.

# San Miguel

A major dive using helium was carried out by Rupert Skorupka in Peter Plummet, the overflow for the Nacimiento del Rio Clarion. He reached a depth of over 74m where the shaft was seen to carry on with no bottom in sight. (See *Caves & Caving* 73).

#### Science

As part of the ongoing scientific study of the Matienzo karst a water quality monitoring programme was initiated this year. The aim of this project is to quantify solute flux through the Matienzo depression.

A combination probe and associated data logging facility, comprising of 'SENTEC direct ION' electrodes to monitor water hardness and dissolved calcium load, were installed in the main streamway of Cueva Molino (Cueva del Agua).

A logging interval of 30 minutes was set giving an estimated six month time scale for data collection. The site will be revisited within this time scale to replenish batteries and extend the sampling period. It is hoped to expand the instrumentation level in the near future in particular to give a more accurate indication of discharge.

Juan Corrin



### **Acknowledgements**

Thanks are due to the caving and regional authorities who provide the necessary permits, and the many friends in Matienzo and Spanish caving groups who make us so welcome. In addition to the Ghar Parau Foundation and William Pengelly grants mentioned above, a sum of £440 was received from the Foundation for Sport and the Arts: thanks are due to all these bodies.

## **Recent References**

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Matienzo '94 in Caves & Caving
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