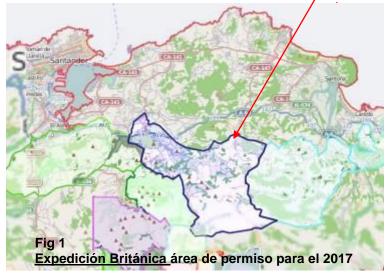


# Cave exploration during 2017

This report covers the expedition's speleological work in the permit area shown in figure,1 below.

The area covers the municipal authorities of Solorzano, Entrambasaguas and Ruesga north of Cruz Uzano. The permit also covers work in Cueva Vallina which was been proved to link hydraulically with the South Vega system in Matienzo in 2016.

In 2017 just under 6.5km of new passage was surveyed, more importantly this included very important extensions in Fuente Aguanaz, Cueva-Cubio del Llanio, and Cueva Vallina all of which were left with open passages to be explored and surveyed in 2018. In addition, 137 new

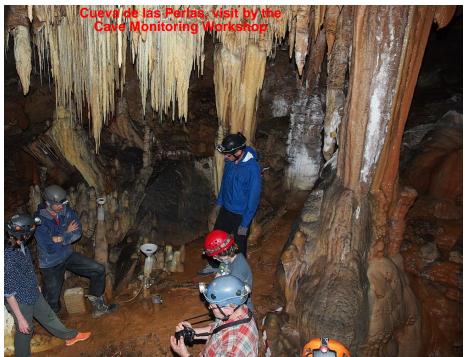


caves and sites were found and located, and many were explored – all the details of these and comprehensive information on all the work which the expedition has done can be found on the website <u>http://matienzocaves.org.uk</u>. The numbers given to caves in this report are those used in the database of caves found on this website.

About 40 cavers took part in the 2017 Matienzo expedition at various times during the year. However, the main work took place at Easter and during the last part of July and early August, with smaller groups working at other times over the whole year preparing for diving in Cueva Vallina, and finding, digging and recording mainly new sites.

During the Easter part of the expedition, the 3rd International Cave Monitoring Workshop took place in Matienzo organised by Dr Peter Wynn of Lancaster University. Dr Wynn has had two PhD students working in our area at Cueva de Asiul (0061) and Cueva de las Perlas (0074) assisted at times by members of the Expedition. Paleoclimate records have been established, from selected stalagmites and cave monitoring, for key periods of human history including 40,000 years ago, when Homo





Neanderthalensis disappeared. Logistics of the workshop was greatly helped by the mayor of Matienzo and the loan of the old school building for the meetings. Various field excursions were made, and members of the Matienzo Expedition assisted out on some of these. The workshop attracted academics from institutions across Europe and as far away as the USA and SE Asia, and will have helped strengthen the knowledge of both Matienzo and the Alto Asón area as one of the key karst areas for such study.

# Hydrology

Work continued on the hydrological work agreed at the SEDEC conference at Ramales del la Vitoria in 2014. Two tests were carried out:

1. Three litres of optical brightening agent (OBA) were placed in the steamway at the downstream sump in El Cubillón (2538) on the 23rd April, with detectors downstream of the resurgences of Cave of the Wild Mare (0767), Fuente Aguanaz (0713) and La Riega (0551), the resurgence for the water in Cueva la Verde (4486). On 1st May (and subsequently) the detector at Fuente Aguanaz was positive. The other two sites were negative and remained negative when tested in the following weeks.

2. In October an attempt to understand the hydrology of the Hornedo area, OBA was put into Cave <u>3010</u> and a detector in a resurgence, <u>3282</u>. The trace was negative after 5 hours and after 4 days only some patches of colour were seen under UV light - an inconclusive result and further testing will be carried out in 2018.

Water tracing to a resurgence up to November 2017							
Trace map code	water source	positively traced to	time	agent	date	more information	
FA-01	downstream <u>Cueva</u> <u>Cobadal</u>	<u>Fuente Aguanaz</u> (San Antonio)	5 - 7 days	OBA (Tinopal CBS-X )	13/4/2006 - 18- 20/4/2006	• <u>website</u> article • <u>NW area</u> (2011)	
FA-02	Sinks at Alisas	<u>Fuente Aguanaz</u> (San Antonio)	?	?	?	Notice boards at Fuente Aguanaz	
FA-03	Duck Pond Sink	<u>Fuente Aguanaz</u> (San Antonio)	4 - 7 days	OBA (Leucophor)	27/3/2016 - 2/4/2016	logbook <u>1</u>	
FA-04	<u>El Cubillón</u>	<u>Fuente Aquanaz</u> (San Antonio)	6 - 8 days	OBA (Leucophor)	23/4/2017 - 4/5/2017	<ul> <li>logbook <u>1</u></li> <li>web page</li> </ul>	
BO- 01	Green Choke, <u>Cueva</u> <u>Hoyuca</u>	Los Boyones (Secadura) via Duckham's Sump and Cueva Llueva	7 days	fluorescein	12/8/1976 - 19/8/1976	<u>logbook</u>	
BO- 02	<u>Sumidero de</u> <u>Carcavueso</u>	<u>Los Boyones</u> (Secadura)	10 hours	fluorescein	12/4/1965	<ul> <li>Fernández Gutiérrez Juan Carlos, 1965</li> <li><u>4VS</u> <u>Hydrology</u> (2012)</li> </ul>	
CO- 01	downstream <u>Cueva</u> <u>Vallina</u>	<u>Cueva del Comediante</u> (La Vega) via <u>Reñada</u> sump 1, but not Squirrel's Passage.	8 days	OBA (Leucophor)	2/4/2015 - 10/4/2015	• <u>website</u> , <u>Easter 2015</u> • <u>SVS</u> Hydrology	
CO- 02	<u>site 4246</u> (Hoyón depression)	<u>Cueva del Comediante</u> (La Vega)	4 - 7 days	OBA (Leucophor)	7/4/2016 - 10/4/2016	<u>website,</u> <u>Easter 2016</u>	
CO- 03	Torca del Hoyón	La Cuevona (newly added Comediante detector was negative)	16 - 19 days	fluorescein	7/8/1985 - 26/8/1985	logbook <u>1</u> : <u>2</u>	
ES-01	<u>Hoyo Mortiro</u>	<u>Cueva Esquileña (</u> between Riba and Ogarrio)	1 hour	fluorescein	28/12/1965	Fernández Gutiérrez Juan Carlos, 1966	
ES-02	<u>Cueva del Orillón</u>	<u>Cueva Esquileña</u> (between Riba and Ogarrio)	< 2 days	OBA (Leucophor)	24/11/2015 - 26/11/2015	<ul> <li>logbook <u>1</u></li> <li><u>Summary</u> <u>diagram</u></li> </ul>	
4272- 01 ES-03	<u>Cueva del Orillón</u>	<u>resurgence</u> <u>4272</u> then <u>Mortiro</u> to <u>Cueva</u> <u>Esquileña</u>	< 2 days	OBA (Leucophor)	16/01/2016 - 20/01/2016	• logbook <u>1</u> : <u>2</u> • <u>Summary</u> <u>diagram</u>	
JI-01	<u>site 3886</u>	<u>Cueva de Jivero 1</u>	3 days?	OBA (Leucophor)	11/3/2015 - 13/3/2015	logbook <u>1</u> : <u>2</u>	

JI-02	<u>site 3884</u>	Cueva de Jivero 1	< 3 days	OBA (Leucophor)	13/2/2016 - 16/2/2016	logbook <u>1</u>		
	<u>Cueva de Loca II</u>	Cueva and regato de la Reguera (??)	2 days	fluorescein	28/09/1965	Fernández Gutiérrez Juan Carlos, 1966		
LI-01 TR-01	<u>Sima-Cueva del</u> <u>Risco</u>	<u>La Lisa</u> and <u>Cueva del</u> <u>Transformador</u> via <u>Cueva</u> <u>de Tiva</u>	5 hours	fluorescein	12/4/1965	Fernández Gutiérrez Juan Carlos, 1965		
LO-01	<u>Cueva del Selvijo</u>	Cueva de Loca I	7 hours	fluorescein	10/10/1965	Fernández Gutiérrez Juan Carlos, 1966		
LO-02	<u>Cueva del Orillón</u>	<u>Cueva de Loca I</u> (light green)	8 hours	fluorescein	31/10/1965	Fernández Gutiérrez Juan Carlos, 1966		
RI-01	Torca del Hoyo la Encina (Moncobe)	<u>La Riega</u> below <u>Cueva la</u> <u>Verde</u>	c. 14 days in a dry spell	OBA (Leucophor)	23/10/2016 - 7/11/2016	<u>website,</u> autumn 2016		
1614- 01	<u>Fuente las Varas</u> <u>Pot</u>	tiny resurgence, <u>site 1614</u>	2 hours	fluorescein	9/4/2001	logbook <u>1</u> : <u>2</u>		
	Tizones area				1965 October	(Matienzo 50 pp12, 14)		
3282- 01	<u>site 3010</u> (N Hornedo)	3282 (inconclusive)	(5 days)	OBA (Leucophor)	17/10/2017- 22/10/2017	<u>summary</u>		
		Small scale water trac	cing wi	thin caves				
	water source	positively traced to	time	agent	date	more information		
HO- 01	<u>Chestnut Hole</u>	inlet to Gorilla Walk, <u>Cueva</u> <u>Hoyuca</u>	2 hours	fluorescein	6/8/1988	<u>logbook</u>		
LL-01	Astradome, <u>Cueva</u> <u>Hoyuca</u>	Cueva Llueva at upstream and pitch, but not the Lake.	11 days	fluorescein	19/7/1978 - 30/7/1978	logbook <u>1</u> : <u>2</u>		
HO- 02	"Sink below Cuvia" <u>site 2857</u>	sump at Pull Up Passage, <u>Cueva Hoyuca</u>	30 hours	fluorescein	9/04/2009 - 10/4//2009	logbook		

More work will be done in 2018 when the weather (sufficient water flow) is suitable, a key site is the North Vega System (marked G on the map below) which could have water in the east flowing to Secadura via the Four Valleys System and in the West to Fuente Aguanaz, shown as red dotted arrows on Figure 2.

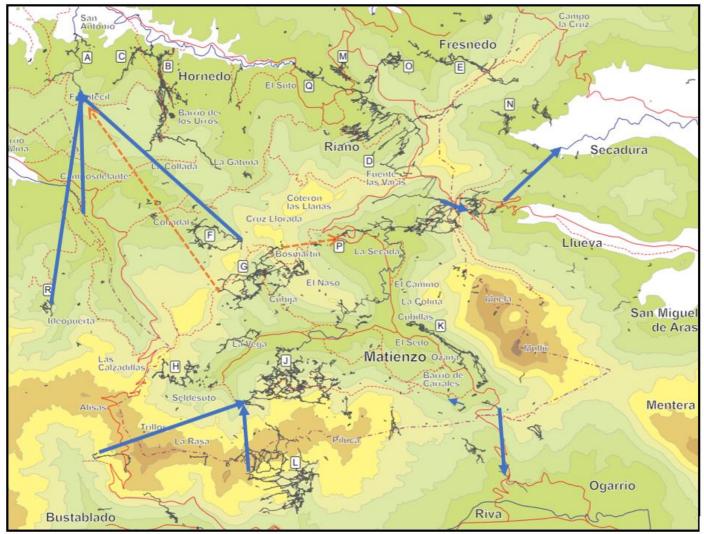
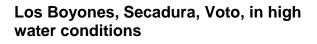


Fig 2 – Main hydrology tests – blue arrows are proven tests; red dotted arrows are possible routes to be tested in 2018 if weather is suitable.



Fuente Aquanaz, San Antonio, Entrambasaguas, in high water conditions, with a flow rate of over 1m<sup>3</sup>/s





Matienzo Caves 2017 - new surveyed caves and passages						
Cave	Name	Area	Previous Length (m)	New Length (m)	Extra Length Found (m)	
3234	3234 Cueva-Cubio del Llanio		4014	6097	2083	
0841	Cueva Fresnedo II	Fresnedo	7928	8977	1049	
0713	Fuente Aquanaz	San Antonio	2416	3186	770	
0081	Systema de Cuatro Valles (Cueva de Carcavuezo)	Riaño	58572	59101	529	
0733	Cueva Vallina	Arredondo	33719	34234	515	
0122	Cueva de Suviejo	Secadura	5023	5353	330	
4606	Cave	Barrio de Arriba		267	267	
2889	Torca la Vaca (incl finds end of 2015)	Hornedo	23436	23696	260	
0415	415	La Secada	1029	1137	108	
0040/0048/0264	South Vega System	S Vega	34242	34345	103	
0035	Cueva del Arenal	Seldesuto	762	861	99	
4575	Cueva de la Iglesia IV	Navajeda		78	78	
0434	Cave	La Secada	75	143	68	
0071/0892/0774	Cubija System (Torca del Mostajo)	Cubija	22353	22408	55	
0394/4537	Cueva de Collada/Eastwater Entrada	La Gatuna	940	989	49	
4050.00	Pipe Cave	Garzón	108	140	32	
4506	Cave	South Vega		30	30	
4534	Two-way Cave	La Secada		26	26	
0603	Shaft	La Secada		25	25	
4180	Cave	La Secada		14	14	
4535.00	Badger Hole	La Secada		4	4	
Total New Cave Surveyed						

Minor sites and finds that were not accurately surveyed are not listed here, but all details are available on our web site (<u>http://matienzocaves.org.uk</u>), including locations, any sketch surveys and photographs. Some sites found in 2017 but not listed above will be pushed further photographed and surveyed during 2018.

# Southern Sector (Vallina, South Vega, Alisas, North Vega, La Colina and Ozana)

In **Cueva Vallina (733)** The main activity was diving in the downstream sumps that connect hydraulically to <u>Reñada</u>, and in the *Rio Rioja* upstream sumps that head north and east. At the downstream sumps diving work continued and all the sumps up to sump 6 were checked. It was found that the re-lining carried out last year was in good condition. However, the old line in sump 6 was found not to be in the best place and needed a new line placing. This was done up to the main inlet and connection with the dry extensions. However, what should have been some of the best visibility available due to the exceptional dry weather was ruined by silt from the *Rio Rioja* steamway caused by tourist cavers going to Vallina II as well as, to a lesser extent, Matienzo cavers travelling to the extension above the sumps. We stopped our work in the extensions to allow the water to clear, and managed to contact the tourist caving group who agreed not to go into the steamway. It was noted in Reñada on a trip to sump 1 that, although the water in the main

steam when first met was clear at the sump, cloudy water from Vallina was just beginning to come

through. This issue caused a delay in the work and prevented a push beyond the inlet in sump 6 at Easter, In the Summer work resumed with re-lining of downstream sump 6 and resurveying sump 6A (to the big inlet), clearing up errors in the old survey. It was found that the sump required more sophisticated diving methods. In October rebreather and other equipment was located for a push late in 2017, or in 2018, depending on weather conditions.

Only one trip went to the dry passages above sump 6 to begin to bolt across the traverse above the start of sump 6. More bolts are needed to complete this traverse.

On a carrying trip, an 86m side passage, *Galería Jesús Lecue*, was found and later pushed and surveyed. This

0m

200m

400r



Vallina 3

Cueva Vallina

passage was named after a good Spanish friend of the expedition: his funeral took place the same day. This passage goes off near the junction of Avinguda de la Sorra (the sandy passage that leads to Swirl Chamber and Double Dutch pitches area) and shows that, despite many trips through this area, there are still finds to be made near the main routes.

A three-man diving team worked in the main upstream *Rio Rioja* sumps. The main objective was to push sump 2a past the limit reached in 2016, but the sump was found blocked with gravel only a few metres further on. As a lot of work was carried out preparing for this dive it was decided to look at sump 3 - thought previously to be a dead end. However, it was found that the sump turned up and back (not obvious) and it was then pushed through sumps 3 to 5 to an extensive area of dry passages heading NE into an area with no known passages in the direction of Cueva de los Cantones (<u>0865</u>). Some 400m were surveyed leaving open leads for pushing in 2018. It is a very important find as it opens a new area that was previously barren of cave passages.



A test of the SubPhones, develop for the expedition by Ron Taylor, was carried out in Vallina at the start of the Road to Glory where Clapham *Bypass* meets it. This is an important spot as Torca de Rotura (0753) is above this point and some years ago a mass of blow flies were found here suggesting a fairly open link to the surface. Unfortunately, the test was hampered by very heavy rain and thunder but showed the revised location on the 2017 map (due to better fixing of the bottom entrance) is more accurate. A re-test in better weather is needed to fix it accurately. The depth reached was approximately 120m and



demonstrated the usefulness of the system. Some refinements will be made to the SubPhones over the winter and they should be fully operational for next year - a very important asset for the expedition with respect to exploration, safety and a communication tool during any rescue situation.

Detailed surveys of Vallina and the new surveys, when complete can be found on: <u>http://matienzocaves.org.uk/descrip/0733.htm</u>

## South Vega

In South Vega, Cueva del Comellantes (<u>0040</u>), was dived in poor visibility to try and identify the way on for the main water flow. Running lines were installed along both walls at different heights to help searching, but no further passages were found. This site needs good visibility for future diving attempts, as it is unpredictable as to when the site has good visibility. The site will be checked during 2018 for good visibility when we have diving teams in the area who can carry on this work.

In Cueva-Cubío de la Reñada (0048) the end of the route found last year at the west side



of *Stuffed Monk Passage* was pushed over a traverse into 55m of new passage - side passages are still to be surveyed and pushed. In the *Stuffed Monk* area over 500m was re-surveyed as part of the South Vega System re-survey project. The possible by-pass to Sump 1 was dug to a small extension and surveyed. The passage is seen continuing low over the fill, but a lot of difficult digging is needed. This site will be checked in good draughting weather to judge its potential.



A high-level lead in the entrance series was investigated via a rigid extension ladder and bolting, but no significant passage was found.



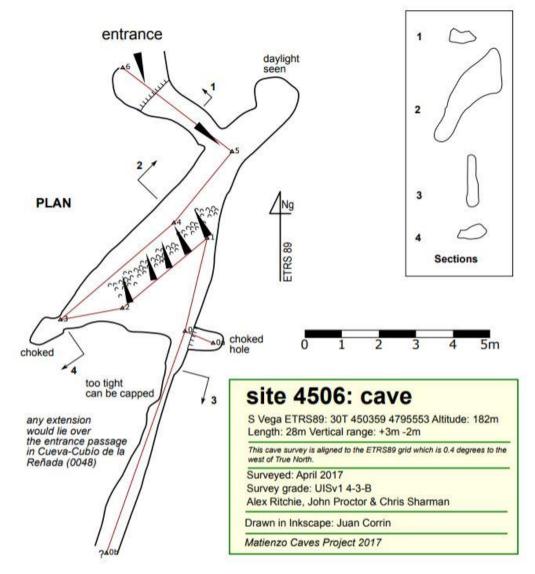
As part of the International Cave Monitoring Workshop members of the expedition took three delegates to *Stuffed Monk* 

Passage and Anastomoses Hall to look at cave geomorphology under Professor John Gunn's





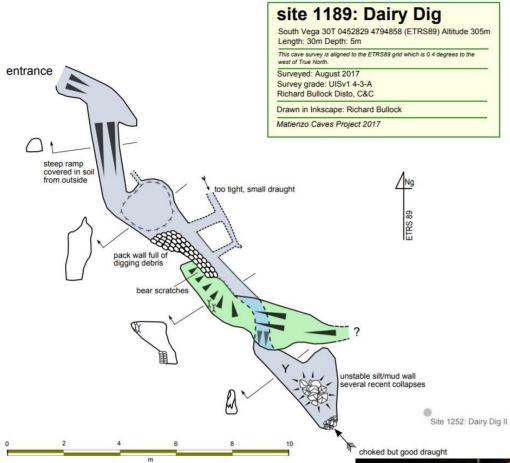




expert tuition.

Experiments were carried out with an infrared camera to test its potential for identifying draughts at a distance, this proved to be useful for future work. A number of sites in the area were checked out and dug. But two, Dairy Dig (1189) and Dead Fox Passage Dig (1253) had a collapse and need work to make safe. Both sites were left to settle and will be looked at again in future years.

Six new sites were located including cave 4506 near Cueva-Cubio de la Reñada and probably associated with it. Also, a number of these sites and previously undescended shafts were checked out but no



significant passages were found in 2017. However, a number show potential and will be looked at in future years.

**Seldesuto**, the rock blocking the entrance to Torcón de la Calleja Rebollo (<u>0258</u>) was removed. The draughting Root Tube Cave (<u>4520</u>) was extended by digging but more easy digging is needed.

Torca de Corcada (0780) was located and found to be still open. On a later trip it was pushed by an English/Spanish/ French team who

removed rock round several tight corners in the active passage leading to the head of a tight pitch which needs more work to descend. In the fossil route, they checked out the end dig and confirmed it will cap out easily to give access into a new area.



An old dig, <u>1298</u>, previously excavated with the help of the Espeleo Club Tortosa, was opened up. Over 14 days, and using more than 1000 caps, the small, strongly draughting

<image>

crack was excavated following the draught and its "river-like" sound. The dig by November 2017 reached an open drop of about 5m that need a rock removing to get down. A lot of holes in this immediate area were checked out using an infrared camera and it is clear, due to the number of draughting holes, there must be a significant



development in this area. This is important as this area is just to the west of the far reaches of Cueva-Cubío de la Reñada and the fault that seems to hinder exploration. There is a considerable area

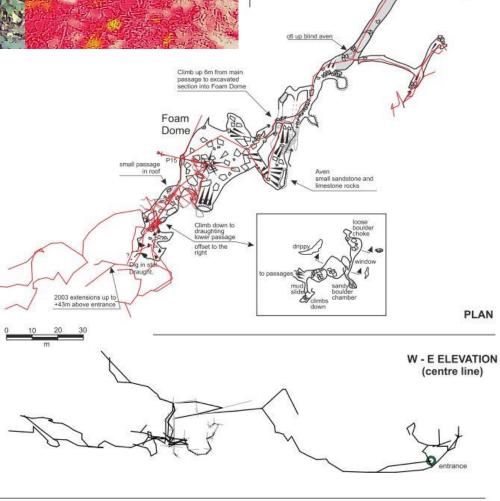
entrance

between here and Torca de Hoyón (0567) and Vallina for a major cave system so it will be a key priority for 2018.

Over 4 trips in Cueva del Arenal (<u>0035</u>) the *Foam Dome* and the lower boulder/flood-stream area were thoroughly checked out and some 99m of new survey in the lower area completed. No good leads or digs were found in the far west reaches of the cave.

#### Alisas Area

At Alisas, site <u>4364</u> was pushed 7m to a choked chamber; <u>4365</u> was



Site 0035: Cueva del Arenal Seldesuto 30T 449198 4794921 (Datum: ETRS89) Altitude 211m

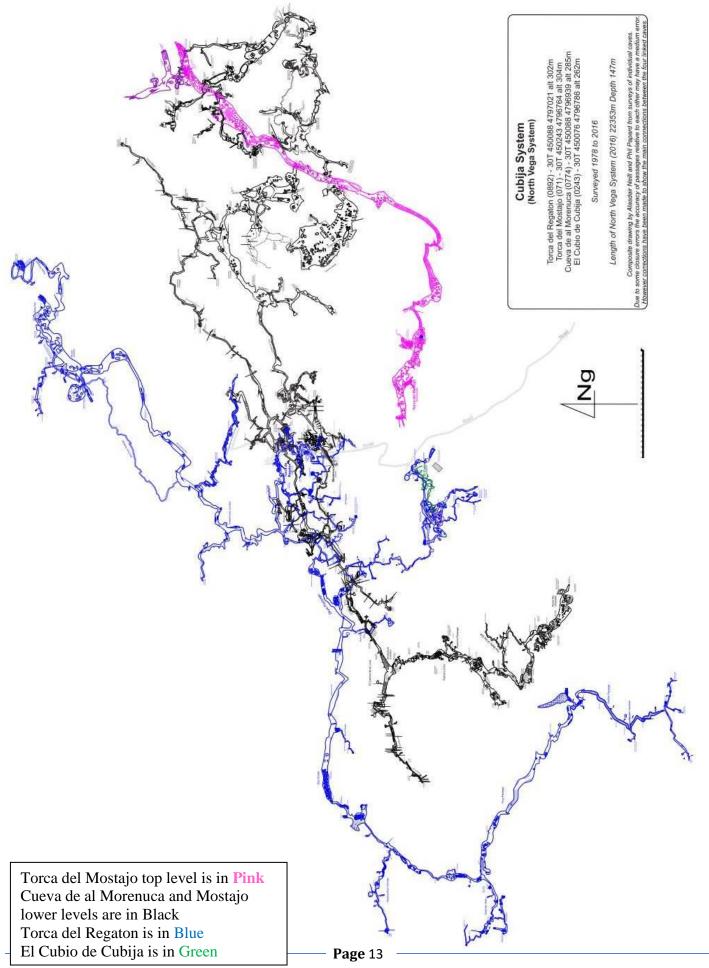
Length 861m Vertical range -5 +43m

found to be 8m deep to a dig in boulders and site 1075 was pushed 25m to a choke. At Las Calzadillas a new hole (4511) was pushed 5m down a slope to a dig needing more work. A nearby 50m deep cave (3638) was re-visited and pushed with the view to a possible connection with Toad in the Hole (0258) but, although a draughting small lead requiring opening up for at least 3m was found, no connection was made.

The site needs to be resurveyed and the bottom located to check its exact position relative to 0258.

After the summer a large open shaft some 13m deep was spotted as site  $\frac{4624}{4626}$  and another open hole, 8m deep, was catalogued as site  $\frac{4625}{4625}$  at Las Calzadillas In the same area, site  $\frac{4626}{4626}$  is blocked at the top by two large boulders. These sites will be looked at in 2018.

**North Vega -** There was no complete survey of the Cubija System on one file and the survey of Torca del Mostajo was in only paper format. Over the winter in 2017 a complete survey of the system was produced, and a copy is below. However, it is very large and to see detail it should be consulted on the web-site at http://matienzocaves.org.uk/surveys/NVS-pp-2016-published.pdf



In Torca del Mostajo (0071) the end of Wonderland was checked out and some photographs



taken. However, there was no draught and the suggested (on the survey) dig into upper passages was not promising and not considered worthwhile as it would need a lot of work. The top of the *Golden* 

*Void* pitch was found to need re-bolting on the next trip to make it safe this will be done early in 2018. Just past the sandy crawls in the top

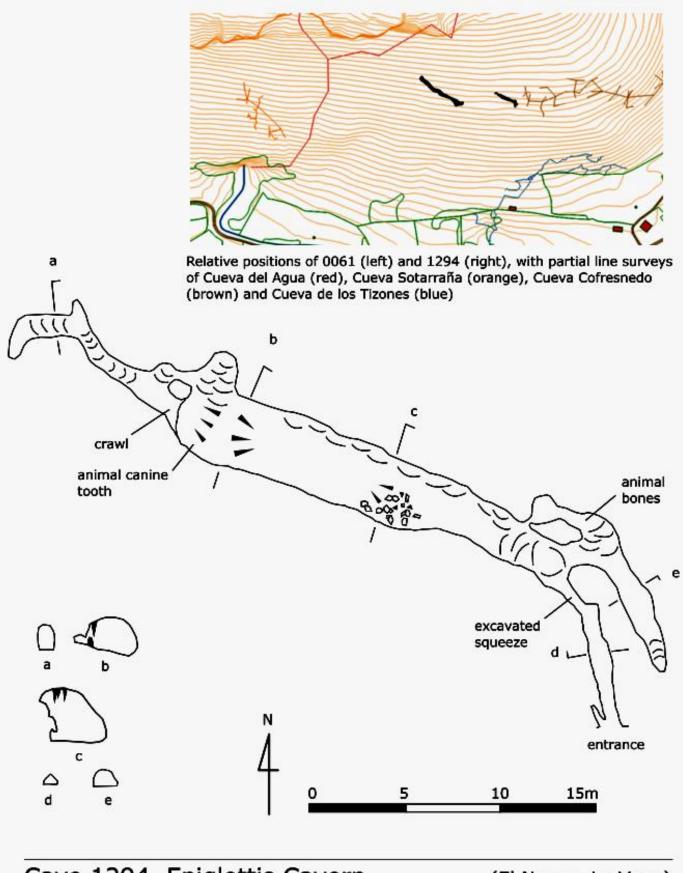
Torca del Mostajo Wonderland



in *Sheppard's Bush*. Possible lower entrance digs (<u>3802</u> & <u>0813</u>) to Torca del Mostajo were checked out but found to need a lot of clearing of vegetation before any work can be done.

The entrance to the 1985 extensions in Cueva de Rascavieja (<u>0077</u>) were capped out to make access easier and a guide line put through part of the choke. A new pitch was found at the west end of the second chamber. Rascavieja is a key site given the draught and the large passage that may be associated with the top level in Torca del Mostajo. The new survey for the long-lost

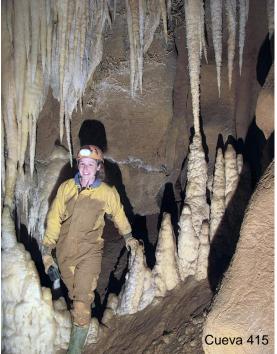
Epiglottis Cavern (site <u>1294</u>), including its relationship to other caves on El Naso, has been completed.



Cave 1294 Epiglottis Cavern 451.921 4.796.120 287m Surveyed August 2017, A. Quin and P. Smith

(El Nanso, La Vega) Length 55m Drawn by P.S. On El Naso, 4 new sites were located: 4505, 4512, 4513 and 4514, these together with 4022 and 2377 were pushed but need more work (descending and digging) to progress. Site 2375 was dropped 15m in two pitches to a choke with an aven above.

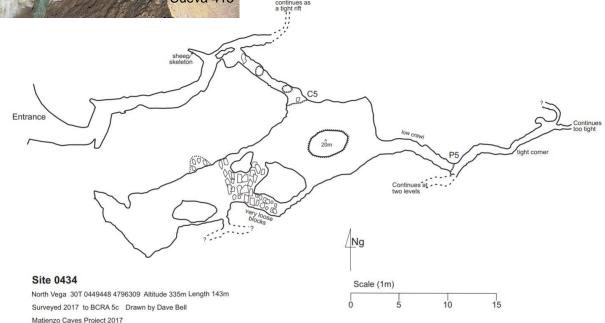






The resurvey work in 415 was completed and is in the process of being drawn up, with just over 100m added to the previous length. Unfortunately, no good leads were found that could link to the adjacent caves.

In North Vega, Cueva del Bosque (0373) was pushed down a pitch to a chamber with possible ways on. These will be looked at and pushed in 2018. Two known sites were visited on the slopes of North Vega: Cueva de Acebo (0433) was capped to get around a corner, but it was found too small beyond and site 0434 was re-surveyed to 143 m (an extra 68 m) but needs more work to progress.



A small resurgence (4590) was noted 150 SE of Fuente de las Colmenas (0363).

The Jivero caves (<u>0016</u>, <u>0017</u>, <u>0018</u>) were visited and native crayfish were spotted, despite the signal crayfish seen on a previous visit.

# The Northeast Sector and The Four Valleys System La Secada Area

In Cueva de Carcavuezo (<u>0081</u>) work continued with the re-survey work needed for the Therion survey of the Sistema de Cuatro Valles, with over 1km surveyed. With a re-calculated length of 59101m, just over 500m of the one kilometre



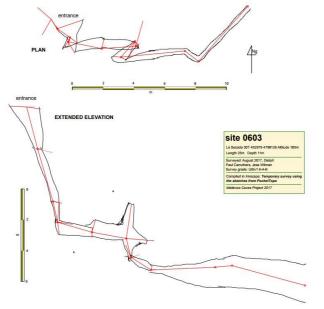


surveyed was new and is recorded in the table of finds. An important aim was to check out the end of *Strangle W Passage* and the possible sump. It was found not to be free dive able, but

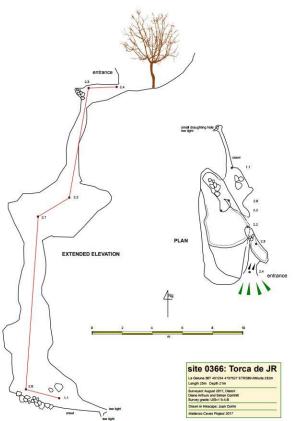
on the next trip it was dived with gear and the 5 - 6m sump then rigged for free diving. This dive emerges in the connection passage to Cueva Hoyuca (0107) and will give a quicker route to this area of the cave. Although open, one boulder needs supporting, and it may be possible to enlarge some of the tight sections.

Elsewhere in La Secada, at Cueva de los Tres Niños (0565) a high-level passage was checked out but closed down after 30m. At site 0603, the

route was pushed to a good draughting dig and a



temporary survey made. Work was carried out to open up the tight sections and secure loose areas with scaffolding, allowing further work to safely

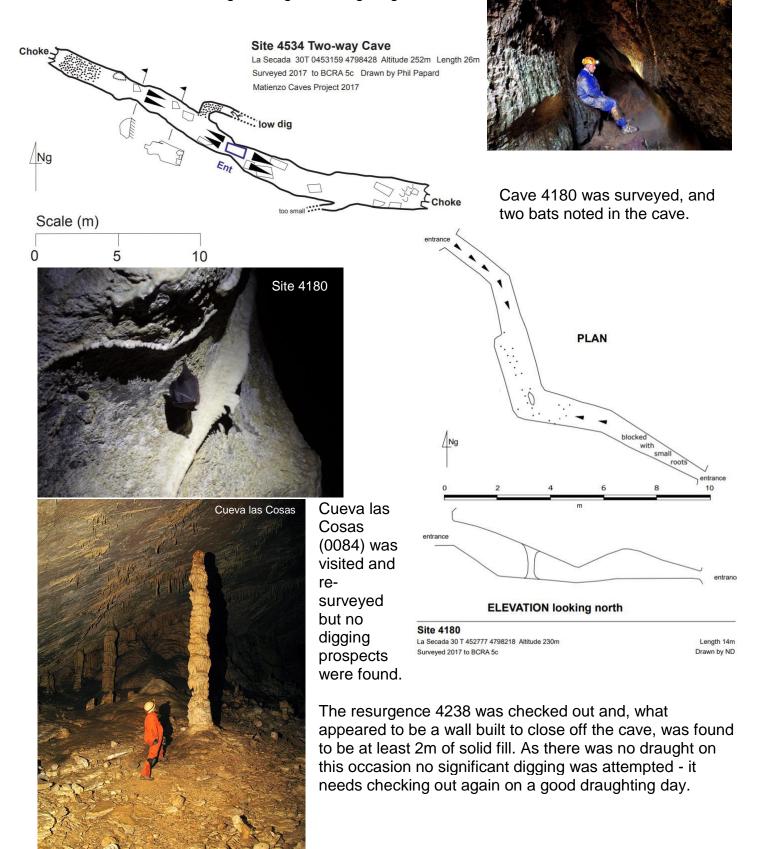


take place in 2018. At Torca de JR (0366), over the course of three trips with capping and jack hammering, the cave was pushed and surveyed. It now needs much more work to progress. The entrance to sites Cueva Seta (0093) and the nearby cave 1744 could not be found. They seem to have been filled in as the location should have been accurate given the nearby barn that is clearly marked on the map.

Two Way Cave (4534). This is an old remnant going both ways from a skylight entrance. It was

Site 4534

surveyed with an easy dig in a side passage heading to the north which needs checking out in good draughting weather.

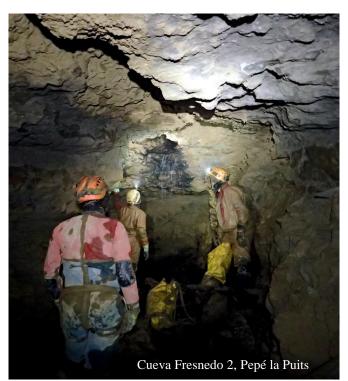




The dig "Socks" (1017) was pushed at the base of the shaft to 11.5m where capping is needed to make progress along the draughting route. Thirteen new sites were identified, the majority draught and may be dug in future years also a number of sites not previously located using GPS were found and accurately located.

#### Fresnedo Area

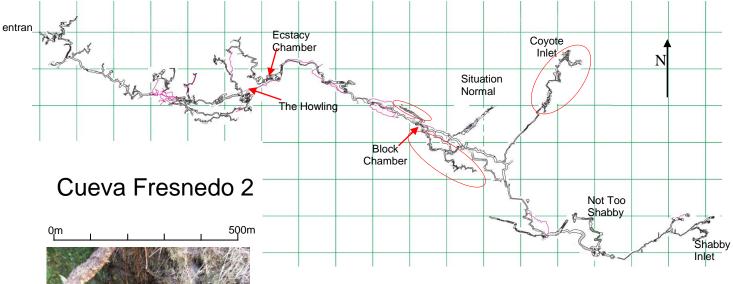
Near the far end of Cueva Fresnedo 2 (<u>0841</u>) three pushing trips were made to the Block Chamber and the Rio Lastras Inlet area via The



Howling, this very wet mud filled crawl bypasses a long route to Ecstacy Chamber. Using a scaling pole to get up a waterfall in poor rock a total, 628m of important new passage was found in this area. In the summer two trips were made to the Coyote Inlet area where the waterfall (Pepé la Puits) was climbed and 366m of upper and lower passages pushed with open leads left for 2018. New areas surveyed are circled in red on



the survey below. The detailed survey can be found on the web-site at





http://matienzocaves.org.uk/surveys/0841-2017s.pdf

Torca de Fanny (<u>1211</u>) in the Fresnedo area was visited with a view to pushing/digging, but was found to be full of rotting matter and plastic sacks. Apart from the health risk, this would need a lot of work to open up.

After a gap of many years the open lead (*Croissant Passage*) found in Cueva de Suviejo (<u>0122</u>) was visited and 330m of new passage surveyed, ending in larger passage and some 500m short of Cueva Fresnedo 2.

#### **Riaño Area**

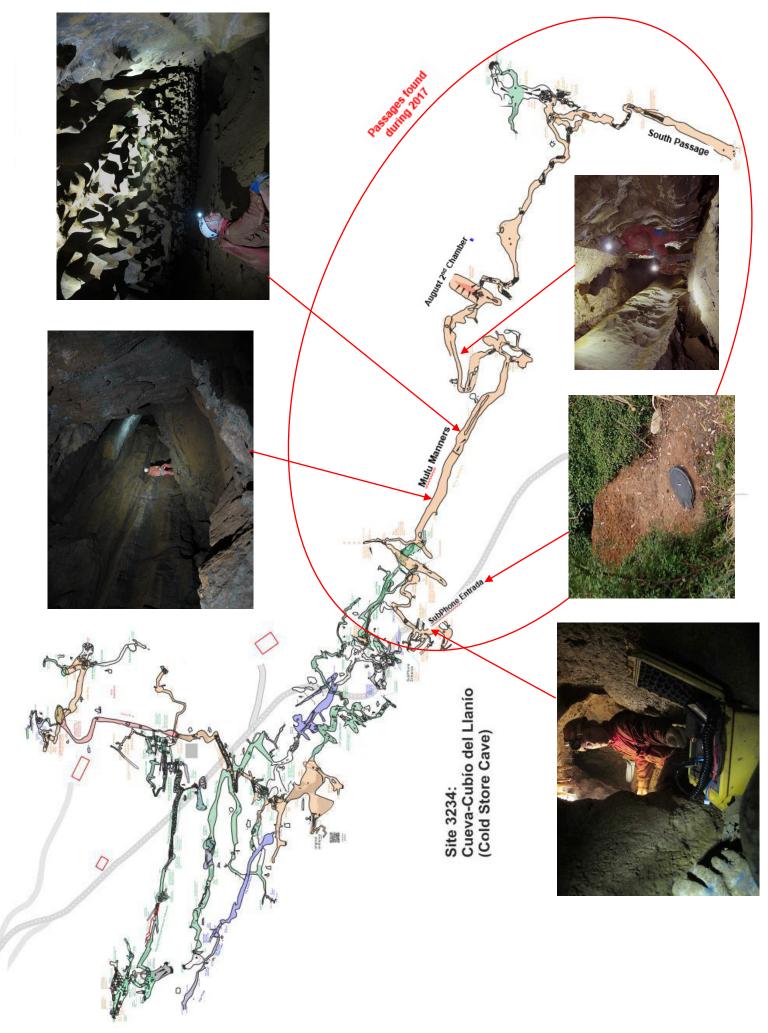
In Cueva-Cubío del Llanío (3234), at Easter the Mitre Passage area was pushed in dry conditions - much better than last year. This resulted in a major breakthrough with 1056m of new passage found including a large passage, Mulu Manners, heading E-W toward Cueva de Riaño (0105), with leads still left for the summer. At the start of this key extension, passages to the SW entered an area with tree roots and what appeared to be a small draughting hole near the surface. Ron Taylor's "SubPhones" were used to very accurately locate this point in an area of dense undergrowth, the depth was estimated to be about 6m to the floor at the SubPhone station, indicating that approximately 5m of digging was needed to the highest point seen in the

Cueva de Suviejo Croissant Passage

cave. As the trip to this point is very awkward and takes over 1.5 hours, a dig was started (site <u>4536</u> - SubPhone Dig). In the summer many days were spent digging and installing an 800mm diameter entrance tube and door, once the connection to Cueva-Cubio del Llanío (<u>3234</u>) was made giving the needed easier access to the far end of the system. Using this entrance three pushing trips were made in Cueva-Cubio del Llanío where large fossil passages and chambers were followed for over 1km, all with a good draught. These passages run above and over the *Road to Torno* area in Cueva de Riaño (<u>0105</u>) and it is possible that they are related to the high levels that lead off from *Pendant Chamber*. An open, draughting lead was left to be pushed in early 2018. When the link is made, it will make the Four Valleys System over 65km long.



SubPhone Entrada (4536) – locating spot above SubPhone station in cave, digging, installing tube and concreting round the fitted lid



At Easter Fridge Door Cave (<u>1800</u>) was flooded below the entrance pitch, however in the summer the water level below the entrance was low and allowed access to the streamway and the dive site. The constriction found previously was removed and a 1.5m wide and 2.5m high steamway was followed for some 31m to a further clear duck/sump. This passage and sump will be pushed and surveyed in 2018, a sketch of the new passage has been added to the survey shown here.

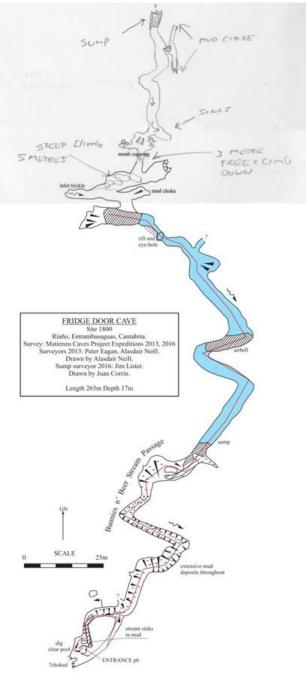
Work continued to make the Giant Panda entrance (2691) to Cueva Hoyuca (0107) safe, following the rock fall at the first pitch two winters ago. However, on close



inspection, it was decided that, although the pitch top could be cleared, this could undermine the large block that had moved in the original collapse. To avoid working in this danger area it was realised an easy dig at the

bottom of the entrance would gain the pitch away from this boulder, giving safer access. Work was started, but in doing so the original way down was blocked. This entry is not currently possible, in 2018, work will be completed on this new access route, including installing an 800mm diameter tube in the entrance drop.

Elsewhere in the Riaño area, five new sites were located and require more work to make progress. Cueva Shelob (<u>4173</u>) was dug with an ongoing passage





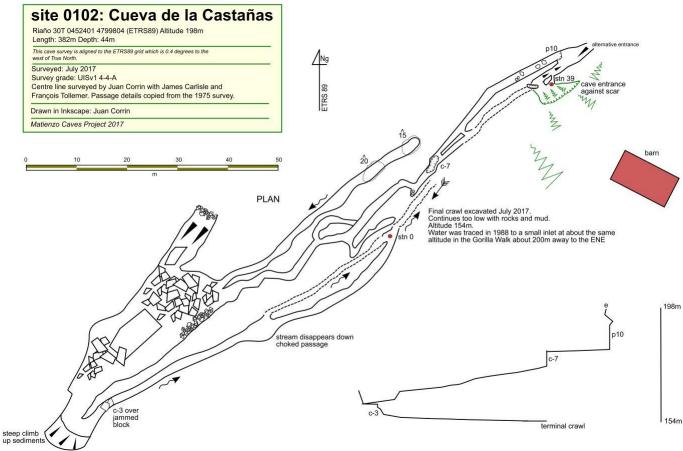
draught, it was thought not to be a good prospect for more work. Above the Four Valley System, Cueva de la Castañas (0102) was resurveyed and examined to see whether it could be a better entrance to the system than the Giant Panda Entrance (2691) but it became clear that the low and very wet crawl at the

needing more digging to get along a visible but small passage. On drawing up the extension in Cueva-Cubío del Llanío (<u>3234</u>) it is clear that it



runs very close to Cueva Shelob

and a connection seems possible. Site <u>4172</u> was pushed to 7m deep and 12m long but, with no bottom would not be a good or safe way in if it could be connected.



CENTRE LINE ELEVATION ON W - E

In the same area Trackside Pot (<u>4517</u>) was opened up to allow access to a18m pitch, but it was small at the bottom with no draught and no prospect.

# North Sector, Solórzano and the Riolastras Area

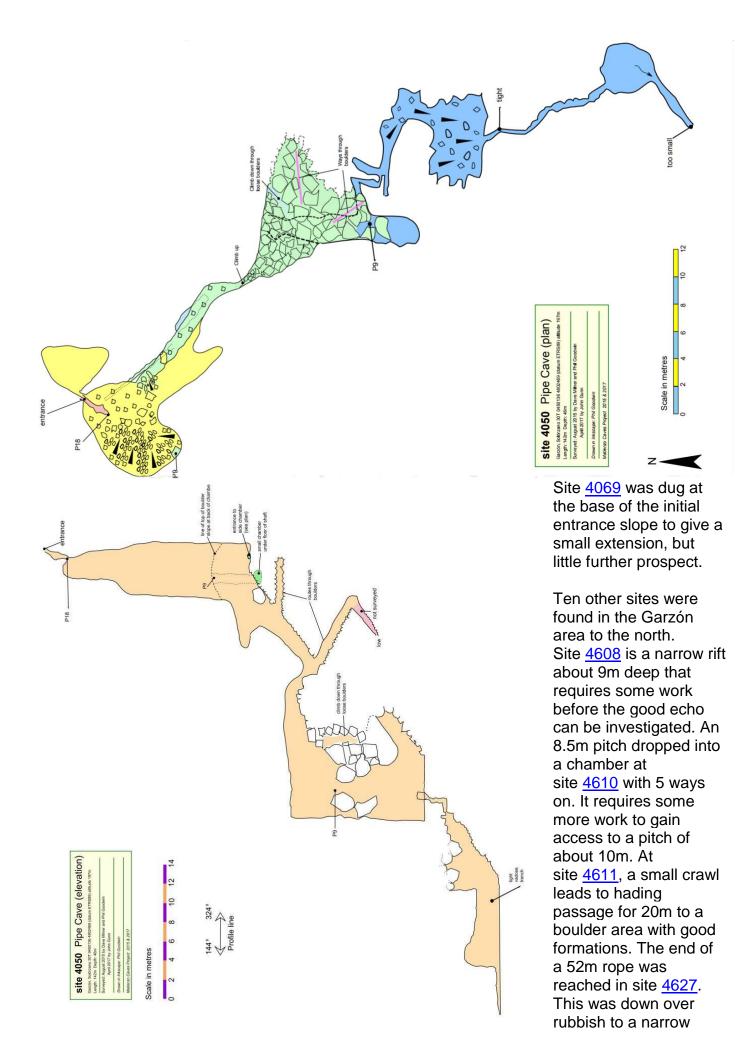
#### Solorzano Area

At Torca de Canastrillas (4407) more slippage had taken place and it now needs more extensive boarding and scaffolding to make safe before work can start to make progress. At Garzón, Pipe Cave (4050) was pushed and surveyed to 140m of which 32m was new. Signs of flooding were noted.

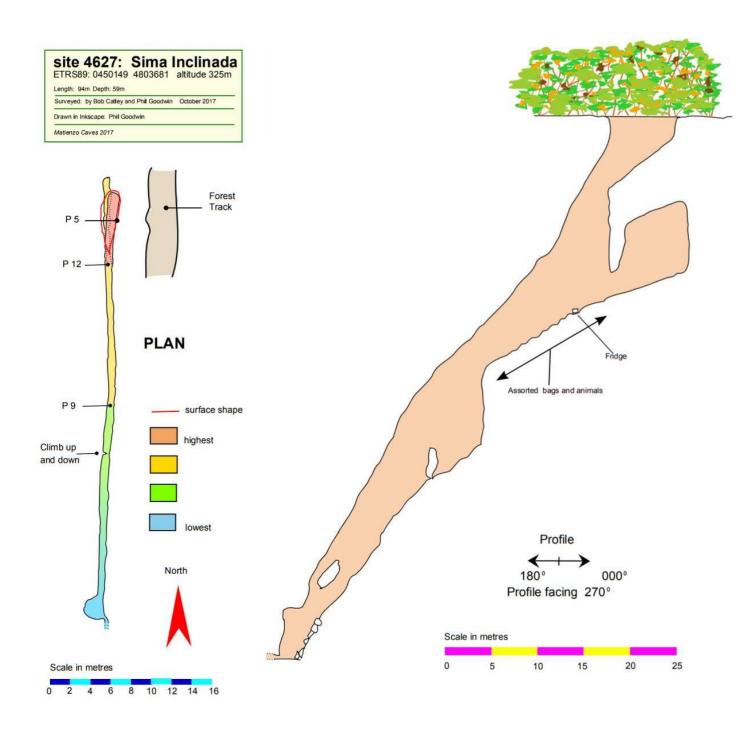




Page 23



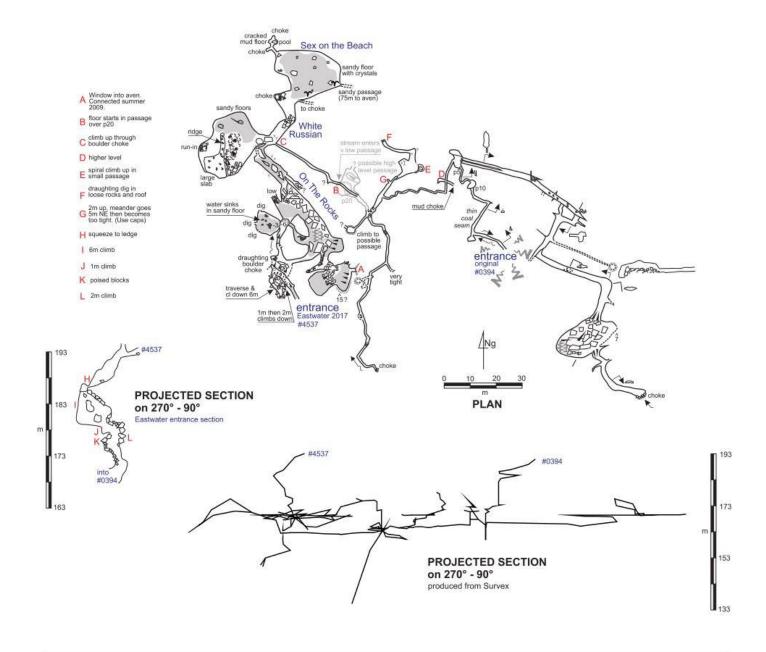
canyon climb down to a short pitch which dropped into a chamber where the cave continues in a very small, tight crawl. At



site <u>4636</u>, a slanting bedding cave descends at about 45 degrees for 25m to enter a small, debrisfilled chamber. The draughting passage can be seen to continue for 10m but is too small to enter. Five smaller sites with less prospects were also pushed.

## Hoznayo/San Antonio area

When looking for Cueva de Collada (<u>0394</u>) in La Gatuna, a new site, Eastwater Entrance (<u>4537</u>) was found, enlarged and explored down between boulders and into Cueva de Collada giving a much better entrance and an extra 49m of passage. This should help in pushing this site which seems to be the origin of the *Suit Wrecker Inlet* and *Friday the 13th Passage* in the far SE of Torca la Vaca (<u>2889</u>).



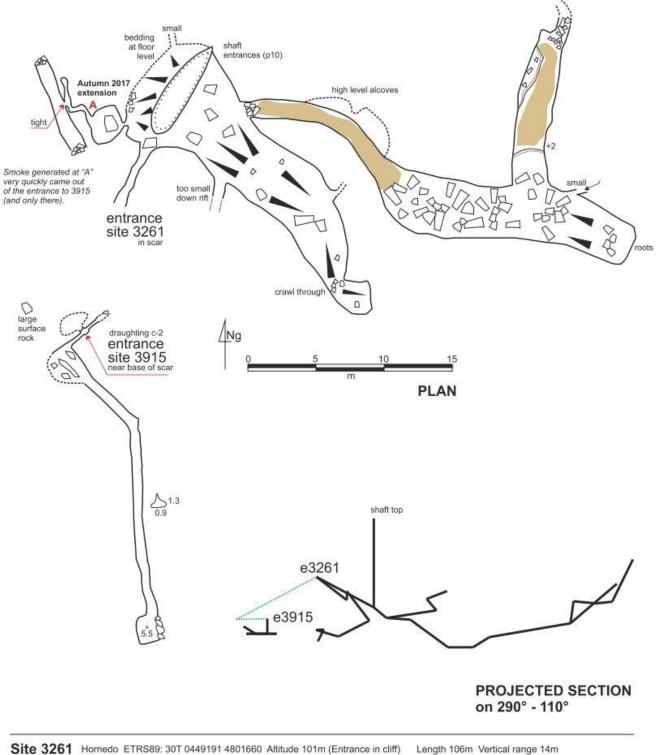
Sites 0394 & 4537 Cueva Collada (original and Eastwater entrances) La Gatuna 0394 @ 30T 0449818 4798844 Altitude 189m; 4537 @ 30T 449739 4758824 Altitude 193m (Datum ETRS89) Length 989m Depth 54m Surveyed 1982, 2005, 2006, 2009, 2017 to BCRA 5c Drawn by Juan Corrin in Corel Draw from original drawings by Juan Corrin, Torben Redder, Peter Smith, Johnny Latimer, James Carlisle and Alex Ritchie

Matienzo Caves Project 2017

At Hornedo in Torca la Vaca (<u>2889</u>), 260m of new cave were surveyed in the Frizzington Extension and Mad Arse areas, more work here is needed. Nearby three new sites were located (<u>4583</u> and <u>4584</u>) and pushed to where digging is required.

The area to the north of the Entrambasaguas-Riaño road was looked at. The main cave (3261) in the cliff was reinvestigated with a dig at the base of the entrance slope enlarged and 15m of passage entered. This appeared to increase the draught in the nearby surface dig, 3915. The latter, very strongly draughting site, was excavated and about 40m surveyed to a collapse zone.





SITE 3261 Hornedo ETRS89: 301 0449191 4801660 Altitude 101m (Entrance in cliff) Length 106m Vertical range 14n Surveyed 2009 & 2017 to BCRA 5c. Original drawings: 2009 by Juan Corrin; 2017 drawing by Phil Goodwin.

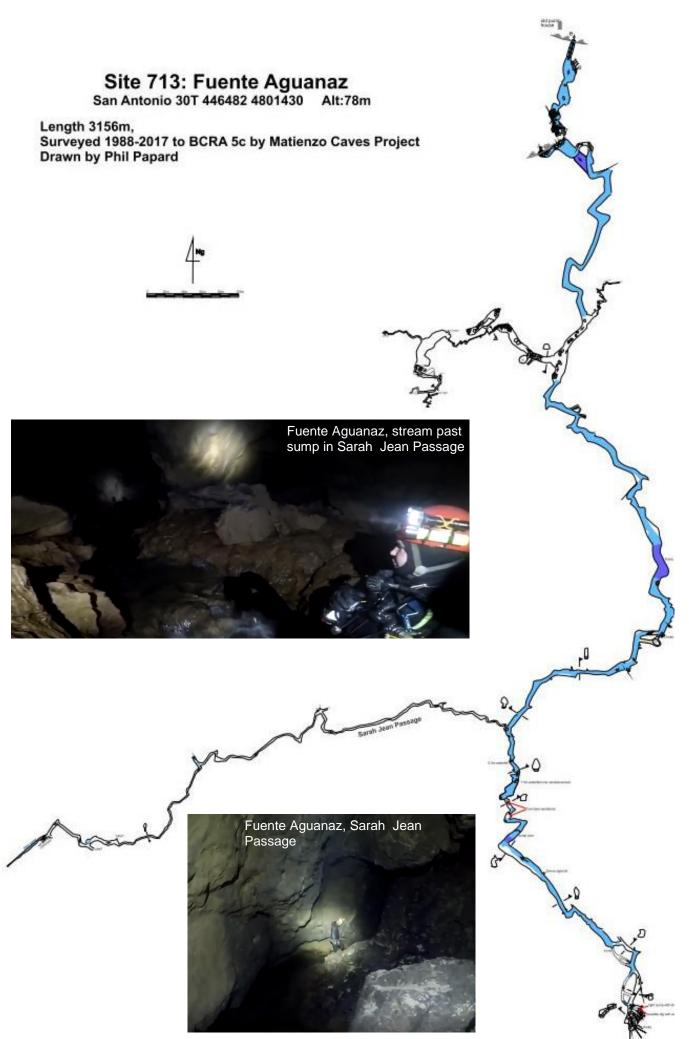
Site 3915 Hornedo ETRS89: 30T 0449188 4801650 Altitude 90m Length 27m Depth2m

Surveyed 2017 to BCRA 5c. Original drawings: Phil Goodwin.

Drawn in CorelDRAW by Juan Corrin

In the east of this area 20 new sites were found, including site 4620, a walk-in, well-developed cave 30m long, site 4632 a 15m long, steep low cave at the base of a cliff, and site 4613 is a 7m old through cave. The other sites need more work and will be looked at in future years.

Attention was diverted to Fuente Aguanaz (<u>0713</u>). This proved to be extremely profitable as, on the first of three trips past sump 1, a major inlet (Sarah Jean Passage) was entered and followed for a considerable distance before reaching a sump. The passage, up to the sump, was surveyed. This short sump was dived to more passage and a boulder choke where a hole could be looked through into what appeared to be a higher large passage.



To gain entry some rock needs removing with a lump hammer, but there was no time to push further in 2017 and it is planned to continue at Easter 2018. The far upstream end of Fuente



Aguanaz (0713) was also checked out to see if the main sump had been missed. The assumed sumped passage shown on the survey prior to the end proved to be correct and it seems all the water does come from the final tight and sharp sump. The best prospect at this end may be by digging above the final tight sump

Diving work was started at Invisible Cave (3283) reaching sump 9. In this

sump gravel had to be dug out under water to allow access for further pushing. On the next trip, the sump was found to close down, and the water smelt very polluted. As both divers felt ill that evening pollution seemed to be confirmed. In the east of this area 20 new sites were found, including Site <u>4620</u>, a walk-in, well-developed cave 30m long, site <u>4632</u> a 15m long, steep low cave at the base of a cliff, and Site <u>4613</u> a 7m old through cave. The other sites need more work and will be looked at in future years.

Seven new sites were located in the San Antonio area, none require more work to progress, the longest at present being site 4569 a rift 10m long ending in a choke (4569). Also in this area, Site 3027 was dug and pushed to 12m with more work needed.

**Navajeda Area** In the hill behind the Church at Navajeda, two new sites were found: 4576 - a 3m long tube needing digging to make progress, and site 4575 - a 3m long cave to a dig with the passage continuing. Cueva de la Iglesia IV, as 4575 was later called, was dug over a few days and pushed into a complex area of phreatic eroded chambers with good formations, this was surveyed to 78m and photographed. Unlike the other "Church Caves" this did not seem to have any archaeological significance due, we assume, to the small entrance that needed digging and the use of snappers to enter!

Further west, photos were taken in site 4386, <u>Cueva del Palo de la Mesa</u> and, at shaft <u>4489</u> towards Navajeda, progress was made down over bags of rotting bones to 3m of descending passage with a slight draught that needs digging.

## Cobadal/Camposdelante Area

A lot of prospecting work took place at Camposdelante, with 35 new sites located (4543 to 4564) which are all detailed on the web-site at http://matienzocaves.org.uk/history/2017.htm Just under half of them have some potential and 3 shafts were undescended needing work to enter in 2018. Of note were 4549 - pushed to 22m deep to a choke; 4553 - pushed to 21m deep to a dig; 4558 - explored to a shaft and tight squeeze with a further shaft and climb to a choke and 4573 - climbed down in a rift to a mud floor and on for 15m to a choke with a draught. Dos Perros (2988) was checked and the sump level



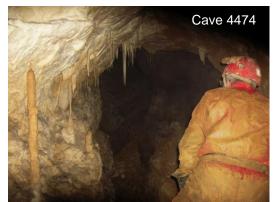
was found to have dropped to a pool with a passage continuing, but was too narrow to follow.

**Riotuerto** working with and in agreement with the Spanish club <u>G. E. Pistruellos</u> **Moncobe Area** 

In El Cubillón (2538), the second pitch was re-rigged to remove a rub point and OBA was placed in the sump - later detected at Fuente Aguanaz, as discussed in the hydrological section of this report.

Much prospecting took place this Easter with 12 new sites located, of these five need more work

to gain significant cave; and two shafts were left undescended (4526 and 4527). In late October at site 4525 a pitch into a chamber was opened and then dug to a draughting rift with some open leads, this site was surveyed and is in the process of being drawn up. and surveying the find. But more work is needed and leads remain. Work at site 4474 included: opening up the entrance pitch to get better access; pushing one lead to a pitch (still to be pushed); and a second to a crawl which led to more chambers and large passages ending in tight sections. Part of the cave was surveyed but more work and pushing is needed in 2018.



#### Ideopuerta Area

At Torca de Hoyo Carabo (Washing Machine Hole, <u>3420</u>) a lot of digging to remove flood debris was needed to gain access. The traverse across the pitch found no onward lead or further pitch. The tight section at the bottom of the cave still needs to be pushed.

Cueva de los Campizos, (YoYo Cave, <u>3812</u>) was pushed at the bottom but nothing of note found and the cave was de-rigged.

Four sites were checked out for future work: 3692 and 4483 are worth digging; 3655 was pushed through a tight section into a choked chamber, but was not worth more work.

#### Barrio de Arriba Area

A walk-in rift cave <u>4606</u>, was found in late October, but quickly became more arduous to explore, with difficult traversing in the roof. Over 10 pitches were descended along the passage - all blind, and continuing exploration along a draughting right hand branch will require a thin person. The length of this site was surveyed as 267m, and is in the process of being drawn up, the line survey (Survex file) can be found at <u>http://matienzocaves.org.uk/descrip/4606.htm</u> where the completed survey will appear when complete.

