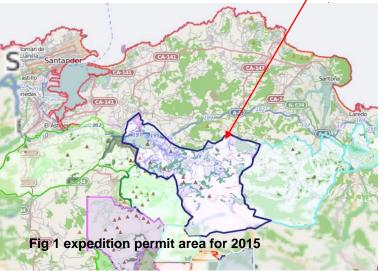


Cave exploration during 2015

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. We also continued to complete our work in a few of the caves we have worked on in Voto and Riotuerto (the parts of two administration areas that were removed from our permit in 2014), under an agreement with the Cantabrian Caving Federation and the two local clubs who now have these areas.

About 50 cavers took part in the 2015 Matienzo expedition. The main work took place at Easter and during July and August, but there were also a number of



cavers making significant contributions at a number of times during the year.

About 10km of cave was surveyed of which some 5.5km were in new discoveries with open leads left for 2016. In addition 128 new caves and sites were found and located and many were explored – all the details on these and comprehensive information on all the work which the expedition has done can be found on our website <u>http://matienzocaves.org.uk</u>.

Nearly 4.5km of resurvey work was carried out in the major systems in our area, as we need modern digital surveys in order to tie in different finds and distribute any errors – most of the original surveys that need updating are from the 1970s and 1980s.

As part of the hydrological work agreed at the SEDEC conference at Ramales del la Vitoria in 2014 a major water test was carried out at **Cueva Valline (733**). This test showed that the water flowed to the main upstream sump in **Cueva-Cubio de la Reñada (48)** in Matienzo and then directly to the resurgence at **Cueva del Comellantes (40)**. Detectors in the passage that had

been connected to Comellantes by diving were negative, showing that this is a separate flow and



that the main stream bypasses this area. The resurgence at **Cueva del Molino (791)** in Bustablado was negative. With the proven link between the Vallina and South Vega systems it shows that there is the potential for another



100km system in the Alto Asón area.

The winter at the beginning of 2015 was especially wet, with major flooding in Matienzo and the surrounding area. This caused a further collapse at **BigMat Calf Hole (site 3916)** and also at the **Giant Panda (2691)** entrance to **Cueva Hoyuca (107)**. Work was carried out to make BigMat Calf Hole safe and accessible but the latter is still to be excavated and the collapsed area made safe.

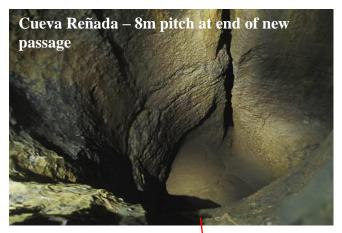
Main explorations and surveys carried out in 2015 - see table below.

Matenzo Caves 2015 - new surveyed caves and passages					
Cave	Name	Area	Previous Length (m)	New Length (m)	Extra Length Found
2889	Torca la Vaca System	Hornedo	18299	20,376	2,077
0048	South Vega System, Renada Area	Ruesga	33,071	34,079	1,008
0733	Cueva Valline	Arredondo	32,458	33,300	842
4042	Cueva Riocueva	Hoznayo	4682	5,125	443
1162	Orillonzuco	Ruesga	400	623	223
2964	Not Too Bad Pot	Ozana	86	241	155
0107	Sistema de Cuatro Valles	Ruesga, Sorlórzano, Voto	57,364	58073	132
4171	Fuente Francés	Hoznayo	X	126	126
4046	Arroyo de Canastrillas, Cueva del	Sorlórzano	X	117	117
4050	Cave	Sorlórzano	X	110	110
4229	Cave	Hornedo	x	90	90
0841	Cueva Fresnedo 2	Solórzano	7599	7640	41
4189	Cueva Ruffle	Ruesga	X	13	13
4123	Shaft	Alisas	X	23	23
4121	Shaft	Alisas	x	13	13
4120	Shaft	Alisas	X	10	10
4124	Shaft	Alisas	X	6	6
4122	Shaft	Alisas	X	3	3
Total new cave found and surveyed in 2015					5,432

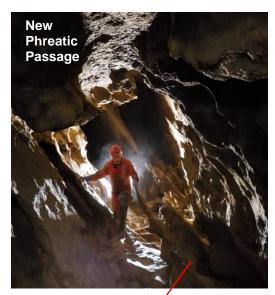
<u>Minor sites and finds are not listed here but all details are available on our web site</u> (<u>http://matienzocaves.org.uk</u>), including locations, any surveys and photographs.

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

In **Cueva Vallina (733)** a major water tracing exercise (as described above) showed that there is a link to **Cubio de la Reñada (48)** and work was started to prepare for a major diving exercise at Easter 2016, with the first 5 sumps relined (old line had broken) and diving gear taken in and stored for the work next year. The connection squeeze into



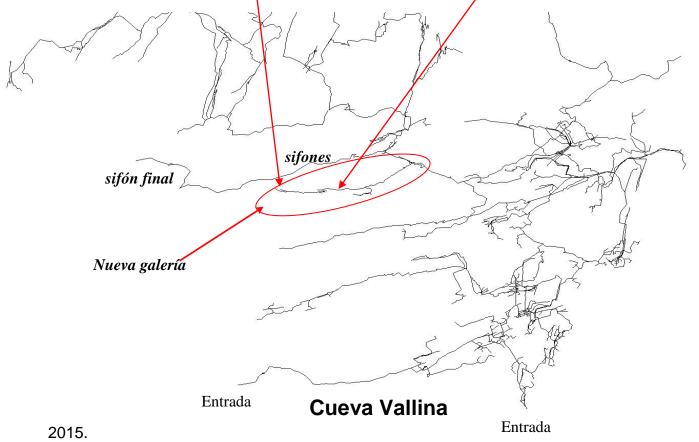
Vallina II was opened up following movement of a boulder that limited access – this



will allow good access for pushing in 2016. A new passage was found and surveyed going off from about 100m prior to sump 1. This parallels the sumps and is formed on a series of joints and runs for about 700m to near the end of sump 5. This series of passages was surveyed to 842m and

was left with a number of open leads including two pitches at the far end. Each needs bolting gear to both descend and reach continuations of the far side. These passages are phreatic in origin and must have been formed by slow moving water as there are many sharp delicate flakes dividing the rift type passage in places. It connected to the diving route it will not provide good access for diving gear or a suited diver to sump 6, but has good prospects as the series carries a good draught.

The final survey is still in the process of being drawn up as this passage was only found in October



Previous detailed surveys and the new one when complete can be found on: http://matienzocaves.org.uk/descrip/0733.htm

Alisas Area – The water falling on this area needs testing as it is not clear where the boundary may be between the catchments for Cueva Vallina (733); Cubio de la Reñada (48); Cueva del Molino (727) and Fuente Aguanaz (713).

However, it will prove difficult to test due to the lack of streams and access to the deeper systems that lie below.

In 2016 we will look to test the stream in **Torca del Hoyón** (567) as the only previous test was inconclusive. Work continued to prospect for caves and 13 new sites (4120-



4125; 4172; 4237-4242) and a number will be dug and pushed in 2016.

The sites we plan to



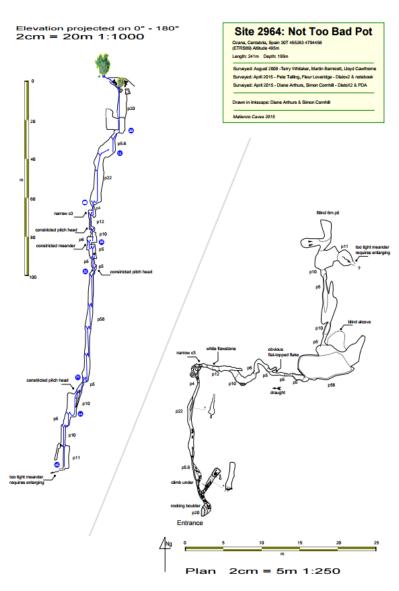
Cubio de la Reñada (48) Work continued to re-survey part of the system, including the now linked Cueva del Comellantes (40), that was found and surveyed in the 1970s. Over 3km was surveyed in 2015 of which just over 1km was new passage found at various points. Work on this re-survey and pushing the system will continue in 2016.



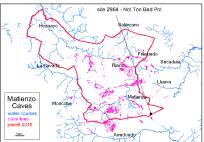




Not Too Bad Pot (2964) is a site that sits on the north side of the



ridge to the east of Cruz Uzano. This 65m deep narrow shaft was capped open during Easter 2015. Over 3 trips 7 pitch heads had to be capped out to make progress. This involved drilling over 100 holes and using around 400 caps. The cave now reaches a depth of 196m. Down the final 11m pitch the cave continues into a tight meandering passage, with a lump of rock in the floor preventing entry. Removal of this



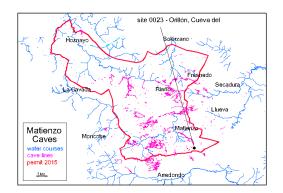


was attempted but needs more work in 2016. There is a small draught and it takes some water in wet weather.

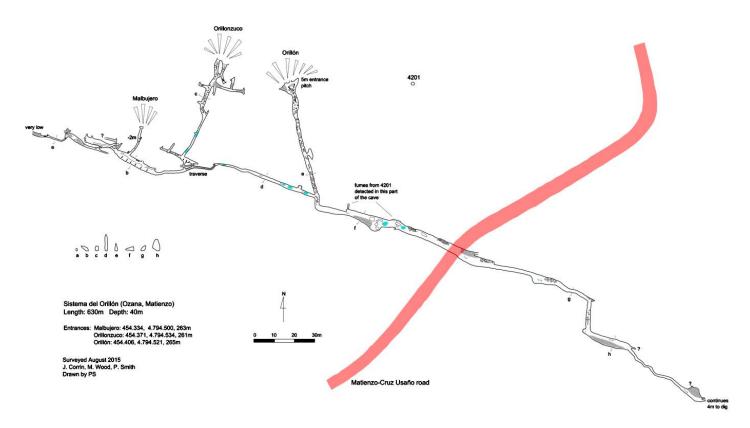
Testing is needed to see if this water flows to the Matienzo side (e.g. to **Cueva del Risco (25)**) or to the Ogarrio side via the **Cueva de Humo system (734)**. The survey can be downloaded from the Matienzo Caves Project website at: <u>http://matienzocaves.org.uk/surveys/2964.pdf</u>

Cueva del Orillón (23). This is the eastern of three entrances to the Orillón cave system. The normal entrance is **Orillonzuco (1162)** with a third entrance **Malbujero (1161)** nearby. A complete resurvey was done in 2015 bringing the original length of 400m up to 623m.

A possible fourth entrance is site **4201** was found. It has a 10m entrance shaft which leads to a further descent in boulders for 20m to reach the top of a 20 to 30m shaft. There are dangerous boulders at the top and the rift walls have been opened out to allow access if the boulders can be made safe. A smoke connection to the Orillón system meant it was not pushed in 2015, given the unsafe nature of the pitch.



The end of the Orillon system has changed since it was last looked at in the 1970s as much of the in-fill has been washed out. This is a promising site and is currently being pushed and dug. It draughts well and the water seems to flow away from the Matienzo side and towards Ogarrio. A water test in 2015 was negative and needs to be repeated in wet weather in 2016,



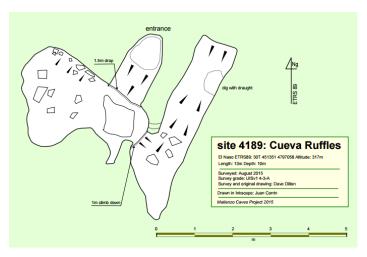
The survey can be downloaded from the Matienzo Caves Project website at: <u>http://matienzocaves.org.uk/surveys/0023-ps-2015s-survey.png</u>

North Vega, El Naso area west to Las Calzadillas

Torca del Mostajo (71). Work continued to push a new and better route into the lower system that was found in 2013 and 2014. This proved to be more difficult than expected and was handicapped by drill failure after a difficult trip to the far side. Some new passage and stream way was found but full exploration and survey needs to be completed.



At Calzadillas six new sites were identified and checked out, none went any great distance and are low priority digs. At El Naso a further 11 new sites were found of which two, **4219** and **Cueva Ruffles (4189)**, have going leads that need digging and have good draughts, these will be worked on further. A number of other sites that had not previously been looked at fully were checked out but all closed down or choke at depth and have low potential.



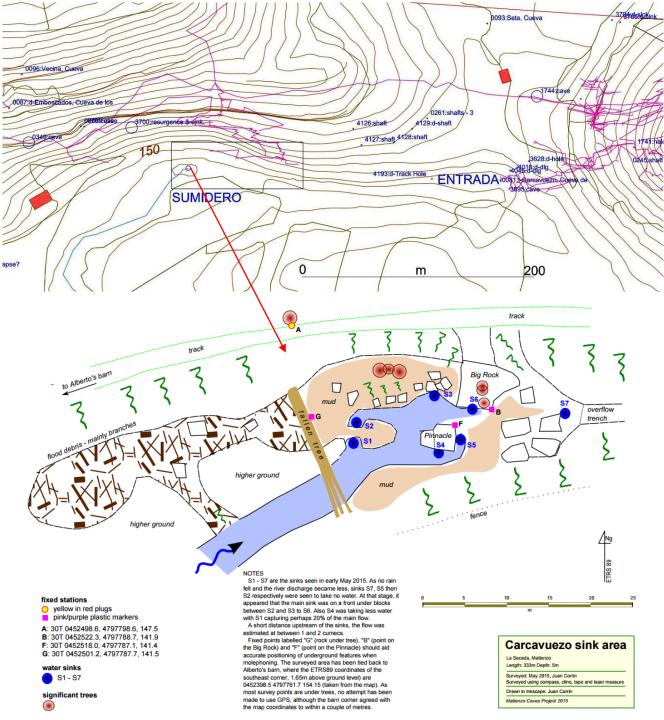


The Northeast Sector and The Four Valleys System

A number (17) new sites were found and dug, all require more work, the most interesting were: site **4179** pushed for 10m where more work is needed: and site **4214** which is an easy dig with a very good outward and is well worth a return in 2016. It lies in a good location for possible access to higher levels in the Four Valleys System that exists below. Dig **4131** had a small outward draught, but it needs a lot of work to if progress is to be made, as a result the nearby **4214** will be given priority in 2016. In Secadura, the choke at the western end of **Lenny's Cave (3721)** was worked on and pushed but no breakthrough was made.

In the Riaño area, seven new sites were found: **4173** ended at a low dig after 14m; 4175 went for some 10m to a narrow continuation; **4187** was pushed to a choke, but near the entrance a passage with a draught needs more work to enter and **Shrewd Find (4188)** went for some 12m to a calcited boulder dig.

Cueva de Carcavuezo (81) – following extensive flooding over the winter, work was carried out to both check the line of the cave near where the water normally sinks and also a surface survey to check the line of the river. This is needed as the current map shows it in the wrong place (due to



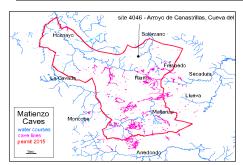
tree cover hiding it in the aerial photographs. A radio location system was used to locate key passages and a comprehensive survey was produced. In the cave a 100m extension was found going towards the surface, this was also radio located. Work continued for the update and resurvey work of the Four Valleys System.

Cueva Hoyuca (107). Little work was done due to the very wet winter causing a rock fall over the pitch in the **Giant Panda Entrance (2691)** this will be cleared and stabilised in 2016. In the entrance series of **Cueva Hoyuca (107)** a visit to Tilers' Way was made and the water lowered, but it still requires more work. Twenty four metres of new cave were surveyed. Site 718 was checked and pushed to a corner that looks like the one seen in Ttiler's Way with some work this looks like a good prospect for a new entrance to the system.

Cueva Llanío (3234), the Horny Dog area was checked out and a rift dropped to a mud choke, but no significant passage was found. One lead has a pool that needs to be removed to make progress; an attempt to pump out the pool was not successful with the equipment available.

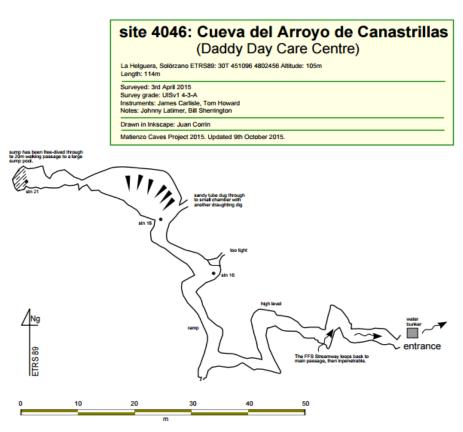
Cueva Fresnedo II (841) A team spent some time sorting out the "by-pass" which is a tight water/mud filled squalid passage (The Howling) to the further reaches and added a little to the cave. They found that this route seems to keep open as the water did drain away and the squalid section is short and cuts out some hours of fairly hard caving. Pushing at the end is now a much easier prospect and will be a target for 2016.

Solórzano and Riolastras Area



to 20m of 4m wide walking passage ending at a large blue sump. A large arch can be seen below the water. This site is an excellent diving prospect.

At Riolastras 12 new sites were found, most choked or closed down but **4141** and **4184** are worth more work. **Cueva del Arroyo de Canastraillas (4046)** was found to lead to a high level passage for some 100m to a short sump (free dived)



Northwest Sector

El Cubillón (2538) in agreement with the G E Pistruellos group a trip to the end had to be curtailed due to a fall of boulders that carried the risk of these boulders moving and blocking the way out at breakdown chamber at the bottom of the second pitch.

The nearby site 2749 was dug to a narrow draughting slot, but will need a lot of work to make



In the **Navajeda** area 10 new sites were found and pushed, four sites needed digging to complete, but they were found to choke or have a narrow slot as the way on. The exceptions was site **4227** a large gully/rift which looked choked but needs a closer look in 2016, and **4144** which was pushed to over 100m. The survey is in the process of being drawn up (carried out in October 2015).

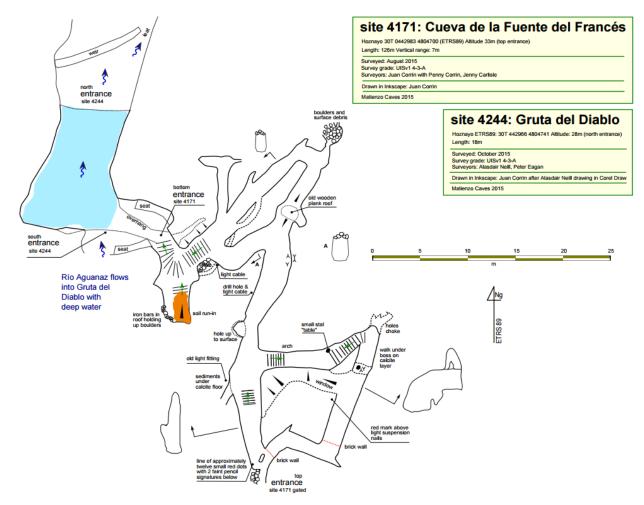
progress. Nearby an 8m choked shaft was found.

At Hornedo two choked shafts (**4230**, **4231**) were found and explored and a well decorated cave

4229 was pushed and surveyed to nearly 100m, and would befit from a further look.

At Camposdelane a side passage in **Civil War Cave (3543)** was dug, some progress was made, but this will be a long term dig.

The well-known sites of **Cueva de la Fuente del Francés (4171)** and **Gruta del Diablo (4244)** were surveyed as part of our project to re-survey the known caves that were in the area newly allocated to us in 2014.

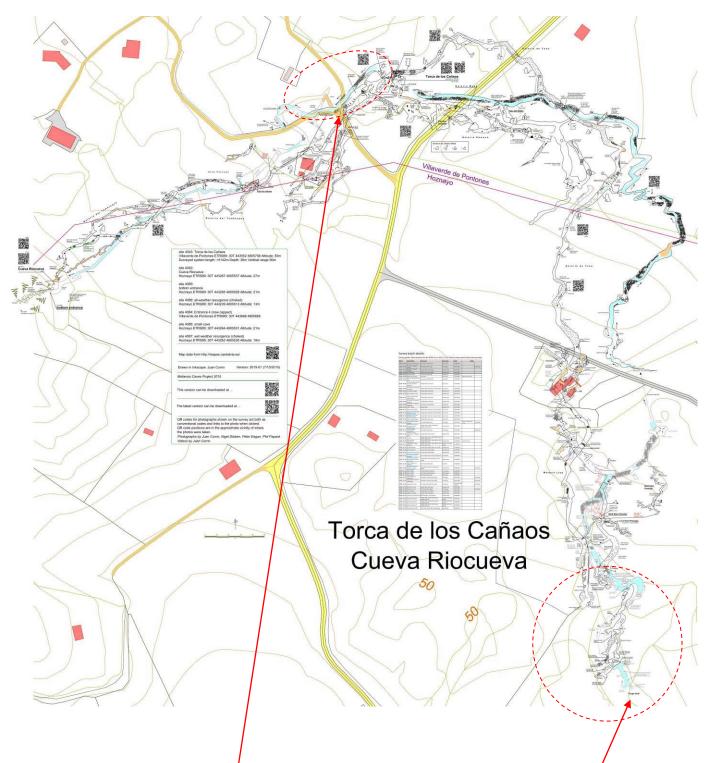


To the east of 4171 a dig **4243** was found. It is further to the east of **Pozo de la Hoya (4017)** and well above it. This area is hard to prospect due to undergrowth and rough terrain, but it is clear it is worth another look in 2016 when 4017 will also be surveyed as part of our project.



Cueva Riocueva (4042)

The re-survey and exploration of this cave in the far north of our new area was completed apart from some small side passages. This brings the length of this cave up to 5142m.



The main added passages were;

a section of stream way below the **Torca Cañaos (4043)** entrance and a series of new passages at the south end of the system. These ended at a low passage which is over half full of cow manure that must come from a nearby farm.

The detailed survey can be found on the Matienzo Caves Project website at: <u>http://matienzocaves.org.uk/surveys/4043-2015s.pdf</u>

Cueva de Los Campizos (3812). The vadose trenches found leading off the bottom chamber were explored. In the up-slope vadose trench the passage meanders gently with an initial descent

of 8m followed by a series of short pitches before it becomes too tight at the bottom level. This route was pushed and partly surveyed at Easter 2015. Just before the rift gets too tight an 8m climb leads to wider passage and a climb/pitch down to a chamber with a narrow outlet (too small for many metres). However, a 20m climb leads to a further passage and a drop down with some water entering on the far wall – this pitch is still to be descended and the survey completed, which will be work for 2016 when the weather is not too wet. Other leads were looked at and the main lead was a choke that will be difficult to dig as it is above head height so it will need remote means of removing the rocks.



Torca la Vaca (2889) The exploration at Easter was hampered by finding that the connection crawl from the dry



entrance **BigMat Calf Hole (3916)** had partly collapsed due to the flooding and wet weather over the winter. The blockage was cleared out over two days and temporary wooden

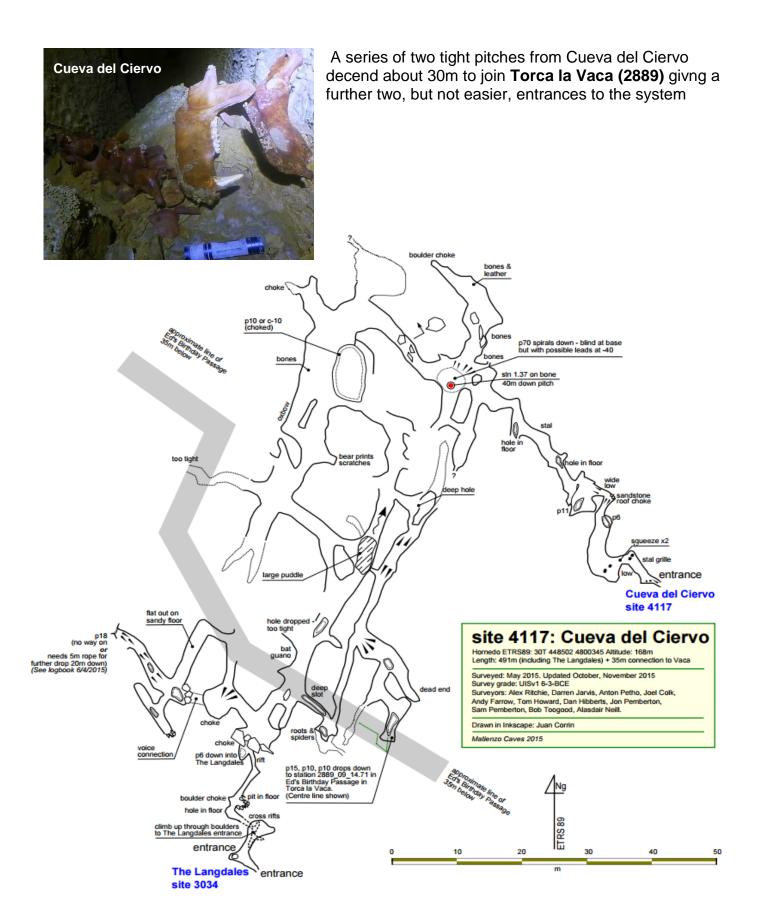


shoring put in place. In August strong tubes were placed in this crawl, after they had been cut into a "kit" form so they be tube. More work is needed in 2016 to ensure this entrance

could be lowered down the entrance tube. More work is needed in 2016 to ensure this entrance remains open in the future. Using the BigMat Calf Hole entrance the area toward the south of the system around Should Have Gone to Survey School and Should Have Gone to Specsavers was pushed and a number of inlets and side passages surveyed. The leads in the far south around 5 Ways Chamber and the end choke proved not to give up any new passage. However, a new pitch was located just short of the end choke and is still to be pushed. A shaft in Deep Rifts Passage was found to be 30m deep where it closed down. Carrying on a traverse lead to a passage that met a hole to daylight, this was opened up to give a new entrance **Cueva Cuba Libre (4182)** in the middle of an overgrown wooded area. Due to the crawl in Deep Rifts Passage this is not an easy entry to the main system. Passages (Doldie's Draughting Passage) were found and surveyed north from between BigMat Calf Hole entrance and the Deep Rift Passage and these seem to be heading toward site 3300 and will be pushed in 2016. In November 805m of new passages were found and surveyed in the far SE of the system, a 200m inlet to half way along "Suit Wrecker Inlet" and a second 600m extended this major inlet to a choke, which is about 500m from **Cueva de Collada (0394)** in the adjacent valley of La Gatuna.

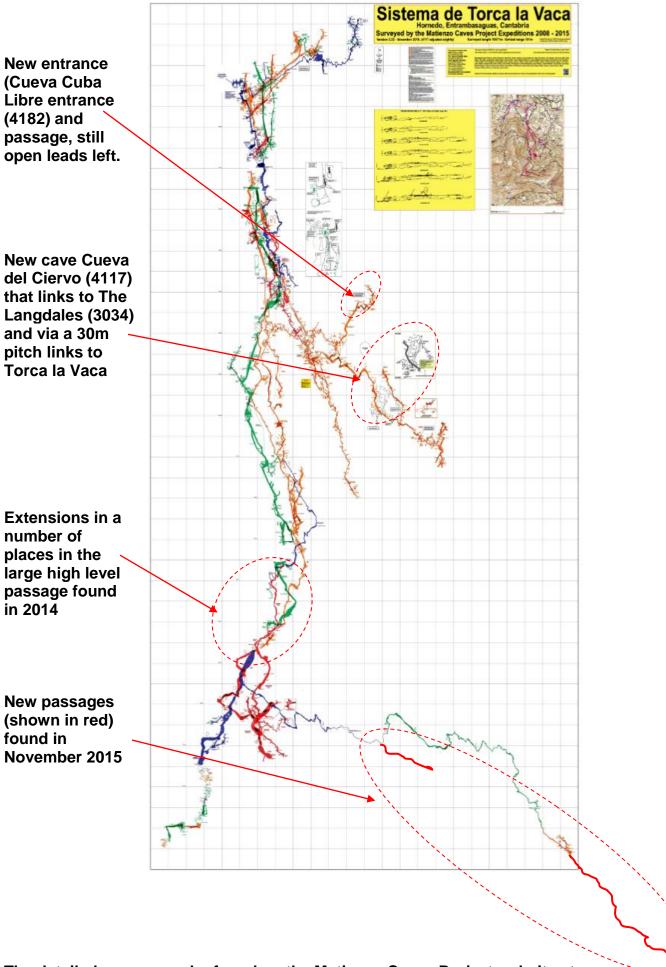
Cueva del Ciervo (4117) This new cave lies above BigMat Calf Hole (3916) and may have developed as part of a maze cave. It is at the same horizon as the more extensive maze cave Cueva de los Urros (2927) which is about 300m to the south, and may be of a similar origin. The Cave is heavily calcited and contans a number of bear bones and a number of bear pits. The cave was linked to The Langdales (3034) which gives an easier entrance.





The survey of this cave can be downloaded from: http://matienzocaves.org.uk/surveys/4117.pdf

The diagram below shows the location of the above sites and finds in the Torca la Vaca system that in 2016 should reach well over 20km in length as there are still many open leads.



The detailed survey can be found on the Matienzo Caves Project website at: <u>http://matienzocaves.org.uk/surveys/2889-v2-22-2015a.pdf</u>