



Tresviso Caves Project

Tresviso 2019

REPORT OF THE CAVING EXPEDITION TO THE TRESVISO AREA, EASTERN
MASSIF OF THE PICOS DE EUROPA, SPAIN

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Cover Picture: The Road to Wigan Pier, Cueva del Nacimiento (Arwel Roberts).

Abstract

This report provides an account of the 2019 caving expedition to the Tresviso area of the Eastern Massif (Andara) in the Picos de Europa of Northern Spain.

The 2019 expedition was undertaken with collaboration between numerous UK based caving clubs and the Spanish AD KAMI club, under the banner of the *Tresviso Caves Project*.

As per previous year's most of the work was concentrated on two main caves, close to the village of Tresviso.

Firstly, *Cueva del Nacimiento*, a >13km cave system with a height gain of over +535m from the entrance. The catchment of this cave totals 37 km² and, if linked with known cave systems high in the Andara mountain range, would create a potential >1500m deep underground traverse, one of the deepest in the world.

The second main cave of interest was *Cueva de la Marniosa*, slightly further up the valley and a feeder system into *Cueva del Nacimiento*. On the 2018 expedition a new entrance to the cave was discovered, creating a -423m deep through trip. A side objective of the 2019 expedition was to attempt this first through trip.

In addition, the ongoing reinvestigation of some of the caves on the higher Andara range was continued.



Picture: The Lake Depression (Pozo de Andara), Andara (Lisa Boore).

Introduction

The Picos de Europa is a range of mountains 20km inland from the northern coast of Spain, forming a Westerly extension of the Cantabrian Mountains. It consists of three main areas, the Western, Central and Eastern Massifs. It was the Eastern Massif (Andara) that drew the attention of Lancaster University Speleological Society (LUSS) in the early 1970s.

The early years of LUSS exploration were spent pushing *Cueva del Nacimiento (Cueva del Agua)*¹ located at the foot of the mountain range. Over the years this was pushed to the 11km and +300m mark, but after several years the cave was abandoned as all the major routes sumped and no continuation could be found.



Picture: Entrance series, Cueva del Nacimiento (Stuart Coxon).

LUSS turned their attention to the Andara region higher up the mountain range and sought caves that would connect into the *Nacimiento* system and hopefully create a record-breaking underground traverse. They found several deep caves around this 'top camp' area. *Sara*, *Tere*, *Flowerpot* and *Sima 56* were all pushed to respectable depths, but the connection remained elusive.

In 1986/87 the South Wales Caving Club (SWCC) and LUSS briefly turned their attention back to *Nacimiento* and investigated a number of sumps and pushed a bold steeply ascending ramp, gaining over 200m of height, at the back end of the *Nacimiento* system with a number of leads left unexplored.

¹ *Cueva del Nacimiento* is the official Spanish name for the cave known to UK cavers as *Cueva del Agua*. All UK publications pre-1996 refer to the cave as *Cueva del Agua*.

Between 2011-2014 the SWCC returned to *Nacimiento* to re-investigate the possibilities of mounting remote trips to the furthest regions of the cave, and re-climbed the steep ramps discovered in the 80's, in addition to a successful dive of the *Far Upstream Sump* in *Nacimiento*, extending the sump by another 80m and down to a depth of -46m. Additionally, the *Death Race 2000* chamber was explored discovering a way down past the previous limit of exploration to find over 700m of new passage.

Since 2015 the *Tresviso Caves Project* has continued work in *Nacimiento* finding more cave passage above and below the *Death Race 2000* chamber, extending the cave by over 5km and reaching a new height of +535m above the entrance.

In the past few years, exploration has returned to *Cueva de la Marniosa*, first explored in 1975. The furthest downstream sump was passed in 2018 leading to ongoing streamway, heading towards *Nacimiento*, and a new entrance *T20A Cueva de la Silvestre* was found, creating the prospect of a through trip between the caves.



Picture: T20A Cueva de la Silvestre entrance (Stuart Coxon).

Expedition Aims

The 2019 expedition was comprised of 14 cavers based in the village of Tresviso. Due to a reduced number of people objectives were more focused than in previous years:

Cueva del Nacimiento

- *Parting Friends* – attempt dive of the *Parting Friends* sump.
- *Dan's Big Room* – examine unexplored section of maze in area of *Dan's Big Room* and *Winter Gardens*

Cueva de la Marniosa

- *T20A Silvestre* – *Cueva de la Marniosa* – attempt first through trip
- *T20A Silvestre* – explore upstream leads, heading toward the *Valdelafuente*
- *T20A Silvestre* – attempt dive of *Bob's Crusade Sump* and *Wet Willy Sump*
- *Cueva de la Marniosa* – climb unexplored avens in the *Extra Caverns series*
- *Cueva de la Marniosa* – examine large voids above upstream passage
- *Cueva de la Marniosa* – resurvey of main upstream passage
- *Cueva de la Marniosa* – resurvey of main downstream passage

Minas de Mazarrasa

- *Pozo del Castillo* – search for way past the snow plug blocking way into the *1983 extensions*
- *T154 CUESTA* – explore beyond the wooden bridge and lower levels
- *Pozo del Castillo* – search for other entrances and,
- *Minas de Mazarrasa* – ongoing re-logging and exploration of old leads and entrance in the area

Sierra del a Corta

Above the furthest reaches in *Cueva del Nacimiento* is the *Sierra del Corta*. A heavily wooded area with several promising leads, that could potentially drop into *Cueva del Nacimiento* and provide an easier route into the back end to aid exploration at the far reaches.

- *A12* - a drafting shaft not yet bottomed. *Jurassic World* in *Cueva del Nacimiento* appears to be heading directly towards this site,
- Surface prospecting close to vicinity of *Terror Firma* in *Cueva del Nacimiento*. *Terror Firma* is only 40m vertically and 200m horizontally from some parts of the surface in the *Sierra del a Corta* region.

Other

- Locate and descend *FT43*, which draughts strongly. It is almost directly above *Boulder Chamber* in *T87 Mazarrasa* and would provide a bypass to the collapse at the *T87* entrance.
- Prospecting on *Hoyo Oscuro* and *Hoyo Evangelista*. Several locations in this area are the current highest sites/entrances on the mountain range,
- *Mine 2.32a* – there is a large unsurveyed level (with tram lines) leading to unexplored passage.



Picture: Andara (Phil Walker).

T13 - Cueva del Nacimiento

A full description of Cueva del Nacimiento is not provided here, but comprehensive details and surveys can be found in previous reports² and the expedition website³.

The following sections summarise the main discoveries made on the 2019 expedition. Further details of exploration are described in Appendix G: Expedition Log.

The Road to Wigan Pier - Parting Friends

The Road to Wigan Pier to Parting Friends series of passages were originally explored in the late 1970's to Spangle Junction and the Wigan Pier sump. In 1986 S.W.C.C. dived and passed the sump to more passage, several bypasses to the Wigan Pier sump and discovered the Parting Friends sump. The most straightforward (dry) route, to Parting Friends, is described in the following section.

At the far end of the *Black Hole*, heading into the cave, is a step up to an obvious passage running left to right. Follow this to the right into large passage with numerous side passages heading up. Continue along the passage until reaching the obvious ramp up to *Clapham Junction*. Stay right into the large continuation of the main passage. The passage heads down, passing a turning on the right back to the *Black Hole*. The passage gently descends for another 25m, passing a small passage on the right-hand side with the sound of the stream beyond. *This is one of the 1986 bypasses and has not been accurately surveyed.*



Picture: The Road to Mandalay, Cueva del Nacimiento (Arwel Roberts).

² "Expeditions to Tresviso and the Picos de Europa in Northern Spain (1974-1977)". LUSS (1978). "An Expedition to the Picos de Europa Northern Spain". LUSS. (1979). "Agua '86 and '87". SWCC. (1987)

³ <http://www.tresvisocaves.info/>

The main passage starts to ascend briefly, passing another short bypass on the right-hand side, and after 75m the passage turns sharply left and then right. A 6m pitch here drops into the main streamway below. A few meters further, on the right-hand side, is a high-level fossil passage, which is **currently unexplored**.

The main passage continues for another 25m to a deep pool, with a stream flowing over calcite on the far wall. A traverse round the right-hand side gives access to a 4m climb up the calcite. After another 20m the passage turns left and then right. A large wide traverse / pitch in the corner, drops back down to the sound of the stream. 10m further along the passage turns and corner and heads down. This is the route to the *Wigan Pier sump*. The recommended way on is a 2m climb up on the right-hand side, before the passage starts to head down.

An easier climb leads to 10m of passage to a window above the earlier travelled passage. The left-hand wall is heavily coated in degraded moonmilk and calcite, with water running over it. The way on is up a climb on this moonmilk. The climb should be approached with caution as a fall would probably prove fatal. The climb twists up for approximately 5m to a series of moonmilk slopes and crosses a blind pit in the floor. A further 2m climb up reaches a junction. Left is **unexplored**, but right is the way on and 25m of up and down passage leads to the edge of a pool / sump. This is a 3m swim, under a duck, to the far side.

The main streamway, *The Road to Mandalay*, is now encountered and is extremely impressive and intimidating especially in high water conditions.

Note: On the 2019 expedition nearly the entire streamway was rigged with 150m of rope to provide a safe traverse against the stream.

The main streamway continues for 100m before starting to ascend steeply up for nearly 60m, to the start of the *Parting Friends* sump.

Parting Friends

Sump 1 is 25m long at a depth of -6m and surfaces in a large air-bell / passage, *Cascade Air-Bell*.



Picture: Parting Friends sump 1, Cueva del Nacimiento (Arwel Roberts).

Sump 2 follows immediately and is 200m long at -18m depth, surfacing an air-bell, leading to Sump 3.

Sump 3 is 35m long at a depth of -6m and surfaces in the *Money Shot Air-Bell*. Sump 4 is immediately beyond but is currently **un-dived**.

A dry crawling passages above the air-bell, *Colon Crawl*, continues for 50m but becomes **too tight**.

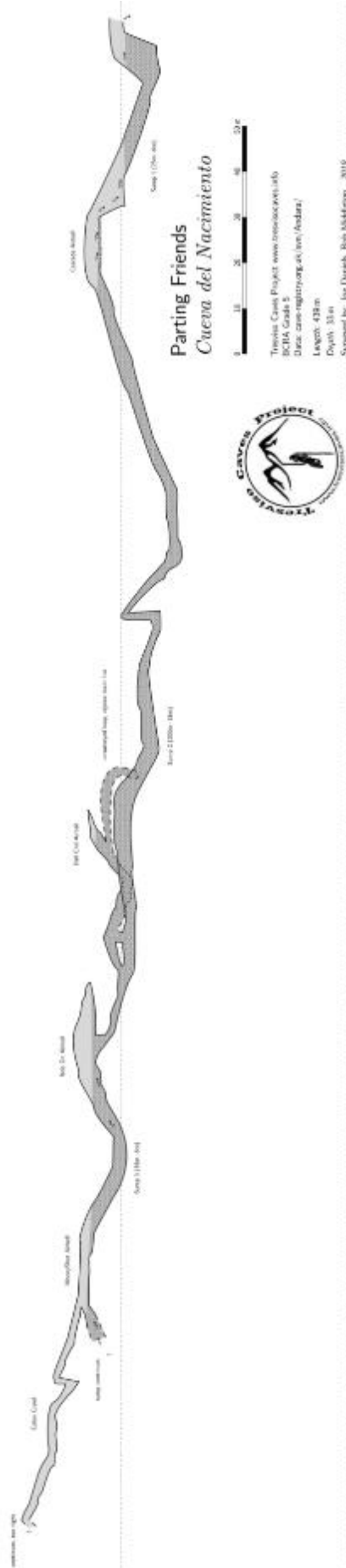
Note: A dye trace conducted from Cueva de la Marniosa has proved a hydrological connection between Marniosa and the Far Upstream sump of Nacimiento. The trace subsequently proved some of this same water appears in the Parting Friends sump. Parting Friends is the continuation of the main Nacimiento streamway and is following the main line of the cave, at a lower level. It is assumed that further dives at this site would probably follow a similar pattern to the 2019 dive, following a series of shallow sumps interspersed with short dry passage.



Parting Friends
Cueva del Nacimiento



Tresviso Caves Project www.tresvisocaves.info
BCFA Grade 5
Data: cave-registry.org.uk/sm/Andara/
Length: 439 m
Depth: 33 m
Surveyed by: Joe Daniels, Rob Middleton 2019



T19 - Cueva de la Marniosa

WGS84 30T x: 0361359 y: 4790462 z: 974m.

A full description of Cueva de la Marniosa is not provided here, but a comprehensive description and survey can be found in previous reports.⁴

The following sections summarise the main discoveries made on the 2019 expedition. Further details of the exploration and discovery are described in Appendix G: Expedition Log.

Alien Weaponry

From *Corner Chamber*, in upstream *Marniosa*, head approximately 125m further upstream to where the passage narrows to a stooping size passage in the stream. Just before the stream bends to the right, is station 42 of the survey, with an obvious dark void above and to the left. This is the entrance to the *Alien Weaponry* chamber. A steep climb up large boulders enters the large chamber, with dimensions of over 100m long x 50m wide x 25m high, much larger than the streamway below. The chamber slopes steeply down to the streamway and is unstable in places. Directly ahead and up, from the entrance to the chamber is a small passage that branches into three further passages. All involve hands and knees crawling and are **unexplored**.

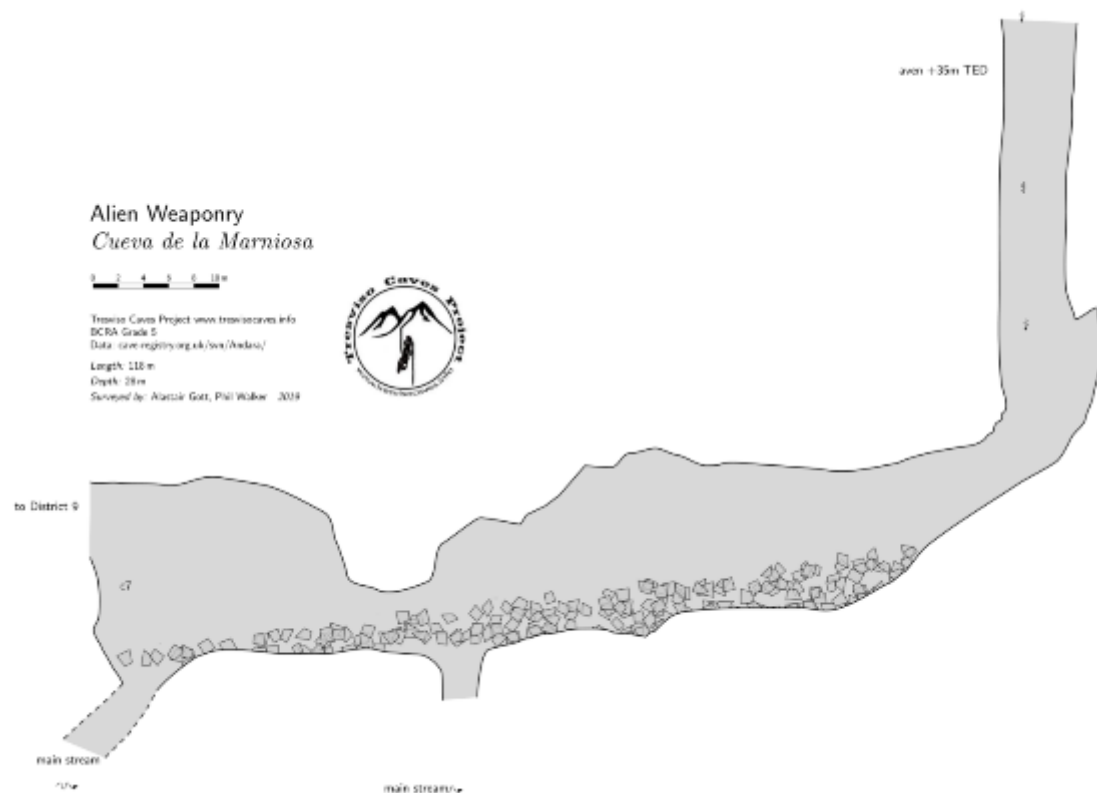


⁴ "An Expedition to the Picos de Europa Northern Spain". LUSS. (1979)

Heading east (left on entering) in the main chamber leads up a further slope to a drop down across further boulders to the sound of the stream. The main-streamway is below and to the left but would appear to be inaccessible from this location. Straight ahead is a low boulder filled crawl with further sound of water, but this is heading directly towards the main upstream stream once more. To the left leads up steeply to the impressive 35m high *Ted* aven. The aven is 5m in diameter and has a small amount of water entering (2019). It is currently **unclimbed**.

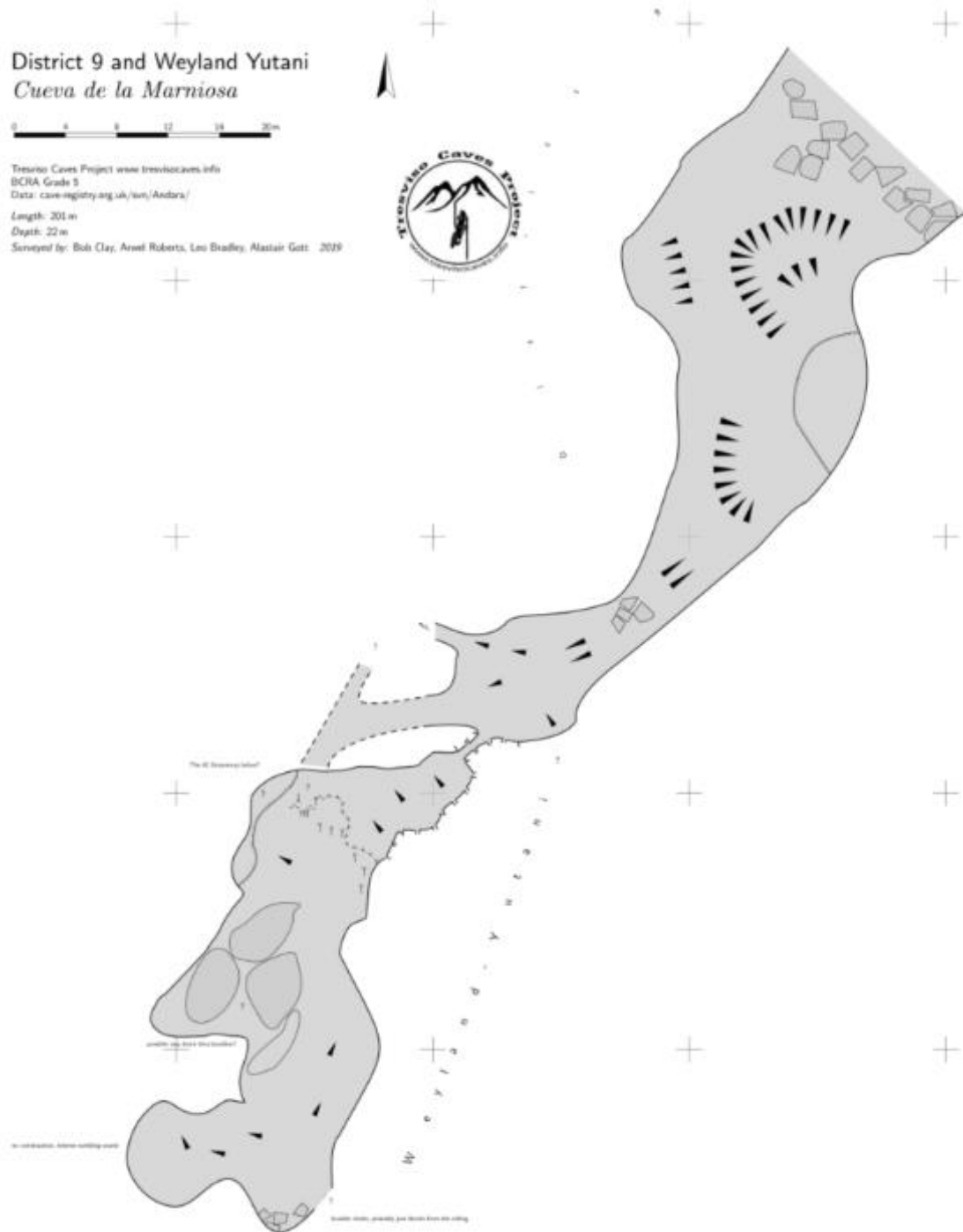
Heading west (immediately right on entering) in the main chamber, leads to a climb / scramble up to *District 9*.

There are some **possible high-level leads** on the north side of the chamber (directly above the stream)



District 9

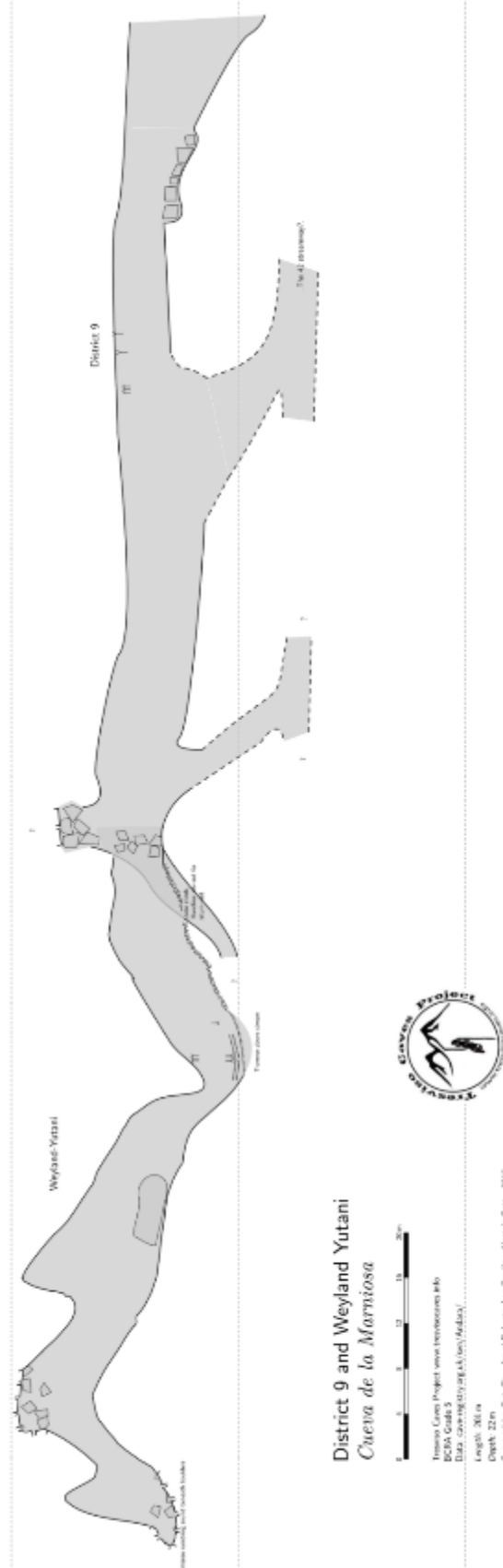
The climb up from the western end of *Alien Weaponry*, leads to District 9, this is a continuation of the *Alien Weaponry* chamber and consists initially of a broad flat floor for 10m, at which point the passage starts to bend left with a steep slope leading to a ramp of 20m leading to a ledge above *The 42 Streamway*. Staying high and right the main passage continues for another 40m to a further steep ramp down to a streamway below (*presumed to be an unexplored part of The 42 Streamway, but not confirmed*). There is an unexplored inlet/outlet on the right and on the left is a connection through boulders to *Weyland-Yutani*.



Weyland–Yutani

At the end of *District 9*, before it steeply slopes back down an opening on the left, through boulders, leads to a further chamber, *Weyland-Yutani*. A difficult climb down of 13m on small loose gravel and a further down climb (*a bolt and handline useful for return visit*) reaches the bottom, traversing above a stream. Care must be taken on the traverse as multiple stalagmites and stalactites are around, including a 3' high stalagmite.

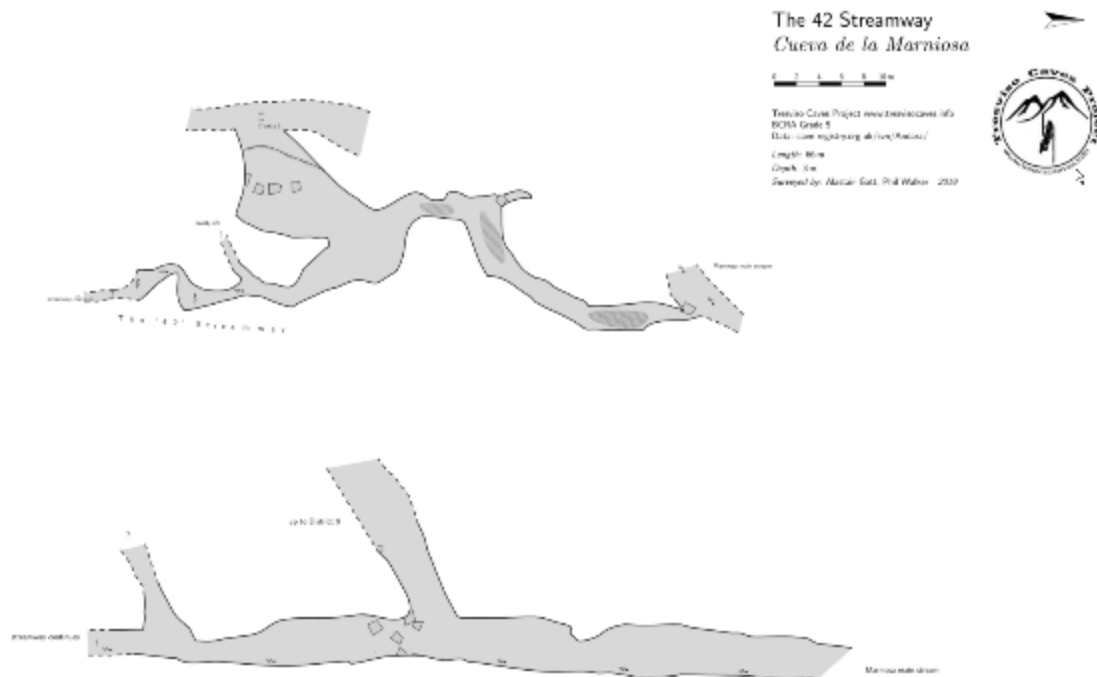
The chamber can be followed further, around numerous large boulders with an intense rumbling sound from below but there is no obvious way on from this point.



The 42 Streamway

From *Corner Chamber*, in upstream *Marniosa*, head approximately 125m further upstream to where the passage narrows to a stooping size passage in the stream. Just before the stream bends to the right, is station 42 of the survey, with an obvious dark void above and to the left. This is the entrance to the *Alien Weaponry* chamber. Below the entrance up to *Alien Weaponry* is a large boulder, climbing over this leads to a short drop down into the start of *The 42 Streamway*.

The streamway appears noticeably colder than the main streamway and is obviously another inlet entering the main cave. It has been explored for approximately 50m in easy walking passage, passing under the *District 9* passage and exploration currently ends at a small climb up in the steam. The passage is **ongoing**.



Extra Caverns Series

The Extra Caverns Series was first explored by L.U.S.S. in the 1970's and referenced a number of possible leads. In 2018 the area was revisited and resurveyed, revealing some errors in the survey and description, with possible further leads for future exploration.

At the bottom of the main 22m pitch, in the entrance series before the streamway is reached, follow the obvious slope down into the continuing main passage. The start of *Extra Caverns Series* is a crawl through a low and wide arch on the right. Immediately after the arch the passage enlarges, and it is possible to stand and walk. After 16m an aven (approximately 12m **unclimbed**) enters on the left. Two low crawls on the right, either side of the aven end quickly. The passage continues for 17m to a low inlet crawl on the left (**this has not been explored but is extremely tight**). After another 12m an obvious chamber is reached, *Mud Chamber*, with several ways on.

A few metres back from the chamber an inlet on the right quickly lowers to a series of tight bends that connects back with *Mud Chamber*.

On obvious mud bank on the left, marks the start of a steep ramp up. This has been climbed to around 45m height, generally following the trend of the passage below and **continues unexplored**. The lower passage is reached by a 3m awkward down climb. 30m of large impressive passage follows to the base of an easy 11m climb up a calcite slope. The passage continues briefly before lowering into a tight rift. It is possible to push this to small chamber, but there is no obvious continuation.

Ahead at *Mud Chamber* leads to a short climb down, right connecting back to the previous small inlet. 5m ahead on the right is climb up into passage leading north. After another 5m a junction is met. Left leads to 8m of passage lowering to a crawl, this has **not been explored**. Right leads to 50m of passage, passing mud banks on the left and an **unpromising flat out crawl** on the right. The passage ends at a small calcite flow with no way on.

Continuing straight at *Mud Chamber* there is an obvious steep calcite ramp. This has been climbed to around 40-60m in height and **continues** and is unsurveyed. To the right of the base of the ramp after 3m a low crawl is reached, this has **not been explored**.

Following the passage left out of *Mud Chamber* follows a small immature streamway upstream, with a slight draft. The stream can be followed for around 50m to a sharp right-hand bend. A passage on the left leads after 10m to two possible climbs (**unexplored**) and the main passage ends after another 10m. Back in the streamway a chamber if reached with an obvious wet aven entering in the right, this is the *Free Willy Aven*.

The passage continues past a 15m climb up on the right (**not explored**) for another 45m, passing an inlet on the right, *Shit Inlet*, which leads to a small old boulder choke. There are several muddy climbs up in the area, but the main route continues to a 4m climb down into a small chamber. There are three avens entering the chamber. The first aven (on the left) has **not been explored**, the other two avens unite at the top into *Forgott Passage*.

Free Willy Aven

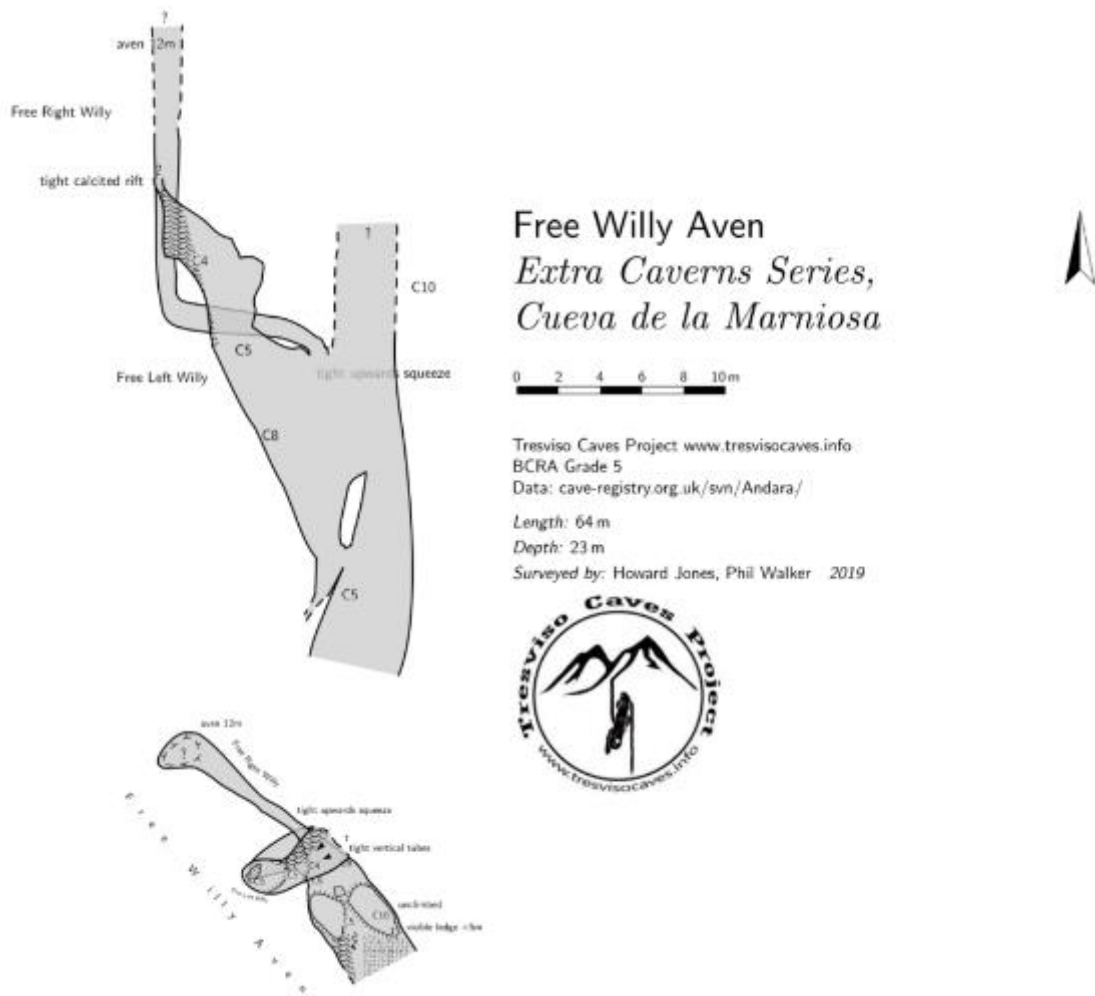
From the base of the aven, a 5m pitch up (*rigged as of 2019*) leads to a large eyehole, climb through the eyehole into a continuation of the aven. Down is tight, but only leads back to the base of the aven. A further 6m pitch up (*rigged as of 2019*) leads to a split in the aven. The left-hand route, *Free Left Willy*, continues up for another 5m to a narrowing of the passage. The roof of the aven here becomes increasingly calcited and only small **tight options are possible**. This aven has been derigged.



Picture: Free Willy Aven, Cueva de la Marniosa (Phil Walker).

The right-hand route, *Free Right Willy*, back at the junction, quickly splits again. Right leads back into the main *Free Willy Aven*. A traverse has been started but the rock is difficult to drill (*the two bolts / hangars at the furthest most point should be ignored; the bolts spin and the placement is poor*). It may be possible for a climber to progress further without the need for bolting. The top / lip of the *Free Willy Aven* is visible around 10m higher up.

Left at the split, leads to another small aven, with a trickle of water, this is 6m high to a tight squeeze into a small chamber, leading to a further aven of 12m. This has **not been climbed** but the route has been derigged.



Shit Inlet

Following the main *Extra Caverns Series* passage, after the *Free Willy Aven*, the passage gradually becomes more rift like for around 20m and passes an obscure inlet on the right, *Shit Inlet*. The passage can be followed upstream for approx. 8m to the base of an **unclimbed** aven (approx. 12m). It is possible to further follow the trickle of water upstream through a low crawl for another 8m at which point the crawl turns sharply left and the passage shrinks to only a few centimetres high, making it too tight to continue.

Forgott Passage

Following the main *Extra Caverns Series* passage, after the *Free Willy Aven*, the passage gradually becomes more rift like for around 20m and passes an inlet on the right, *Shit Inlet*, before entering a small boulder choke. At the end of the boulder choke is an awkward 2m climb down into a further small chamber. The exits from this chamber are several climbs in the roof. The far-left climb is currently **unexplored**.

The two climbs on the right unite at the top and lead to a tight thrutch in a traverse, approx. 5m above the stream. This is *Forgott Passage* and leads to a window over a lower continuation, which can be accessed by following the right-hand wall, entering

a chamber with an **unclimbed** aven in the roof. The passage continues upstream, with a trickle of water passing under the window, seen earlier on the higher route, to a short climb to the base of another **unclimbed** aven.



Forgott Passage

*Extra Caverns Series,
Cueva de la Marniosa*



Tresviso Caves Project www.tresvisocaves.info
BCRA Grade 5
Data: cave-registry.org.uk/svn/Andara

Length: 30 m

Depth: 6 m

Surveyed by: Leo Bradley, Alastair Gott 2019



T20A – Cueva de la Silvestre

WGS84 UTM 30T x: 0360767 y: 4789715 z: 1121m

A full description of Cueva de la Silvestre is not provided here, but a comprehensive description and survey can be found in previous reports.⁵

Dry Inlet

At the bottom of the *Silvestre* entrance pitches there are three ways on from the main chamber. There is a small, dry inlet on the right which continues in a northerly direction, passing a few formations and stalactites. This is mostly one body width and ends, after 62m, at a mud and boulder blockage that prevents any further progress.

Back in the main chamber there is a further two ways on in the streamway, upstream which very quickly sumps, and downstream which is the way on.



Picture: T20A Cueva de la Silvestre (Stuart Coxon).

⁵ "Tresviso 2018". *Tresviso Caves Project*. (2018)

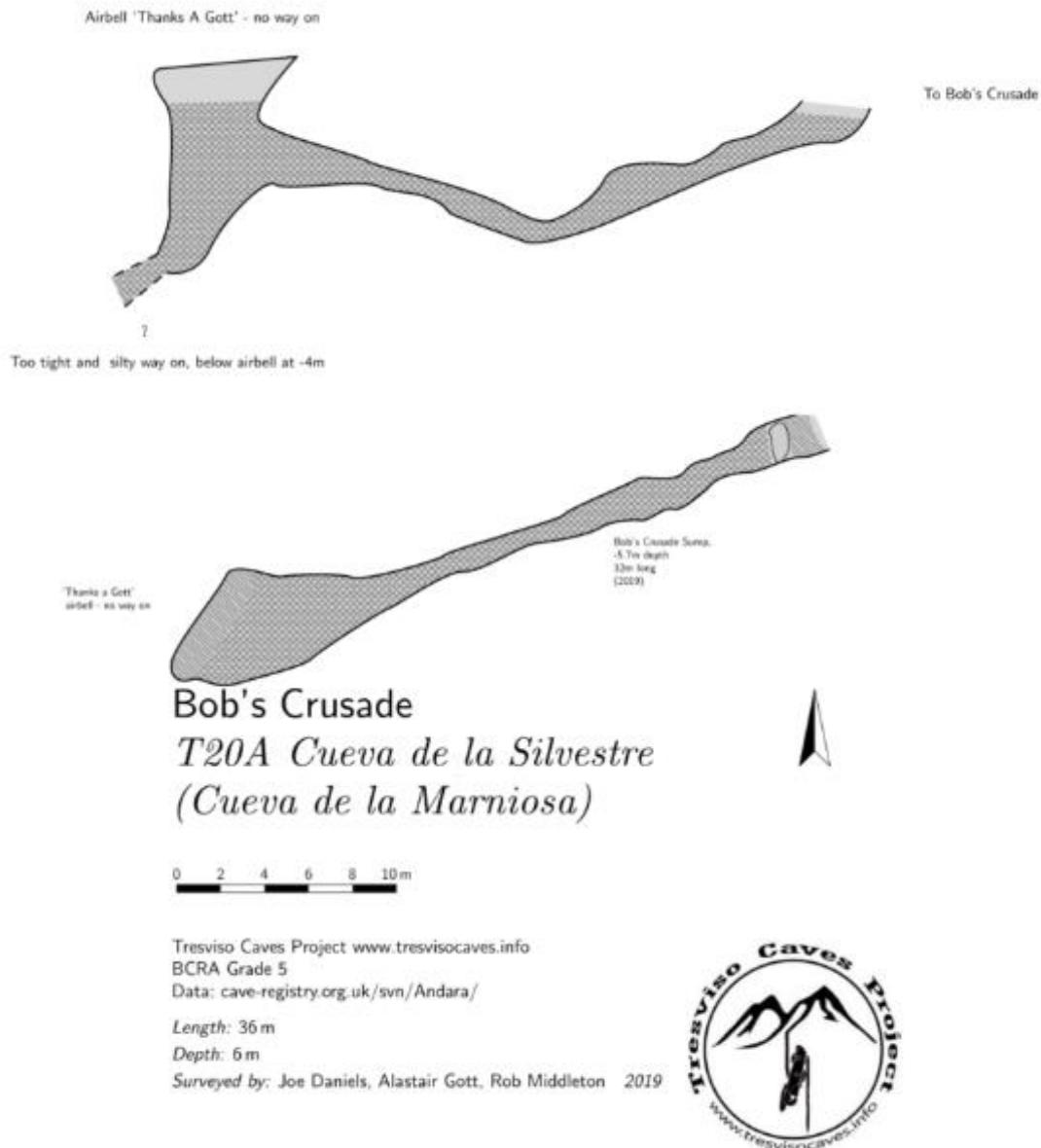


Bob's Crusade Sump

After the ninth pitch in *Silvestre* a sharp left turn doubles back along a passage for around 25m, dropping down several climbs before the passage turns north for another 25m. After an obvious bend in the passage to the left *Bob's Crusade Sump* is met.

The sump descends quickly in poor visibility to a constriction at -5.7m. After the constriction the passage enlarges to an underwater chamber (2m x 3m) with an air-bell in the roof, *Thanks a Gott*. The air-bell is 4m wide by 1m high with no way on. A possible tight diggable way on is below the air-bell but is unappealing.

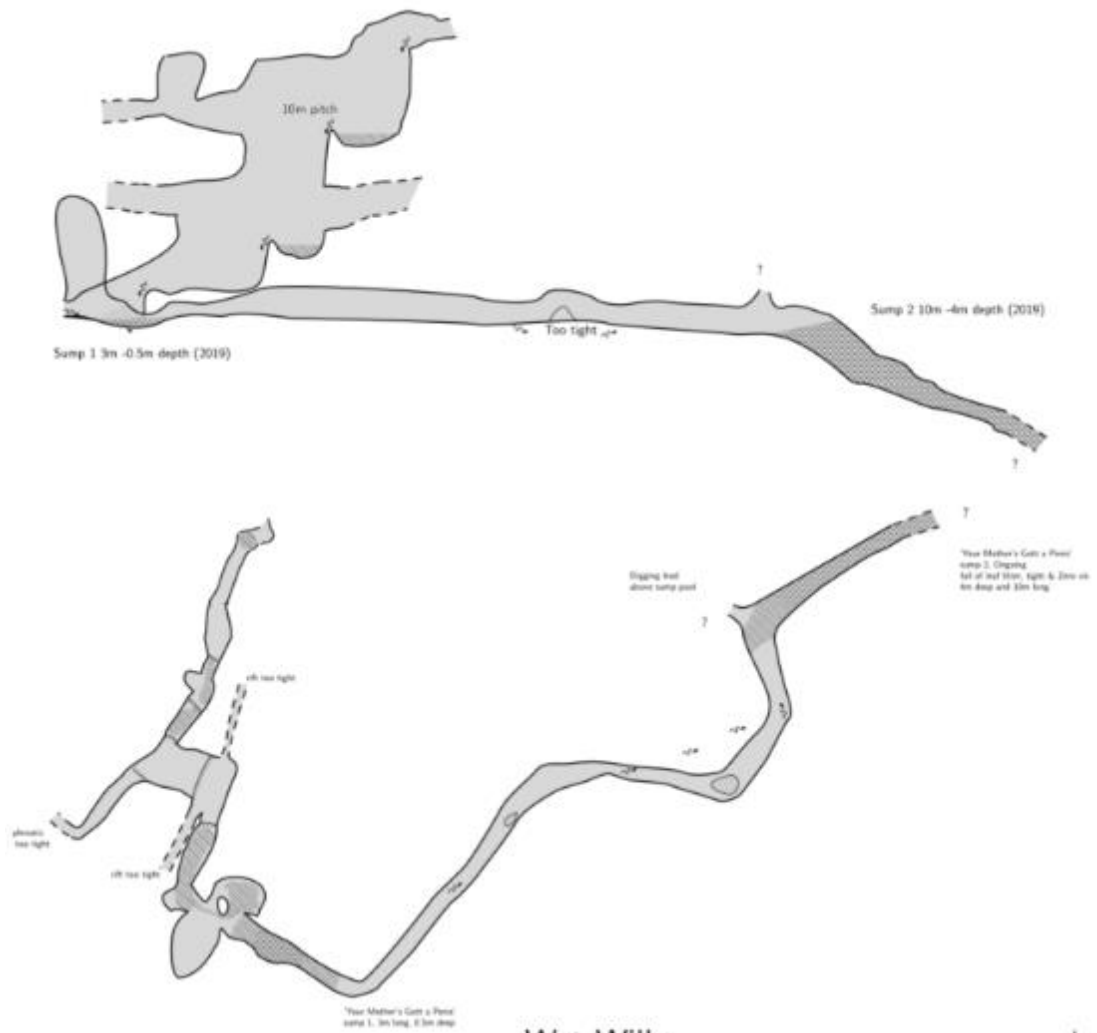
The sump is 32m long in total at a maximum depth of -5.7m



Wet Willy Sump

After the ninth pitch in *Silvestre* a sharp right bend doubles back under the passage, through a waterfall, to around 10m of passage leading to the *Wet Willy Sump*. The sump is 3m long at a depth of -0.5m. The passage surfaces into a pleasant streamway, *Your Mother's Gott a Penis*. The passage is approx. 40m long to the *Wet Willy Sump 2*. There is a small awkward tube above the second sump that could be dug out.

The second sump is tight, with zero visibility, and is 10m long at a depth of -4m. The sump is ongoing but filled with organic debris, closes to 0.5m squared and is generally unpleasant.



Wet Willy

T20A Cueva de la Silvestre (Cueva de la Marniosa)



Tresviso Caves Project www.tresvisocaves.info
BCRA Grade 5
Data: cave-registry.org.uk/svn/Andara/
Length: 97 m
Depth: 22 m
Surveyed by: Joe Daniels, Alastair Gott, Rob Middleton 2019

Other Exploration

Minas de Mazarrasa

Pozo del Castillo (T145, Castillo I)

WGS84 UTM 30T x: 0360524 y: 4785376 z: 1870m

An attempt was made to continue exploration of Pozo del Castillo, but the previously passable snow plug had once more collapsed and no further exploration was undertaken in the cave this year.

T144 Rosario

WGS84 UTM 30T x:0360522 y:4785705 z:1758m

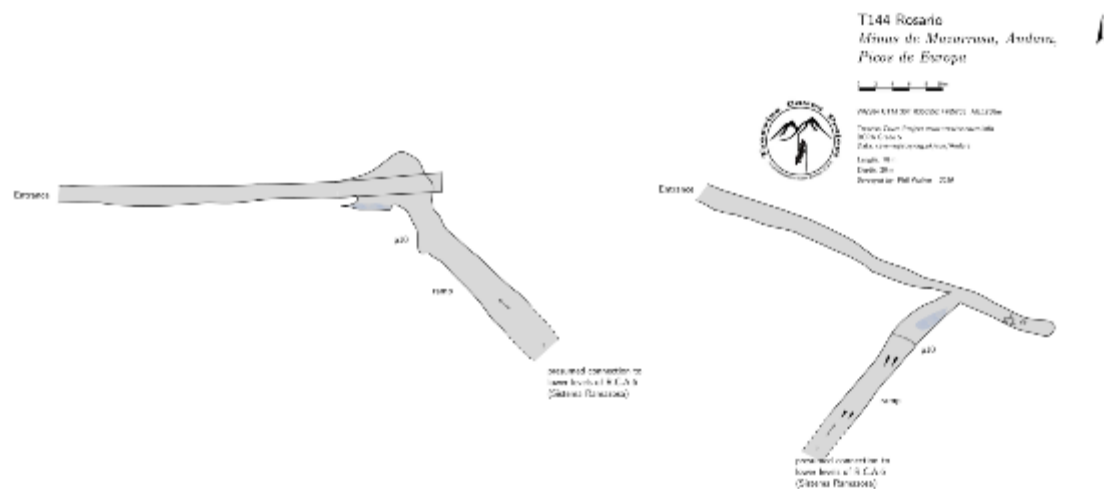
Location

In the Pozo de Andara (Lake Depression) follow the track into the depression until opposite the first large spoil heap (R.C.A.6 entrance). The *T144 Rosario* mine entrance is just to the left.

Note: There are 2 entrances marked as Rosario. The mine level is T144 Rosario (UTM 30T 0360522 4785705 1758m) and Pozo Rosario (UTM 30T 360636 4785707 1788m), which is directly above R.C.A.6, following the obvious large rift in the side of the hill.

Description:

The main adit is approximately 30m in an easterly direction to a blank wall. At the 25m mark a right-hand passage leads to a 10m pitch directly onto a steep ramp. This has **not been descended**. A strong draft emits from the ramp. It has previously been recorded as connecting to the lower levels of *R.C.A.6* and *the Lower White House Mine* (all part of the wider *Sistema Ramazosa*)



T436 El Queso

WGS84 UTM 30T x: 0360372 y:4785526 z:1779m

Location:

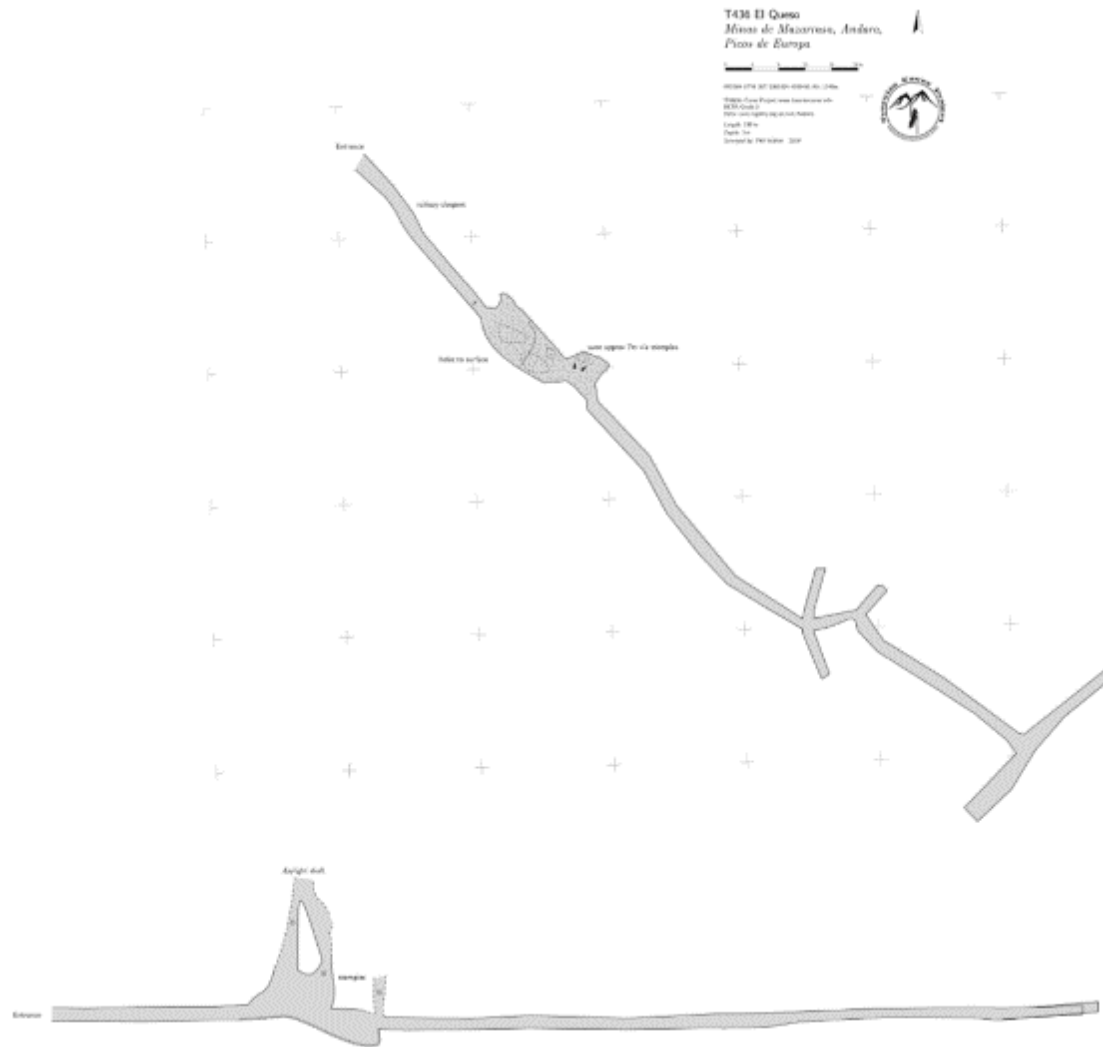
In the Pozo de Andara (Lake Depression) follow the track into the depression, on the eastern side is the large *R.C.A.6* spoil heap. Continue along the track to the very end of the depression, the final, obvious, mine entrance before leaving the depression is *El Queso*, and is easily identifiable by the railway sleepers in the entrance.

Description:

The mine adit heads 25m south east, following the evidence of old railway lines, until a mined-out chamber is encountered. The chamber is approximately 10m long x 5m wide and up to 20m high. A daylight shaft is obvious above and there is a lot of mine stemples and platforms in evidence. A short crawl down and under the northern wall, leads to a climb up (over stemples) that has not been explored, but is assumed to head up to the same daylight shaft.

Immediately opposite the entrance to the chamber is a continuation of the mine adit. This continues south east for 75m, passing several junctions, all of them blind.

The passages pass within 5m of the *Castillo-FT16 Connection* passages of the wider *Sistema Castillo* complex, but there is no apparent connection between the two caves.



T123 - ROSA

WGS84 30T x: 0360999 y: 4785269 z:1914m

Location:

From the *long cabana* walk north along the track towards the *Caseton de Andara*. Take the first obvious track on the left past T122 (0360509 4785655 1910m) and follow it up to the level ground and spoil in front of the mine

Description:

An obvious 2m by 1m walk in adit entrance in a snow filled rift. 20m of passage leads to a junction. The right-hand passage leads to an **undescended** pitch whilst straight ahead for 200m leads to a 40m pitch. From the bottom of the P40 the right-hand route has **not been investigated** but left past an **undescended shaft** leads to a 20m pitch through platforms and a further 10m pitch, landing in the T154 CUESTA mine level (beyond the wooden bridge).

T154 - CUESTA

WGS84 30T x: 0360668 y: 4785503 z:1835m

*T154 – Cuesta was previous described in the Tresviso 2018 report. Further exploration was undertaken in 2019 and the following details replace all previous descriptions.*⁶

Location:

From the Pozo de Andara (Lake Depression) take the first left track up towards the Mazarrasa mine area. Follow the track into the large, flat floored depression riddled with mines with many surrounded by green fences. *T154 Cuesta* lies in the back wall of the depression just above the floor and is labelled CUESTA in red.

Description:

The entrance quickly leads up over a small rock pile to an opening to the surface 8m above. A significant draft is evident at this point and throughout the cave (follow the draft at each junction!). The rock pile drops back down to re-enter the obvious mine adit. The mine passage continues in a southerly direction for 90m, in a 2m x 2m passage. Part way along, on the left-hand wall, is a small climb into a rift like passage to a natural passage descending a pitch / rift, with the possible sound of water below. **This has not been explored but is noted in the Tresviso 1979 journal as 10m deep and blind.**⁷

Continuing along the main adit an obvious aven enters on the right, with a trickle of water. The aven is a 3m climb (**not explored**) and appears to head south, in a tight rift parallel to the main passage.

After 12m the passage reaches a junction. *The right-hand branch, is 30m, passing some small pools to a dead end.* The left-hand branch heads east for 50m to another junction.

Straight on leads immediately to a collapse of mine deads. It is possible to crawl over the top of the deads, but the passage quickly ends at a further collapse. This would appear to have once been connected to the ELENA mine entrance (1970's R.C.A. mine schematic).

Turning right leads after 17m to another junction. *The right-hand junction leads to 80m of passage and a dead end.* The left-hand route continues to follow the draft for 80m before an obvious pitch on the right is encountered. The pitch head appears unstable and there is evidence of an old winch platform. The pitch is approximately 15m down a ramp and connects partway up *Plank Pitch*.

5m past this first pitch an obvious pitch / rift across the mine passage is encountered. The remains of an old wooden bridge are present and appears unstable. The pitch, *Plank Pitch*, drops down 30m to a lower level, passing a ramp connection with the winch platform pitch in the main adit. The pitch lands in the lower mine levels with water dripping in from the ceiling.

⁶ "Tresviso 2018". *Tresviso Caves Project. (2018)*

⁷ "Tresviso 1979". *L.U.S.S. (1979)*



Picture: T154 Cuesta, Minas de Mazarrasa (Phil Walker).

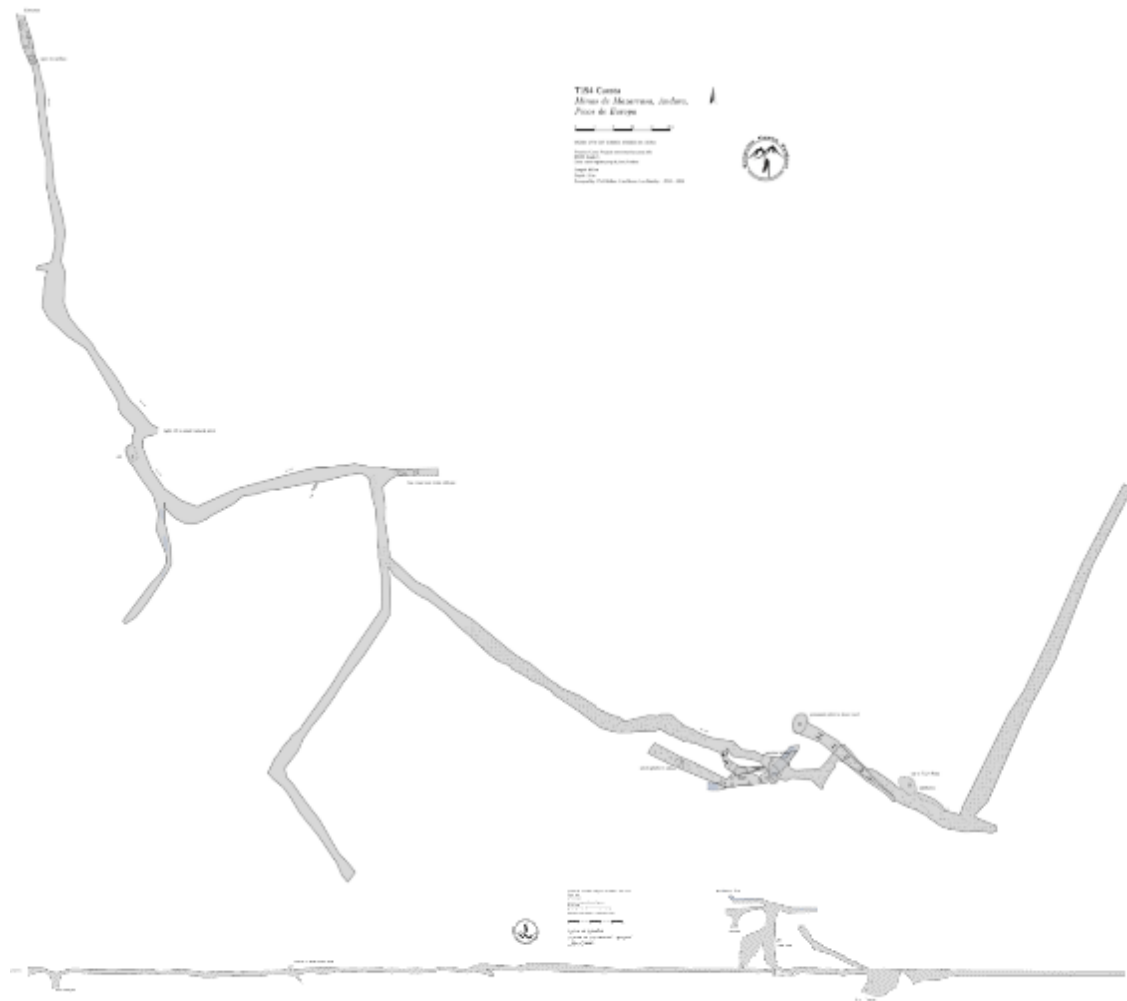
Down from the pitch bottom a short (2m) climb leads to 8m of false floor passage with a winch shaft coming from above and no way on. A lower level, immediately below the climb appears to be flooded, dropping suddenly from thigh deep water into a very deep blue pool. No dry continuation or natural was found so the pitch was derigged.

Up from the pitch bottom leads to a short, wet section and a blank wall. Back in the main adit the wooden bridge can be traverse safely with a handline on the left-hand side. After a sharp left bend the passage continues in a straight line for 25m, before another sharp left—hand bend. 10m further on the passage doglegs right to 30m of passage, passing through a large mined out chamber, with platforms and stemples in the roof.

A strong draft is evident, and this is the high-level route back up to the *T123 ROSA* mine levels. *There is an obvious surface feature, directly above this at 0360845 4785333 1956m that is worth investigating.*

Just before the chamber a passage on the right, heads back towards the *Plank Pitch* area, descending steeply to further winch platforms. This has **not been descended** and is assumed to connect to the lower levels. A voice connection was made but any physical connection appears to be beyond old and unstable mine workings.

At the far end of the chamber the passage turns left and heads north east for 80m to a dead end.



Sobra Valley

H12

WGS84 UTM 30T x:0360342 y:4790225 z: 1059m

Location:

The Sobra Valley has a significant track (part concrete in places) that runs east to west through the valley. Follow the track west. The track forks opposite the *Cueva de la Marniosa* entrance, on the left, and the higher (right-hand) track continues further up the valley. Follow the track until it turns left and starts to head downwards. A less distinct track continues west up the valley. Follow this track for around 385m until the tree cover is met. Turn off the track and head up the hill in a south-west direction for approx. 170m to the entrance.

Description:

An obvious 10m diameter shaft contains a dry stream bed, entering on the southern side. This can be descended as a 5m pitch into the main pot. The sink is choked with logs and organic debris but would appear to take a stream in wet weather. The northern end drops down further into a possible area that could be excavated but would take a large amount of work.



Picture: H12, Sobra Valley (Phil Walker).

H12

*Sobra Valley, Cantabria,
Picos de Europa*



0 2 4 6 8 10 m

WGS84 UTM 30T 0360342 4790225 Alt: 1059m

Tresviso Caves Project www.tresvisocaves.info

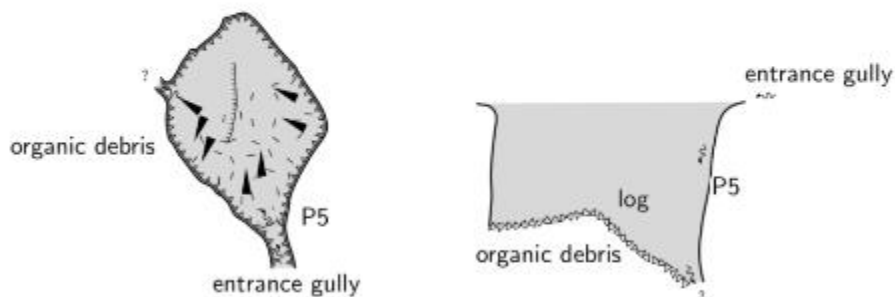
BCRA Grade 5

Data: cave-registry.org.uk/svn/Andara

Length: 20 m

Depth: 7 m

Surveyed by: Howard Jones, Phil Walker 2019



T516A Calf Hole (Cheese Cave 1)

WGS84 UTM 30T x: 0362398 y: 4790564 z: 825m

Location:

Follow the Sobra valley downstream past *Cowshead Cavern*. Approximately 25m further along, on the left is another small resurgence (*very low to boulder blockage*). 3m further along, on the same side and set slightly back from the track is an obvious cheese cave entrance.

Note: This is almost certainly Cheese Cave I, reported in the S.W.C.C. 1986 journal and it is assumed the cave is a flood overflow from Cowshead cavern.

Description:

The entrance is partly bricked, with a doorway, but is easily accessed to an 8m walking passage and leads around the corner to a 3m x 3m chamber full of old cheese racks. Immediately ahead a small drop leads straight into a small streamway, full of plastic panels, used for cheese storage.

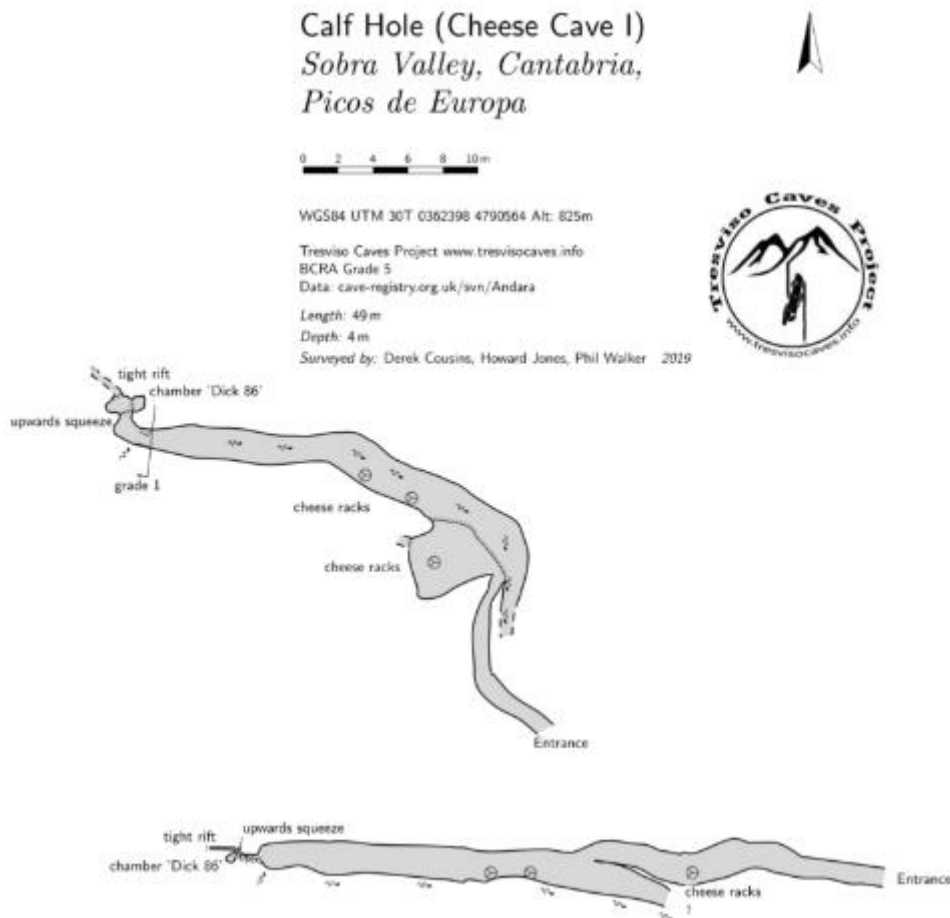
The downstream passage is approximately 4m long, getting gradually smaller and heads back towards the entrance. The end has surface debris and possible just resurges into the track leading to the cave.

Upstream is easy going passage to a small boulder collapse, with the sound of water below the boulders (*not a promising dig and most likely the water previously seen resurging beside the track*).

A crawl over the biggest boulder leads into a small chamber. A sharp right and up through an awkward squeeze into another small chamber. There are two ways on, up and right drops down again into a small chamber with a vocal connection back to the upstream limit and 'LUSS 1986 Dick' carved into the mud.

Straight ahead and up to the right leads to a tight squeeze that might be passable by a very small person, or the solid roof could be expanded. It is possible to see along the rift to where the passage gets bigger and a **possible continuation beyond**. There is a slight draft present, but the cave is still close to the surface and would appear to be heading directly towards the currently inaccessible cheese cave passage, on the right of the *Cowshead Cavern* entrance.

From the small chamber with the cheese racks, there is a small step up behind the racks, leading to a crawl. This is approximately 3m long to a small chamber, there is a passage above the incoming passage, heading back in the same direction, along a crawl to a slope with surface roots. In the chamber there are 2 tight crawls (top one is easier) that lead to a **possible continuation**.



T516C Cowshead 2

WGS84 UTM 30T x:0361914 y:4790930 z: 925m

Location:

The Sobra Valley has a significant track (part concrete in places) that runs east to west through the valley. Follow the track west. At the first obvious fork, with left heading down to the *Cowshead Cavern* entrance, stay on the main track for 350m, to where the track runs through trees on either side. Head north straight up the side of the valley for 200m. The entrance is very small and difficult to spot.

Description:

A tight entrance crawl leads to a 6m long passage between very old calcite and stalactites. There is no draft and no way on. However, the cave is only 50m horizontally from the large avens at the back end of *Cowshead Cavern*.



Picture: Cowshead 2 entrance, Sobra Valley (Derek Cousins).

Fuente Soles

H3

WGS84 UTM 30T x: 0359609 y: 4787783 z: 1499m

Location:

An obvious square entrance on the east side of Fuente Soles, overlooking Sotres below.

Description:

A 5m aid climb, on steep, near vertical, limestone, leads to the entrance chamber, approx. 3m wide by 2m high. The chamber extends steeply back for 3m.

A small passage on the left-hand side is blind.



Picture: H3 entrance, Fuente Soles (Phil Walker).

Sierra del a Corta

T48 La Torca Grande

WGS84 UTM 30T x:0361420 y:4788712 z: 1419m

Location:

Follow the Valle de Valdediezma from the Sobra Valley, about 30m to the grassy bowl beneath a group of cabanas. From here climb up on to the Sierra de la Corta, and walk in a NE direction, descending the irregular ridge towards Sobra. The torca comes into view on the left-hand side, after walking along the ridge for about 15 minutes and is unmistakable due to its impressive 40m x 20m dimensions.



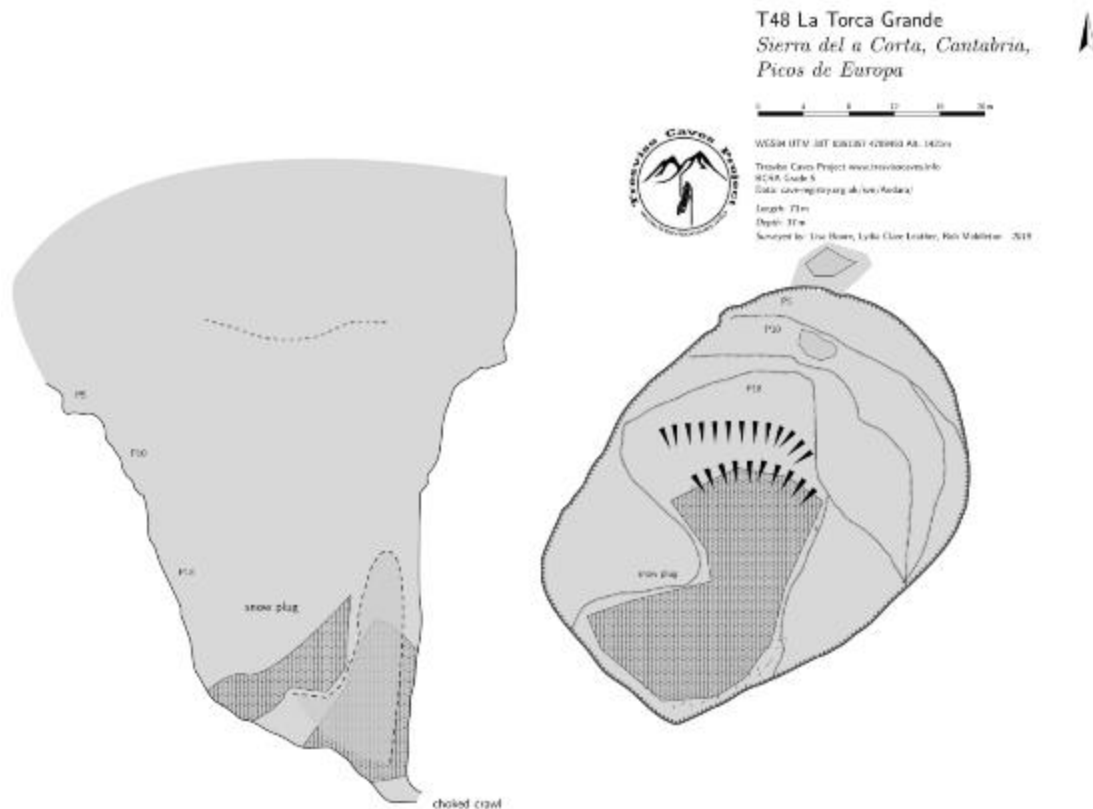
Picture: T48 La Torca Grande, Sierra del a Corta (Lisa Boore).

Description:

The shaft is large and impressive, about 40m across at the top and about 25m deep. The floor is a snow plug. However, at the northern end of the shaft is a pitch of 5m do a further 10m pitch, followed by a pitch of 18m to the snow plug. The snow can be descended into debris filled passage and further to a blind aven

A hole on the south side of the main shaft can be accessed via a 20m slope, belayed from a tree to a 20m drop to a further 15m shaft, 2m in diameter which is blocked at the bottom.

A ledge on the western side of the shaft gives access to two holes leading to a parallel shaft which joins with the main one at the bottom. On the eastern side of the shaft within 10m of the edge are several small shafts and entrances none of which go more than 10m without choking.



T510 Cueva del Entre Cuetos

WGS84 UTM 30T x:0360869 y: 4788182 z: 1305m

Location:

From the *Jitu Escarandi* carpark head over the obvious small col to the east and skirt round the right-hand side heading for the obvious gap between two small cols. Follow the track down-hill, through a leafy area. An obvious depression contains a small pile of rocks dug from the entrance and a cheese cave door is visible low and, on the right.

Description:

The entrance passage slopes down to a chamber with evidence of cheese storage racks on the left. A high-level tube on the left has **not been explored**. The passage continues down through to a short drop down to a junction. Left and up leads to an awkward crawl up to a low boulder strewn chamber. Straight ahead leads to a short flat out crawl to a calcified section of passage. A low slot on the right leads to a

muddy tube descending to a tight squeeze. Beyond the squeeze the passage continues but has **not been explored**.

Back at the junction a low crawl at floor level, with an obvious draft, is the way on deeper into the cave. The passage turns sharp right to a very tight section, *The Constriction of Doom*. The constriction is approx. 6m long, with the tightest bit in the middle, ending on a small debris filled chamber. Straight ahead over further debris leads to a dead end. The way on is down through an obvious hole in the floor, to *The Corkscrew*, best tackled feet first facing into the cave.

At the bottom, a hands and knees crawl, leads to the top of the first 10m pitch. The second pitch follows immediately and is another 10m to an awkward climb down, for a further 4m, to a chamber.

The passage descends to the top of the third *Sword Pitch*. Across the pitch head and above is a possible high-level passage entering, but this has **not been explored**.

The pitch is 30m, split with a rebelay approx. 5m down.



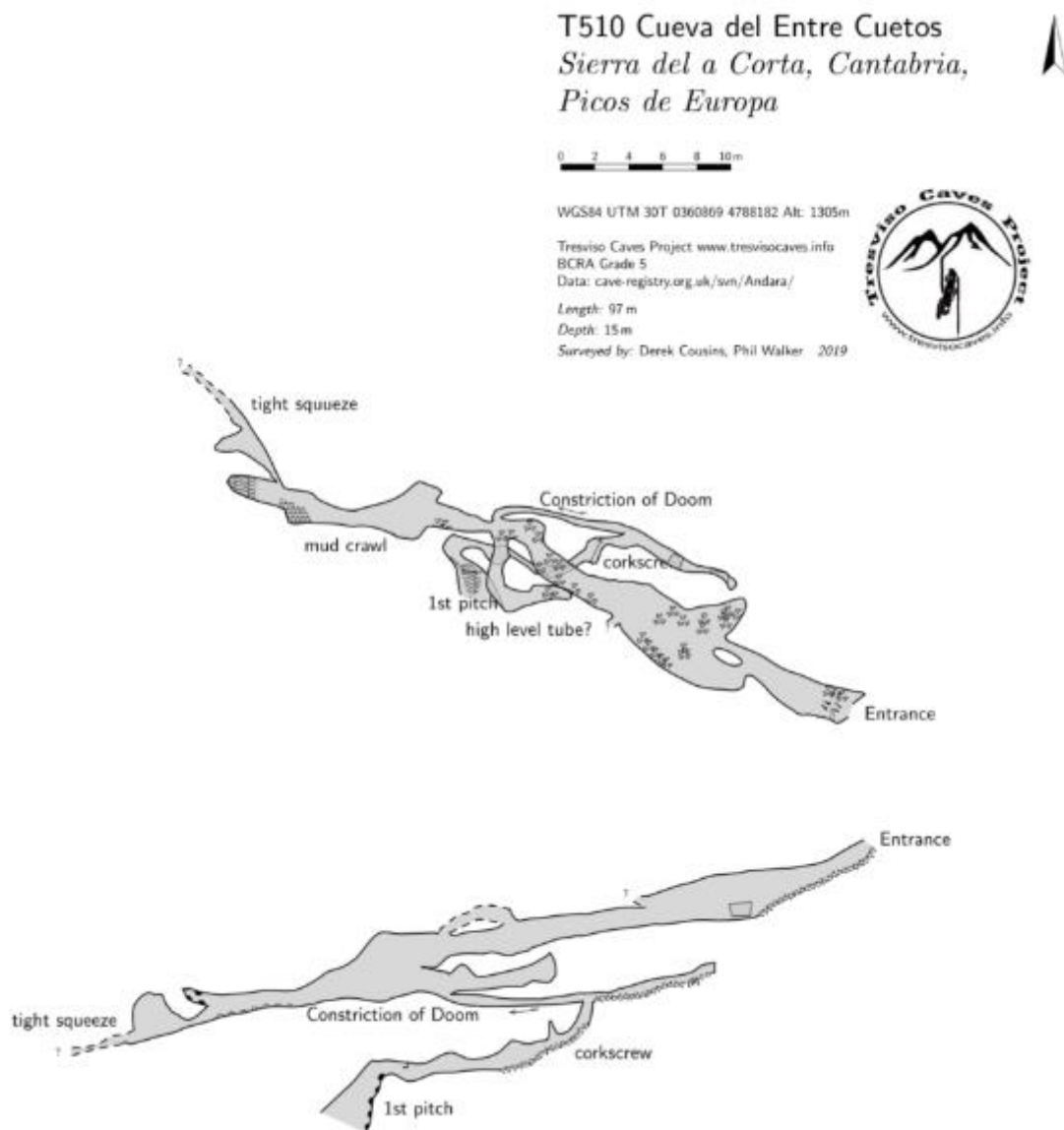
Picture: Sword Pitch, Cheese Cave (Bob Clay)

At the base of *Sword* pitch a 2m climb up on the right-hand side leads to the start of the fourth (6m) and fifth (5m) pitches, which can be rigged as one. At the bottom of the fifth pitch a low crawl leads back to a pitch parallel to *Sword Pitch*, but this has **not been explored**.

A winding rift passage leads to the sixth (4m) pitch into the *Waiting Room*, a small sandy chamber. At the bottom of the chamber a series of flat out crawls leads to a tight rift with a draught. The rift has been enlarged at the head of the seventh (7m)

pitch, quickly leading to the eight (8m) and ninth (10m) pitches. There is a possible high-level passage entering above the pitches, and a high-level traverse around the side to a calcited hole on the far side, but neither has **been explored fully**.

The final pitch lands in a roomy chamber where the character of the cave begins to change, becoming wetter and colder. A route through breccia leads to a drop down at the end of the chamber leading to an immature stream way. The streamway drafts but is tight. It can be forced round a right hand and then left-hand bend to a lowering of the roof. The passage continues beyond and appears to drop slightly but attempts to push further along have failed.



Summary

The 2019 expedition has continued to build on the successes of previous trips advancing exploration in line with objectives and discovering over 1.5km of new cave and several new leads. Over 2km of existing cave was also resurveyed to improve accuracy of old data and provide a better picture of the interconnected systems.

Cueva del Nacimiento

The *Parting Friends* sump was successfully dived during the expedition. It took 3 days to rig and re-survey the route to the sump, before the dives could be attempted. Over 400m of new passage was discovered, covering 3 sumps and a 4th un-dived sump. The new sump was proven to follow the main *Nacimiento* route through the mountain, but at a lower level, and is the same water as seen at the *Far Upstream Sump*.

A trip to *Dan's Big Room*, to investigate the unexplored maze, was undertaken but time and route-finding issues prevented any progression in the area.

As part of the *Parting Friends* dive, the preceding *Road to Wigan Pier* streamway, from the *Black Hole*, was re-surveyed to BRCA grade 5 standards, replacing the previous 1986 grade 2 survey. This work will be continued in 2020.

Likewise, the *Outer Mongolia* passage, leading away from *Clapham Junction* was resurveyed, with a few potential leads confirmed.

Cueva de la Marniosa

In the *Extra Caverns Series*, several leads were explored. The *Free Willy Aven* was aid climbed to a height of 23m across 3 separate avens, the first one becoming impassable, the second one leading to a further unclimbed aven and the main aven still continuing, but with a possible lip to the aven in sight, a further 10m higher. This will be revisited on the 2020 expedition.

At the southern end of the series, two small avens were climbed to a continuation into *Forgott Passage*. 23m of passage leads to two more unclimbed avens.

During a surveying trip a large void above the main streamway was scaled and entered the large *Alien Weaponry* chamber. Not shown on any previous surveys, this chamber was a significant find, over 100m x 50m x 25m in dimensions and multiple leads discovered. Similarly, below the entry point to the chamber a new inlet streamway was discovered. Again, this is not on any survey and appears unexplored. The passage was named *The 42 Streamway* (for the closest surveying station) and heads south into the Valdela Fuente ridge. These will also be major objectives of the 2020 expedition.

In *Cueva de la Silvestre*, an unexplored dry lead near the entrance series was extended for 62m to a boulder blockage. *Bob's Crusade Sump* was dived for 32m to

a potential tight diggable lead and the *Wet Willy Sump* was passed after 3m to 40m of streamway and a second 10m sump to a tight continuation

T20A Cueva de la Silvestre – Cueva de la Marniosa through trip

Cueva de la Silvestre was rigged on the first day of the expedition and the first through trip was undertaken the following day. A team of 4 completed the trip in just under 6 hours. One further through trip was completed before the *Silvestre* side of the trip was de-rigged. After 41 years of exploration, these were the first subterranean traverses of the mountains in the area.

The overall cave system is now 6,300m long and -423m deep (from the *Silvestre* entrance to the furthest point beyond sump 2 in *Marniosa*). It is now the 2nd longest and 10th deepest cave in the Tresviso – Andara region.

Minas de Mazarrasa

T145 Pozo del Castillo was revisited, following the passing in 2018 of the snow-plug that had blocked the route down into the cave since the 1980's. Unfortunately, further collapse has blocked the way once again.

T145 Cuesta was explored further, passing an old wooden bridge across a large pitch. The passage beyond and the lower levels were explored and resurveyed. Although a few sections were unexplored, potential appears to be limited. However, in future an attempt will be made to enter the cave via the higher *T123 ROSA* entrance to explore and complete a fuller survey.

Several other old mines were revisited, including *T144 Rosario* and *T436 El Queso*. In both cases no previous survey existed and a new BCRA grade 5 survey was commenced for both. *T436 El Queso* has now been shown to pass within 5m of passage in *T145 Pozo del Castillo*. Examination of the surrounding area is recommended for future trips to look for potential ways past the snow blockage in *Castillo*.

Sierra del a Corta

Several leads were identified and *T48 La Torca Grande* was revisited, but unfortunately still contains a large snow plug preventing further progress, despite there being very little snow compared to previous years.

Other

As per previous expeditions several old sites were revisited and catalogued, plus several new leads for future trips were identified.



Picture: Tresviso 2019.

Sitting L – R: Howard Jones, Rob Middleton, Leo Bradley, Lydia-Clare Leather, Arwel Roberts, Alastair Gott, Joe Daniels, Will Burn, Stuart Coxon, Bob Clay, Toby Dryden, Lisa Boore

Standing L – R: Derek Cousins, Phil Walker, Ana Moradiellos Barreiros

Appendix A: Expedition Members

In total 14 people from 8 clubs were involved in the 2019 expedition:

Bradford Pothole Club (BPC)

Stu Coxon
Phil Walker

South Bristol Speleological Society (SBSS)

Bob Clay
Arwel Roberts

Sheffield University Speleological Society (SUSS)

Leo Bradley
Will Burn
Rob Middleton

Technical Speleological Group (TSG)

Alastair Gott

South Wales Caving Club (SWCC)

Toby Dryden

Chelsea Speleological Society (CSS)

Lisa Boore

Nottingham University Caving Club (NUCC)

Lydia Clare Leather

Lancaster University Speleological Society (LUSS)

Howard Jones

Unattached

Derek Cousins
Joe Daniels

Appendix B: Permission & Permits

The 2019 expedition was run in association with the Agrupacion Deportiva KAMI club of Madrid, using their exploration permits, granted from the Asturian Caving Federation, the National Park and the Cantabrian Government.



**GOBIERNO
DE
CANTABRIA**

Appendix C: Finance

INCOME	TOTAL COST	PER PERSON	COMMENTS
Balance C/F	£0.00	£0.00	
Deposit	£700.00	£50.00	
Member Contribution	£7150.12	£510.72	
TOTALS	£7850.12	560.72	

EXPENDITURE	TOTAL COST	PER PERSON	COMMENTS
Transport			
Ferries	£2800.00	£200.00	4 people per car x £800 per car
Fuel	£525.00	£37.50	4 people per car x £150 per car
Breakdown cover	£525.00	£37.50	
Accommodation			
Youth Hostel	£1023.12	£73.08	6 EUROS per night
Catering			
Day Fee	£980.00	£70.00	£5 per day fee
Group Equipment			
400m x 9mm Fides	£200.00	£14.29	
50 x Petzl Spoon or Twist Hanger	£136.00	£9.71	
50 x 7mm Long M/R	£125.00	£8.93	
2 x Petzl Tam-tam Hammer	£72.00	£5.14	
120m x 5mm Petzl Accessory Cord	£64.00	£4.57	
Misc.			
Insurance	£1400.00	£100.00	approx. £100 per person (dependent on insurer)
TOTALS	£7850.12	£560.72	

Appendix D: Cave Locations

The original locations from the 1970's and 1980's expeditions are largely inaccurate when plotted into modern GPS devices. The following are either new sites or older entrances re-logged. Datum WGS84 UTM.

Cave	Area	Zone	Easting	Northing	Altitude
T144 Rosario	Minas de Mazarrasa	30T	0360522	4785705	1758m
R.C.A.6	Minas de Mazarrasa	30T	0360527	4785672	1757m
T436 El Queso	Minas de Mazarrasa	30T	0360372	4785526	1779m
ELENA	Minas de Mazarrasa	30T	0360711	4785424	1894m
GA-49	Minas de Mazarrasa	30T	0360709	4785280	1953m
T516C Cowshead 2	Sobra Valley	30T	0361914	4790930	925m
T516A Calf Hole	Sobra Valley	30T	0362398	4790564	825m
H10	Sobra Valley	30T	0360595	4789654	1141m
H11	Sobra Valley	30T	0360497	4789659	1159m
H12	Sobra Valley	30T	0360342	4790225	1059m
FIS1	Sobra Valley	30T	0361771	4788970	1088m
FIS2	Sobra Valley	30T	0361964	4789213	1025m
FIS3	Sobra Valley	30T	0362067	4789310	977m
FIS4	Sobra Valley	30T	0362242	4789431	913m
FIS5	Sobra Valley	30T	0362439	4790278	837m
FIS99	Tahadura	30T	0360620	4791477	1123m
FIS98	Tahadura	30T	0360514	4791294	1175m
FIS97	Tahadura	30T	0360512	4791301	1178m
FIS96	Tahadura	30T	0360511	4791308	1181m
T18D	Tahadura	30T	0360273	4791740	1093m
T18B	Tahadura	30T	0360399	4791275	1200m
FIS89	Tahadura	30T	0360699	4791304	1162m
FIS88	Tahadura	30T	0360500	4791986	1250m
FIS87	Tahadura	30T	0360454	4791021	1261m
FIS86	Tahadura	30T	0360348	4791108	1242m
FIS85	Tahadura	30T	0360338	4791130	1246m
T18B1	Tahadura	30T	0360407	4791240	1197m
HO40	Hoyo Oscuro	30T	0361516	4784999	1859m
HO51	Hoyo Oscuro	30T	0361863	4784857	2059m
HO52	Hoyo Oscuro	30T	0361876	4784805	2035m
HO53	Hoyo Oscuro	30T	0361861	4784772	2036m
HO54	Hoyo Oscuro	30T	0361921	4784775	2051m
HO55	Hoyo Oscuro	30T	0361938	4784763	2065m
HO56	Hoyo Oscuro	30T	0361486	4784505	2011m
HO57	Hoyo Oscuro	30T	0361337	4784784	1888m
T614	Sara Depression	30T	0361376	4785468	1846m
T114B	Sara Depression	30T	0361117	4785620	1870m
AN-58	Sara Depression	30T	0361630	4784549	1972m
AN-186	Sara Depression	30T	0361378	4785096	1802m
AN-200	Sara Depression	30T	0361363	4785501	1842m

2.2 (AN-20)	Sara Depression	30T	0361506	4785226	1814m
2.31	Sara Depression	30T	0361677	4785102	1830m
2.33	Sara Depression	30T	0361766	4785081	1868m
2.36	Sara Depression	30T	0361786	4785032	1911m
T616	Sara Depression	30T	0361537	4784834	1915m
T617	Sara Depression	30T	0361754	4785116	1865m
SI1 Shaft nr rock bridge	Sierra del a Corta	30T	0363328	4789285	1079m
SI2 Rock Bridge	Sierra del a Corta	30T	0363335	4789286	1077m
SI3 Rifty Hole	Sierra del a Corta	30T	0362838	4789263	1132m
SI4 Toby's rift	Sierra del a Corta	30T	0362813	4789261	1133m
SI5 Leafy Cave	Sierra del a Corta	30T	0362760	4789291	1045m
SI6 Big Rift	Sierra del a Corta	30T	0362746	4789820	1146m
SI7 Big shaft nr track	Sierra del a Corta	30T	0362649	4789172	1160m
SI8 Dead Tree Hole	Sierra del a Corta	30T	0362296	4788951	1253m
SI9 3xMassive pots	Sierra del a Corta	30T	0362281	4788643	1374m
T48 Torca Grande	Sierra del a Corta	30T	0361420	4788712	1419m
T71D	Sierra del a Corta	30T	0360660	4787610	1361m
T583	Sierra del a Corta	30T	0363355	4789233	1087m
T585	Sierra del a Corta	30T	0362762	4789243	1134m
T173 Dossers Delight	Pico Boro	30T	0359645	4786781	1711m
T174	Pico Boro	30T	0359681	4786803	1707m
Cueva Del Rio Chico	Tresviso	30T	0334417	4789200	890m
KCG28	Tresviso	30T	0360629	4791274	1211m
H1	Tresviso	30T	0360175	4791085	1295m
H2	Inv. De Caballar	30T	0358815	4787976	1397m
H3	Fuente Soles	30T	0359609	4787783	1499m
H4	Fuente Soles	30T	0359732	4787819	1251m
T21 (Cueva C29)	Inv. De Caballar	30T	0360022	4788360	1270m

Table: 2019 grid locations, UTM WGS-84 datum.

This information is being collated and published on the expedition website: <http://www.tresvisocaves.info/>

Additionally, the large collection of old and new survey data is being updated, modernised and stored with the UK national cave registry archive (<http://cave-registry.org.uk/>) under the *Andara* dataset.

Appendix E: Surveying

The following table details the passage explored and surveyed during the 2019 expedition:

Cave	Survex Name	Date	Surveyors	Length
Cueva del Nacimiento	clapham_to_wp.svx	05/09/2019	PW, AG, WB	368.64
Cueva del Nacimiento	parting_friends_to_wp	07/09/2019	LL, LBr, AR	209.22
Cueva del Nacimiento	parting_friends_sump	07/09/2019	JD, RM	438.85
Cueva del Nacimiento	outer_mongolia	09/09/2019	LBr, LL, WB	300.51
Cueva del Nacimiento	anotherpotbypass2pfriends	08/09/2019	SC, AG, HJ	20.19
Cueva del Nacimiento	bypass2pfriends	08/09/2019	SC, AG, HJ	67.94
Cueva de la Marniosa	free_willy.svx	03/09/2019	PW, HJ	40.35
Cueva de la Marniosa	free_left_willy.svx	07/09/2019	PW, HJ	9.68
Cueva de la Marniosa	marniosa_upstream3	06/09/2019	DJC, LB, AG	331.57
Cueva de la Marniosa	marniosa_upstream4	09/09/2019	PW, AG	272.77
Cueva de la Marniosa	alien_weaponry	09/09/2019	PW, AG	117.67
Cueva de la Marniosa	the_42_streamway	09/09/2019	PW, AG	65.83
Cueva de la Marniosa	district9	11/09/2019	BC, AR	125.83
Cueva de la Marniosa	free_right_willy	11/09/2019	PW, LBr	14.1
Cueva de la Marniosa	forgott_passage	11/09/2019	AG, LBr	23.98
Cueva de la Marniosa	weyland_yutani	12/09/2019	AG, LBr	75.07
Cueva de la Marniosa	shit_inlet	11/09/2019	AG, LBr	12.01
Cueva de la Marniosa	silvstre_dry_inlet	01/09/2019	SC, LL	43.91
T154 Cuesta	beyond_the_plank	02/09/2019	PW, LB	177.82
T154 Cuesta	plank_pitch	02/09/2019	PW, LB	55.71
T154 Cuesta	below_the_plank	02/09/2019	PW, LB	53.56
El Queso	el_queso	02/09/2019	PW	189.85
Rosario	rosario_mine_adit	02/09/2019	PW	78.33
Calf Hole	calf_hole	02/09/2019	HJ, DJC	44.41
T20A Silvestre	your_mothers_gott_a_penis	02/09/2019	RM, JD	53.08
T20A Silvestre	thanks_a_gott	02/09/2019	RM, JD	36.00
T20A Silvestre	wet_willy_inlet	03/09/2019	SC, LBr	9.33
T20A Silvestre	wet_willy_inlet2	03/09/2019	SC, LBr	34.19
Cueva de Entre Cuetos	entre_cuetos_entrance	08/09/2019	PW, DJC	96.82
T48 Torca Grande	t48_La_Torca_Grande	11/09/2019	RM, LB	72.6
TOTALS				3439.82

Table: 2019 surveying data.

Appendix F: Sponsors and Thanks

The 2019 expedition was sponsored by the following:

Bradford Pothole Club: donated equipment,



Bradford Pothole Club

Ukcaving.com: donated rope,



Safety Aloft Ltd (Mark Wright Training): discounted equipment,



BCA Caving Cover: specialist caving and activities travel insurance,



Thanks also due to Nick Airey, Jos Beyens, Colin Boothroyd, Ken Daykin, Fernando de la Fuente Moreno, Carolyn Ginnever, Tim Nichols, Mark Sefton, Sheena Stoddard, Jim Thomson, Ana Moradiellos Barreiros, UKCaving.com and the people of Tresviso.

Appendix G: Expedition Log

Phil Walker (PW), Howard Jones (HJ), Leo Bradley (LB), Rob Middleton (RM), Bob Clay (BC), Derek Cousins (DJC), Alastair Gott (AG), Lydia Leather (LL), Lisa Boore (LB), Stu Coxon (SC), Arwel Roberts (AR), Joe Daniels (JD), Toby Dryden (TD), Will Burn (WB)

Friday 30th July

Travel

TD, LB, LL

No log written

Saturday 31st July

Travel – everyone else

No log written

Cueva del Nacimiento

TD, LB, LL

Took dinghy to *Agua* entrance and pumped it up. Then continued down the valley for a walk.

Sunday 1st September

Cueva de la Marniosa – Extra Caverns Series

PW, HJ

At cave entrance for 11AM, with 2 heavy bags between 2 people. *Extra Caverns* passage leading to the avens was more miserable than I remember, especially with tackle sacks and SRT kit on. Reached end point and placed tape on the 2m climb down into the 'chamber' with avens. First aven was tackled by PW, with HJ belay. Fairly solid wall for 4.8m to calcite popcorn from which point becomes quite tricky. A few hammer blows opened the tight rift (basically the same rift as below). Must have taken about an hour trying different ways through, kicking large rocks down onto Howard. Eventually squeezed through into small ledge above rift and took off most equipment. Further flat out traverse, high in the rift, leads to wider area of breakdown. A draft evident. Small window straight ahead looks out over cross rift, quite spacious with small stream / puddles at the bottom. Possibly a boot print, but only 1!?! Middle of nowhere, not sure how anyone with only one leg got here and nothing on survey in this area.

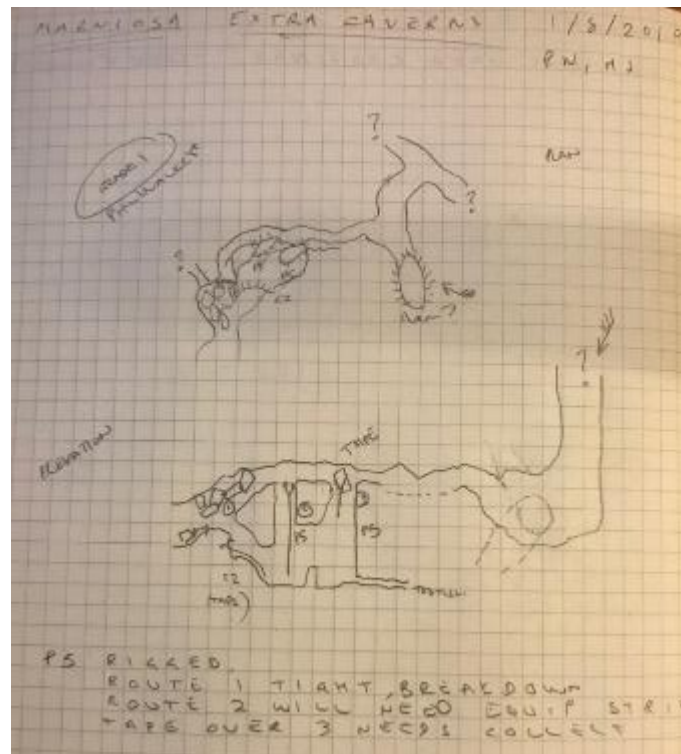
Popped down into cross rift. To right is large aven (approx. 10-15m high). The draft maybe coming down here. Left leads to walking(ish) passage to further cross rift. Stopped here and turned back. Rather than reverse route down the aven climb, I asked Howard to lower me down tube in rift. All worked well until popped down last bit, straight onto my harness chin strap. Proceeded to choke to death. Howard jumped underneath to push me back up just enough to pop-off helmet. Death averted. Quite scary episode!

Back in chamber we resorted equipment in order to tackle the next climb. Similar size (4.8m) up nice clean lump of rock. Much easier take off at top, but into collapsing small chamber. Two ways on, right to top of previous climb, but with exposed traverse and left. Left ended up going back down to the top of the 2m climb. The source of the water beneath this 'left' aven is still unknown, possible could be forced with some capping.

The 2nd aven is currently rigged with a y-hang (use the right-hand rope, the left-hand one is left over from a pointless traverse line). Next trip should either go up pitch, right and then rig a traverse across to PW tape hanging about the first aven, and then follow right at high level. Alternatively, before the 2m climb down, head up into the boulder choke, right and pop out over 2nd aven. 2nd Aven will need derig of climbing aids. New stuff needs survey.

Slow exit, aid climbing kit, drill and rope left at foot of big aven part way along *Extra Caverns*.

8-hour trip. Quite sore now



Picture: Forcott Passage sketch, Cueva de la Marniosa (Phil Walker).

Gear to Aqua and bumble into Cueva del Rio Chico

JD, RM,

RM and JD took 2x 9l cylinders to *Agua* in preparation for diving *Parting Friends*. (Thanks to TD and LB for carrying our lead to *Agua* also). RM stripped to pants and crossed the entrance lake to set up the polyprop boat line before both carried all kit to just inside the entrance for security. We then continued down the canal for approximately 1km to the mined level where *Chico* appears. More bare feet and pants based hilarity was had exploring up to 400m from the entrance, nearly at sump 1, before a quick return was made to be utterly soaked on the return walk up the hill (at which point the bare feet and pants felt like an utter waste of time!).

Chico Cave & Aqua Entrance

TD, LB

Went to *Agua* entrance to place dye detectors, then placed one in the river above the bridge at *Agua*. Followed the canal down to *Chico* to place another dye detector. The grid reference was not correct (364417 4789200). The Grid reference for the entrance is: 364427 4789104. Lisa had a brief explore of the cave.

La Hermida power station – dye trace detector set up

WB, LB

Me and Leo walked down to La Hermida in gorgeous sunshine which lasted approximately 15 minutes. The rest of the day was cloudy. We set up the detector in the stream just beyond the bridge before the power station, tied to a steel bar jammed in the stream. After a quick chocolate bar, we proceeded up the hill, it was one of those days when no waterproof will help you. Upon returning to the hut we had a cold shower and drank. All in the name of science!

Cueva de la Marniosa – Upstream Survey

AG, DJC

We had two tasks for the day. The main objective was to continue the survey upstream to the *Silvestre* connection point. The secondary objective was to mark the route out of *Marniosa* for the people doing the through trip. We got to the end of the survey last year (and where this May's survey started) and looked at the time. We turned around and made our way out without adding to the survey but marking the route with reflective strips.

We got to the boulder choke and Derek dislodged a large boulder which temporarily trapped him. Having got beyond the choke he trapped Alastair beyond the choke. After a lot of boulder kicking Alastair found a different route through the choke and we could continue out. A small inlet was spotted between the pitch into the streamway and the boulder choke. Someone who likes water needs to return.

T20A Silvestre Pot – rigging

BC, AR, LL, SC

We had a late start, but it was all ok. Some people had 3 breakfasts... due to beers the night before. Some people just had two breakfasts and it wasn't due to beers. Rigging was good. Arwel was called in to place a bolt that was too high for Bob to reach, much amusement to all present. We all got a little geographically embarrassed on the way home, but it was dark. 1am was the return to Tresviso. A good day's holiday was had by all involved.

Monday 2nd September

Castillo mine – checking Natacha upper, and the snow plug

LB, WB

We had joined Sir Phillip in his luxury vehicle and along with Toby and Leo proceeded to the white house. A quick walk to the mines where Phil and Leo went to do a pitch and traverse in *Cuesta*. Lisa and I popped into *Castillo*, to check the snow plug. I had a feeling of impending doom and wandered about some side passages whilst Lisa (the one with the SRT kit) checked out the snow plug in *Castillo*. Unfortunately, the snow plug had slumped somewhat and blocked the way one (pictures available). The gap between snow plug and wall is very tight. We then had a wander round the rest of the mine, checking the way into *Castillo* pitches entrance and then checked out *Natacha* upper series. I was dubious about the wooden ladder, but my weight was supported – upon climbing up it was obvious to me that the whole area is death on a stick: Lisa climbed towards a cairn on the right, but this was also loose and sketchy. I will leave it to someone braver than myself. Everywhere is loose, do not rely on any handhold. We then popped into *Natacha* main pitch to find it was still rigged, left by lazy feckless members of ULSA last year. This was derigged by Lisa whilst I did nothing

T154 Cuesta

PW, LBr

Passage was followed to previous limit of exploration at the wooden bridge left by miners, a traverse was bolted across the bridge and PW continued surveying the main passageway while LBr rigged and descended the pitch adjacent to the bridge (~30m deep). The main passage continued to a chamber with a strong draft coming from an aven in the ceiling, and a downwards sloping passage on the right which seemed to intersect with the pitch LBr descended, (voice connection but not fully followed as there were sketchy old workings). The 30m pitch ended on a lower level with water dripping in from the ceiling. A short (2m) climb led to 8m of false floor passage with a winch shaft coming from above and no way on. A lower level appeared to be flooded, as the passage dropped suddenly from thigh deep water into a v. deep blue pool. No dry continuation or natural was found so the pitch was derigged. One offshoot was explored on the way back, which appeared to just be an alcove where miners had dumped spoil, Near the entrance the mine intersects a tight natural rift, which can be followed for a few meters before seemingly dropping into a natural pitch, which was left unexplored. A good days holidaying was had by all.

El Queso

PW

L.S.D (1981) says *Mine with small metal cart, about 60m but no natural passage.*
Passage is 190m long, no metal cart. Intersects a mined-out chamber with some shafts and old winch platforms coming in from the surface. Post trip survex work seems to suggest this passes about 5m from the *Castillo – FT16 connection* point.

Rosario

PW

L.U.S.S. (1979) states *Rosario - entrance into Ramazosa, Junction at -30m with FT39 Pozo Compromisso*
No obvious connections point, unless down a ramp, although that appeared to go down and under the lake depression.

Other

- Rosario 30T UTM 0360522 4785705 (1758m)

- RCA6 30T UTM 0360527 4785672 (1757m)
- El Queso 30T UTM 0360372 4785526 (1779m)

Sobra Walk

DJC, HJ

We took a lift to the parking spot with the *Silvestre* dive team and walked down the track to said cave. We were given reflective strips to mark the way back to the track. We found the way back to *Cueva Donga*, but then deviated from the normal route. We followed a gulley and came across a hole in the ground that took the water in the gully when it was flowing:

- 0360595, 4789654, e1141m (H10): 2 m climb down beneath a silver birch. 5 m crawl in good rock. Cobbled floor ends in choke. No draft.

Having regained the track, we walked back to *Cueva Donga* and back to the track placing the remainder of the reflective strips. We need more!

We then followed the track further down. What a mistake that was, it degenerated into nothingness after a few turns. We think the track is just to remove big trees. We were then reduced to bush whacking- or more correctly bramble, bracken and the like. It then started to steepen until:

- 0360497, 4789659, e 1159m (H11): 10 m shaft, chokes

The terrain got more interesting and we corrected our route various times until:

- 0360342, 4790225, e 1059m (H12): 10 m diameter shaft, 10 m deep, needs rope and SRT kit. The easier approach is from the lower *Marniosa* side of the valley via
- 0360556, 4790361, e 1016m: This is on the track where one should depart of H12 above

We walked on downwards to the dam and then traversed along stream level towards *Agua*. It became quite interesting and then too interesting, so we backed out. I'll get there one day... On the way back up the valley we asked where this water came from? Just around a corner was doorway into an abandoned cheese cave, with a stream. We explored an 'expedition' 50m up the stream to where we wanted real caving gear. We came out and calibrated a Disto X. We went back in and surveyed out. As it is close to *Cowshead Cavern*, we first named it *Small Cow* and then *Calf Holes*.

- 0362398, 4790564, e 825m Calf Holes. *Note this point is on the track about 5 m from the entrance.*

Silvestre – Marniosa – through trip

BC, AR, LL, SC

We got to the *Silvestre* layby at about 11am, kitted up and started walking down the track. This time round it was a lot easier to find having been well travelled. Stu's white tape on silver birch trees was not so great in the day light as it had been the night before. Whilst we were doing the through trip, Joe and Rob were diving the sumps in Wet Willy and had stolen Alastair for the day to carry for them. As Stu and I weren't carrying much we took two of their bags down for them (on the basis that Rob would later repay us with a create of beer, but failing that, dancing bear coffee liquor).

The *Silvestre* entrance had been rigged the day before down to waterfall chamber, where Bob needed to re-bolt before we continued with the through trip, so Bob and Arwel headed in whilst the rest of us followed behind. The day before Stu had found the jaw of what we think is horse, to match the skull he'd found the year before. Now Bingo (see photo for scale) lives happily in the entrance chamber. Following through the rest of the cave, Rob who hadn't been in the cave before grew increasingly more impressed at the fact that it was indeed a cave. We took our time marvelling at the finest bolder I've ever seen that sat in the middle of the stream way and is a conglomerate, at first I assumed it was originally the floor of the streamway and had been eroded away, but not all that convinced, think it might just be a bolder.

When we reached Bob and Arwel, there was a short wait for the bolting to be finished before we could reach the bottom of waterfall pitch (see phot bellow of Rob frustrated at the idea of waiting). When everyone was down waterfall pitch we left the diving team and their bags and continued on. From waterfall chamber we continued up the aided climb and through into old stream way rift passage. This continued on (picture below), getting slightly small in places (for Bob and Stu) and down

climbs and eventually leads to a junction, left being the way on and right being *Hall of the Mountain King*.

As Stu and I hadn't been before we went to *Hall of the Mountain King* which is an aven roughly 50m in height and 20m width with a mud slope to the left of the chamber and 2 water inlets coming in through the aven above to the right. Here was where we stopped to take a group photo.

From *Hall of the Mountain King* back to the *Silvestre* junction we followed the stream and continued down the active passageway. The passage follows onward with multiple down climbs, some more exposed than others. Eventually the passage follows a fault and here the bolder choke began. Alastair Gott had been in *Marniosa* the day before and placed reflectors along the bolder choke which were extremely helpful and saved a lot of time as there are multiple ways along the choke in which you can go wrong. When the choke ends, the passage re-joins into stream way and this follows straight towards the bottom pitch of *Marniosa* (see photo below).

We headed up the muddy pitch out of the streamway, where Bob showed us "the boulder" which must not be touched or moved in anyway as it was wedged right between the wall and multiple boulders which became the false floor of the next slope.

Following this onwards the passage is very well decorated series of chambers (see photos), with various calcite flow slopes and formations, including this flying pizza like disc thing... Eventually reaching the bottom of a 22 m pitch. From here there's 3 more small pitches until eventually you get into the old cheese chamber and we were at the *Marniosa* entrance. The trip in total took 6 hours and we got out with plenty of time to spend in the bar drinking celebratory beers and eating local cheese. Rob and Joe eventually turned up and kept the promise of buying Stu and I a dancing bear coffee liquor.

Description - (from the bottom of waterfall pitch to *Marniosa* bottom pitch)

*the main way on is the passage directly in front, follow the climb on the left, this corkscrews up and has been made easier with the addition of a fixed rope handline. At the top of the handline the rift continues in a northerly direction. Through some fine fossil passage. Some downclimbing is necessary at points, till a right-angle right turn followed by a calcite flow and a right angle left. A fixed traverse line starts before the calcite flow. And aids climbing down into the continuation of the rift.

* from *Silvestre* description

Rift continues on, getting occasionally tight in places with down climbs and eventually leads to a junction where the old dry stream way drops into active streamway, left being the way on and right is *Hall of the Mountain King*.

Hall of the Mountain King – up stream and gradually gets increases in size until an aven chamber roughly 50m in height and 20m width with a mud slope to the left of the chamber and 2 water inlets coming in through the aven above to the right.

Onwards from the *Silvestre* junction - passage follows downstream with multiple down climbs, some relatively exposed. Eventually the passage follows a fault and here the bolder choke begins. Reflectors placed in bolder choke to be followed as multiple ways along the choke to go wrong. When the choke ends, the passage re-joins into stream way via climb down to the right (2 reflectors above climb show the way on). A small pitch downwards is reached, rigged off a calcite boulder. After this follow the passage for 5 minutes, until a rope hanging down on the left is found. This is papoose pitch, the bottom of the ropes that lead out of *Marniosa*. Upon reaching the surface you can marvel at the trip before enjoying the rest of your holiday.

Silvestre – sumps

RM, JD, AG

Having scrounged a lift to the parking for *Silvestre* with AG and a few others we kitted up in wetsuits and SRT kit whilst pleading with the assembled masses to help carry kit. AG, SC and LL kindly offered to carry some of our gear whilst we lugged a pair of threes and the rest of our stuff.

Once in *Silvestre* we made quick progress down to *Bob's Crusade/Wet Willy* passing some impressive pitches and plenty of nice streamway. From here JD, RM & AG split from the main party and made our way down *Bob's Crusade* rigging the next pitches and finally finding the sandy bottomed static sump pool.

The sump descended in quickly deteriorating vis utilising a number of silt screw belays until a constriction at -5.7m. the passage then enlarged into an underwater chamber 2x3m with an air-bell in the roof (now named "Thanks a Gott" in praise of AG determined carrying). The line is secured just below water level in the air-bell which is 4m wide and 1m high with no way on. (total dive of 32m). The way on appears to be directly below the air-bell in a wide and too low/silt filled bedding. Though vis quickly reduced to zero for most of the dive due to vast quantities of silt so a further look might be worthwhile.

Once at the sump pool for *Wet Willy* JD kitted up with a pair of threes for his first bit of virgin passage laying line. After diving a glorious couple of metres JD surfaced into stream passage and crawled along about ten metres of streamway, looking around the bend and confirming it didn't sump straight away again. Returning to find RM & AG spooning in the bothy. Survey kit was packaged, and the two divers passed the extensive sump again to survey on down-stream to find a further sump after about forty metres. This second sump had a reasonable amount of organic matter floating on the surface and looked a little uninviting.

Here it was RM's turn to dive in the murky and organic looking pool.

RM quickly secured the line to a solid belay 2m in at -1m, before continuing descending rightwards to a max depth of 4m approximately 10m in. This section of passage was heavily filled with organic deposits and closed to 0.5m squared in zero vis with no line belays. Conscious of having stolen JD's exit bottle to dive the 2nd sump, RM decided prudence was necessary, and made a hasty retreat, cutting and securing the line at the 2m mark. This is not a pleasant site, but a further investigation might offer further passage.

Horrific carry but won a cider and an air-bell named after myself, for my troubles of waiting for an hour in a bothy.

Tuesday 3rd September

Cueva de la Marniosa – Extra Caverns Series

PW, HJ

11AM at *Marniosa* entrance for PW and HJ. Discovered didn't have my spare light battery and fleece base-layer. Luckily had a torn jumper in the car so pressed it into action. Nice sweaty walk up to entrance and then quick trip into the start of *Extra Caverns*. Aven to climb was not too far on and quickly kitted up. Aven looked quite easy and in general it was, first 2m were freeclimbed to a stal flake, and combined tactics lassoed a sling over it. From there I was able to start a 'credible' route up the side of the aven. About 4m further up a small window leads into a nice puddle / ledge, left heading back down to same level as starting point. Upwards continues for another 2m to an obvious split in the cave. Right appears to go up another 10m to a possible high-level route, looked easier route, but take off at the top may be difficult. Took the left-hand route which seems shorter but possibly less of interest. Good draft and echo at this 'junction.' LHS continues up another few ledges, over calcited popcorn. Currently rigged with SRT from this point backdown. Obvious route to the left appears to be in good rock. Need to go back.

As Howard regaled me with talk of the time he climbed '*Free Bird*' above *Consort Hall*, as he was a big fan of Lynyrd Skynyrd. Called the aven '*Free Willy*', as I'm a big fan of whales..... and a blue whale was spotted on the ferry journey over (allegedly).

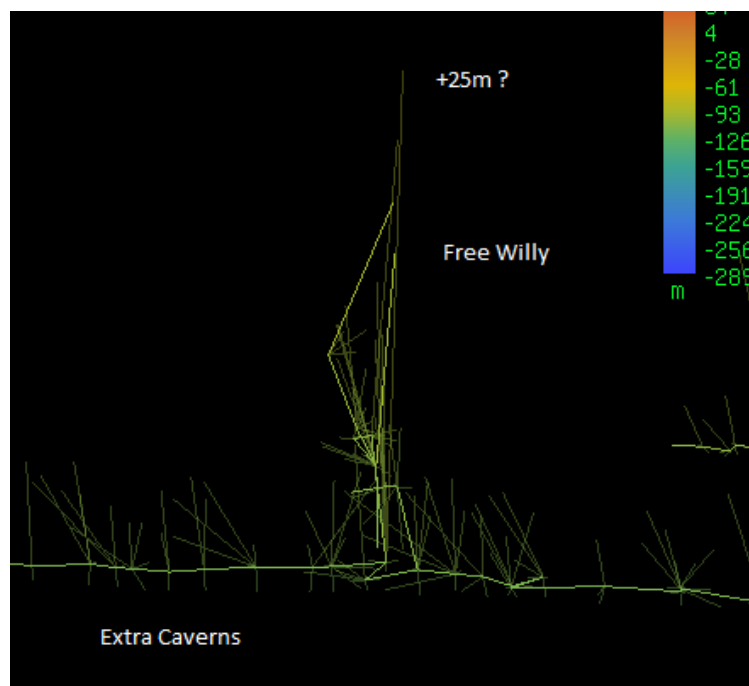
6-hour trip in total, aching trip out.

Kit left at base of *Free Willy*.

22x 85mm Fischer through bolts

14 quick draws
20 maillons
30 hangars
10 carabiners
22m static
33m static on the aven
30m dynamic at midway point
1 BOSCH 18v battery (fully charged)
PW aid climbing kit
Assortment of slings

Need longer drill bit for the 85mm bolts.



Picture: Survex model of Free Willy aven, Cueva de la Marniosa (Phil Walker).



Picture: Left Free Willy aven, Cueva de la Marniosa. (Phil Walker)

Silvestre – leads?

SC, BC, LB, AR

We gathered our kit together and wandered down to *Silvestre*. Upon kitting up, SC found he didn't have his over-suit as it was left drying back at the hostel. AR leant SC a jacket and SC had waterproof trousers so caved in that attire. Bob and Arwel descended followed by Stu and Leo. We reconvened at *Waterfall Chamber*. Arwel created a useful dam at the rebelay using a tackle-sack full of water. Stu and Leo found this very useful as they went under the waterfall into *Wet Willy*. Stu and Leo surveyed in and looked at the 3 rift leads with cobble floors. Lead 1 is straight ahead after a short descent. This goes to a small phreatic tube that is too tight without a little engineering work. Above this the rift continues 8m (floor to ceiling) but is filled with loose boulders. Back at the rope, descend to the ledge at the base of the waterfall. Lead 2 is back towards the waterfall (on the right looking at the waterfall). This has a loud echo and is a climb that is a touch too tight (engineering work needed to progress). Lead 3 is a rift which can be found by turning your back to the waterfall and looking to the right of the downstream passage. This is also too tight and would need some capping to progress. Stu and Leo then continued to survey down to the sump before derigging *Wet Willy* and returning to the surface a little on the cold side.

Once Stu and Leo had left, Bob went back to place some more bolts in *Electronica* pitch to avoid the rub points. Arwel stayed and waited to dam the waterfall for Stu and Leo's return. We took 1 hour to return to the surface from waterfall chamber.

Nacimiento – Parting Friends

WB, RM, JD

The day proceeded as planned with a late start, setting off around 12, and getting to *Agua* by about 1:15. We marched in, Rob and Joe (for some reason) giving me all the lead which was a pain in the arSe... and back, shoulders, core and legs. After a moment of navigational difficulty in *Black Hole* series (we think some of the reflectors broke off during a flood), we managed to find the *Wigan Pier*

sump bypass with some ease (kit kat wrapper intact). This was entertaining and the passage to it particularly beautiful, and we made it to the stream which was flowing intimidatingly fast and high.

After some difficult traversing (for me, not Joe and Rob) we made it into a side passage. Joe and Rob climbed the waterfall to the right that Gareth had previously fallen off, I sat in a survival bag for about 6 million years. After leaving, I placed a dye detector in the *Parting Friends* streamway and Rob checked out a rift, with pitch, that goes in the *Parting Friends* streamway above the day's difficulties. It was mentioned that, as far as we were concerned, we thought there was more water in the *Parting Friends* streamway than could be found in the *Agua* streamway by the entrance.

Arroyo de Valdediezma walk – the Riverside.

AG, DJC, LB

- FIS1- A fissure with leaves at the bottom, needs capping to get in. 0361771, 4788970 e 1088m
- FIS2- A riverside mud hole, would need digging. May have promise, but at present is blocked by leaves. About 1.5m diameter hole. 0361964, 4789213 e 1025m
- FIS3- a 2m aven in an alcove. No more cave to be found. 0362067, 4789310 e 977m
- FIS4- 5m cave, no more cave to be found. 0362242, 4789431 e 913m
- FIS5- 2m drop into the unknown, could have promise. Quite near to the dam near cowshead cavern. 0362439, 4790278 e 837m

Wednesday 4th September

Tahadura (Tajadura)

AG, DJC

The only hole we found with much promise is *FIS98*. *T18B* and *T18D* do not exist at current grid references, we prospected mainly in the right-hand wooded section, this is where all the grid references were. The left-hand wooded section (which we did not prospect) may be the area where the real *T18B* & *T18D* are, this left-hand wooded section is behind the buildings with tiled roofs on them. I plan to return to ensure these question marks are resolved.

- FIS99- 0360620, 4791477 e 1123m Depression 1m deep 3m wide, dig.
- FIS98- 0360514, 4791294 e 1175m A cold hole, needs capping to enter, it looks bigger inside. But still would only be body sized, could prove a challenge for the larger caver.
- FIS97- 0360512, 4791301 e 1178m Fissure too small to enter, no promise.
- FIS96- 0360511, 4791308 e 1181m 3m pot, leafy base.
- T18D- 0360273, 4791740 e 1093m Does not exist, no obvious cave nearby at Grid ref.
- T18B- 0360399, 4791275 e 1200m Does not exist, No obvious cave nearby at Grid ref.

H12 (Head of Sobra Valley)

PW, HJ

Returned to *H12* at x:0360342 y:4790225 z: 1059, 10 m diameter shaft, 10 m deep. Obvious (dry) stream bed runs straight into the pot, from the top it would appear the stream then 'winds' down the pot, into obvious sink area (full of logs and debris)

HJ rigged down gully into main pot, and found choked sink, would require digging. Lots of organic material blocking the way on which would wash in after every rain fall.

Calf Hole

PW, HJ

Following trip to *H12* visit new 'Calf Hole' to check out possible leads. Interesting cave, not far from *Cowshead Cavern*. Lots of cheese racks, even along the stream.

Upstream: crawl over big boulder into small chamber. Sound of water to left below boulders (not a promising dig, and still close to the surface.) Turn sharp right and up through awkward squeeze into another small chamber. Two ways on, straight ahead and up and right. Up and right drops down again into small chamber, vocal connection back to upstream limit and LUSS 1986 'Dick' carved in mud. (need to check 1986 logs for exploration history, if any written up).

The straight on lead is more interesting. Tight squeeze might be passable by very small person, otherwise solid roof could be capped for a short way. Leads to rift getting bigger and possible continuation beyond. Slight draft present, but still close to surface and this is heading towards *Cowshead Cavern*.

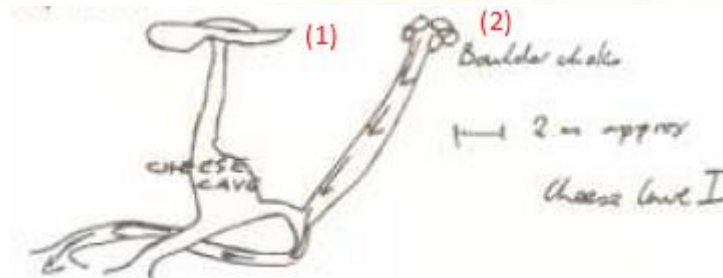
Downstream: short crawl to muddy boulder choke, this is right under the track (corresponding to muddy section). Daylight can be seen

Cheese Racks: back at entrance there is a small passage behind the cheese racks. This is around 3m long to a small chamber, back above the incoming passage is a crawl to a slope with surface roots evident. In the chamber there are 2 tight crawls (top one is easier) that leads to a possible continuation.

Update: SWCC 1986 report has the following reference which may be the same cave

7th August 1986 - Rich Barker

Cheese Cave I - The Cheese cave was visited, and a crawl pushed to a small chamber and a smaller crawl. Two minutes knocking the shit out of some stals. opened it up for another small section ending in a calcite choke.



Picture: Cheese Cave I sketch from S.W.C.C. 1986 Journal (S.W.C.C).

It would appear the passage behind the cheese racks (1) was not explored and the upstream lead (2) was not pushed much beyond the boulder choke, although the 'graffiti' chamber is past this boulder choke.

Cueva del Nacimiento – Upstream sump

BC, SC, LL, LBr

A late start eventually reached *Agua* at 3pm with objectives to place dye tracer in Collins Climax and photography in the winter gardens. Reached *Consort Hall* by 8pm and the continue to the junction above *Green Domino* where the four of us split into 2. Stu had issues with his contact lens and after taking it out and putting it back in, Leo and Bob headed down to *Green Domino* and off to *Colin's Climax* and successfully place dye.

[For the purpose of retrieval on the approach to Collins Climax the slippery descending passage crossing a high inlet from the left (from Twilight Zone) and continues around to the right passing a small pool on the right. The passage continues around to the left descending a little more until an open chamber is reached with rope ascending on the far wall. Continue around to the left following the sound of the water. A small opening with a sand covered flow can be seen (with an arrow drawn in the sand). Walk past the window on the right (which gives access to the stream via a short down climb) and continue to follow the sand around and down to a larger opening giving easy access to the wide stream. Looking to the right a thin white pipe will be visible tied to the top of a rock with the detector tied on the end.]

Lydia and Stu continued to the passage into *Dan's Big Room*, replacing a 5m hemp rope on downwards pitch with 15m of 8mm rope. Bottom the pitch and continue up the ramp that leads to *Dan's Big Room*, wall of passage getting progressively more pristine. Stu not comfortable with exposed climbs, Lydia continues for 25 minutes until at the bottom of *Dan's Big Room*. Climbs get progressively more exposed and time until proposed turnback time gets closer, photo trip is abandoned and Lydia and Stu head back to meeting point.

After a steamy meal in a 4-man Bothy in *Consort Hall* the party headed out. On the way-out photos are taking at the window however Lydia wants to redo them because she's fussy. Plan to retake photos on *Death Race* camp.

Cueva del Nacimiento – Parting Friends

AR, JD, RM

2nd trip in to rig to parting friends and carry lead nearer the sump. Water was a little lower yesterday though still impressive and it was again necessary to bolt climb above the streamway up the cascade seen the day before. RM set about bolt climbing while JD and AR re-rigged the dodgy tat and climbing rope used previously. RM climbed 30m diagonally in sporting conditions to where it appeared to be over. Unfortunately, this led to even more cascades which required rigging, so RM re-used the tat to climb further but was still annoyingly short of the top of the cascade. Another rigging day will be needed.

Sierra de la Corta

LB, TD

We were tasked with the objective of finding numerous shafts in the *Sierra De La Corta*, whilst walking along the track, we noticed a few potential leads, firstly spotting a depression from the track UTM 362760 4789291 turn right off of track to see a big Silver Birch tree in depression, on the left it the cave which goes for about 20m before closing down to rock. Continuing along the track, there was a track to the right, which had the Yellow and White line marker with a cross through it. We followed the track up to find *Rift Cave* UTM 362838 4789263 which is small but drops for approximately 10m, without seeing the bottom. Continuing up the track on a similar elevation about 20m along the track is *Toby's Rift*: Approximately 15m deep the rift was turning right out of view

We followed the track until there was a muddy gulley and we went up the gulley to find *Big Fluted Rift* UTM 362746 4789202 approximately 20m deep, we could see the bottom but not sure if there is a way on. there was a rock bridge in the entrance

At this point, *AL2* grid reference was inputted into the GPS and we found *Big Fluted Rift* was approximately 1 km away. We walked back to the main track and started to search all depressions either side of the track until we reached *AL2*.

Following the GPS to *AL2*, on the main track *T585* UTM 362762 4789243 was found, approximately 15m deep.

Continuing along the track there next to the track was a *Big Open Shaft* UTM 362649 4789172, shaft is approximately 15m deep.

Following the track upwards, there was a big hole on the left of the track 10 to 15 metres beyond *Big Open Shaft*. Approximately 5 m deep bearing around to the right out of view.

After another 500m or more we found *Dead Tree Hole* UTM 362296 4788951, a sloping shake hole leading to a shaft in the corner, could not get close enough to view down the shaft.

We followed the track until the man-made track petered out, then headed up to the peak, to find three massive pots on the top UTM 362281 4788643

Being approximately 156m away from *AL2* grid reference (UTM 362073 4788639), we continued to find the *AL2*. We searched the rock at the *AL2* reference, but no cave was found.

- Shaft near the Rock bridge - Grid Ref: 0363328 4789285 elevation 1079m
- Rock Bridge - Grid Ref: 0363335 4789286 elevation 1077m
- T583 - Grid Ref: 0363355 4789233 elevation 1087m
- Rifty Hole - Grid ref: 0362838 4789263 elevation 1132m
- Toby's rift - Grid Ref: 0362813 4789261 elevation 1133m
- T585 - Grid ref: 0362762 4789243 elevation 1134m
- Leafy Cave - Grid ref: 0362760 4789291 elevation 1045m
- Big Rift - Grid ref: 0362746 4789202 elevation 1146m
- Big shaft next to the Track - Grid ref 0362649 4789172 elevation 1160m

- Dead tree hole - Grid ref: 0362296 4788951 elevation 1253m
- Three Massive pots - Grid ref: 0362281 4788643 elevation 1374m
- North Edge of La Torca Grande - Grid ref: 0361420 478712 elevation 1419m
- 45-degree shaft near white house track (T71D) - Grid ref: 0360660 4787610 Elevation 1361m
- Rio Chico - grid ref: 0334417 4789200 elevation 890m
- ELENA – grid ref: 0360711 4785424 elevation 1894m
- GA-49 – grid ref: 0360709 4785280 elevation 1953m

Thursday 5th September

Marniosa – Papoose Pitch and dye release

HJ, DJC

The big day has finally arrived, we can release the dye into the streamway! Howard and I headed to the *Marniosa* streamway and descended the pitch into the streamway. Just downstream (ok, 5 m) was a likely looking pool with which to fill the bucket. Howard took the camera and Derek started to add the dye to a bucket of water. Various photos were taken for a before and an after shot. The dye was added and the streamway turned green and started to move downstream (see photo's). After a quick rinse we started to prussik out of the streamway.

Near the top of the *Papoose Pitch* we stopped to find the fossil continuation. It turned out to be above the start of the traverse line to the pitch. We looked and thought it needed some dynamic rope to climb up. The super-duper torch illuminated the *Papoose Pitch* area very clearly, but there were no other passages off.

The torch was very useful and could be used in many other instances, especially when climbing.

Rio Chico – dye detector

TD, LB

We returned to *Chico* as the sluice gate had been closed, the water was now diverted into the canal. We moved the location of the dye detector to ensure that it was in *Chico's* main flow.

Nacimiento – Parting Friends

RM, JD, AR

3rd trip in to rig to the *Parting Friends* sump. RM continued onwards from the high point of yesterday while AR and JD re-rigged the climbing rope and tat with proper caving rope. RM reached the sump pool within 20m of rope and set about arranging washing lines and a safety catching rope as the sump was perched on the edge of the top cascade. A high-level traverse line was placed, and a low catcher line in case a diver was to exit the sump too quickly in the flow. JD and AR successfully re-rigged the lower streamway. In all, approximately 150m of rope is needed to rig the streamway from the bypass to the sump, as well as approximately 35 bolts and 10 slings. The streamway is an awesome and impressive place that would be very serious in wet weather.

Nacimiento – Wigan Pier to Parting Friends survey

PW, AG, WB

Lovely day surveying with PW and WB (AG)

Tresviso - Recovery Trip following 14-hour Nacimiento trip

SC, BC, LBr, LL

Following a 7am bedtime for all involved, we had a late start to the day. Much deliberation over plans led to sorting kit from the previous trip. A decision was made to go to La Taverna for a lunch of cheesy chips and blak pudin (Spanish spelling). We left at 4.45pm and made it to the entrance before 5pm. Food was enjoyed and the rest of the expedition joined us throughout the night, having heard how good the 'cave' was. We all ate at the 'cave' de la Taverna and managed to stay until closing time. The whole expedition then headed back to the hostel for more refreshments and another late evening. This was the first of the serious expedition days.

Friday 6th September

Hut prep

SC, LL, BC, JD, RM, WB, AJ

Today was a rest day for most. It was a tough day. Some serious sleeping was had following a late (read early morning) bedding down. The teams left at the hut sorted kit and even swept and mopped the floor and tidied the kitchen prior to cooking spaghetti bolognese. Others at the hut prepped for a *Parting Friends* dive tomorrow. Only one beer bottle was harmed in the evening. Despite Lydia's constant nagging, we did not play bananagrams. A serious day of expedition had by all.

Silvestre to Marniosa

AG, LB, DC

The main aim of this trip was to get more of the survey of upstream *Marniosa* completed and, if possible, get some more photographs of *Silvestre* on the way through. Derek and Lisa had not yet been to *Silvestre*, so I think they enjoyed this way into the *Marniosa* system.

We steadily made progress down the pot and popped out at waterfall junction where I pointed out where *Bob's Crusade* and *Wet Willy* are. Following the dry fossil passage after this point, we arrived at the LUSS Graffiti, and knew we were close to the start of our survey.

We found the point we needed to start our survey; this was the Whoop! Sign from Chris, Hannah, Dave and Jason. It denoted that we were linking into point 1944.

The surveying went reasonably smoothly, we achieved about 350m of surveying in 3 hours before we called it to ensure we got out. This was about 6pm. There is approximately 200m of surveying to do to link the two systems, this will include a bigish chamber on the southern side of the streamway, at the base of the Z shape in the passage between *Yorkshire Inlet* and the waterfall climbs.

After 6pm we were on the way out, steadily making our way through into passageway that felt more familiar with reflectors marking the route. We donned our SRT kit after the boulder choke to aid climbing down the handline into the stream. The final part of the trip up *Papoose* and through *Marniosa* went swiftly. I was able to tidy up the extended elevation survey at the base of the 20m pitch, some of the extends had not been picked up, so the elevation truncated at the head of the *Yorkshire Inlet* climb. This was easily fixed, and we were able to exit to a Moonlit starry night, the Moon shone straight down the Valdediezma valley.

Fuente soles – 6m Bolt route into solution hole

HJ, PW

On the west side of Pico Fuente Soles is H4 0359732 4787819 1251m, a small hole in the side of the cliff. 6m aid climb into a solution pocket HJ learnt how to use a gri-gri. Verdict from HJ is he didn't like it, (you sometimes can't teach an old dog new tricks). Day was saved from being wasted when 2 vultures were seen. Smaller solution hole spotted to left hand side of this larger one, not attempted.

Saturday 7th September

Cueva de la Marniosa – Free Willy Aven

PW, HJ

Return to the aven towards the end of the *Extra Caverns*. Quickly up to current limit (left hand aven from main split). Another 10m climbed to a narrowing of the passage. Appears to be slight draft but general passage is closing into squeezes around old calcited popcorn. A few holes may continue up but would be extremely hard work. De-kitted back to split in aven, knocking large stal onto Howard's foot in the process. Large bruise next day.

Chocolate bar for late lunch and then we started making the ledge suitable for attacking the right hand aven. This one looks promising, going back out into the main aven above *Extra Caverns*, with possible lip visible another 10m. Started a traverse but only had time for a couple of bolts as battery started to die. Right hand aven now rigged with SRT rope (y-hang) to current limit. Survey station for continuation is the bolt at the centre of the facing wall, where the aven splits into 2. (Just bolt sticking out, the maillon & hangar have been removed).

Back down and out the cave. 5-hour trip

Cueva del Nacimiento – Parting Friends

JD, RM

Thanks to AR, LBr and LL for assistance carrying in various bags of dive gear both into the cave then up the streamway to the sump. RM dived first passing the first sump after 25m and securing the line on the far side. JD followed surveying. Both divers surfaced to be surprised by a large cascade. This was carefully climbed by RM with dive line left throughout the dry section (30m approx.) to act as a handline. JD continued the survey through the air-bell, and the divers reconvened at start of the second sump pool. RM again dived first lining in in a large 4m diameter tunnel. The sump dropped quickly to -20m before rising again to -6m, then straight down a shaft to -13. In total RM laid 180m of line from the start of sump 1 (115m in sump 2), before turning on thirds. JD continued surveying behind also turning on thirds at the same point. Thanks to AR, LL and LBr for their assistance removing the used cylinders from the cave.

Cueva del Nacimiento – Parting Friends survey

LBr, LL, AR

The aim of the trip was to carry in dive gear for Rob and Joe, pick up more gear that had been left further in the cave on the way to parting friends and then also survey from the top of the stream way back to the lake, which had been the last surveyed station by the previous team in. Once the divers were set up with all their gear Leo and Lydia begin surveying back down the stream way using tape, compass and clino as the passage was too misty for a disto. To make the surveying easier we pretty much decided to survey along the bolts so easier for Leo to pull the tape along. This was proved by how occasionally the stream would catch the tape and drag it down the stream way. We got a clear centre line and I took cross sections along the streamway. Once we were back in the kit up chamber area, we could use the disto again in order to connect the stream way to the previously surveyed passage to parting friends. Still to be surveyed is down stream of parting friends and past the parting friends kit up chamber.

Tajadura – Surface

AG, WB

We could not find any caves worth mentioning on this day either up on Tajadura. The only thing probably worth revisiting is T18B1.

- FIS89 - 0360699, 4791304 e 1162m A shake hole.
- FIS88 – 0360500, 479986 e 1250m A large Rock shelter visible from the road.
- FIS87 – 0360454, 4791021 e 1261m A 5m by 1m high cave, along the same line as the rock shelter.
- FIS86 – 0360348, 4791108 e 1242m Descending cave passage 2m long filled with leaves.
- FIS85 – 0360338, 4791130 e 1246m An Interesting leafy fluted hole.
- T18B1 – 0360407, 4791240 e 1197m A 2m drop into a leafy hole with the slope continuing, It was not descended as I was looking at it by myself without a rope, the hole was about 2m wide.

Sunday 8th SeptemberCueva de Entre Cuetos survey

DJC, PW

Derek and Phil started a survey into the cave. One of the side passages had some liquid moonmilk before it became too tight. Another passage tended upwards to a small breakdown chamber. We then went through the constriction- an unpleasant experience and Phil continued the survey down through the corkscrew to the top of the 1st pitch. A surprisingly chilly bit of cave.

Cueva del Nacimiento – Parting Friends

JD, RM

Dive day 2. RM and JD self-carried the two recharged cylinders back into the sump and kitted up ready to dive. This time JD led with RM surveying. JD laid line to 230m into a confusing area of swiss cheese like passage where the way was not obvious. He passed the line to RM who continued, eventually surfacing in a small off route air-bell with no way on. At this point JD had returned to base so RM attempted to estimate a survey back to 230m in deteriorating vis. Both divers hit thirds and retreated confused. Both divers then struggled to carry 2 cylinders out each and a set a regs ready for the third and final dive. Thanks to LL and WB who were cornered at the entrance to carry cylinders up the hill for two very tired divers.

Cueva del Nacimiento - surveying

AG, SC, HJ

Phil had marked some side passages on his surveying trip several days earlier and our objective was to explore and survey. 33 years since HJ last entered the cave! The bridge across to the entrance was a shock, but the dingy technology works well. An efficient trip to the black hole series where we met the first cairn marker. HJ was explorer, AG drawer and SC was laser man. A passage headed up above the main route and eventually curled round to look back down to it. 2 little climbs.

At the second lead HJ and SC swapped roles and SC pushed via a flat out crawl up a dodgy rift. No way on. An uneventful exit was made until the streamway where SC took some fine photos and videos with his GoPro. AG tried his best to fall out of the dingy which we then pumped up for other users. The slog up the track had not diminished in the 33 years!



Picture: Cueva del Nacimiento (Stuart Coxon).

T48 - La Torca Grande

LB, TD

Used grid reference (361357 4788450) from website, got to grid reference to find no caves.

Monday 9th September

T48 – La Torca Grande

LB, TD

Phil used google maps to locate the shaft on PC, then converted it to grid reference (361376 4787804) this was found to be about 30m off the cave.

We found the North Edge of the Shaft, which could be easily abseiled down. New grid reference for this point is: 361420 4787812

The website suggested 10m rope, we took 20m, so we did not descent the shaft. We estimate about 80m of rope is needed to get to the snow plug. From what could be seen from above, there looks like a potential way on, at the bottom of the gully on the opposite wall. We could not see around the rock into the south end of the shaft.

Cueva de la Marniosa – Surveying

PW, AG

A job which needed completing was the upstream surveying in *Marniosa*. Having spent a previous day surveying down from the junction with *Hall of the Mountain King*. I knew we had about >200m of surveying to do, and it was on the list of things which needed doing. On the through-trip from *Silvestre* to *Marniosa* 3 days ago I had found an interesting black space above the southern end of the passage that we needed to survey, so I was keen to get back and see if there was anything that needed looking at there.

The surveying of known passage went swiftly, with AG on Disto and spotting of survey points, and PW on Topodroid. When we got to the interesting black space, we decided we would have a look at it, knowing that we only had 10mins of surveying to finish off the surveying of known passage. I climbed onto a block and saw that there was a streamway (*The 42 Streamway*) going off into the distance 3m wide at the start. I had a quick look up there for 20m, while Phil poked his big light into the void above.

We jointly decided that we needed to survey the chamber above the streamway (*Alien Weaponry*) it is a 20m wide, 50m long and 14m high Chamber. At one end of the chamber is an aven (*Ted Aven*) more than 35m higher than the top of the chamber and 6m wide.

At the other end of *Alien Weaponry* is a high-level route (*District 9*) which heads off in a southerly direction.

Ted Aven and *District 9* are both ongoing leads which need climbing/Exploring/Surveying.

We then returned to survey point number 42 and hopped over the 1m boulder to start surveying the *42 streamway*. This leads off in a southerly direction and now needs surveying and exploring, we think that this could be the lower level to *District 9* and the holes in the roof of the *42 streamway* lead back into *District 9*.

Howard has suggested that to progress the exploration of *Marniosa*, we should think about setting up a camp, we had a ponder over this, and a likely candidate may be up in *District 9*. The reason for a camp would be a place to store gear, have food and make the exploration of the leads more pleasant (and perhaps even bed down for a bit). There are 3 Avens which could then be explored from this camp: *Hall of the mountain king*, *Yorkshire Inlet* and *Ted Aven*. There are also the easier objectives of *District 9* and *The 42 Streamway*. With heavy bags the potential camp would be more than 2 hours from the entrance, with a further hour and a half to get to *Hall of the Mountain King*.

Cueva del Nacimiento – Parting Friends

JD, RM

Final dive in *Parting Friends*. Thanks to LL and WB for their assistance carrying in recharged cylinders to the beginning of the sump bypass. Unfortunately, this still left two tired divers with 2 9l cylinders and a reg bag each to struggle with up the streamway ropework. RM set off first through the sump with JD just behind videoing the dive. Both divers looked for missed leads on the way in but to no avail, so RM relocated yesterday's dead-end air-bell (now called "*bell end*") with JD surveying behind to the bell where the divers reconvened and discussed a plan. RM continued again from below the air-bell eventually looping back into the main passage at 205m. RM secured the line at a junction then cut the rest to have one last look. RM spotted a dark void left off the line at 230m the mark and followed this round a couple of bends and into a typical Agua ramp passage which surfaced in a large rift-based air-bell. JD surveyed behind and both divers reconvened in the air-bell impressed with their find.

The air-bell was 20m long, 4m wide and 4m high (provisional christened "*nob on*") with 2 possible ways on. There was a large shaft directly below the entrance to the bell, and at the far end an enticing sump pool leading off at the end of the rift. Both divers were running low on gas and spare line so realised they could only have a quick look at one of the possible options. While discussing this it was noted that the water in the air-bell was flowing for the upstream continuation on the far side was chosen. As gas reserves were low, the decision was RM would dive first and JD would only follow if RM didn't return within 10 minutes (i.e. if RM surfaced again). As luck would have it, RM surfaced after 30m (with only 4m of line left) into a larger air-bell with the roaring sound of falling water. Game on!

RM set up a washing line for the kit and waited for JD to come through. Both explored and surveyed the main-stream/air-bell (approx. 25m to another sump with one small cascade), and then up a rising ramp crawl for approximately 40m until it became too tight. Both divers returned safely very satisfied with their find, and again struggled back down the streamway with two cylinders and regs each, as they were aware the weather was coming in the next day. Two tired but very happy divers continued out from the bypass with reg bags only and surfaced in time for a few beers in the pub. An excellent trip and just reward for the effort. Many thanks to all those who assisted with gear carrying!

Cueva del Nacimiento – Outer Mongolia

WB, LL

No log written

Cueva de Entre Cuetos (Cheese Cave)

BC, AR, LBr

No log written

A visit to the Sara depression

DJC, SC

Stu and I drove to the crossroads and started a walk up to the Sara depression. We stopped at the Whitehouse and consulted the sketch map from the early LUSS expeditions. We walked upwards and took a quick peak at the Lake Depression before continuing upwards. We passed several mined entrances before reaching the col. The afternoon was a mixture of low clouds and high clouds, so the depression popped in and out of view. A few shafts were found with numbers, a few shafts were found without numbers and numbers were found that weren't on the cheat sheet provided by the old LUSS people. A couple of GPS points were taken:

- 0361376 4785468 1846: T614 Unmarked hole with a 6 ft drop followed by a pitch about 10 ft
- 0361117 4785620 1870: T114B mine entrance just up the slope from T114
- 0361363 4785501 1842: AN200- a shaft

Tuesday 10th September

Outlook: Rain!

Cueva de la Atum

Searching for *Minas de Los Inglesas*, I could not find it, but did find an interesting hole in a similar area. It might require enlarging to enter, but once in it would be larger. And looked quite promising. T615 (RAI1) 0365142 4790977 894m

Cueva Mueria

PW, HJ

Rain started at 10 p.m. last night and continued through the day. Varied from drizzle to violent down pours. We decided all stream caves would be sporting so headed to *Cueva Mueria*, a cave first explored in the distant past. The description seemed straight forward and a GPS reference of the entrance should have meant it was easy to find. Its position between the two *Marniosa* sumps makes it an interesting prospect. The fact it had been a cheese cave led us to think there would be a good path to the entrance! Ha ha!

Monsoonal conditions continued as we crossed the dam and headed up from the small bridge. We left the path and headed up the hillside, fighting through the normal unpleasant flora until a sheer cliff was met some 150 feet below the entrance.

We returned to the path and decided to out flank the cliff and come to the cave from above. An hour later we topped out and was faced with the prospect of abseiling down to the entrance. By this time, we were both very wet and cold and decided to head back to the car.

The valley was awash and the stream heading down to the Urdon was a torrent. It is suggested we revisit in May when the flora might be easier to thrash through. All kit is now much cleaner, but also much wetter than before!

Arenas de Cabrales, Serious Expedition

SC, BC, AR, LL, LBr, DC, RM, JD, WB, LB, TD

The forecast was for rain. Lots of rain. After the rain had started the night before and the diving team had completed the last of their diving in *Parting Friends*, for this year at least, it was decided a serious expedition day was needed. A positively alpine start of 10am saw the plans from the previous night shunned, well almost all of them. Without our glorious leader, Sir Philip, the rabbles of cavers were left to their own devices. This resulted in a few brave cavers taking to the kitchen and cooking poached and fried eggs on wraps, some with fried chorizo and some without. a clean down of the kitchen ensued whilst more serious expedition plans were made to take two vehicles to Arenas. The journey was productive in that we prospected a new resurgence in the Sobra valley, opposite *Marniosa* (ish), from the road. Other such events of the journey included avoiding running over a man with a stick who was walking on the wrong side of the road, followed by two cows and another equally angry man with another stick. The main event of the day was completing 7 through trips, all of which were a significant size, and had concreted entrances and a special speleothem floor of what can only be described as asphalt.

Once in Arenas, the weather had not improved, and it was wetter than an otter's pocket. We traversed the streets to the bank where more expedition funding was secured and traversed further to pick up some supplies from the outdoor shop. The main lead we wanted to look at was the taverna

where all members of the expedition were grateful of Bob's ability to make a great shelter and to arrange us a 3 course meal, drink and somewhere warm and dry to recover from the previous hours of strenuous work.

Following the pre-described refreshment stop, we then set off for the second promising lead of the day. El Supermercado. The objective was reached, passing another Expedition funding opportunity, and the delights and beauty of the chamber found were explored. Various items were collected for later analysis, such as cake ingredients and several flavours of alcoholic drinks.

A short napping session by some of the group's cavers was needed, which happened whilst the 7 through trips were repeated from the opposite end, on our return to Tresviso.

The return to Tresviso saw the full expedition team re-form into the great team that it is. This saw a chilli con carne get cooked, followed by some exploration into how the oven worked. Arwel was pivotal in this exploration, thus proving his invaluable status on the expedition again, as he managed to light the oven, that, to our knowledge has never been lit before! This extraordinary breakthrough meant that Dreads could instigate the further analysis of the cake ingredients through combining them into a chocolate cake, despite unconvincing thoughts from the rest of the team.

It was decided, due to a lack of members being present at the hut, that the cake should be celebratory of the 500m of new passage surveyed currently. Sir Philip was asked to cut the cake and various photos were taken for sponsorship purposes.

Comments were returned that the cake was indeed a cake, tasted like a cake, looked like a cake and was indeed a cake.

A top day of seriously hard expedition breakthroughs that has left a few of the team very tired.

Wednesday 11th September

T48 La Torca Grande

LB, TD, RM, LL

Exploration of *La Torca Grande*, abseiled approximately 50m down to the snow plug. The original passage which we thought might go, was full of debris. Climbed down the snow plug to the lower point, and Rob climbed up an aven which led to nowhere.

Rob had spotted a hole on the South side of the shaft, which was explored, 20m slope to a tree, 20m drop to the smaller shaft (2m diameter), shaft dropped 15m and then was blocked.

All the exploration was surveyed by Lydia and Rob.

Cave Near the White House Track. (T71D) Grid reference: 360660 4787610

Toby noticed this shaft last year. On Monday we took some photos of the entrance and showed Derek and Howard, they did not recognise it, so on Wednesday Lisa descended the shaft, to find no way on, but lots of animal bones, plastic bottles/ rubbish. Some digging equipment was found.

On my return to the surface Rob found minimal red markings on the wall, there are now two drill marks on the left wall, before descending.

Extra caverns Marniosa

PW, HJ, AG, LB

Objective was to continue climbing *Free Willy* aven and survey the avens at the far end of Extra Caverns.

A late start (10.30) was made even later by Al (for)Gott leaving his over suit in Tresviso store! HJ and LB waited at the top of the 20 and met BC and AR who were on their way to the upstream discoveries of the day before the day before.

AG and LB went to the far avens and surveyed 50m of passage before pushing the passage beyond the RH aven to a further aven, some 10m high bifurcating. Aven has been left tackled.

PW and HJ returned to *Free Willy* aven and continued above previous high point. The ledge PW was stood on crashed 25m to the floor which woke us both up! Five minutes earlier Al and Leo were stood below this ledge. Beyond, a band of poor rock made upwards progress impossible. Another slot directly above the belay ledge led up 10m to a squeeze. At this point LB (thin man) arrived at the bottom of the aven with AG. HJ and AG exited, and LB pushed the tight slot into a continuation of the aven which closed. This aven was derigged and PW and LB exited to a sunny evening in complete contrast to yesterday!

Free Willy aven description: From the base of the aven in Extra Caverns, a 5m up pitch (rigged) leads to a large eyehole, climb through the eyehole into a continuation of the aven. Down is tight, but only leads back to the base of the aven. A further 6m pitch up (rigged) leads to a split in the aven. The left-hand route continues up for another 5m to a narrowing of the passage. The roof of the aven here becomes increasingly calcited and only small tight options are possible. Aven derigged. The right-hand route, back at the junction, quickly splits again. Right leads back over the main aven. A traverse has been started but the rock is difficult to drill (the two bolts / hangars at the furthest most point should be ignored; the bolts spin and the placement is poor). It may be possible for a climber to progress further without the need for bolting. (still rigged). The top / lip is around 10m higher up. Left at the split here, leads to another small aven, with a trickle of water, this is 6m high to a tight squeeze into a small chamber, to a further aven of 12m. This has not been climbed and this route has been derigged.

Cueva de la Marniosa – District 9

BC, AR

It was the day after the big downpour and we knew the water levels were likely to be high, but we hoped the worst of it would have washed through – we wouldn't know though until we got to the streamway.

We entered *Marniosa* with every expectation we might have to turn around at the streamway, what we didn't expect was the passage to be completely flooded halfway there. It was just past the turning to *Extra Caverns Series*, just at the point where a muddy slope usually needs to be climbed both on the way in and on the way out. The newly formed lake now needed a delicate traverse at water-level on the right-hand edge was required as a swim at this stage would have seriously jeopardised the rest of the trip.

After the 'lake' was passed the rest of the route to *Papoose Pitch* was uneventful. At the head of the pitch the sound of water was a little louder than normal which didn't bode well, however as it turned out the descent into the streamway was easier than expected and the water was thankfully only twice as high as it was normally, in this case wellie to knee deep (although you could see it had been at least chest deep recently from the foam).

We headed upstream through a series of passages which were decidedly more 'drippy' than normal and it was quite hard to try to stay dry, especially in the boulder choke where there was a distinct waterfall which gave us a good soaking even with the psychological protection of the hoods in our suits.

The water level remained high all the way to the point where we left the streamway to locate the *District 9* area. After a small amount of exploration, we matched up the rough sketch we had of the area with the cave around us and managed to locate one of the survey stations to tie in to.

From the distinct rock which marked the survey station we proceeded up the slope of loose rocks and delicate crystalline formations to a flat-ish ledge which marked the entrance to the series we'd been tasked with exploring. Whilst not the huge, flat, potential camp location we'd hoped to find, it may well be possible to flatten out enough places to set up a camp.

From the edge, we proceeded into the chamber which dropped away to the left back down to the *Marniosa* streamway and on the right passed through some interesting drip-pitted mud floors. Avoiding the drop to the left, from which the streamway could be seen and heard, and trying to preserve the mud on the right was a little tricky.

At the far end of the chamber the route on turned up a narrowing slope around to the right. To the left a blank wall. The top of the slope emerged onto the side of a slope coming down from a boulder ruckle in the ceiling on the left falling away to a choke on the sloping floor to the right. Crossing the slope, the floor also dropped away straight ahead down to a streamway which was not explored but showed promise.

As we returned to the point at which we left the main *Marniosa* streamway we found the point at which a dry inlet had been found a few days before, however today there was noticeable more water entering the *Marniosa* stream way from this inlet than was coming down from the *Hall of the Mountain King*.

We started up this passage, negotiating the deep pools at high level which a few days before had been dry passage. Following the left branch (and the last of the previous survey stations, now underwater) we proceeded up the passage to a junction where the stream entered from the right and passed underneath to the left.

We could see quite a way up this passage which although calcified, was large enough to explore. The issue we had was that there was so much water dripping down the Disto laser was not able to shoot any reasonable distance. As we had reached our turnaround time, we decided to come back another day with less water in the passage to continue the survey.

As we came back out of the inlet we saw a hole in ceiling which we assumed was the sloping chamber we had looked down from earlier, however when we drew up the survey we found this was in another location which means this was also worth climbing into.

The return was as wet as the way in, except for the waterfall in the boulder choke which couldn't be avoided. The flooded passage I lake in *Marniosa* was just a tricky on the return, but we did laugh at the reflector which was now underwater.

We emerged without incident, a great trip and the amount of water in the inlet we explored means it's worth returning too.

Cueva del Nacimiento – Parting friends

RM, JD, WB, LL

No log written

Entrance in flood



Picture: Cueva del Nacimiento entrance in flood (Derek Cousins).

Thursday 12th September

Cueva del Nacimiento – Parting friends

RM, JD, DJC, LL

A trip down to *Agua* started ominously when the waterfalls were heard within 500m of the start of the descent. Although lower than yesterday, the water was still overflowing the dam by 3 inches and overflowing many places along the canal side. The pool was clearly not passable so RM set about bolting a flood traverse route in the roof of the entrance. After 2 hours, and with a seriously exhausted core RM managed to bolt to the far side of the entrance pool into the bypass passage. RM

set about up the bypass, which had clearly been flowing, and had to swim over a new lake which had previously been dry. The short handline down had also been washed upwards and at the base of this, 1ft lower, was a sump to the right! A quick look at the river crossing on the flood bypass showed it was deep underwater with the rope bouncing joyously in bounding white water. Clearly not passable! (It should be possible to bolt above the flood traverse if needed to access the far side. Rope/ drills/ hangers will be taken in for kit retrieval tomorrow.) On return it was noted that the water at the dam had dropped 1inch in 3 hours, the height drop is predicted to drop linearly, however once the height level drops under the weir we can assume the flow will remain the same and the height will be stationary for some time and then begin to drop exponentially.

Cueva de la Marniosa – Weyland-Yutani

AG, LBr

Our trip was to look at a lead found this expedition in *Marniosa*, off *District 9* in *Alien Weaponry*. We packed everything we might need and planned to set off with plenty of time to get to where we needed to be and at least achieve something.

Then Phil gave us a meter which measures the resistivity of water. He explained that some science could be done on this and we should take a notepad and a pencil for this.

We got down to the streamway outside *Marniosa* at about 10.45 (from memory) although my notepad and the resistivity readings will prove a test to my memory (5days on! back in the UK). At the stream outside *Marniosa* we took a reading so that we could contrast this over the day and see what the reading would be when we got back out.

Following the cave down to *Papoose* and upstream to where the water from the *Hall of the Mountain King* and the *42 Streamway* bifurcate. We took measurements in every inlet ensuring we also took a reading upstream of the inlet to see if there were any differences. In some places there were, but we have not processed the results with a scientist qualified to give us an opinion on the results we saw. When most of the science had been done (bar a remeasurement of an errant result and measuring the stream outside again) we continued with the exploration of the leads around *Alien Weaponry*, and we were bang on schedule starting the exploration of *District 9*.

We had been told by Bob and Arwel that they had got to a slope going back down into a stream. We found their survey points with ease, however we decided to stay high in case there were an easier way back down to the streamway.

We climbed upslope from their point 8 and through an opening in the blocks and found ourselves in another antechamber, we saw that we could climb down quite a "necky" loose climb, where we considered rigging a rope but decided "it would be ok", [note this will need a rope on next time, as difficult to return].

At the base of the antechamber was a 3foot high stalagmite which I pinged the survey to. At this point me and Leo could see how pretty the antechambers were and were overjoyed to find a plethora of stals, flowstone and helictites. Following the chambers round at the top of this section we found that the very end of this higher section came down to a rumbling sound between boulders and no obvious way on. Following the *42 streamway* will be the only option to ensure we are able to progress south and into the mountain.

The passage from the antechamber, including the formations, to the rumbling sound was named *Weyland-Yutani*. The *42 streamway* still needs pushing, as does *Ted Aven*.

Cueva Mueria

HJ

Having been defeated in the storm 2 days ago I was determined to find this cave which is above *Marniosa* between sumps one and two.

Go to the Sobra dam and continued along the path on the LHS. Cross the little bridge and follow the little track to the large track junction after 5 minutes. Turn right (uphill) for 60m and then turn up the hillside following the path of least resistance to the obvious big cliff. There is a vague path in a vague

very shallow gully. When you hit the tree line you are 150 feet beneath the cave entrance. Follow the gully directly to the cave entrance which is at the base of obvious cliff line.

Big chamber entrance with partial wall. Further inside is another small wall. Wires in the roof above pit fires suggest meat is dried and smoked in the cave. A 10m drop and several chokes are worth prospecting. A climb into the roof as well. If going back take a drill, short rope and crowbar (and capping gear). In my GPS are useful references to find the track leading to the cave, but its stopped working!

Monte los Joyos

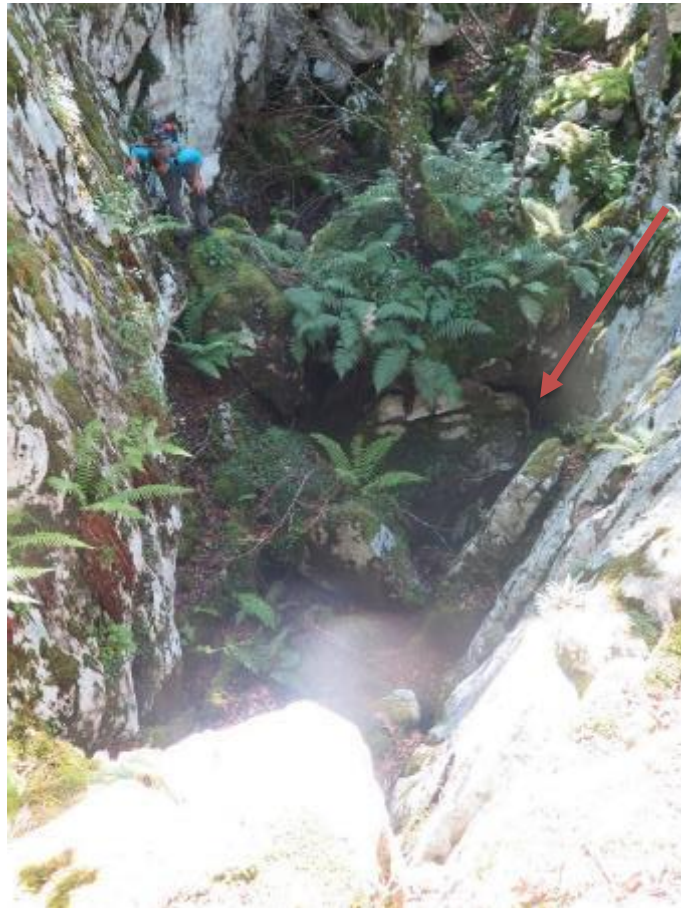
LB, TD

The objective of the day was to find shake hole with a rock bridge. We followed the footpath until it abruptly stopped. 10m on we had an adventure balancing on sloping and razor-sharp limestone, with body eating holes when we stumbled across T583 rift (Grid Reference: 363355 4789233). Approx. 1m by 2m wide, and 7m deep.

Continuing our balancing skills across the rock, we found many shake holes on our way to the northern end of the cliff. As we got closer to the cliff, there were plenty of grassy body eating holes to avoid, we could not see them until we almost fell in. One of us followed the edge of the cliff, whilst the other looked deeper into the forest, within ear shot of each other and checking in regularly. We did a good sweep of the area, looking at various shake holes that we came across, there were at least two rows of shake holes that matched the description but no Rock Bridge in any shake holes.

We decide to return to the end of the footpath. Whilst walking on the GSP bearing back to T583 we discovered four more shake holes which matched the description and the most northernly one of this group had what we believe to be the *Rock Bridge* (Grid reference: 363335 4789286). This was the only shake hole to have any form of bridge in it. Whilst exploring the shake hole, there was to shafts one obvious shaft which is full of leaf debris and another in the south end (Grid Reference: 0363328 4789285) not obvious. There was a dark patch on the ground which we could not see if this was a passage or not. Due to the nature of the terrain we had experienced we were not confident it was safe to descend to it without ropes.

Photo below show an orange arrow, where we believe there may be a passage. Lisa is stood on the rock bridge as seen in the photo it is very green and the bridge is made up of large wedged rocks, with a small passage underneath.



Picture: Shaft on Sierra del a Corta (Toby Dryden).

Silvestre Pot – derig
No log written

BC, AR, SC

Friday 13th September

Hoyo Oscuro – Sara Depression

PW, AG, WB

The day after the night before.

Interesting Entrance: AN-58, no records found yet on exploration of this.

We set off with an objective of adding to our knowledge of the Hoyo Oscuro area above the Sara Depression. We had a secondary objective of checking out some of the mine levels on the way up. one of these mine levels near the base of the hill was drafting heavily into the warm day outside, this was a lovely adit entrance with a wooden bridge about 15m in. I would love to go back here and rig down the internal shaft to the left which the bridge goes over. Following uphill we ticked off several entrances and got accurate grid references for them but did not progress far beyond the entrances of any of them without our caving gear and SRT kits.

On getting to the top of Hoyo Oscuro we then split up and made our way down the hill. Phil found a large entrance, P7-2019 (HO56), on the left side of the rubble slopedown the hill and I re-found another large entrance AN-58 on the right hand side of the rubble slope, I would tentatively say that a rock I dropped down had a 4 second freefall before hitting the bottom. There was a snow-plug I could see but did not descend so have no idea if this would block progress. We could not descend as we had no caving gear.

I also found HO40 and a depression probably caused by mining, but both looked like bad leads.

- AN-58 0361630 4784549 1972m
- T616 Depression (possible mine) 0361537 4784834 1915m

- HO-40 0361516 4784999 1859m
- 2.2/AN20 0361506 4785226 1814m (sink below Sara spoil heap)
- Sara 0361436 4785240 1822m
- 2.31 0361677 4785102 1830m – 15m to shaft with wooden bridge (continuation beyond). 3 second drop down shaft (drafting)
- P1-2019 (T617) 0361754 4785116 1865m – small crawling size hole under large obvious rock
- Stream (going towards AN-186) 0361294 4784977 1821m
- AN-186 0361378 4785096 1802m (interesting sink 100m from Sara)
- 2.33 0361766 4785081 1868m – drafting twin entrances to scree slope
- 2.36 0361786 4785032 1911m – entrance with shaft above and to the right (drafts), descending scree slope for 15m
- P2-2019 (HO51) 0361863 4784857 2059m – chamber with multiple surface entrances, possible continuation downslope
- P3-2019 (HO52) 0361876 4784805 2035m – 5m shaft
- P4-2019 (HO53) 0361861 4784772 2036m – entrance to small pool of water, no way on
- P5-2019 (HO54) 0361921 4784775 2051m – entrance to drafting chamber
- P6-2019 (HO55) 0361938 4784763 2065m – large hole, undescended
- P7-2019 (HO56) 0361486 4784505 2011m (Large shaft to snow plug, 8m x 3m)
- P8-2019 (HO57) 0361337 4784784 1888m (Natural shaft, stones roll further down)

Cueva del Nacimiento – Parting friends - derig

RM, JD, AR

A late start due to last night's frivolities still found *Agua* looking rather sporting. The water was just below the dam on arrival and pouring out of various parts of the canal on route. RM and AR used the flood SRT route put in yesterday, while JD waited and picked a line for a rapid and fairly sketchy swim across the lake (JD is a canyoning guide so understood this better than most). Inside the bad step/cascade traverse rope was found to be cored, and a higher rope was placed. Conditions were passable but only just. On the way in foam was noted in the black hole, and later an impressive streamway was flowing down usually dry cascades throughout the route to the bypass. A few new lakes were also swum on route and it was clear the streamway had backed up a lot. Amazingly the gear left at *Road to Mandalay* was still there, though it quickly became apparent that there was no way anyone was getting up the parting friends streamway. It was absolutely raging and probably over a 1m higher than when last seen. The likelihood of any gear having survived at the top of the sump pool seems doubtful. It also seems likely that most of the rope and metalwork in place to rig the sump will no longer be safe/ existent! (approximately 150m, 35 hangers, 10 slings, 45 maillons). An entertaining exit was made with 6 bags between 3 and some video of the conditions is available in Robs pics.

Cueva del Nacimiento – Colin's Climax

LBr, LL

The dye tracer that had been placed in *Colin's climax* last week needed to be taken out and both LL and LBr had foolishly agreed they would do it the day after the expedition meal. LBr was his usually grumpy morning self-while LL was just very hung over. Eventually getting into the entrance at 12.45, after LL had to take some time on the new entrance traverse, as it was rigged but a man a foot taller than her. Once on the other side, the very spicy travers along the stream way was the only other struggle on the trip in high water. *Consort Hall* was reached in 2 hours, in 3 hours we had collected the dye tracer and were back in concert hall and then were out in another 2 hours, derigging the stream way as we left and cutting the traverse line across the entrance so that the rope is not visible, as it was cut after the third bolt.

Cueva de la Marniosa – derig

HJ, DJC

Plan was to pull the heavy bag out of *Marniosa* and then continue to *Mueria* to get some better references for the walk to the entrance.

DC proved that 14mm that ropes can scupper even a physics PHD hauling system, so we pulled the bag up hand over hand. As soon as it was landed HJJ suffered a back spasm which led to a slow crawl exit with some unpleasant rope climbing thrown in.

The slowest ever walk up back to the car ensued and *Mueria* was not visited.

Thankfully as this was the last day of the expedition the back injury did not cost too much.

Appendix H: Dive Logs

T20A Silvestre Pot – Bobs Crusade Sump

Date: 02/09/2019

Diver: R Middleton

Support: J Daniels, A Gott, L Leather, S Coxon

The diver entered the initially inviting static sump to find the vis instantly deteriorated with high silt levels. The sump descended in quickly deteriorating vis utilising a number of silt screw belays until a constriction at -5.7m. the passage then enlarged into an underwater chamber 2x3m with an air-bell in the roof (now named "Thanks a Gott" in praise of AG determined carrying). The line is secured just below water level in the air-bell which is 4m wide and 1m high with no way on. (total dive of 32m). A tight way on might be diggable below the air-bell, however this appeared uninviting and vis had reached zero by this point, so the diver made a quick retreat.

T20A Silvestre Pot – Wet Willy Sump 1

Date: 02/09/2019

Divers: J Daniels, R Middleton

Support: A Gott

JD dived first for his first taste of virgin line laying. He returned quickly to report that the sump had surfaced after only 3m and offered one of his cylinders to RM who followed with survey gear. The pair surfaced to find a pleasant streamway continuing and set about surveying. The streamway continued for approx. 40m (now christened "Your Mothers Gott a Penis") to another sump with a small tube (awkward to enter) which could possibly be dug above.

T20A Silvestre Pot - Wet Willy Sump 1

Date: 02/09/2019

Diver: R Middleton

Support: J Daniels

The diver entered the murky organic pool and quickly secured the line to a solid belay 2m in at -1m, before continuing descending rightwards to a max depth of 4m approximately 10m in. This section of passage was heavily filled with organic deposits and closed to 0.5m squared in zero vis with no line belays. Conscious of having stolen JD's exit bottle to dive the 2nd sump, RM decided prudence was necessary, and made a hasty retreat, cutting and securing the line at the 2m mark. This is not a pleasant site, but a further investigation might offer further passage.

Cueva del Nacimiento – Parting Friends

This sump has been previously dived on one occasion by Gavin Newman and left ongoing at approx. 200m in but had not been surveyed or written up.

Cueva del Nacimiento – Parting Friends

Date: 01/09/19

Non-Divers: L Blore, J Daniels, T Dryden, R Middleton

All four carried lead and cylinders down to the entrance. Due to the difficulty of accessing this site and the likelihood of needing multiple dives to explore it, carbon 9l tanks were used, allowing them to be removed each day and the lead needed to sink them left in place. This did however require a lot of lead (30kg?) to be taken into the cave

Cueva del Nacimiento – Parting Friends

Date: 03/09/19

Non-Divers: W Burn, J Daniels, R Middleton,

The team carried lead to black hole chamber, then ropes and rigging kit to the parting friends streamway. The streamway was steep, fast flowing and constricted, and carrying a significant volume of water follow heavy rain a couple of days earlier so it became apparent much of it would have to be rigged for the safety of the divers and support team. The rest of the trip was spent rigging traverses and bolt climbing to gain approximately 60m of stream passage.

Cueva del Nacimiento – Parting Friends

Date: 04/09/19

Non-Divers: J Daniels, R Middleton, A Roberts

The team carried the lead further towards the sump, before continuing bolt climbing cascades in the sporting streamway. The team ran out of kit after a further 60m with a possible end in sight, 20m away.

Cueva del Nacimiento – Parting Friends

Date: 05/09/19

Non-Divers: J Daniels, R Middleton, A Roberts

Final rigging trip up the streamway to locate the sump, which was reached after 20m. The sump was then kitted with a washing line and catcher rope as it surfaced just at the head of a rushing cascade. On exiting the team tidied up the rigging and picked up cylinders and moved them further in ready for the dive.

Cueva del Nacimiento – Parting Friends

Date: 07/09/19

Divers: J Daniels, R Middleton

Support: L Bradley, L Leather, A Roberts

Between them, the team gallantly moved 8 tackle bags including 4 cylinders to the sump pool. RM dived first passing the first sump after 25m and securing the line on the far side. JD followed surveying. Both divers surfaced to be surprised by a large cascade. This was carefully climbed by RM with dive line left throughout the dry section (30m approx.) to act as a handline. JD continued the survey through the air-bell, and the divers reconvened at start of the second sump pool. RM again dived first lining in in a large 4m diameter tunnel. The sump dropped quickly to -20m before rising again to -6m, then straight down a shaft to -13. In total RM laid 180m of line from the start of sump 1 (115m in sump 2), before turning on thirds. JD continued surveying behind also turning on thirds at the same point. Some old-line shreds were noted on route. Thanks to AR, LL and LBr for their assistance removing the used cylinders from the cave.

Cueva del Nacimiento – Parting Friends

Date: 08/09/19

Divers: J Daniels, R Middleton

Support: W Burn, L Leather

RM and JD self-carried the two recharged cylinders back into the sump and kitted up ready to dive. This time JD led with RM surveying. JD laid line to 230m (165m into sump 2) into a confusing area of swiss cheese like passage where the way was not obvious. He passed the line to RM who continued, eventually surfacing in a small off route air-bell with no way on. Both divers hit thirds and retreated confused. Both divers then struggled to carry 2 cylinders out each for the third and final dive. Thanks to LL and WB who were cornered at the entrance and persuaded to carry cylinders up the hill.

Cueva del Nacimiento – Parting Friends

Date: 09/09/19

Divers: J Daniels, R Middleton

Support: W Burn, L Leather

Final dive in Parting Friends. Thanks to LL and WB for their assistance carrying in recharged cylinders to the beginning of the sump bypass. Unfortunately, this still left two tired divers with 2x9l cylinders and a reg bag each to struggle with up the streamway ropework. RM set off first through the sump with JD just behind videoing the dive. Both divers looked for missed leads on the way in but to no avail, so RM relocated yesterday's dead-end air-bell (now called "bell end") with JD surveying behind to the bell where the divers reconvened and discussed a plan. RM continued again from below the air-bell eventually looping back into the main passage at 205m. RM secured the line at a junction then cut the rest to have one last look. RM spotted a dark void left off the line at 230m the mark and followed this round a couple of bends and into a typical Agua ramp passage which surfaced in a large rift-based air-bell. JD surveyed behind and both divers reconvened in the air-bell (20m long, 4m wide and 4m high and provisional christened "nob on"). There was a large underwater shaft directly below the entrance to the bell, and at the far end an enticing sump pool leading off at the end of the rift. Both divers were running low on gas and spare line so realised they could only have a quick look at one of the possible options. While discussing this it was noted that the water in the air-bell was flowing for the upstream continuation on the far side was chosen. As gas reserves were low, the decision was RM would dive first and JD would only follow if RM didn't return within 10 minutes (i.e. if RM surfaced again). As luck would have it, RM surfaced after 30m (with only 4m of line left) into a larger air-bell with the roaring sound of falling water. Game on! RM set up a washing line for the kit and waited for JD to come through. Both explored and surveyed the mainstream/air-bell (approx. 25m to another sump with one small cascade), and then up a rising ramp crawl for approximately 40m until it became too tight. Both divers returned safely very satisfied with their find, and again struggled back down the streamway with two cylinders and regs each, as they were aware the weather was coming in the next day. Two tired but very happy divers continued out from the bypass with reg bags only and surfaced in time for a few beers in the pub. An excellent trip and just reward for the effort. Many thanks to all those who assisted with gear carrying!

Cueva del Nacimiento – Parting Friends

Date: 11/09/19

Derig etc.

Appendix I: Cueva de la Marniosa – Cueva de la Silvestre Plan (2019)



T19 - Cueva de la Marniosa
Sistema Vidrio, Cantabria, Pinar de Europa

Appendix J: The Road to Wigan Pier – Parting Friends, Cueva del Nacimiento (2019)



Appendix K: Extra Caverns Series, Cueva de la Marniosa (2019)

