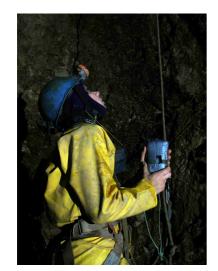
Fisura Chica 2007

Oxford University Cave Club

Equip de Recerques Espeleològiques del Centre Excursionista de Catalunya

Expedition Report









Picos de Europa Mountains, Asturias, Spain.

2nd July – 8th August 2007

Ed. David Legg & Chris Rogers

Seeking to further the exploration and understanding of the cave systems in the high Picos de Europa mountains of northern Spain.

With Thanks To:

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Professor Steve Roberts

Juan Jose Gonzalez Suarez

Photos

The photographs used in this report were kindly provided by Ben Lovett and Marc Rubinat.

Special Mentions

Dr. Tariq Qureshi, Director of the Oxford University First Aid Unit

Mrs. Gillian Hoyle, Administrator of the Gordon Foundation

Mr. Andrew Darley, Oxford University Insurance Office

Pedro, Warden of the Vega de Ario refugio

Abstract

The Fisura Chica 2007 expedition intended to continue the exploration of Fisura Chica, a cave discovered in 2003 and explored to a depth of -521.9m in 2006. The deepest known point in the cave was a ledge 50 m down a large shaft, which was estimated to continue for a further 80 m. The direction and location of the cave suggested that it could connect to Pozu Cabeza Muxa or Sistema Julagua, two large systems nearby.

Fisura Chica 2007 continued exploration to a depth of about 650 m in the direction of the lower reaches of the stream in Pozu Cabeza Muxa. The later part of the expedition was notable for the very good relations established between the English and Spanish cavers, which we hope will continue for many years.

28/4, a cave on the north-east slopes of Cabeza Llambria, was pushed through an awkward s-bend but despite the "whooshing" draught and excellent location the bend was found to be too challenging. Another lead may remain possible. Exploration for new entrances on the eastern slopes of Cabeza Llambria, forming the west flank of the Cares Gorge, has suggested that below 1500m this area has several entrances and may be worth further investigation in future years.

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Introduction

Fisura Chica 2007 was a six-week caving expedition to the Picos de Europa in Asturias, Spain. The primary goal was the further exploration of Fisura Chica, which it is hoped will connect to one of two large caves in the area: Sistema Julagua or Pozu Cabeza Muxa.



Map of Spain showing the location of the Picos de Europa.

Members of OUCC expeditions have explored caves in the western massif of the Picos de Europa for over 25 years. From 1961 to 1978 the club explored caves from Los Lagos towards the coast. In 1979 the club decided to camp at Vega de Ario and explore caves in the area. The first cave discovered was Pozu del Xitu, which was explored to a depth of -1143m over the next three years. From 1982 to 2000 most expeditions focussed on the caves of the higher mountains in the OUCC area, particularly Pozu Jultayu, which ends in an impassable boulder-choke. Since 2000 OUCC expeditions have focussed their attention on the area to the north and east of the Ario bowl.

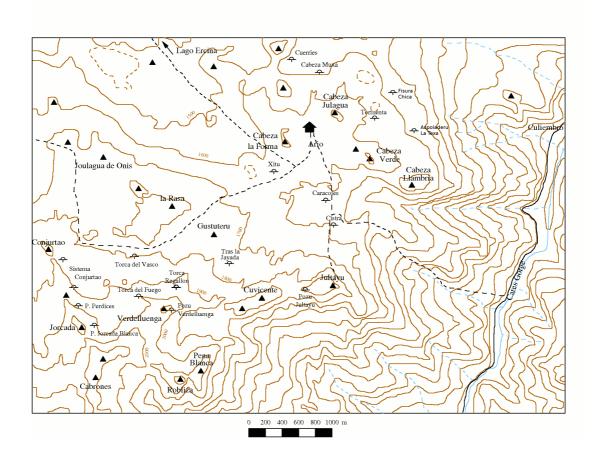
Exploration by the Barcelona section of the Sociedad de Investigaciones Espeleológicas (CA-SIE) in Pozu Cabeza Muxa and Asopladeru la Texa (part of

Sistema Julgua), and by divers in the Culiembro resurgence in the Cares Gorge, have discovered large caves to the north and east of the OUCC area. Since the mid-1990s CA-SIE have focussed their attentions on the Pyrenees and have allowed OUCC to explore caves in this area, most notably the further exploration of Asopladeru la Texa, undertaken in 2005, which extended Sistema Julagua (Asopladeru la Texa and Pozu Tormenta) to -1060m. OUCC expeditions have been and continue to be the driving force behind the exploration of one of the larger cave systems in western Europe. The eventual aim of this exploration is to connect the caves of the high mountains with the Culiembro resurgence in the Cares Gorge.

At present the waters of three underground streams have been dye-traced to the Culiembro resurgence, those of Xitu, Jultayu and Muxa. The water in downstream Asopladeru is also thought to drain into Culiembro, although it has not been dye-traced. At one point it was thought that the lower streamway of Asopladeru carried water from Muxa, however, the 2005 expedition results suggest that this may in fact be a parallel stream to that of Muxa. The three known streams account for over 80% of the water resurging at Culiembro, raising the possibility of a mysterious fourth stream connecting into the Culiembro system. The limits of exploration in Muxa, Asopladeru and Xitu are sumps (sections of flooded passage) which have yet to be passed, as has the terminal boulder-choke in Pozu Jultayu.

Discovered in 2003 and first named Pozu Chicago, Fisura Chica was further explored in 2004 and 2005 as a side-project of those expeditions' main aims. In all three years it was thought to have been 'bottomed', only for new leads to be discovered in the cave. In the final trip of 2005 a calcite rift was forced at the 'end' of the cave to reveal a 30m pitch and further passage. The exploration of Fisura Chica was therefore made the main objective of the 2006 expedition, which explored the cave to a surveyed depth of –521.9m. The limit of exploration was a ledge 50m down a large shaft, which was estimated to continue for a further 80m. The location and direction of Fisura Chica suggested that it might connect with downstream Pozu Cabeza Muxa or the lower stream in Asopladeru la Texa. The lower reaches of Chica may also have connected with fossil passages (passages without an active stream) and thus bypass the sumps that currently mark the limits of exploration in these caves. The cave was therefore ideally positioned to further our knowledge of at least one important system in the area, and perhaps to yield the long-anticipated connection to Culiembro.

This report documents the events of the expedition, records its achievements and analyses its management. The report is intended to provide not only an historical record of the expedition, but also to be of use for future OUCC expeditions both in the further exploration of Fisura Chica and the OUCC area in the Picos de Europa, and in the planning, organisation and conduct of the expedition.



The OUCC area in the Picos de Europa. Area 4 is to the north and east of the ridge from Cabeza Julagua to Cabeza Llambria.

Expedition Members

David 'Con más cojones que cerebro' Legg - Leader, Medical Officer

Tom Evans - Secretary

John 'Technological Singularity' Pybus - Financial Officer

Rick 'Stains down my leg' Padfield – Gear Officer

Yifan 'Hibernating' Huang

Chris Day

Pete 'The Shaft Basher' Eastoe

Chris Sinadinos

Fleur Loveridge

Pete Talling

Ben Lovett

Anita Milicic

Gareth 'Gandalf the Teabagasaurus' Phillips

Philip 'I am not a terrorist' Leichauer

Chris 'Bohemian' Densham

Mike Hopley

Marc Rubinat

Javier 'El Torro Frijo' Garrido

Daniel 'Bombonas' Ferrer

Jaimie Amether

Roger Rovira

Gemma Labrańa

Francesc 'Kiku' Rubinat

Arcadia Cabanas

Date	Caver/s	Activity
01/07/07	TE, PE, CCD,	Land Rover left Oxford
	YH, JP	
03/07/07	TE, PE, CCD,	Land Rover arrives at Los Lagos
	YH, JP	-
07/07/07	JP, CCD	Rigged Chica to Wild West Passage
09/07/07	CCD, CJD	Rigged WW Passage and Disposable Belays
09/07/07	TE, PE, YH	Carried gear to Wild West Passage
10/07/07	CJD, CCD, PE,	Portered camp gear to WW Passage, Laissez Faire
	TE	rigged
11/07/07	JP, RP	Rigged to the top of We Are Still Warthogs
11/07/07	PE, YH	To the bottom of Laissez Faire
13/07/07	PE, YH, TE	33/11 bottomed
13/07/07	BL, CJD	Rigged to Isle of Dogs
14/07/07	JP, AM	To The Boys Are Back in Town
14/07/07	PE, PT, FL, YH	To Boys Are Back
15/07/07	CJD, BL, TE	Rigged to the ledge 45m down Unspeakable
16/07/07	FL, PE, PT	Rigged to the head of Vamos
16/07/07	BL, MH, YH	Photo trip to Wild West Passage
17/07/07	BL, MH	Rigged to the bottom of Vamos
18/07/07	TE, YH	Carried tackle-sacks to Warthogs
19/07/07	CS, CD	Explored 119m pitch 'Flawless'
19-21/07/07	BL, FL	Bolt-climbed wall at the bottom of Flawless
20/07/07	PT, DL	Hammering rift in 28/4
21/07/07	PT, DL, YH	Hammering rift in 28/4
22/07/07	YH, TE	To Wild West Passage
22-23/07/07	CS, DL	Explored Please Please Me Passage & Fools Gold
23/07/07	TE, YH	Hammering in 28/4
23/07/07	DF, KR	Photo trip to Wild West Passage
23-24-07/07	MR, JG, RR	Explored Fool's Gold
25/07/07	PL, GP	Got lost in 28/4 following the SIE route
27/07/07	DF, MR, RR,	De-rig Chica camp
	YH	
27/07/07	DL, JG	Explored to the current limit of exploration, de-
		rigged to Warthogs
27/07/07	PL, GP	28/4 pushed, declared impassable, de-rigged
29/07/07	DL, PL	Shaft-bashing NW of Cabeza Llambria
31/07/07	DL, GP	De-rigged Fisura Chica
1-5/08/07	DL, GP, PL	Remove equipment from Ario with help from
		Pedro and his horse
6-8/08/07	DL, PL	Drive back to Oxford, arrive 11.40pm 08/08/07

Into the Fisura

The expedition departed for Spain at 7.18pm on Sunday 1st July. After a farewell evening barbecue the Land Rover and trailer were collected from the club hut and driven down to Portsmouth, to cross to France by ferry. It arrived in Le Havre at 7am, filled by John Pybus, Chris Day, Yifan Huang, Pete Eastoe and Tom Evans, and was driven through France and Spain over the next two days to arrive at Los Lagos de Cangas de Onis at 5pm on 3rd of July. The team spent the next week carrying supplies up from Los Lagos to the camp in the Vega de Ario at 1565m, a three hour walk into the mountains. Their progress was slowed by poor weather and a delay in the issue of the necessary permit by the National Park Authority of the Picos d'Europa: as we would be caving with members of club Recerques Espeleologiques de l'Agrupació Excursionista de Catalunya (ERE-AEC) they had to be added to the permit at the last minute.

The first caving trip of the expedition took place on 7th July, when John Pybus and Chris Day rigged the entrance series of Fisura Chica to Wild West Passage. Chris Densham joined the expedition on 9th July and with Chris Day rigged Wild West Passage and Disposable Belays that day. The expedition was further swelled by the arrival of Anita Milicic, and Richard Padfield on the 9th, and by Ben Lovett, Loveridge, Pete Talling and Mike Hopley on the 12th. Unfortunately, the leader, Dave Legg, had incorrectly told the team that rope had been left in the cave from the top of Laissez Faire. The rope was actually only left in the cave from the top of The Boys Are

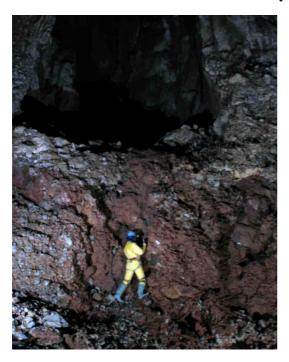


Back in Town, and the field team did not contact the UK to clarify the situation. Dave's mistake meant that the rope was not reached until on the 14th July Pete Eastoe, Pete Talling, Fleur and Yifan made it to the top of The Boys Are Back in Town and found the rope with some relief.

Rigging from The Boys Are Back in Town was faster, as rope no longer had to be carried into the cave on each trip. Successive trips on the 15th, 16th and 17th of July rigged the cave to the bottom of Vamos, placing a camp at the top of that pitch. Fisura Chica has no great campsites, and the decision had to be taken to string the hammocks across a 10m long passage directly above Vamos. The passage had a stream running through it in a trench in the floor, was splattered with droplets of water from the ceiling far above and the pitch right beside and was draughty, being situated in the

middle of a shaft series with two 10m pitches above and a 90m pitch below. A tarpaulin was rigged over the hammocks to keep them dry, but staying at camp was not a particularly pleasant experience.

The first exploration of the expedition occurred on the 18th July when Chris Sinadinos and Chris Densham bolted their way down the huge pitch at the bottom of Vamos. Explored by Gavin Lowe and Gareth Phillips to a ledge at -50 m in 2007, the 2008 route descended a total of 120 m with the rope rigged precisely to keep it free of the razor-sharp rocks on the wall. Flawless, as they named the pitch, landed in a chamber 15 m in diameter. The pitch landed on boulders jammed into the floor, which swallowed the droplets of water from the stream down Vamos and Flawless and issued gusts of wind. No way could be found down through the boulders despite a strong draught. The South-Eastern side of the chamber sloped up to a towering wall covered in small rocks stuck to the wall by thick mud and a window 5 m above them.



Ben Lovett and Fleur Loveridge descended on the evening of the 19th to bolt-climb up to the window. Immediately on the other side of this window they found a short pitch and a second window on the far side. They descended the pitch only to find that it was blind, and left the further window for the next team to explore. David Legg and Chris Sinadinos descended to the bottom of Chica to explore beyond the window across the blind pot. They reached the bottom of Flawless at 3 pm and began rigging a pendule across the pot to the window. Chris crossed first and rigged a pitch down into a 4m deep pot, from the bottom of which ran Please Please Me Passage. This passage had several

leads off it, of which two were discounted. At the end of the passage were two adjacent leads from which issued a strong draught. The cavers descended a 12m deep pot, landing in fossil stream-passage covered in 'popcorn'. This passage went on for 30m, down some dry cascades ad another short pitch, to a 12m deep pitch which was left for the next party.

At this point the expedition was joined by the 6 Catalan cavers, of whom Marc Rubinat, Javier Garrido and Roger Rovira descended for a three day camping-pushing trip on 23rd July. Speeding to the bottom they descend the 12m pitch to find that the roof sloped to meet the clay sediment floor. The mud sump formed a tiny chamber at the bottom of the shaft, 1.5m diameter and with the ceiling only 1m high. The cavers headed out without examining the remaining lead at the bottom, a fossil gallery which they thought connected to the previous lead, and the poor location of the camp was evident as they chose to come out rather than stay in the damp sleeping bags at the

draughty campsite. Their report upon exit was grim: there were no leads at the bottom of the cave, meaning the only leads were two windows near the top of Vamos and on Unspeakable.

Believing the bottom of the cave to be without leads, Javier Garrido and David Legg descended on 26th July to de-rig the ropes to Vamos, explore the window on Vamos, and then head out of the cave, pulling ropes up to the head of pitches and storing them safely for 2008. Upon reaching the bottom they decided to explore the fossil gallery, which did not connect to the previous lead. The gallery angled down across a muddy slope for 10m, at the end of which the passage turned a corner. Around this corner there was 20m of walking passage ending in a muddy tube, which could be squeezed through to reach the head of a pitch in rift. Stones dropped down this pitch rattled for 6 seconds before stopping, and there was a strong draught. Although there was a lead at the bottom of the cave the pair did not have the equipment to rig the pitch so this was left another expedition. Dani, Marc and Roger had descended to camp to remove the sleeping equipment, and Dave and Javi de-rigged out from the bottom of the cave to the top of We Are Still Warthogs After All These Years. This involved Javi getting very cold as Dave forgot his rigging spanner and took an hour to de-rig Flawless. By the time he reached the top Javi was frozen and desperate to get moving. This set the pattern as Javi quickly prussiked up each pitch with two heavy tackle sacks and then sat at the top of the pitch waiting for Dave to labour his way up.

The last trip in Fisura Chica was on 25th July when Gareth Phillips and Dave Legg completed the de-rigging. The pitches were stripped of rope and equipment, which was stuffed into tacklesacks and hauled to the surface. Gareth proved himself to be an excellent haul-master, whilst Dave de-rigged each pitch, pulling the rope up behind him. The trip took just 8 hours, and left several rucksack loads of equipment at the cave entrance.

The expedition field team now consisted of Dave, Gareth, and Phil Leichauer, the latter pair both carrying injuries that prevented them from carrying heavy loads down from Ario to Los Lagos. The decision was taken to pay the *refugio* warden, Pedro, to carry 150kgs of equipment down on his horse in two loads. We had gotten to know Pedro after Marc and the Spanish arrived. They stayed in the *refugio*, enjoying the open fire, cooked food and ready supply of beer, and those staying at Ario frequently deserted camp for these comforts. After a few late night sessions we got on well with Pedro and asked about the use of his horse. This saved a great deal of effort at the end of the expedition and enabled the remaining cavers to spend two days shaft-bashing. The second day was spent on the slopes running down to the Cares Gorge from Cabeza Llambria, where the hillside proved devoid of entrances, although entrances were spotted at 1300m.

The remaining days were spent carrying the expedition equipment down from Ario to Los Lagos, with a welcome diversion one morning when Pedro's horse could not be seen, leaving the day free for a carry down and a walk up Jultayu, which Dave and Phil spent sniggering about teabags and dinosaurs. At this point the expedition was enjoying some of the best weather so far, and frustratingly we were unable to take full advantage of it in the form of shaft-bashing. Each day was spent carrying equipment

up and down the hill, until on Saturday 6th August the three expedition members packed up camp and headed down the mountain to Los Lagos. Pedro was due with 60kgs of equipment on his horse the next evening, so the members tried to find a hotel near Cangas de Onis on the busiest weekends of the year, the Descensa de Sella festival, when hundreds of canoeists paddle down the river from the mountains to Ribadesella on the coast. Four hours later they found a hotel in Covadonga. The next day Gareth departed whilst Phil and Dave explored caves at the *plaja de los cuevos del mar*, before Pedro was met at Los Lagos. Phil and Dave loaded the final bags of gear into the back of the trailer and descended the twisting road down to Covadonga in terrible fog, crawling reluctantly away from the high mountains and caves of Spain for the bustle of French motorways and Oxford's dreaming spires.

The expedition succeeded in pushing a spectacular 118 metre vertical descent into an interesting area of rift. The lead is promising, with a strong draft in a section cave littered with evidence of powerful air movements. Two further leads exist: windows located near the rope on both Vamos and the unnamed pitch after Crystal Ship. The exploration of new caves was hindered by poor weather and changes to the plans of some expedition members, although 28/4 was looked at once again, and a new area of exploration Northwest of Ario has been surveyed for potential. Fisura Chica remains well located in relation to downstream Cabeza Muxa and is an excellent objective for an expedition in 2008.

Fisura Chica – Cave Description and Rigging Guide

Location

Fisura Chica is located on the eastern slope beyond the Vega de Roca Naranja (Valley of the Orange Rock), which heads down towards Oston. It is best reached from Ario by following the path which leads around the top of the Roca Naranja depression, then crossing over a saddle at the north-east end of the depression. The trail then skirts above and around a double bowl, before descending a steep hillside heading roughly east towards the Cares Gorge with the Canal la Texa to the left (north). The cave is located in a slight gulley with a small tree in a cliff. The entrance is a 2m high slot in the back of the gulley, hidden by a small overhanging cliff. GPS 0344791 4790105.

Entrance Series

The entrance is a vertical slot at the back of the indentation in the cliff. The cave starts as a rift, narrow, but not tight, which soon opens out at the top of the first pitch, $D\acute{e}j\grave{a}$ vu (P10). The bottom of the pitch is blind, but swinging onto a ledge 4m from the bottom reaches the top of the second pitch, Adrenalin (P26). This lands on a boulder-strewn ledge, at the edge of which is the top of Don't Stop! Pitch (P71).

[At the bottom of *Don't Stop!* are several routes. [A climb up to the left (facing away from pitch) leads in to a parallel shaft with nothing at the bottom.] To the right is a short climb down to a rift. [Climbing down to the bottom of this rift leads to a small stream-way crawl which quickly becomes impassable.] The way on is reached by an awkward traverse along the rift at a mid level until a bolt signals a short tight climb down followed shortly by a pitch of approximately 30–40m, *Windy City* (P35). The chamber at the bottom of this pitch contains a narrow, unexplored, unpromising rift off to the left (which probably reconnects) and a slippery climb up a slope to the bottom of *Disposable Belays* (see below).]

The normal route is to swing into a window 45m down *Don't Stop!*, leading to the fossil *Wild West Passage*. The passage begins with a rift with a calcite and boulder floor. Soon a lined traverse past a large column is reached. Continuing past this leads to another traverse, lined off boulders and one bolt; the traverse continues past an impressive column to the top of *Disposable Belays* (P40). [To the left, the passage continues for about 30 metres with occasional openings into tight, deep rift; after passing a fist-sized crystal formation, the passage drops down a short climb (10m handline) into a small section of rift blocked by calcite at the far end.]

[About 35m down *Disposable Belays* is a large ledge, *Tacklesack Ledge*, from which a small passage quickly turns into an unpromising tight crawl. Following a traverse opposite this ledge leads to a blind pot.]

The normal way on from the bottom of *Disposable Belays* is to scramble 5m to the right, and then descend a handline climb down a muddy rift, which opens out slightly after 5m. The way on from this small chamber is to squeeze down into the rift below

and turn a corner, immediately after which the rift opens into the top of *Laissez Faire* (P30).

[Alternatively, going left from the bottom of Disposable Belays soon reaches a three-way junction. [Going straight on leads down a slippery rift to the bottom of *Windy City*.] Going right descends a rift to a small chamber. [Climbing up from here reaches a traverse, leading back to *Disposable Belays* in one direction, and to a blind pot in the other.] Doubling back under the route just taken leads to a lower level of the three-way junction. [Going right here leads to a climb down to an aven.] Going left is tight and meandering, before opening out at the top of *Laissez Faire*.]

Pitch	Rope	Rigging
Déjà Vu (P10)	60m	Bolt backup; bolt and chockstone Y-hang; thread
		deviation at -3m; bolt rebelay at -6m.
Adrenaline (P26)	"	Bolt backup; bolt; bolt and spike Y-hang; bolt rebelay
		at ledge at -10m; stal deviation at -13m.
Don't Stop! (P45)	80m	Spike where Adrenaline lands; boulder half way
		down ledge; bolt backup; two bolt Y-hang; stal spike
		rebelay at -5m; bolt rebelay at -35m; spike rebelay
		at -40m; spike belay at swing into <i>Wild West</i> ; bolt for
		traverse; natural backup. [If Disposable Belays is
		descended fully, it is 71m deep and requires a 95m
		rope]
Windy City (P35)	40m	Natural backup; natural Y-hang; bolted Y-hang.
First traverse	10m	Boulder belay; large stal boss; boulder belay.
Second traverse	55m	Two boulders; bolt; stal boss.
Disposable Belays (P40)	"	Backup to traverse; Y-hang from bolt and thread;
		spike deviation at –6m; spike rebelay at –35m.
Rift climb	15m	Backup to Disposable Belays; spike for approach;
		spike belay.
Laissez Faire (P30)	35m	Backup to rift climb and thread; bolt; bolt rebelay
		where it opens out.

Big Rift Series

Laissez Faire lands at the lowest level of the three-way junction encountered at two higher levels. [Two ways lead immediately to avens.] The way on is to ascend a ramp and then a roped climb. A lined traverse leads gently up and around a corner to a climb down to the top of a 10m pitch. This pitch lands in a rift, where an ascending ramp leads to two short climbs up (best laddered) past stal into a small chamber at the top of a 23m pitch, Still Warthogs After All These Years. Warthogs lands in a chamber at the start of a meandering rift, consisting of ascending ramps interrupted by a 2m handline climb, an 8m pitch, and another 2m handline climb.

Eventually the rift widens at the top of a pitch, *The Isle of Dogs* (P25). Halfway down the pitch lands on a traverse level in the rift, where a slight constriction is passed, before it opens out again. [The bottom of the pitch lands in a chamber, from where a too-tight rift continues.] The way on is to pendule from part way down the bottom

section of the pitch onto a prow, and then to traverse around a ledge to a climb up, *Monkey Panic*. An ascending ramp continues along the rift. Just after a prominent stalagmite, it is possible to descend in the rift. [Above, the traverse steepens before closing down.] Another ramp soon leads to a climb down to the top of a 58m pitch, *The Boys are Back in Town*.

The pitch lands in a large rift passage. The way on is to traverse forward a few metres and descend a 4m pitch to land on a solid floor, the first solid floor since *Wild West Passage*. [Doubling back leads to an undescended pitch down the rift.] Walking forward soon reaches a 4m pitch, followed immediately by a 40m pitch, *The Crystal Ship*, where an inlet enters from above, only the second time water is encountered on the route. A 5m pitch follows immediately, which leads to a traverse, passing above a blind 8m pitch. Ahead, an ascending ramp leads to a traverse to the top of a shaft.

Pitch	Rope	Rigging
Climb up (C8)	12m	Bolt backup at top; 2 bolt Y-hang; bolt rebelay half
		way down; spike deviation for bottom section.
Traverse	15m	Bolt at top of climb; bolt rebelay; spike belay.
		Alternatively, four bolts for higher traverse.
P10	15m	Spike at end of traverse for climb down; bolt rebelay;
		deviation off boulder at –7m.
Climb up (C7)	15m	15m Rope belayed to false floor and stal; ladder
		belayed to large boss.
Still Warthogs After All	30m	Thread and spike backups; spike and bolt Y-hang.
These years (P23)		
Climb down (C2)	5m	Spike backup; spike belay.
Pitch (P8)	10m	Spike and bolt Y-hang; spike deviation.
Climb down (C2)	5m	Stal spike belay.
<i>The Isle of Dogs</i> (P32)	45m	Stal boss backup; spike and bolt Y-hang; bolt rebelay
		at -4m; spike deviation at -10m; bolt rebelay at
		traverse level; bolt rebelay over shaft; bolt on prow.
Monkey Panic (P5 up)	15m	Bolt on prow; bolt for traverse; 2 bolt Y-hang; bolt
		backup.
The Boys are Back in	70m	Spike backup; stal belay; spike belay for climb down;
<i>Town</i> (P58)		2 bolt Y-hang; stal deviation at -20m; spike rebelay
		at -35m.
Pitch (P4)	10m	Bolt at bottom of previous pitch; bolt for traverse;
		bolt.
Pitch (P4)	60m	Natural backup; bolt and spike (high up); Y-hang.
The Crystal Ship (P40)	"	2 bolt Y-hang; bolt deviation at −10m.
Pitch (P5)	10m	Spike at bottom of previous pitch; bolt and spike Y-
		hang.
Blind Pitch (P8)	15m	Thread backup; two spike Y-hang.

Shaft Series

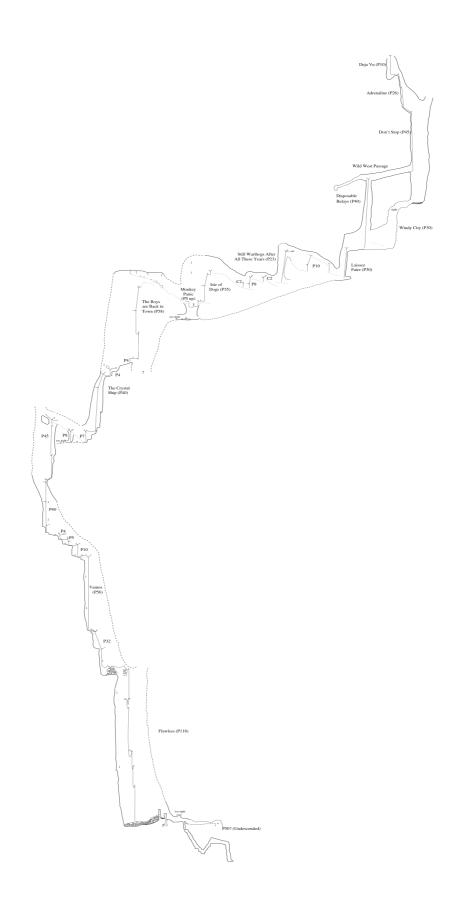
The shaft starts with a 45m pitch, landing on a ledge from where a 40m pitch continues. The bottom of the pitch lands in a large passage, doubling back under the approach route, and containing several pools. Pitches of 4m, 5m and 10m continue, and a campsite can be established between the P5 and P10 by slinging hammocks across the passage and erecting a tarpaulin to keep the drops off. These pitches are followed by *Vamos Pitch*, an 87m pitch which is free-hanging for 56m to a broad ledge before the second hang. *Vamos* lands in a 6m wide by 10m long, boulder-strewn chamber. [The original route was to clamber down to the right to reach a continuation of the shaft]. The current way on is a traverse up over boulders to reach the head of a 118 m pitch, *Flawless*. The pitch is broken by a ledge at -60m and lands on a boulder floor in a 10m x 25m chamber.

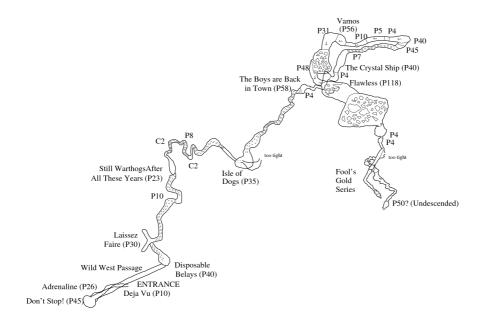
Pitch	Rope	Rigging
Pitch (P45)	60m	Bolt and natural for traverse; bolt and spike Y-hang;
		bolt rebelay at -5m; spike rebelay at -27m.
Pitch (P40)	45m	Backup to previous pitch; spike belay; spike
		deviation at -2m; spike deviation at -17m; spike
		deviaiton at –35m.
Pitch (P4)	25m	Y-hang off two spikes (needs a traverse line).
Pitch (P5)	"	Backed up to previous pitch; spike belay (needs a
		better backup); spike deviation at -1m.
Pitch (P10)	20m	Backed up to previous pitch; two bolt Y-hang.
Vamos (P87)	95m	Backed up to previous pitch; spike for traverse; two
		bolt Y-hang. Broken by a ledge at -56m, Y-hang off
		two spikes; spike deviation at -69m.
Flawless (P118)	135m	Backup to boulder; bolt for traverse; bolt; spike
		rebelay at -24m; bolt rebelay at -30m; spike rebelay
		at -64m; spike rebelay at -84m; bolt rebelay at -98m.

Popcorn Series

In the chamber at the bottom of *Flawless* the water disappears into the cracks in the boulder floor. The way on is to climb over a 4m high wall of mud and small stones (the wall was originally bolt-climbed, and gear has been left *in-situ*). The wall is 1.5m wide and the top should be rigged with a traverse line. The wall forms one side of a blind pot, which must be swung across to gain access to a window on the opposite side. From the window a 4m pitch lands at the start of *Please Please Me Passage*, a 30m long passage with four routes leading off it.

[At the bottom of the P4 a 1m diameter hole in the floor leads to a 5m climb down and ends in a small boulder chamber with no routes on.] [5m along the passage a 2m climb up on the left leads to two free-climbable avens, which become too tight with no way on.][Descending into a hole in the floor after 10m leads immediately to a P10, the entrance to *Fools' Gold Series*. The pitch lands at the head of a fossil inlet, which





can be followed down free-climbable dry cascades, broken by a P4, before climbing up to a 5m long section of walking passage. At the end of this passage a 12m pitch lands in a small mud sump with no way on.]

The way on is to pass over the hole in the floor after 10m and continue past a column along a muddy fossil gallery, which must be traversed across an awkward slope for 10m before the floor is once again reached. The passage turns a corner and continues for a further 10m past a constriction, before emerging at the top of a muddy rift. Stones dropped into the rift rattle for 6 seconds, and there is a strong draught in the cave.

Pitch	Rope	Rigging
Wall-climb (C4)	15m	Traverse line across the top of the wall from the bolt
		at the top of Swinger's Paradise to bolt on opposite
		wall; bolt on the floor; bolt rebelay on the wall at
		-1m.
Swinger's Paradise (P6)	20m	Backup to traverse line; bolt Y-hang; bolt rebelay at
		-3m.
Pitch (P4m)	46	Backup to previous pitch; bolt on prow; spike belay.
Fools' Gold 1 (P10)	15m	Chockstone backup; column belay.
Fools' Gold 2 (P4)	10m	Thread backup; bolt belay; spike deviation.
Fools' Gold 3 (P12)	15m	Bolt backup; bolt Y-hang.
Fossil gallery	20m	Chockstone backup; column belay.

Chica Wapa!

David Legg and Javier Garrido push and derig the bottom pitches in Fisura Chica and find a pleasant surprise.

The previous night had involved much head-scratching over the best plan for doing a final push/de-rig trip and also removing the underground camp. The council of war decided that Javi, Marc, Roger and Jamie would de-rig the camp, whilst Dani and I would head to the bottom of the cave, de-rig it, head back up to investigate a window on Vamos, and then head out, de-rigging as much as possible. The next morning we ended up stood outside the refugio at just after 10am (I had left for it 3 times, having twice forgotten important pieces of kit), making yet more adjustments to our gear. Marc had lost his caving glasses and was unable to go on the trip, and I was now to cave with Javi, not Dani as previousy planned. This was decided by the Spanish, who correctly decided that Javi's motley (and effective) assortment of words and phrases learnt whilst travelling would be better than Dani's mostly forgotten two years of taught English from school. After a quick photo we were off, and despite a few slight errors on my part arrived at the cave by 11am, where the Spanish began eating. I was beginning to get worried: on the walk over I had been the only one blowing like a steam engine, and now they were fuelling up for the real work. I was second in after Javi, shortly before mid-day, and we reached camp by 1.30pm. My attempts at learning cave-practical Spanish were not going well: my cry of 'liberi' ('free') had morphed into 'libero' ('book') as we descended.

At camp we stopped for some food. I grabbed all the available Frumboost bars from the camp stash, whilst Javi opened his personal 3.5 litre darren drum and took out a wheel of camembert, some chorizo and good bread. My mouth watered, and I was slightly embarrassed when I gave him a Frumboost bar after scoffing his bread and cheese. Having spent a sociable night in the refugio we were now getting along famously, and bombed down to the bottom. The lead Chris S and I had given the Spanish on their previous trip had crapped out spectacularly, stopping immediately after the pitch. We pulled the gear out of this section, and then decided to check out a fossil gallery directly above this route, at the end of Please Please Me Passage. Marc had decided that this probably connected into the other lead, and so hadn't explored it on the previous trip. We scrambled along the muddy gallery, and then turned a corner to arrive in a level section of walking passage. Javi took the lead, clearly excited by the new development, and followed the passage past a short constriction to emerge at the head of a pitch in rift. As Javi said, it clearly goes somewhere, possibly Muxa! There's a wide pitch in rift and a strong draft, with stones dropping for many seconds into the darkness. The multi-level nature of the cave here is also exciting – it means there is potential to find a high level route past the sump at the current end of Muxa. However, we had no rope and no time, having left our gear at camp, in anticipation of pushing the window on Vamos. Reluctantly, we left the pitch for next year and started to head out.

Javi let me do the derigging, but things got off to an inauspicious start when I realised I didn't have a rigging spanner on me. An opened maillon was OK for most things on Flawless, but 2 intractable maillons needed jamming into appropriately shaped crevices in the rock before they would budge, and one of these got the better of the teeth I applied to it in a moment of desperation. It took me over an hour to deal with Flawless, and things at the top were not good. Javi was freezing and desperate to get going, meaning all the de-rigging was going to be done at my slow fat-bastard pace. He did, however, speed things up immeasurably by lending me his adjustable spanner.



By the top of Vamos we had settled into a pattern. Javi would go up first very quickly, carrying a heavy tacklesack, then sit around and get cold whilst I slowly made my way up and de-rigged with an increasingly heavy tacklesack. At the top he'd coil the ropes and then head off whilst I dealt with the pitch head and faffed. By the bottom of Crystal Ship, having picked up an extra bag of camp gear, Javi was freezing and ready to dump the bags at the bottom of The Boys Are Back and head out quickly. I was that he worried was getting hypothermic. Fortunately the Ship was quick to de-rig and by the time I reached the top Javi's temperature and spirits had both been raised. He agreed to let me de-rig Boys Are Back as well, and after a little cajoling we agreed that Javi would

carry the bags back to We Are Still Warthogs before heading for the surface. We reached Warthogs at 2.30am, having de-rigged the cave from the bottom back to a point where, I hoped, at least one of the invalided Gareth and Phil might be able to reach and thus finish the de-rig.

Once we had passed Warthogs, Javi dropped his sack and promptly shot off towards the surface. I was determined to try and shift my gear out if possible, but by 5am I was shag-knackered and decided to dump the bag at the end of Wild West Passage. I met Javi on the surface at 7am, to find that he'd been out since 5am. I changed, and we made it back to camp at 8am, eyes barely open but satisfied, for a cup of tea and some all too brief kip before the tent became sweltering and the 'new' day began.

The Hammer vs. the Rift

Phil Leichauer and Gareth Phillips have a look at 28/4, a small cave to the East of Fisura Chica

My lame attempts to cairn the cave delayed finding it a little. One rock on top of another rock, how hard can it be?

Well, we were in. Gareth ambled past Wobbly Rock Junction. Ambled is the wrong word; for Wobbly Rock Junction is a tight/spikey/partly virtual affair. He did though, take a left (this time not going as far as the Spanish pitches, which we had free-climbed on our last excursion in the cave). I'm pretty sure he followed the obvious route through the rift rather than popping into a slightly obscure chamber. Anyhow, the route he took didn't go. Whilst Gareth was wriggling about below, I'd taken the route recommended by Pete Talling. Taking off the battery belt to prevent snags, I was left in complete darkness. My home-brew light clearly does not suit the Picos.

This little bit of snaggy rift opened into an aven. Here a rock had to be scrambled over to get to the rift that Pete had been smashing. Gareth had by this time caught up, bringing with him some digging tools. We knocked a few rocks out of the rift and then he attempted to wriggle around the corner. After much squirming about with his helmet off, Gareth re-emerged, declaring it to be an awkward S-bend that he couldn't get round. Then he asked if I wanted a go. In reply I pointed out that I clearly eat more pies than him and therefore didn't stand a chance in hell. To this he meanly said that I might be more reckless than him. Alas that may be true, but being that I have a higher pie consumption, we turned round and left, satisfied that further pushing in 28/4 would require a wider squeeze.

Officer's Reports

Expedition Leader's Report

Preparation for the Fisura Chica 2007 expedition started well in autumn 2006, when grant applications and requests for permission to cave and camp were submitted. The expedition was repeatedly destabilised from December until March, when several members of the committee stood down, burdening the leader with responsibility for the gear order and medical training. This workload and an untimely ankle injury restricted the expedition leader's ability to recruit expedition members, and this shortage of manpower reduced the time spent exploring Fisura Chica and searching for undiscovered entrances on the surface. The most effective use of the leader's resources during this time would have been to delegate the officer's positions swiftly and focus on recruitment, and to clearly instruct the expedition members in the Land Rover that the expedition needed to begin caving swiftly.

The exploration of new passage in Fisura Chia could have been more successful; the cave was extended by about 150 m vertically with an exhilarating 120 m pitch, but a connection to Pozu Cabeza Muxa was not found. The principal problem faced by the expedition was a shortage of manpower throughout the expedition, exacerbated by two avoidable delays in the early weeks of the expedition. Firstly, caving in Fisura Chica did not begin until the second week of the expedition, 3 days behind schedule. Secondly, the expedition leader incorrectly told the team that rope had been left in the cave from Disposable Belays when it was in fact only left-in from Boys are Back in Town onwards, slowing progress for several days. During both weeks the expedition was also hampered by unusually bad weather, an unexpected consequence of running the expedition from early July.

These delays meant that the expedition did not reach the previous limit of exploration until 19th July, rather than 12th, and that more experienced cavers spent more of their time in the field rigging to the bottom of Vamos than exploring the new passage beyond. Both of these delays might have been avoided had there been better communication between the expedition leader and the field team during the first weeks of the expedition. At this time the correct use of human-resources was vitally important for the longer-term success of the expedition.

The small number of expedition members restricted the ability of the expedition to respond to changes of circumstances. The early delays, the decision of two members to leave the field early, the limitations placed on some members by prior injuries, and the lack of a good location for underground camp, combined to hamper the expedition at times when numbers in the field were low and it was important to maximise the time spent in Fisura Chica. Bad weather at the beginning of the expedition prevented the exploration of new entrances as had been planned, and the low number of members in the field in the final weeks meant that this work could not be carried out as hoped. The expedition's failure to overcome the circumstances in the field in the summer was an unfortunate consequence of the difficulties suffered by the leader in the spring.

Although the expedition did not explore any new entrances to a considerable depth some time was spent 'shaft-bashing'. The clear results are that the bowl complex to the north of Ario, high on the west flank of Cabeza Llambria, contains no new caves; and that there are no caves on the north-facing slope down to the Cares Gorge located to the west of the Cabeza Llambria bowl complex from 1450m to 1300m. Entrances were spotted lower on this slope at ~1300m and may be worth further investigation.

The greatest success of the expedition was in its relationship with the six Spanish cavers from the club Recerques Espeleologiques de l'Agrupació Excursionista de Catalunya (ERE-AEC). These cavers joined the expedition for one week and both explored Fisura Chica and aided the de-rigging. It should be noted that the permit requires specific permission for cavers from this club to cave with OUCC in the Parc National of the Picos d'Europa, and it is hoped that they will return to Fisura Chica in 2008.

The de-rig this year was conducted with the help of Pedro, the warden of the *refugio* at the Vega de Ario, who took 150kg down from Ario on his horse for €90. Pedro informed us that supplies could be transported up from Cangas de Onis by helicopter for €70 for 100kg. Should future expeditions be short of members when de-camping from Ario it is worth asking Pedro about using either the helicopter or his horse.

Equipment Officer's Report

The Expedition Equipment Officer's role was split between David Legg, who placed the equipment order, and Simon Goddard and Richard Padfield, who distributed the order and, in their role as OUCC gear officers, maintained the club equipment that was used by the expedition.

The expedition spent £800 on new equipment this year, including £230 on the 'Shetland Attack Pony', the official name of a new combined compass and klinometer purchased for use in surveying this year. The SAP proved itself to be both laboursaving and practical, and was an unqualified success.

This year the expedition left rope in the cave from We Are Still Warthogs After All These Years. ~55m of rope is required for Unspeakable, the large pitch immediately after The Crystal Ship, as the rope became irretrievably snagged during the de-rig. Hangers were left in place on bolts, although they were not oiled and should be checked before use in 2008.

At Ario the expedition provided three light-weight tents sleeping up to nine people, rather than a single large 'Scout' tent (6-8 man, canvas). Expedition members were also encouraged to bring private tents. This arrangement worked well with the numbers on expedition, although the larger canvas tent should be taken in the trailer for extra capacity if needed.

Medical Officer's Report

All expedition members had in-date first aid qualifications prior to the expedition departing.

There were no medical incidents of note whilst the Fisura Chica 2007 expedition was in the field. Three members arrived in the field nursing long-term injuries, which restricted their involvement in the exploration of Pozu Chicago.

Treasurer's Report & Accounts

The treasurer's role was shared between Dave Legg, Chris Rogers and John Pybus. Accounts are summarised below. The cost for gear is the actual amount spent and does not include income in-kind from sponsorship; without this valuable sponsorship, for which we are very grateful, gear would cost significantly more. In addition, the loan of a Land Rover from the Gordon Foundation made transport significantly cheaper and again we are very grateful for this support.

EXPENDITURE

Administrative costs	-16.46
Personal Equipment	-4375.09
Common Equipment	-489.52
Report & OUCC Proceedings	-120
OUEC Publications	-100
1st Aid Equipment	-340.13
1st Aid Training	-138
Channel Ferry	-400
Subsistence and Petrol	-905.19
TOTAL	-6884.39

INCOME

TOTAL	6884.47
Members Contributions	5084.47
Oxford University Expeditions Council Grant	1000
Ghar Parau Foundation Grant	400
Oxford University Travel Grant	400

Summary

Fisura De Chica continues to provide us with great challenges and exciting discoveries. The caving was not easy – bolt climbs and traverses made progress slow, while the way on was not always obvious. However, we have pushed one of the largest single pitches in the Culiembro area and we continue to maintain good relations with our Spanish colleagues. The lead we leave for next year looks promising; we look forward to hearing about, and hopefully participating in, their discoveries.

