

## KARST RESEARCH EXPEDITION TO THE PERUVIAN ANDES 1987, APPROVED BY THE ROYAL GEOGRAPHICAL SOCIETY

Headquarters First British Corps British Forces Post Office 39

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## **PERU 87**

PRELIMINARY REPORT OF THE 1997 ARMY CAVING ASSOCIATION EXPEDITION TO THE PERUVIAN ANDES

The members of the "Peru 87" returned safely three weeks ago and are hard at work completing area notes, drawing up surveys, producing cave descriptions and sorting through thousands of photographs. It is expected that our final report will be published and forwarded to you in a few weeks. In the meantime, we felt that you as our sponsors or helpers in any capacity would like to know a little about how the expedition went. Here, therefore, with our compliments is a short report.

Our advance party consisting of interpreters Capt Ian Ruddock and Lieutenant Fran Evans and photographer Jenny Woodrige left for Lima on the 24th April, and by the time the 16 strong main party joined them a week later, they had achieved an administrative miracle. They had squared off Peruvian officialdom, chartered a 55 seater coach, obtained mapping and aerial photographs and purchased all the food, carbide and supplies needed by 20 people for a month.

Meeting us at Lima airport in a bus with all it's tyres down to the canvas, and which had been released from the police pound for the journey, we were whisked off to a two – dollars - a night hotel in central Lima. Pausing just long enough to exchange dollars for wads of intis which devalued while we looked at them, we dragged our jet lagged bodies to bed: not aided by certain other residents who elected to hold an impromptu disco on the roof once the 1am curfew came into force.

The following day, having been joined by Captain Juvenal Barrientos Lara and Lieutenant Arturo Malaga Rubira of the Peruvian army, we loaded all our food and equipment on the bus and headed off on the twenty four hour journey to the Celendin area via Trujillo and Cajamarca. This was as uncomfortable a trip as might be imagined, especially after Cajamarca where the tarmac ends. We were somewhat irritated too when PO Tony Loones had a bag containing his camera, passport and money stolen during a change of buses. It could have taken days to obtain the necessary paperwork from the Cajamarca police, but amazingly the policeman involved immediately recognised Captain Lara from his national service days, and everything was done in under an hour. So much for the cover story that we were all students and Juvenal and Arturo were Peruvian "friends". We arrived at Agua Colorada, about a 75 minute drive west of Celedin just before it went dark. Our contract with the bus company specified the junction of the road to Sorochuco as the end of the line, and there we had to get out, even though on arrival we found it to be the middle of nowhere. Fortunately 500 metres back up the road was a disused adobe road side cafe and the owner was persuaded (reluctanly) to let us stay. We negotiated a price, later discovered to be astronomical, for him to take a party to Sorochuco

the following day, then having dumped our kit in the old cafe, erected our tents and slept the sleep of the just.

Shortly after dawn we awoke to the jingle of harnesses and the clank of churns. We were camped right by the milk collecting point for the whole area. Campesinos came from miles around to meet the milk lorry and the presence of an unprecedented number of gringos caused quite a stir.

Within a short time a six man team led by SSgt Ian James left for Sorochuco and an amazing day long trek by horse and mule to the gigantic surface depressions and river sinks near La Victoria at 4,000 metres. We had high hopes of this area which had a depth potential of 300 metres and sink to resurgence distance of about 2.5 kilometers. Meanwhile, leaving two people behind to guard camp, the remainder split into small groups to begin checking the multitude of dolines which spread for miles around Agua Colarado.

One group traveled down to Celendin itself and were told of caves in numerous locations including Balsas, Limon, and Huasmin. That evening spirits were high. A significant number of entrances had been noted and some short caves entered. Everyone felt that the area had potential for significant discoveries.

Unfortunately the following days showed that our early optimism had been a little misplaced. The area yielded about 40 caves, some of which seemed extremely promising at first. The problem was that they all closed down very quickly. Nothing was found to be deeper than 100 metres or longer than 200 metres.

One of the biggest disappointments was the cave at Laguna, five miles east. A large 30 metre shaft was followed by significant vadose development and three other pitches. Just when everything was looking good the stream ran into a tight sump totally choked with mud and vegetation. The second great let down was a superbly located pothole on the south western slope of Cerro Leon Churco. Descending a 35 metre dramatic entrance shaft some 30 metres from a choked river sink, past two bolt changes, Ben Lyon was drawn on by the roar of a waterfall dropping into a large chamber. Here again the water disappeared into an impenetrable crack, and the cave quickly calcited up a situation we were to encounter repeatedly.

Undaunted, even by the news from La Victoria that everything was blocked, we continued to search a huge area, dispatching groups to Limon, Balsas, the Quebrada Tincat and Comulca where a French team had had some success in 1982. Those remaining at Agua Colorada continued to search the area systematically and even undertook digs at several sites. At one of these, a stream the size of the one going down Marble Steps in Yorkshire could be heard crashing down as a waterfall. Unfortunately the sound was coming up a rift about 15cm wide and an attempt to go down through boulders was thwarted by one measuring 2.5m x 1.5m x lm which needed to be dissolved by explosives. Of these we had none, and so Agua Colorada went down in our records as the most "nearly good" area we had ever been in.

With ten days left in the field, we decided to send a strong party round to Huagalyoc near Bambamarca where we had reason to believe there would be caves. As the crow flies, the distance involved is about 70km, but the only route is via Caiamarca and involves two days of very rough traveling. The approach to the area was via a spectacular volcanic region dotted with ancient plugs, whilst ridges of limestone alternating with various types of impervious rock rise in all directions around Muagalyoc and Bambamarca. We were met with considerable suspicion in this area. Gold is mined there and the locals were convinced we were up to no good. Following a police raid and search of our camp, we moved a couple of kilometers north of Huagalyoc. Ignoring protestations that there were no caves there, we found well over forty on two hillsides only. It is impossible to assess how many more there are in this region. Any estimate is complicated by the complex geology, and the fact that where we were, the hills are capped by limestone. This covering an impermeable layer and then more limestone. Once we had worked this out, we were able to locate a number of caves at the lower interface (and incidentally to gauge the considerable inaccuracy of the new geological maps).

Despite a series of dawn to dusk days, it was possible only to cover a very small part of this huge area of limestone. The caves we discovered, although frequently well decorated, were rather small. Nevertheless if only one of the surrounding mountains has an impervious capping, then the area potentially could be one of the best in Peru.

Our recovery plans to Lima involved very tight timings, but everything worked smoothly. The bus turned up punctually at Agua Colorado, the teams from Balas and Huagalyoc met their connections and we were back at our starting point with 36 hours to spare before our flight home.

Sadly, caves of the great length or depth eluded us. Nevertheless in a concentrated month of reconnaissance we covered a huge area of cave bearing potential. In so doing our searches took us into villages and areas, where no European had ever been before, and we gained a considerable insight and appreciation of the way of life of the local hard working farmers. We explored 90 caves and investigated countless dolines and river sinks. We returned somewhat fitter and thinner as a result of long hard days trekking across a South American equivalent of the Yorkshire Dales hoisted up to 4,000 metres. We burned in the hot sun and strong winds by day and froze at night when the temperatures touched -6 Celsius.

The whole trip was a very physical and stimulating experience. We feel sure you will agree when you read our final report, that it and your valued support was well worthwhile.

J A SHELDON

Major