

64

THE BRITISH CAVER

Vol 64

August 1976

NEW ADDRESS

PUBLISHED BY -

Mrs ANNE OLDHAM
RHYCHYDŴR,
CRYMMYCH,
DYFED SA41 3RB,
Great Britain

THE CAVES OF PERU

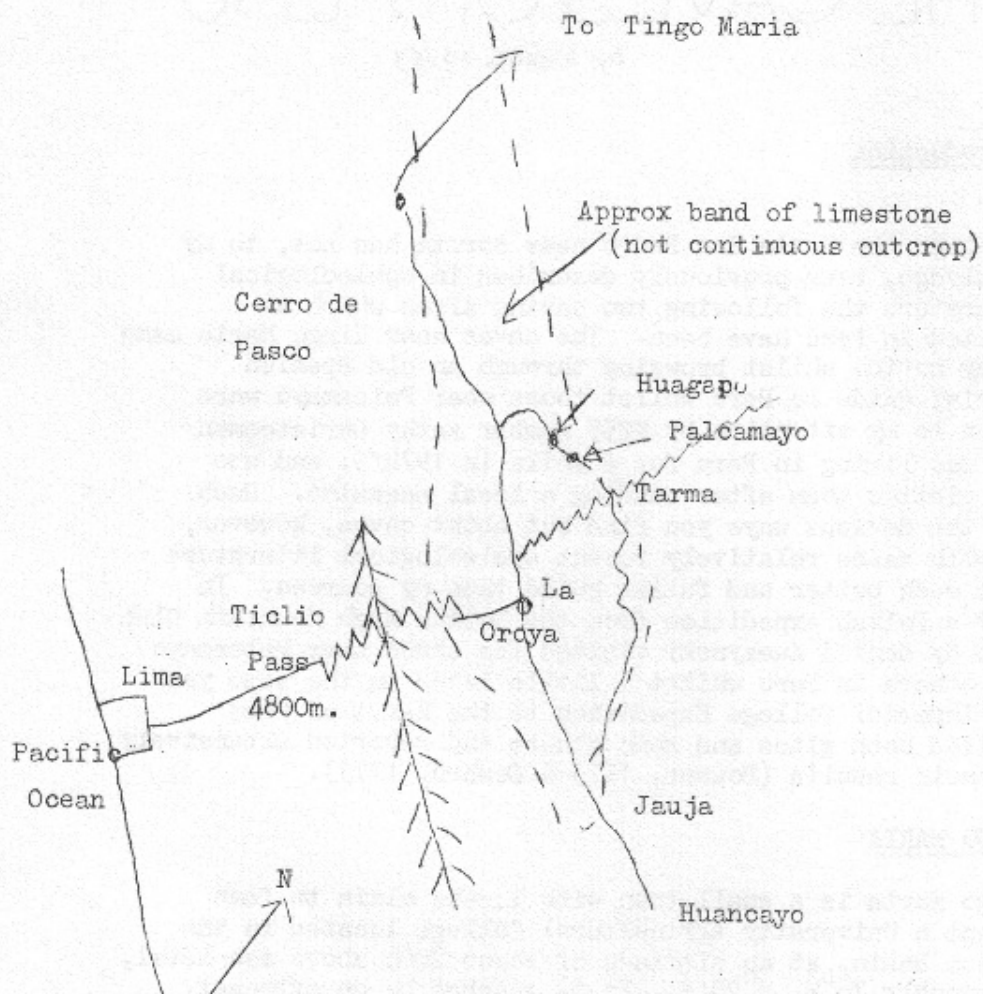
by ANDREW PAVEY

Introduction

Although the Gruta San Pedro near Sorota has not, to my knowledge, been previously described in speleological literature the following two caving areas which we visited in Peru have been. The caves near Tingo Maria came to my notice whilst browsing through an old Spanish tourist guide to Peru whilst those near Palcamayo were drawn to my attention by NZ55 member Kathy Christeomen who was living in Peru for a while in 1974/5, and who had visited them after reading a local magazine. Such are the devious ways you find out about caves, however, in both cases relatively recent speleological literature is a much better and fuller guide than my sources. In 1972 a Polish expedition from the Polish High Mountain Club lead by Maciej Kuezynski visited the caves near Palcamayo and others in Peru whilst a little later in the same year the Imperial College Expedition to the Karst of Peru visited both sites and some others and reported extensively on their results (Bowser, 1973 & Coward, 1973).

TINGO MARIA

Tingo Maria is a small town with little claim to fame except a University Agricultural College located in the Amazon Basin, at an altitude of about 800m above sea level, at roughly 76°W, 9°20'S. It is reached by an extremely rugged 20 hour bus ride from Lima which includes 500km of extremely rough road and transit of the Anticona Pass at 4,800m above sea level which is an experience all in itself. Get a return bus ticket as it is extremely uncomfortable sleeping on the bucking, heaving and filthy bus! Being in the Amazon Basin guarantees the town a steamy atmosphere and frequent rain. There are also jungle covered limestone peaks surrounding the town and we were quite happy to catch glimpses of these through the mist. Despite being surrounded by limestone only two caves are well known to the locals.

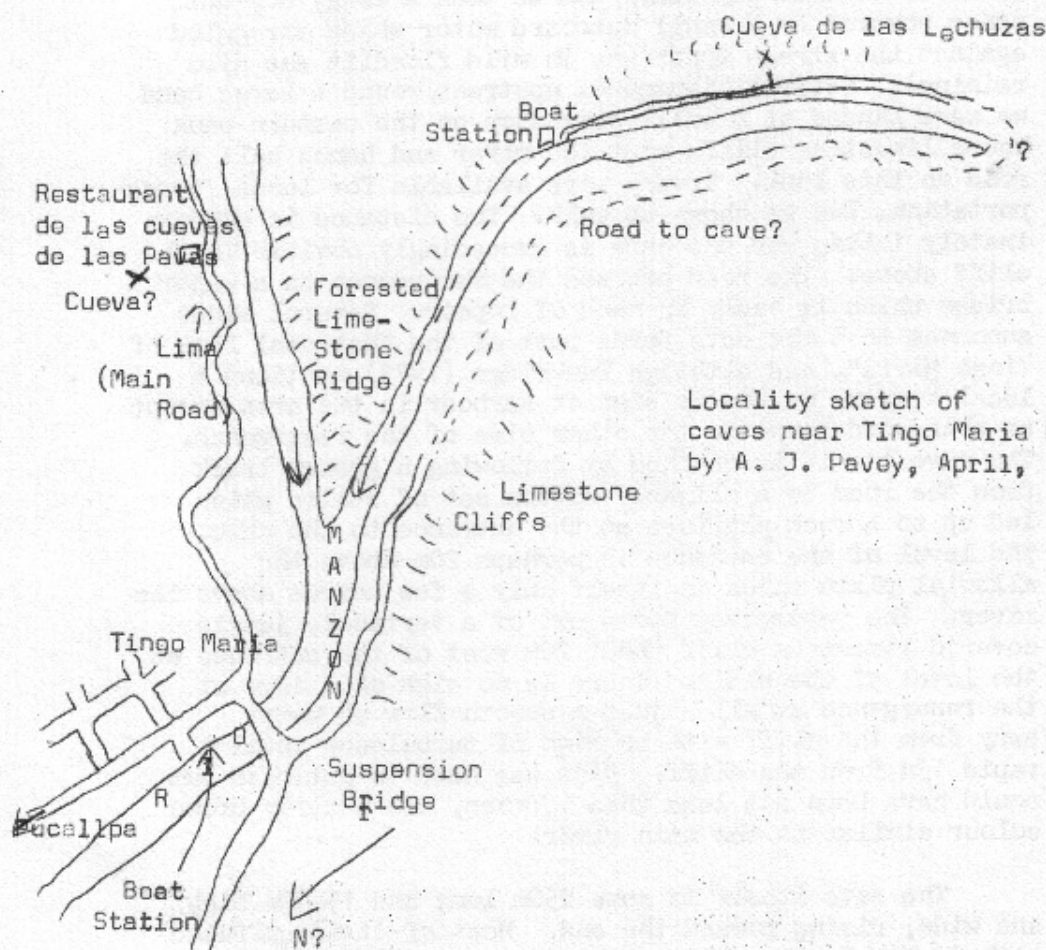


SKETCH MAP OF CENTRAL PERU SHOWING
APPROXIMATE LIMESTONE AREAS ABOVE
3000m.



CUEVA DE LAS PAVAS (CAVE OF THE TURKEYS)

This cave is around 10km from Tingo Maria on the Lima side of town, relatively close to the main road. We passed the "restaurant de los Cuevas de los Pavas" beside a dry creek bed at about this point, but did not return to investigate too closely as Tunbridge (1973) had reported it as merely a steep, narrow gorge and not a true cave and the locals gave us the impression that it was not really worth visiting.



Locality sketch of caves near Tingo Maria Peru by A. J. Pavey, April, 1975.

CUEVA DE LAS LECHUZAS

This cave is located up the Manzon River from Tingo Maria about 5km in my estimate. (10km according to Coward 1973, and "a few" km according to Tunbridge 1973). There is a road on the Western bank of the river which we were told led to the cave although the cave itself is on the Eastern bank, and Coward had reached it by road. We were told the road was exceedingly muddy and we took a long, dug-out canoe powered by a small outboard motor which struggled against the stream which was in mild flood(it was also raining). Several kilometres upstream, round a large bend we were landed at a small beer shop on the eastern bank where limestone cliffs meet the river and hence halt the road on this bank. Trucks were available for local transportation, but we chose to walk. The distance is approximately 1.5km, and the cave is exceedingly obvious in the cliff above. The road crosses the resurgence on a major bridge which is badly in need of repair. Several signs announce that the cave forms part of the "National Park of Tingo Maria", and although Tunbridge (1973) mentions a local keeper, we saw no sign of anybody in the area except an abandoned house on the other side of the resurgence. The cave itself is reached by following a greasy track from the road to a slightly rotten set of stairs which led up to a rock platform at the entrance to the cave. The level of the entrance is perhaps 20m above the alluvial plain which is itself only a few metres above the river. The resurgence flows out of a vertical, jungle covered limestone cliff about 20m west of the entrance at the level of the plain. There is no sign of a cave at the resurgence at all - just a smooth flow of water away from the cliff with no sign of turbulence until a rapid 15m from the cliff. Flow was hard to estimate but could have been not less than 1 m³/sec, and a dirty brown colour similar to the main river.

The cave itself is some 250m long and 15-30m high and wide, rising toward the end. Most of it is suffused with daylight although at the far end total darkness prevails.

There are several large stands of stalagmite and flowstone and during our visit the large flowstone on the western wall, midway in, was running continuously with quite a stream of water, which seemed to sink into the guano around. There is no sight or sound of the resurgence river in the cave although it would seem obvious that the cave was an abandoned resurgence of the river. Nearly at the far end, directly below the "lecheezas" (Spanish for owls, reported as "guacharos" or "steatornis" birds) for which the cave is named, are several ways in. Right and left are downward sloping rifts filled with guano which no one seems to have "pushed" (and we didn't either!), and directly ahead is a 10m high flowstone barrier which can be climbed on the left. Beyond is a chamber with no way in.

The reasons for the distinct lack of enthusiasm for exploration reported by all who have visited the cave is fairly obvious. The owls have produced quite a bit of guano and those parts of the floor not covered with it directly are covered with seed husks (which the birds live on and drop) and with a myriad "bugs" - spiders, beetles, 10cm long millipedes and cockroaches (greeny white). Thus the cave explorer tends to be very concerned about the number of unwanted passengers which he picks up along the way. (It is impossible not to walk on a lot of them) Added to which the locals are in the habit of hunting the owl chicks, which they boil down to make cooking fat. So the birds quite understandably do the best they can to dissuade visitors by screeching loudly in the dark and dive bombing any hapless cavers who come near. It seems reasonable to suppose that if either of the downward rifts were explored to the river, a fair sized cave system would be found.

The locals have reported a river sink in the hills behind Coward, (1973) suggests it is 14km through the mountain, and Tunbridge (1973) at least a day's walk from the entrance, and judging from the colour of the water in the resurgence it must be a fairly wide open cave with a fast flow-through time. The locals also suggest that it's possible to catch Histoplasmosis in the cave!

Thus the area is extremely promising, lots of limestone, lots of water and known caves, but the difficulties of exploration are formidable - insects, disease, heat, humidity and heavy jungle. Both Coward and Tunbridge felt relief at leaving the cave and area to other workers and I'd have to do the same. Access is reasonable - bus or plane from Lima and a number of roads in the area plus a relatively civilized town (3 hotels and movie house etc.) would make Tingo Maria a good base, but I'm not sure if there is a "dry" season at all.

PALCAMAYO

Palcamayo is a small town about 25km from Tarma (District of Tarma) (See map) at a height of about 3400m above sea level. 4km up the road to San Pedro is the Huagapo Cave (follow the signs you can't miss it). Access is a lot easier than to Tingo Maria. Tarma is a well established departmental capital and is on regular bus service from La Oroya and Huancaayo. Both can be reached by bus or train from Lima. There is also a bus or colectivo service from Tarma to Palcamayo. The caves are obviously well known to the locals and must be quite a tourist attraction. The first place we stopped in Tarma to ask directions had a newspaper report about the caves pinned to its wall. We travelled by Colectivo up to Palcamayo and returned by bus to Tarma.

Huagapo cave is the best known in the area, and is a large resurgence cave containing an active streamway which debouches a little below the main cave entrance and flows down the hill over a complex series of tufa dams to join the River Shaca, just below the two houses opposite. In one of these houses lives Modesto Castro, "official guide to the caves." Modesto is always willing to guide tourists into the cave, although it is only possible to go about 100m before having to wade and swim and this is the usual limit for hardened tourists. He has a couple of large notebooks in which he has newspaper cuttings, expeditions reports etc., and various photographs. I photographed this record and so can now provide a reasonably accurate history of exploration of the area.

"THE GROTTO WHICH CRIES" - THE LEGEND OF HUAGAPO CAVE

In earlier times Huagapo was apparently known as "La Gruta que Clora" (the grotto which cries in Spanish) and the following legend is repeated in many newspaper accounts of the cave.

During the time of the expansion of the Inca empire when the forces of the Inca Pachacutec invaded the region held by the Tarumas. The locals, determined to make a big battle of it decided to send all their women and children to the cave and told them to go as far inside as possible and not to come out until they were victorious. Unfortunately all the Tarumas soldiers were wiped out in the battle and so there was no one to tell the women and children to come out. They all perished and were turned to stone forming the multitude of different sized stalagmites. Since that time they have been weeping and collected tears gather together to form the crystal clear stream which flows out of the cave. "Huagapo" apparently means "the grotto (or mountain) which cries" in the local dialect. (Quechua)

HISTORY OF EXPLORATION

Huagapo, being the largest and most obvious cave in the area has received the most attention. Archaeological excavations carried out by Peruvians in the entrance area have shown that the cave itself was a site of habitation for perhaps 2000 years for primitive Andean people, and their successors. A number of primitive, irregular and indecipherable "paintings" have also been found which are attributed to these people. The Peruvian expedition which was the first of the well recorded recent visits to the cave thought that these paintings were 10,000 years old.

As many of the locals believe that caves contain no oxygen it is quite probable that before 1969 no one had been beyond the daylight section of the cave as a few simple obstacles at this point would dissuade any but the most determined casual explorer without electric lighting. Rosell(1965) mentions Huagapo but indicates no further exploration took place due to darkness within the cave.

The 1969 Expedition was organized by the Newspaper "El Comercio" and "Ray-O-Vac" (who make torches and batteries) and comprised (leader) Cesar Morales Arnao (prominent climber and head of "Seccion Andismo del Ministerio del Educacion Publica" which oversees climbing expeditions in Peru), geologist Tomas Guerreo, archaeologist Hermilio Rosas and surveyor Enrique Leon. That they were relatively ignorant speleologically is evident from reading the newspaper accounts of their efforts. Nevertheless it is an important start to speleological investigations by Peruvians and they did penetrate well past the first obstacles in the cave. They studied geology, hydrology and the cave paintings. They concluded that the cave was formed in limestone and explored for a length of 660 m. (although the newspaper reports over 1000 m. this is the addition of inward and outward oxygen supply units since they found the air remarkably wholesome. They apparently had some difficulty exploring the cave using rubber dinghys and hand torches, (Reports are in "El Comercio", Lima 18-21 February 1969 and Morales et al (1966-68(?)).

In 1970 a small group from "La Asociacion Venezolana de Espeleologia" made a flying visit and confirmed the importance of the cave (Buse, ?). Also in 1970 a party of enthusiasts lead by Raul Nieves Herr went "1800" metres into the cave and were stopped by a deep canal and left their names as mementos (Buse, ?). Since subsequent expeditions have shown that the cave is not that long and haven't reported names from far within the cave we can presume some journalistic licence has been used in this report.

The next and most significant visit was by members of Klub Wysokogorski (Polish High Mountain Club) lead by Maciez Kuezynski in February 1972. They visited caves elsewhere in Peru and in May (Annon, 1972) reported that they had explored "totally" Huogapo cave to a sump after a passage length of 1.5 km. ("1 km." according to Bouser Coward 1973). They had obviously had an epic trip in high water conditions for 19 hours (or 22 hours depending on report!). The cave was reported to have an active streamway with numerous lakes and waterfalls and extraordinarily beautiful stalactites in various forms and colours. They had been the first to reach the sump. In contrast when the Imperial College Expedition to the Karst of Peru arrived in mid August they took just one hour to reach the sump in low water conditions and on the way out discovered 400 m. of dry inlet passage plus tidying up some canals near the entrance for a total trip of just four hours. They spent several weeks in the area and completed a survey of the cave, unsuccessfully dug in the sump

and proved it couldn't be free dived and in a water tracing test showed that some of the water was coming from a cave 650 m. higher and 10 km. away. The report which they produced (J. B. S. A. No 52) is quite detailed and is the best source of information on the caves in this area.

Our own visit in May 1975 was restricted to a "tourist" trip (sole) over the easy first 100 m. to the ladder pitch leading to the canals.

HUAGAPO CAVE DESCRIPTION

This description is simplified from that of Bowser and Coward (1973). The cave entrance is located on a terrace on the north side of the Shaca valley at 3572 m. above sea level, and is a large arch 30 m. high and 15 m. wide. Beyond is a descent to the streamway, to the east the stream flows out to the resurgence whilst the main passage continues north west around a few corners to the first canals (110m. in). To this point the cave has been large (30 m. high, 10 m. wide) and continues after the bypass for 50 m. to the next (40 m.) canal, then 150 m. of walking streamway leading to the 150 m. long straw-decorated Wonderland, the third canal (30 m.) is accompanied by a lowered roof which rises to reveal a dead end side passage (10 m.). Another 120 m. of very low canal leads to 200 m. of boulder strewn passage with sump, 150 m. downstream of the sump up a 3 m. climb is Wilderland a 400 m. extension. It is basically 'T' shaped and combines mud and fine formations. There are no decent leads but a few tight squeezes terminating passages clearly lead to other known passage. Total passage length 1698.5 m. It is essentially developed parallel to the sincline followed by the valley. The cave is probably the longest in South America.

OTHER CAVES IN THE AREA

The next major cave in the area is La Sina de Milpo a sink hole situated in the gorge above and behind Huagapo at an altitude of 3992 m. above sea level. It was first explored by the Polish party to a depth of 60 m. and then by the Imperial College team to 407.2 m. thus establishing the South American Depth record. The cave carries a small streamway and is reported to be an excellent sporting trip with many traverses, climbs and short pitches (tackle 8 X 9 m. ladders)

The cave follows the dip and the sump is up strike from Huagapa and only 7 m. above its final sump. Although no dye tracing has been done it would be highly unlikely for the water not to come out of Huagapa.

The Imperial College team found five other small caves in the area (up to 100 m. long); The upper and lower Antacocha caves drain a lake near the limestone contact and this water was proved to flow through to Huagapo Cave although both caves end in tight squeezes with little likelihood of extension. Nearby La Cueva de Concha Loma (260 m. deep) and La Cueva de Mata Patta (in 50 m. deep) were two caves with potential connection to Huagapo (880 m. below) which were too tight and might need blasting. They take streams in wet season only. On the opposite hill La Sima de Callash Punta reached 50 m. but was disappointingly choked in a large chamber.

Several other entrances were seen 300 m. below Callash Punta but not investigated and in my conversation with Modesto he suggested that he knew of many caves in the area which he had been 50 m. into but wouldn't go further without assistance. He showed us a map with a number of caves marked not only restricted to the area around Huagapo but further afield towards Palcomayo and Tarma, on the bus out from Tarma to La Oroya we saw quite a few dry valleys but no signs of caves although some outcrops between Javja and Tarma had black holes (possibly only shelters but worth checking) and we saw one obvious subjacent collapse next to the road a conical depression 10 m. in diameter set least 10 m. deep. Nearby a large marshy lake showed no obvious outlet and the surrounding rock was definitely limestone.

In fact from travelling around the district in a bus you could form the impression that the whole area was limestone. This seems fairly exciting at first when the scale of the countryside - plateaus and deep valleys, is considered but there were no obvious signs of sinking stream or large rising. The area for probably 50 km. either side North and South of Tarma would seem to need much closer scrutiny and could well reveal better caves than those now known near Palcamayo.

ELSEWHERE IN PERU

Tunbridge (1973) refers to Rosell (1965) and picks out four other caves which might be the best possible other prospects

than Huagapo and Tingo Maria. These are La Gruta de Uscopisco (20 km. South of Hualgajoc) also populated by steornis birds and reported by Raimondi in 1868 as containing a couple of chambers and a pitch with the stream which disappeared possibly being 5 km. long. Sanson Machay near Cerro de Pasco (towards Tingo Maria from Huagapo) seems to be of archaeological interest but may bear further exploration. A similar cave (La Cueva de Toquepala, near Moquegda) has animal cave paintings 7000 years old.

The remaining cave, La Gruta de Huariri, near Livitica in Southern Peru was also visited by Raimondi and is described as low, well decorated and then branches, one of which could be pushed. Press reports (Anon, 1972) indicate that the Polish party visited the cave and found it had 300 m. of passage and was well decorated.

The Imperial College team also investigated the Pirhuacocha area near La Oroya but found no caves only a few shakeholes and some limestone pavement.

CONCLUSION

It is clear that there is quite an amount of limestone at considerable altitude (3000-5000 m.) in Central Peru and that very little systematic exploration has taken place throughout the country. Two expeditions in 1972 achieved significant results but have by no means covered the field and have really only just scratched the surface. Small mobile parties, not burdened by much equipment (customs and police problems etc.) would be well suited to the task as public transport is cheap and wide ranging and access to many of the areas would be relatively easy. Lone cavers can achieve little more than preliminary reconnaissance. Whilst it is nice to think that large, deep caves could be found in Peru it should be realistically admitted that at this stage, upon the current evidence only caves of Huagapo or Milpo's size are likely to be found. The most promising area for investigation is the area centred on Tarma.

REFERENCES ON CAVES IN PERU

- ANON. 1969 "En las entrañas de los Andes" El Comercio 18/2/69
"Dramática jornada tuvo Expedición en Caverna de Huagapo" El Comercio 21/2/69
Lima (?) (newspaper, cutting in Modesto's collection)

- ANON. 1972 "Polacos Dicen Grutas Peruanas Son de Gran Atractivo Toristico"
La Prensa, 11/5/72, p. 2. (Lima newspaper)
cutting from Modesto)
- BOWSER, R.J. "Log of the Peru Expedition" J. Brit. Speleot.
1973 Association. (52) pp 1-6
- BOWSER, R.J. "The caves of the Paleamayo Area"
& COWARD, J. Brit. Speleol Association (52) pp 18-26
J.M.H. 1973
- BUSE, H. "Huagapo, La Montana que Uora" (cutting in
Modesto's collection) pp. 12-16
- CAVARO, E. "Guazapo: La Gruta Que Lloro" (In Conozca el Peru
(Knows Peru) series in colour magazine in
Medestos collection) pp. 120-16.
- COWARD J.M.H., L. W. Tunbridge, R. J. Bowser, 1973. "The Palcam ya
area" J. Brit. Speleol. Assoc. (52) pp.13-17
- COWARD J. "Caving in Peru" Canadian Caver, 4 (2) 48-55, illus
survey.
- MORALES, Arnau et al. 1966-68. "Primera Expedicion Cientifica
de Espeleologia Caverna de Huagapo, Tarma"
Revista Peruana de Andinismo y Glaciologia
Club Andinista Cordillera Blanca Huarez, Lima,
Peru, 7, 173-91
- ROSELL, C.G. 1965. "Cavernas, Grutas, y Cuevas del Peru" Lima.
(Available in US from Edmund Taylor, in U.K. from
Tony Oldham.) In Peru from Talleros Graficos,
R.L. Villaneuva S.A. Tiron Yauli 1440-50, Chacra
Rios, Lima) At present out of print, photocopies
available from TO at £2.00 each)
- TUNBRIDGE, L. W. "Caves in Peru. J. Brit Speleol. Assoc.
(52) pp.27-29.
- WADGE, G. and COWARD J.M.H. 1973. "The Pirhuacocha Area"
J. Brit. Speleol. Assoc. (52) pp.7-12
- (J. Brit. Speleol. Assoc. Available from Sales Secretary,
B.C.R.A., 7 School Lane, Combwich, Bridgwater, Somerset. U.K.