

POLL-CAHERMAAN (C6)

by
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The cave Poll-Cahermaan, as named by Tratman (1969), lies on the shale-limestone boundary on the north side of the Knockavoarheen ridge, in the townland of Cahermaan. Access is from a farm track which leaves the main road from Lisdoonvarna to Ballyvaughan opposite the track to the Cullaun series of caves. The cave entrance is found a short distance south-east of the farmhouse, just to the west of a small stream sink. This is very close to the terminal complex of Culluan Five, but the two caves do not connect in their explored parts.

The dry entrance to Poll-Cahermaan is blocked by a single flake of rock, placed by the farmer against the inquisitiveness of his animals. The stream is met just inside the entrance and after an easy squeeze a small canyon is followed, rapidly gaining height as the floor drops away. The passage twists very violently and its narrowness makes progress difficult until after 38 metres daylight is seen from a small opening in the roof of the canyon. This opening is in a hollow on the shale margin west of the main entrance and is passable to very thin cavers. After a further 4 metres a pitch is reached. The pitch is 9 metres deep and can be very wet.

From the roomy fluted chamber at the foot of the pitch an aven to the north leads up to flowstone formations; a narrow canyon carries the stream off to the south. The stream canyon is 3½ metres tall but in width varies from 20 to 45 centimetres. A slight enlargement at stream level enables progress to be continued on the few occasions when the upper rift becomes impassably narrow and this single passage comprises the rest of the cave, a distance of approximately 1 kilometre. A single roof bed is followed for the whole of this part of the cave, which follows the main jointing in the 196° direction, crossing and recrossing through a zone of calcite veins which are probably associated with a minor tear fault in this direction. The vein zone is 3 to 5 metres wide, with individual veins usually less than 3 centimetres wide; the veins can often be seen to be pinnate. The canyon is sharply scalloped and meanders with a short wavelength, on average about 5 metres. The bedding plane precursor to the cave is poorly developed so the classic "T" shape of County Clare streamways is not at all prominent here. At times the floor gradient shallows and a sediment of water-rounded flakes of shale is found on the passage floor. Flood debris suggests that the water in the cave can back up for a considerable distance from the end. It is not known where the water resurges but the Fergus River is the most likely recipient.

From the pitch the stream canyon is followed. A discontinuous chert band is seen low down on the passage walls, but this disappears below the passage floor after 120 metres due to the stream gradient being shallower than the gentle southerly dip of the rock strata. Calcite formations are seen in the first 180 metres of this passage with some small helictites and a very fine series of "bloody guts" flowstones at 120 metres. After this the cave lies under a considerable overburden of shale as it passes under the Knockavoarheen ridge and formations are absent. At 190 metres a tiny inlet enters from the east and the passage height has by now lowered to 2 metres. By 300 metres the height has risen back to 3 metres only to lower slowly to 2½ metres. 460 metres below the pitch a limestone block has tipped into the top of the canyon due to weakness along the north-south jointing across a passage meander. This is the high-spot of this unremarkable passage, as it continues at a steady 2½ metres height, slowly rising again to 3 metres at 700 metres from the pitch. From here the passage rapidly loses height, in compensation widening slightly to 60 centimetres. At 760 metres a small inlet enters from the east, the mainstream passage being 1 metre high. 20 metres beyond this another small inlet enters from the east, bifurcated into two streamlets. The mainstream passage continues to lower and at 830 metres bifurcates into two branches; these meet and divide again after 10 metres and the braided character of the cave continues to the end. The last 30 metres of the cave are a flat-out crawl in the stream and at the termination lateral mud-banks narrow the cave passage to an uncomfortable degree. This point is 1 kilometre from the entrance.

The cave was discovered and explored in 1956 by a UBSS party who estimated the length of the cave by pacing as 1330 yards. In the subsequent account in *Proceedings* (Witts 1958) this figure was quoted and the direction of the cave was stated as west. In 1960 a party surveyed the first 90 metres of the cave below the pitch and found that the correct direction was southerly; the demoralised team also declared that the cave could not be surveyed in a month and it was not until 1977 that a length survey was made using a 10 metre line. In 1978 a party examined the relationship between the cave and the vein zone. From the combined data a survey has been drawn; though more accurate than a sketch survey no grading is claimed on the Cave Research Group scale. The straight line distance of the cave has been calculated from the sinuosity of known sections of the cave (sinuosity as defined in the Coolagh River Cave paper (qv pages 79-80)). Between the two entrances the sinuosity is 1.2, whereas for the first part of the southerly canyon the figure is 1.15. Constrained by the vein zone, the position of the end of the cave can be estimated.

REFERENCES

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| TRATMAN, E. K. | 1969 | <i>The Caves of North-West Clare, Ireland</i> , David and Charles, Newton Abbot. |
| WITTS, G. D. | 1958 | Pollcahermaan, <i>Proc. Univ. Bristol Spelaeol. Soc.</i> 8(2), 138-139. |

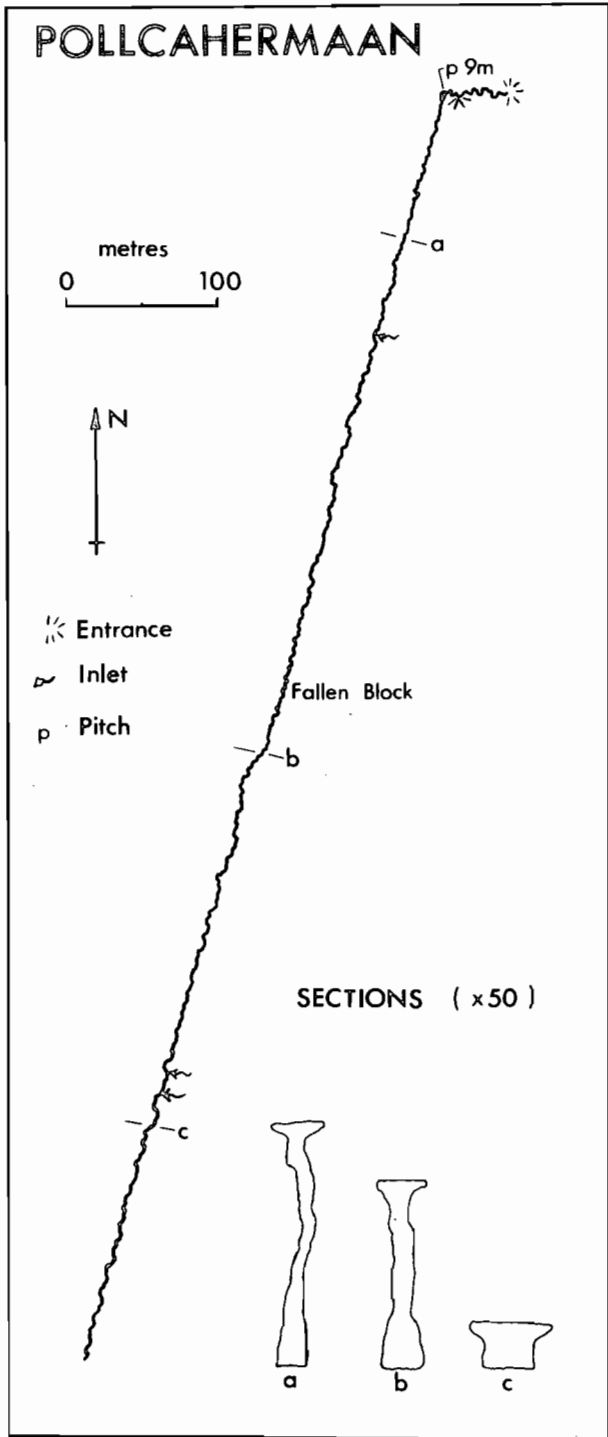


Fig. 21. Pollcahermaan.