

HAWTHORN CAVE, CO. CLARE, IRELAND

by
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Hawthorn Cave

O.S. 1 : 10560, Clare Sheet 4

Main Cave, entrance A2a, E. 72.5, N. 35.6cm.

Townland, Balliny South

Resurgence, B1d, E. 64.5, N. 29.2cm.

Townland, Knockaunsmountain.

Length 255m.

Altitude 263m.

Length 6m.

Altitude 220m.

ABSTRACT

A description and survey of the cave is given. The water resurges in a closed depression and sinks soon after to become a tributary of Pollballiny.

HISTORY OF EXPLORATION

The cave was given this name by the University of Bristol Spelaeological Society in 1957, as it was the only cave in Td. Balliny South with a hawthorn bush above it. A party in 1956 penetrated the cave for only 18m. but another in 1957 went for 26m. to a point where the roof passage closes up. No further progress was made until 1970, when members of the South-West Essex Technical College Caving Club (SWETCCC) followed a meandering stream passage for an estimated 85 metres to a tight hole. In 1971 John Gradwell and Trevor Faulkner returned and explored a further 50m. at which point the passage became impassably low (Faulkner, 1971). On the 31st March, 1975 a party from the UBSS dug their way through this low section exploring a further 100m. of passage. The cave was surveyed on the 10th April, 1975 by Bob Mathews, Julian Griffiths and Sam Moore, and in April 1980 it was extended by the author for a further 20m., when the low bedding plane that marked the previous end to the cave was passed.

DESCRIPTION

Hawthorn Cave is situated on the west side of Slieve Elva between Faunarooska Cave and Pollballiny. Its entrance lies 67m. south of the main entrance to Faunarooska Cave, Faunarooska One, on the southern side of the townland boundary fence, in Td. Balliny South. Immediately south of the fence are a number of holes that let daylight into the streamway of Faunarooska Cave. These are unconnected with Hawthorn Cave.

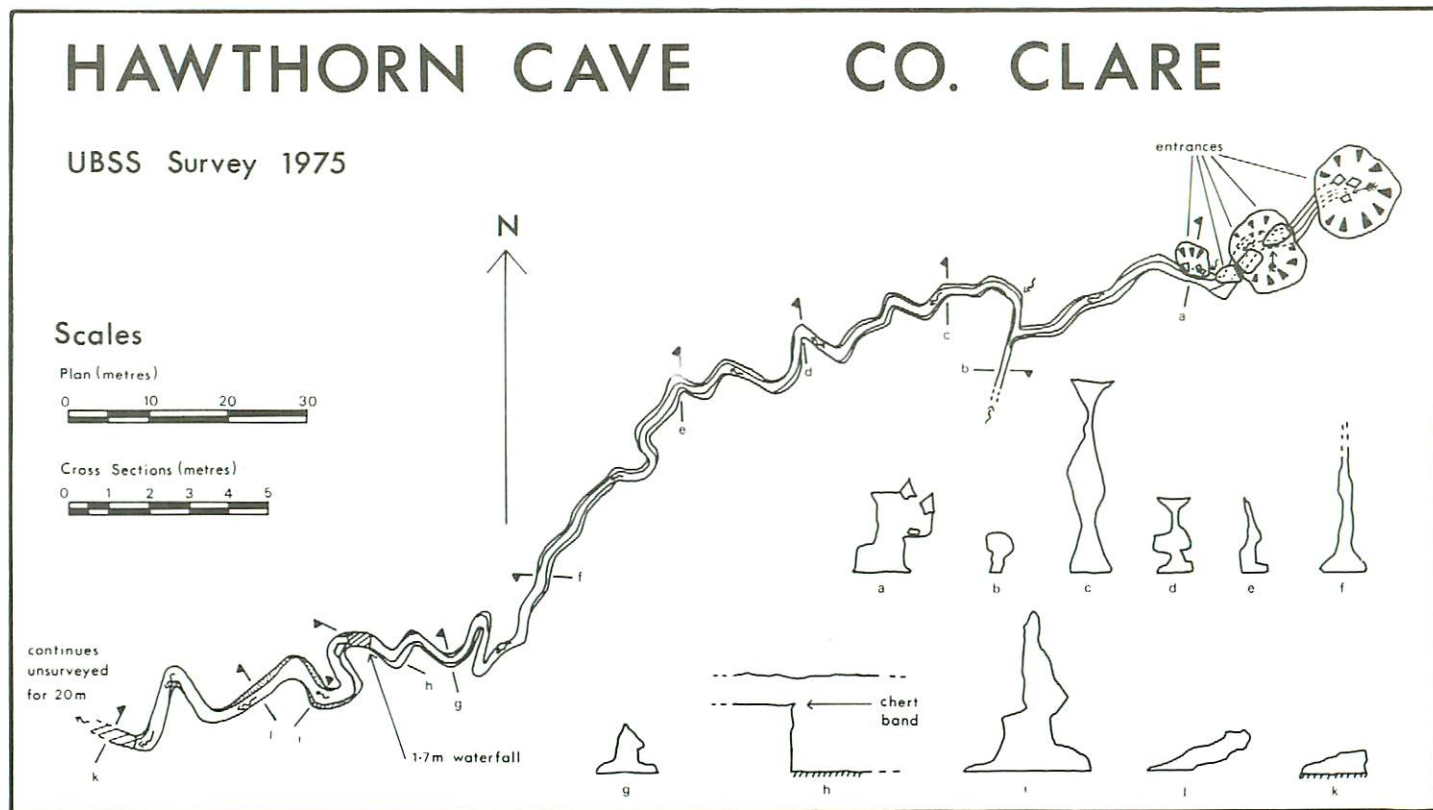


Fig. 57: Survey of Hawthorn Cave

From the entrance, which lies in a twin swallet, the passage is followed down dip under several alternative entrances. Just before the last of these a small inlet enters on the right. This has not been explored. 45m. from the entrance another small inlet enters, this time on the left. This can be followed for a short distance but becomes too tight. The main passage continues five metres high and one metre wide for a further 20m., mostly walking sized, until the passage section becomes such that, although the rift is fairly high, it is necessary to crawl. 190m. from the entrance after a series of flat-out crawls the stream breaks through a chert band at a 1.7m. waterfall (Fig. 57). The canyon passage beyond lowers to a crawl after 30m., as the upper part of the passage becomes filled with flowstone. The full height of passage is soon regained but 10m. further on the cave ends at a very tight right hand bend, that would require modification to negotiate. This point is approximately 900m. from the cave's resurgence (B1d).

The water resurges at the bottom of an opened joint on the north side of the east arm of the large closed depression, which lies in the flat area between Slieve Elva and Knockauns Mountain. The cave here has been followed for 6m. to a chert obstruction. The water from the resurgence flows south for 30m. to be piped into a drinking trough, the overflow from which sinks immediately. Colour testing has shown (Cassely, 1977) that water from Hawthorn Cave begins to enter the lower part of Pollballiny in the by-pass to the Scalloped Bedding Plane and that the bulk of it enters to the right at roof height from a bedding plane just upstream of the Choked Inlet (Section P - P on Cassely's map). These points lie immediately underneath the closed depression already mentioned (see Area Map, Fig. 64 in Cassely's paper).

DISCUSSION

The entrance swallets are on the shale-limestone boundary and two separate streams flow off the shale and into the cave. These are joined by the water from three inlets which may dry up in dry weather. The combined waters flow near to the surface throughout the explored part of the cave. This is probably due to constraint by the chert bands, such as the one at the waterfall. It is probable that the cave stays near to the surface for the rest of its journey to B1d. In Pollballiny the cave stream cuts through six chert bands before going deeper and passing under the surface closed depression. The ninth chert band is at the Scalloped Bedding Plane. The water from Hawthorn Cave enters Pollballiny at this level, having sunk in the closed depression.

The closed depression on the surface is believed to have formed towards the end of the last glaciation (Tratman and Perratt, 1975). At this time it was receiving surface water from the Polldubh area through three incised channels, while its northern arm was fed from the Pollballiny area. The water may well have sunk in the depression and entered Pollballiny between the first and second boulder chokes, where

the cave suddenly becomes large. Cassely has suggested that this part of the cave may pre-date the Pollballiny stream.

In the post-glacial period the shale-limestone boundary retreated eastwards to its present position and the swallets for Hawthorn Cave and Pollballiny were then first formed. They are thus younger than the closed depression. It is presumed that the water from Hawthorn Cave resurges in this depression simply because the depression is there. However the depression shows a number of collapse features and has evidently deepened in the post-glacial period to produce the boulder chokes in Pollballiny. Another piece of evidence for this collapse is the fact, pointed out by Cassely, that the dry valleys from the east do not incise the lowest set of cliffs in the depression.

SURVEY

The cave was surveyed using a Fibron tape and a Suunto hand-held compass. Tape measurements were taken to the nearest centimetre and the compass was read to half a degree. No clinometer was used. However taking into account the 1.7m. waterfall and a 3m. climb down in the entrance swallet the cave is approximately ten metres deep. The last 20m. of cave has not been surveyed.

REFERENCES

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