

Photo Feature

Bubble Springs Cave, Lathkill Dale, Derbyshire: Britain's youngest limestone cave?



It is quite common for caves to be described as ‘young’ or ‘old’ without any criteria for defining objectively what those terms mean. Ongoing passage development in a cave that is still enlarging actively is clearly more recent (“younger”) than the former growth of a cave that is now abandoned (“relict”), and a radiometric date on the base of a stalagmite growing on the passage floor provides an indication of when the passage was abandoned. However, it is impossible to say with any accuracy when a particular conduit became large enough to be entered by humans, thereby achieving cave status. Another constraint on the age of a cave is that it is inevitably younger than the limestone in which it has formed. Whereas Bubble Springs Cave in Lathkill Dale may or may not be the most recent British void to have achieved cave dimensions, it is incontrovertible that it has formed in one of the country’s youngest limestones, a tufa deposit of late Pleistocene age. The cave is water-filled for most of the year and can be entered only following a prolonged dry period. There are no natural entrances, but the cave was intersected by lead miners driving Lathkilldale [sic] Sough during the 1740s and the present entrance is via one of their shafts. The top photograph shows one of the cave’s larger chambers, whilst bottom left shows more-typical dimensions. The caver is viewing a tufa mound that was cut through by miners when enlarging the passage. Bottom right shows laminated clastic sediments that have accumulated in the cave.

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