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Carreg Cennen Castle Cave, Llandeilo, Carmarthenshire: a review of the work undertaken by T. C. Cantrill in 1900

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Excavations by T. C. Cantrill within Carreg Cennen Castle Cave in 1900 revealed stalagmite deposits, together with human remains and a perforated horse tooth, which like a number of more recent discoveries of human remains have remained undated. Cantrill's account of his excavations and the surviving human and animal remains from the site are published in full for the first time. The horse tooth, possibly a bead or pendant, and previously suggested to be of Late Glacial age, has been radiocarbon dated to the later Roman to early medieval period and is discussed in the light of other Roman finds from the vicinity and in cave deposits in Wales and elsewhere.

INTRODUCTION

Carreg Cennen Castle Cave (SN 66838 19064; Figs 1–2) is one of at least nine caves in the outcrop of Carboniferous Limestone upon which the medieval castle stands (Davies 1980, 23). The cave was visited, explored and investigated by the geologist Thomas Crosbee Cantrill in 1900. His unpublished manuscript and new study of the finds from his excavations held in Amgueddfa Cymru – National Museum Wales, which include human and animal remains and a perforated horse tooth, are published here for the first time.[5]

The cave is incorporated within the medieval castle. A doorway located in the south-east corner of the castle's inner ward leads to a series of steps descending to the projecting base of the watchtower and a small open area outside the south curtain wall. Another set of steps leads down through the base of a corner turret built out to the edge of the cliff face. The passage is walled and is lit by narrow apertures in the outer wall. From the end of this passage further stone steps lead to the cave floor. The natural cave entrance is at this level. During the medieval period the entrance was blocked by a limestone wall with a dovecot built into it. The cave runs from the blocked entrance approximately 46 metres due northwards into the hill and is entirely contained within the outer ward of the castle. Blocking the natural cave entrance prevented potential intruders from infiltrating the castle's defences and is thought to have been done in the early fourteenth century, either just after, or just slightly before, the outer ward was constructed (Lewis 1990). Closing the cave also had other benefits: the dovecot encouraged birds to nest, thus providing a source of meat for the castle, whilst others have suggested that the cave was used as a water source. At the very end of the passage there is a small feature that Cantrill and earlier commentators interpreted as a spring or well and water source. In 1815 Thomas Rees described the well as 'a small quantity that drips into a bason [*sic*] excavated in the rock four feet above the ground, or floor, and capable of holding about two gallons' (Rees 1815, 320). A further reference notes that 'At the end of this fissure or tunnel is a pit about six feet deep, but not perfectly dry. It does not seem to have ever contained a spring, but near it is a small spring of dirty water' (Anon. 1906, 197). The same suggestion that the passageway to the cave may have been constructed to give access to this natural water source has been made elsewhere (Remfry and Ruckley

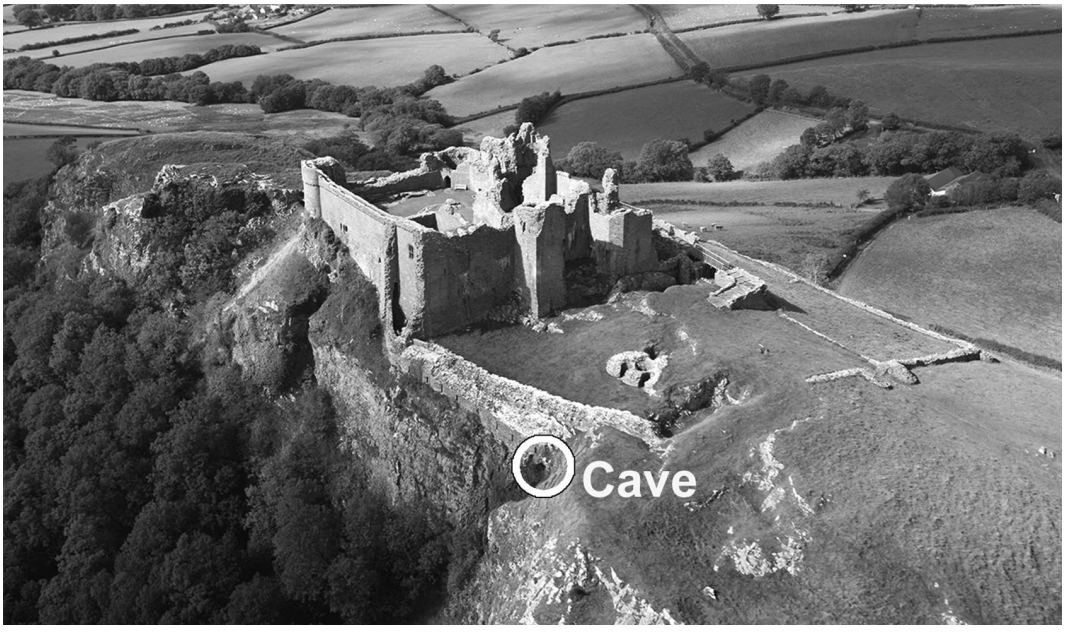

Fig. 1. Aerial view of Carreg Cennen Castle from the south-east showing the cave entrance. *© Crown copyright (2020), Cadw – Welsh Government.*

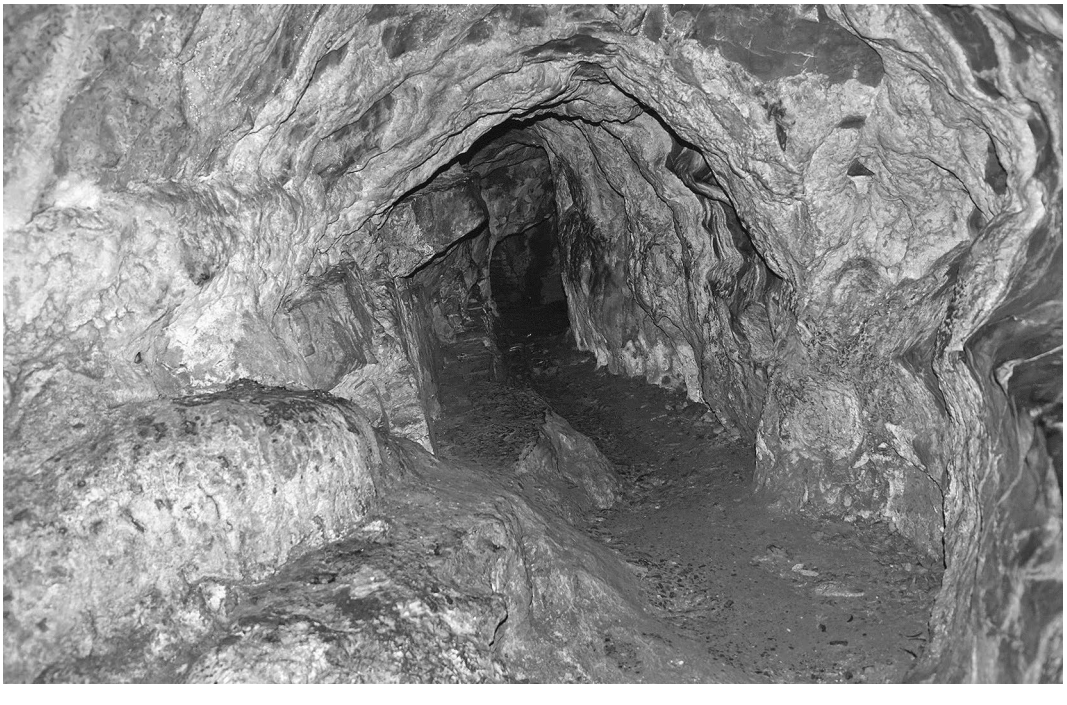

Fig. 2. Passage leading to Carreg Cennen Castle Cave. *© Wikimedia Commons.*

2010, 98). However, it seems improbable that this was the only water source, judging from the volume of water issuing from this spring in recent times.

CANTRILL'S EXPLORATION OF THE CAVE IN 1900

The cave was investigated by Cantrill in 1900, who at that time worked for the Geological Survey of England and Wales. During his visit he identified stalagmite containing bone fragments on the eastern side of the cave passage just above the present-day floor level.

Cantrill prepared a manuscript report on his work[6] which together with extant finds[7] was presented to the National Museum of Wales following his death in 1931 (Grimes 1933, 94). The manuscript is in the form of a lecture and is hand-written with edits, but also contains footnotes, suggesting it was intended for publication. It is undated but is accompanied by a two-page manuscript entitled 'Bones from the Cave at Careg Cennen' (*sic*) written in a different hand and annotated with a note by Cantrill saying 'Rec^{d} from E.T. Newton 1/6/15' (the palaeontologist and specialist in fossil mammals, Edwin Tulley Newton), which has suggested that a report was being prepared for publication at this time (Davies 1995).

Cantrill's report records his findings and provides a detailed description of the stratigraphy and a section drawing (Fig. 3). The following excerpt is transcribed from the unpublished manuscript report.

> *The deposit on the eastern wall was found to consist of the following materials, in descending order:-*
>
> | | | *Inches* |
> |---|---|---|
> | *3.* | *Stalagmite, hard, white, in thin layers ...* | *1 to 1½* |
> | *2.* | *Bone-bed: a mass of hard cellular cream-coloured stalagmite, enclosing small angular pieces of limestone, fragments of bones, several human teeth, & some charcoal ...* | *8* |
> | 1. | *Stalagmite, soft, white, & crumbling ...* | *3* |
> | | *[Present floor-level here]* | |
> | | *Similar stalagmite, adherent to the wall, proved for ... ...* | *4* |
>
> *The material forming the present floor of the cave is a brown clayey soil containing pieces of limestone, among which were seen a metal button, a pin, pieces of beer-bottles (all quite modern), & fragments broken from the bone-bed. This clayey soil abutted against the soft crumbling stalagmite (1) adherent to the sides of the cave; its thickness was not ascertained. All the stalagmite that contained fragments of bone was cut away with a hammer & chisel, & yielded about half a cubic foot of material for future examination.*

Cantrill's section is still visible in the cave today, forming a ledge on the eastern side of the cave passage and the surface deposit is loose and contains bone fragments. Some of this deposit is also eroding from the cave passage floor. Melvyn Davies visited the cave in 1980 and 1995 and recorded finding loose human teeth in this same location (Davies 1980, 23; 1995). This deposit, therefore, contains further remains and offers potential for future archaeological investigation.

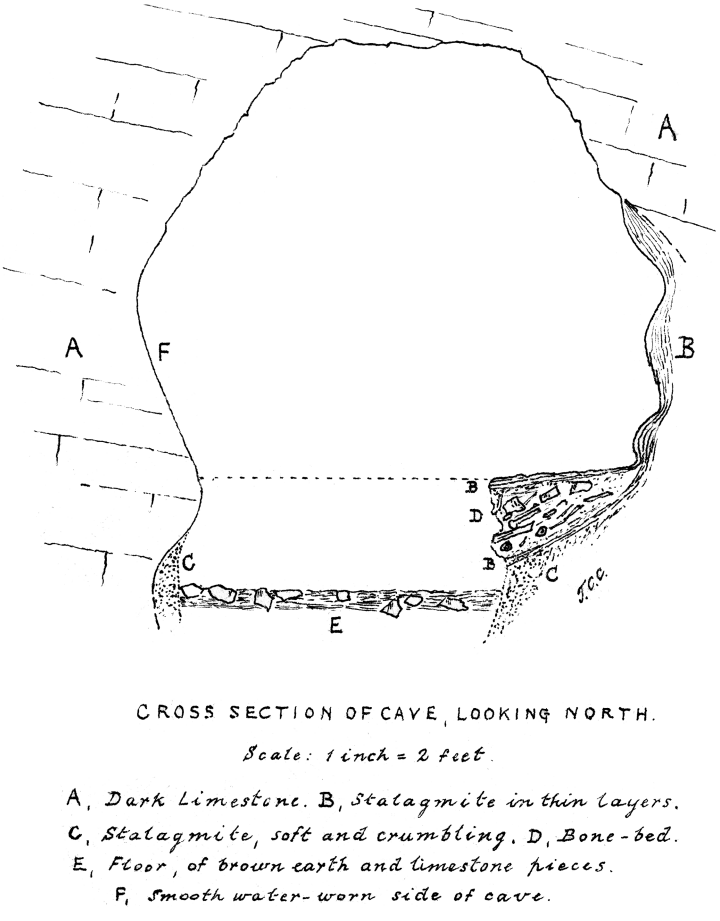

Fig. 3. Section drawing through the deposits in Carreg Cennen Castle Cave drawn by T. C. Cantrill.

THE HUMAN AND ANIMAL REMAINS FROM THE CAVE

Today, 142 human bones and one perforated horse tooth are all that survive of the finds from Cantrill's excavation, together with two additional human teeth and a cattle bone recovered more recently by Cadw staff during a site monitoring visit. Bat remains, recorded in Newton's report, are not amongst the Museum's collection.

Analysis of the 144 extant human remains from the cave by Katie Faillace are summarised here (see Table 1). Most of the skeletal elements are highly fragmentary which precluded the taking of standard measurements and which make it very difficult to determine a minimum number of individuals represented. The teeth are better preserved than the bones, so using these suggests a minimum of three individuals, based on tooth class and dental attrition (Newton suggested there were four individuals present). At least one individual is a juvenile, evidenced by the presence of deciduous dentition, aged between 5–9 years old (Ubelaker 1989). At least two individuals are adults, since there are three premolars and a permanent canine with occlusal wear exposing the dentine. One tooth (a probable first mandibular premolar) had

both cusps worn off, suggesting older adulthood. A fragment of an adult ilium from the hip containing a portion of the auricular surface which equates to an age estimate of 30–40 years old (following Lovejoy *et al.* 1985) or 37–65 years (following Buckberry and Chamberlain 2002). This portion of ilium also had a preauricular sulcus, which suggests the individual was probably female (Buikstra and Ubelaker 1994). There are no obvious signs of trauma or pathological conditions, though this is unsurprising given the extensive taphonomic fragmentation and calcareous concretions.

Identification of the two faunal remains was undertaken by Poppy Hodkinson. One, fused, left cattle tibia was recovered during a Cadw site visit during December 2017. The fracture suggests that this bone was broken whilst fresh, since it is indicative of bone marrow extraction (Outram 2001). The second specimen is the perforated horse incisor, most likely maxillary, described below.

Table 1. Distribution of human bone fragments by anatomical region

Anatomical region	number of fragments
Cranium	7
Mandible	8
Permanent teeth	12
Deciduous teeth	6
Vertebrae	11
Axial (non-vertebral)	27
Pelvis	2
Upper limb/shoulder	17
Lower limb	7
Hands and feet	28
Unidentified	19

PERFORATED HORSE INCISOR

The horse tooth is very simply modified to make a bead or pendant (Fig. 4). The crown is intact and the tooth has been perforated laterally across the root close to the apex. The perforation is mainly drilled from one side, but the hole was finished by drilling from the other side, as indicated by a small ridge inside the perforation. The hole is wide enough to house a piece of cord or leather. It shows little obvious sign of heavy wear and the edges are sharp and unworn, suggesting the bead has not experienced much use. The apical end of the tooth root has broken away, and presumably this break caused the tooth to be lost by its owner. The tooth has a coating of calcite concretion, which is consistent with the coverings observed on the human remains. The root shows no signs of having been thinned or trimmed and there is no further decoration of the surfaces of the tooth.

Comparable perforated animal teeth are known in early prehistoric to modern contexts and might have a number of functions which include being hung individually as pendants, or as part of a necklaces, or worn as ear-rings or sewn to clothing or onto headdresses. Though previously undated, the Carreg Cennen tooth has been considered to be probably of Late Glacial age (cf. Davies 1980; 1981, 17; 1995, 31). In order to establish its actual date an AMS radiocarbon determination was carried out by the University of Oxford Radiocarbon Accelerator Unit, with sampling by David Chivall. This resulting date of cal.

Fig. 4. The perforated horse tooth from Carreg Cennen Castle Cave.

AD 265–535 at 95% probability and cal. AD 354–440 at 77% probability (OxA-39194, 1649±21 BP),[9] suggests that it belongs to the later Roman or early medieval period.

The dating of this tooth raises questions about how it came to be introduced into the cave. Perforated teeth have been recovered from other similar contexts in Wales. These include the dog canine with a central perforation found during excavations at Ogof-yr-Esgyrn, Abercrave, which Hubert Savory interpreted as a pendant or amulet (Mason 1968, 38). The site has evidence of both Bronze Age and Roman activity. The late phase of Roman activity would fit with the date obtained for the Carreg Cennen Castle Cave tooth (ibid. 56). Another centrally perforated tooth, a sow's tusk is recorded from Burry Holms, Gower (Walker and Davis in prep.), which though undated may relate to Iron Age activity.

The use of caves during the Romano-British period appears to have been reasonably widespread (Brannigan and Dearne 1992) though interpretation of this evidence is often difficult since much of the recorded evidence is from antiquarian or non-archaeological cave exploration. Recent research re-evaluating cave deposits in northern England has identified considerable Romano-British activity, including burials (Lord and Howard 2013; Leach 2015; Fear and O'Regan 2019). Ritual activities are also widely seen, from the burial of human neonates with lambs, calves, piglets, puppies and a horse in the late Iron Age to early Romano-British period at Dog Hole Cave in Cumbria (O'Regan *et al*. 2020), to the deliberate deposition of objects including jewellery in drip pools and the dark zones of the caves at a number of sites in the Yorkshire Dales (Lord and Howard 2013). Cave deposits are notorious for bioturbation and the mixing of sediments and it is often difficult to disentangle material from different periods without direct radiocarbon dating. In an intriguing example of direct relevance to the horse pendant, two bear third phalanges from Sewell's Cave, North Yorkshire, that were thought to be associated with Romano-British deposits, were radiocarbon dated by Edwards *et al*. (2014, 134). However, these specimens turned out to be Late Glacial in date and the authors concluded that it was likely that they may have collected the bones as curios from another site in the Roman period and later deposited them in the cave. Lord and Howard

(2013) suggest that, at least for the Yorkshire Dales caves, the majority of artefact deposition occurs in the earlier part of the Romano-British period, whilst Leach (2015) also found human remains dating to this period in the Windy Pits sites of the North York Moors. However, direct dating of both adult and juvenile human remains from Cumbria and the Peak District has also identified cave burials from the middle and late Romano-British periods (AD 134–395; Fear and O'Regan 2019; O'Regan *et al*. 2020). Therefore, on the available dating evidence, the use of caves in the Romano-British period does not appear to be concentrated in any one century but instead spans the entire period of occupation. Fourth-century cave occupation is attested in more than a dozen caves (Brannigan and Dearne 1992, 41), including all those in South Wales with dating evidence (ibid. 43).

Beads are rare in Romano-British cave deposits, although we should acknowledge that many may have been lost during excavation if the sediments were not sieved. Dog Hole Cave, Cumbria, has yielded a large assemblage of glass, and jet or shale beads recovered after wet-sieving of all deposits (O'Regan *et al*. 2020). Another cave site that has yielded beads referred to the Romano-British period is Frank i'th' Rocks Cave, Derbyshire (Palmer and Lee 1925; Fear and O'Regan 2019). As well as the tooth from Ogof-yr-Esgyrn noted above, a further perforated dog canine is recorded from Merlin's Cave, Symonds' Yat, Gloucestershire (Phillips 1931, pl. II.16), and a number of perforated wolf (or dog) teeth from three Yorkshire caves: Dowkerbottom Hole, Jubilee Cave and Victoria Cave (Raistrick 1939, 139). Perforated animal teeth are reasonably common finds at other Romano-British sites — dog/wolf canines and *Bos* incisors predominate, but no other example of a perforated horse incisor has been found. Dog/wolf canine examples seem to span the Roman period (Crummy 2010, 52–3; Greep 1998, 279), but it is suggested that perforated *Bos* incisors are mainly of late Roman date (Greep 1986, 209; 1995, 1130).

The creation of a bead or pendant from a horse tooth may have particular significance. Horses were important in Iron Age and Roman Britain, with at least one northern goddess — Epona — being associated with them (de la Bédoyere 2002). Horse remains associated with caves have been radiocarbon dated to the Romano-British period in a number of places, including a possible 'head and hooves' burial at Kinsey Cave in the Yorkshire Dales dated to cal. AD 131–277 (1807±31 BP; OxA-14797; Lord *et al*. 2007; Lord and Howard 2013); the horse burial from Dog Hole Cave, Cumbria dated to cal. AD 69–226 (1895±30 BP; SUERC-39126; O'Regan *et al*. 2020) and a processed horse bone from Buckland's Windypit, North York Moors dated to cal. AD 166–402 (1784±42 BP; Wk-13308; Leach 2015). In addition, and uniquely in Britain, the Romano-British cremation cemetery at Brougham in Cumbria, yielded ten cremations containing horse remains, including three whole horse cremations dating to between AD 200–270 (Bond and Worley 2004). The site is also notable for the number of inscribed Celtic, rather than Latin or Germanic, names (Fitzpatrick 2004), perhaps suggesting that horses were significant to the local population (O'Regan *et al*. 2020).

ROMAN COINS AND OTHER FINDS RECORDED FROM CARREG CENNEN CASTLE

There are records of antiquarian finds recovered from within the vicinity of Carreg Cennen Castle, though attempts to locate them have proved unsuccessful. These included a stone object, variously described as a hatchet or chisel and some Roman coins but their findspot is uncertain. The first edition Ordnance Survey map (*c*. 1885) shows a cross within the castle's inner ward noting 'Roman coins and primeval implement found'. An earlier account by Archdeacon John Williams (Williams 1857, 347) records 'some few years ago a deposit of Roman coins was found within the castle, in a spot close to the wall not far from the iron gate which leads to the cave stair-case'. The earliest account is by Thomas Rees who simply noted that 'Some Roman coins of the time of Domitian are said to have been lately discovered in this neighbourhood'

(Rees 1815, 321). Cantrill's manuscript misquotes Rees as saying that coins of Domitian and Constantine were found in the castle ruins. Reference is made to the coins being viewed in the Llandeilo Scientific Institution's Museum during a visit to the area by the Cambrians in 1855 (Anon. 1855, 311).

CONCLUSIONS

The question that remains unanswered by this review of Cantrill's finds from within Carreg Cennen Castle Cave is the relationship between the late Roman perforated horse tooth and the human remains. As seen elsewhere, it is possible that the horse tooth and at least some of the human remains come from different periods, as seen at Ogof-yr-Esgyrn, for example, and other British caves. Equally, there is evidence suggesting that there would be no reason why these remains could not be contemporary. Indeed, the analysis of the remains, which concludes a minimum of three individuals were buried in the cave, and the association of horses were not uncommon in Romano-British burials. Site inspection at Carreg Cennen Castle Cave would indicate that the deposits within the cave passage contain further human remains. These would merit a full study, which is not within the scope of this current research. If dating of these individuals is to be determined, then it would be beneficial to date a securely stratified bone, recovered under modern conditions, from a known, recorded and studied context. Until such time as this is undertaken it is not possible to speculate on the dating of the human remains. Furthermore, the relationship between the dated perforated horse tooth and the human remains will never fully be understood for the record of their discovery fails to mention exactly where the tooth was located in relation to the stratigraphy Cantrill recorded. Despite there not being a date for the human remains at present, it was felt to be important to place the work done so far on record. It is to be hoped that in the not too distant future research will determine whether or not there are Roman human remains in Carreg Cennen Castle Cave.

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NOTES

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2. Oxford Radiocarbon Accelerator Unit, University of Oxford, 1 South Parks Road, Oxford, OX1 3TG.
3. School of History, Archaeology and Religion, Cardiff University, John Percival Building, Colum Drive, Cardiff, CF10 3EU.

4. Department of Classics and Archaeology, University of Nottingham, University Park, Nottingham, NG7 2RD.
5. This paper has been prepared from detailed reports received from all contributors. Each section has been edited, but all details of methodologies used, and the full results can be found in the excavation project archive which is housed in Amgueddfa Cymru – National Museum Wales accession number 31.384.
6. Amgueddfa Cymru – National Museum Wales (AC-NMW), acc. no. 31.385.
7. AC-NMW, acc. no. 31.384.
8. AC-NMW acc. no. 31.384/398.
9. This and other calibrated radiocarbon measurements in this article have been calibrated against the IntCal20 calibration curve (Reimer *et al*. 2020) using OxCal v4.4.2 (Bronk Ramsey 2009).

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