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THE HUMAN REMAINS FROM STOKE LANE SLOCKER, STOKE ST. MICHAEL, SOMERSET.

by

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ABSTRACT

In 1947, fragments of human bone were discovered in Stoke Lane Slocker, Somerset. Most of the finds were removed from the cave in 1949/50 and deposited in Frome Museum. They are now curated at Frome Heritage Museum and at the Somerset Heritage Centre, Taunton. Recent analysis shows that there were at least two adult and three juvenile individuals present. Radiocarbon dating indicates that they are Early Bronze Age in date.

INTRODUCTION

In 1947, the cave of Stoke Lane Slocker was extended by cavers and bones, both human and faunal, were discovered in the Bone Chamber beyond Sump One. During the 1950s some of the human bones from the cave were displayed in Shepton Mallet Museum, while others were eventually deposited in the archaeological collections of the Somerset County Museum. The finds that had been curated at the now closed Shepton Mallet Museum were transferred to Frome Heritage Museum where their historical and scientific importance was recognised recently by the museum's curator Colin Wisbey.

HISTORY OF INVESTIGATION

Stoke Lane Slocker is an active stream cave located near the village of Stoke St Michael, in Somerset. NGR ST 66856 47431 The first recorded descent was in around 1906 when a party from Downside Abbey entered the cave. Dom. Walter Mackay is recorded as having penetrated about 200 m from the entrance. (Hicks, 1906 p171). The hydrology and geology of the cave was described in detail in 1930 (Welch, 1930). In 1947 a group of cavers from Frome led by P. M. (Pat) Browne passed the then terminal choke at Corkscrew Chamber to reach Cairn Chamber and Sump 1 (Browne, 1949). Later that year, D. A. Coase, F. G. Balcombe and T. H. Stanbury free-dived Sump 1 to discover Stoke Two. The cave beyond the sump was found to have a series of roomy chambers above the continuation of the streamway and it was soon noticed that they contained a large number of bone fragments, both faunal and human. The majority of the finds were made in a large chamber named by the explorers as the Bone Chamber.

Browne arranged a visit to this part of the cave by a group including Prof. Tratman and Dr Crook of UBSS who confirmed the presence of human, ox, red deer as well as many unidentified fragments (Tratman, 1947). As far as can be ascertained, the material was removed from the cave in 1949/50, probably over the course of several visits and, after passing through the hands of E.J. Mason were deposited in Shepton Mallet Museum. A report was apparently

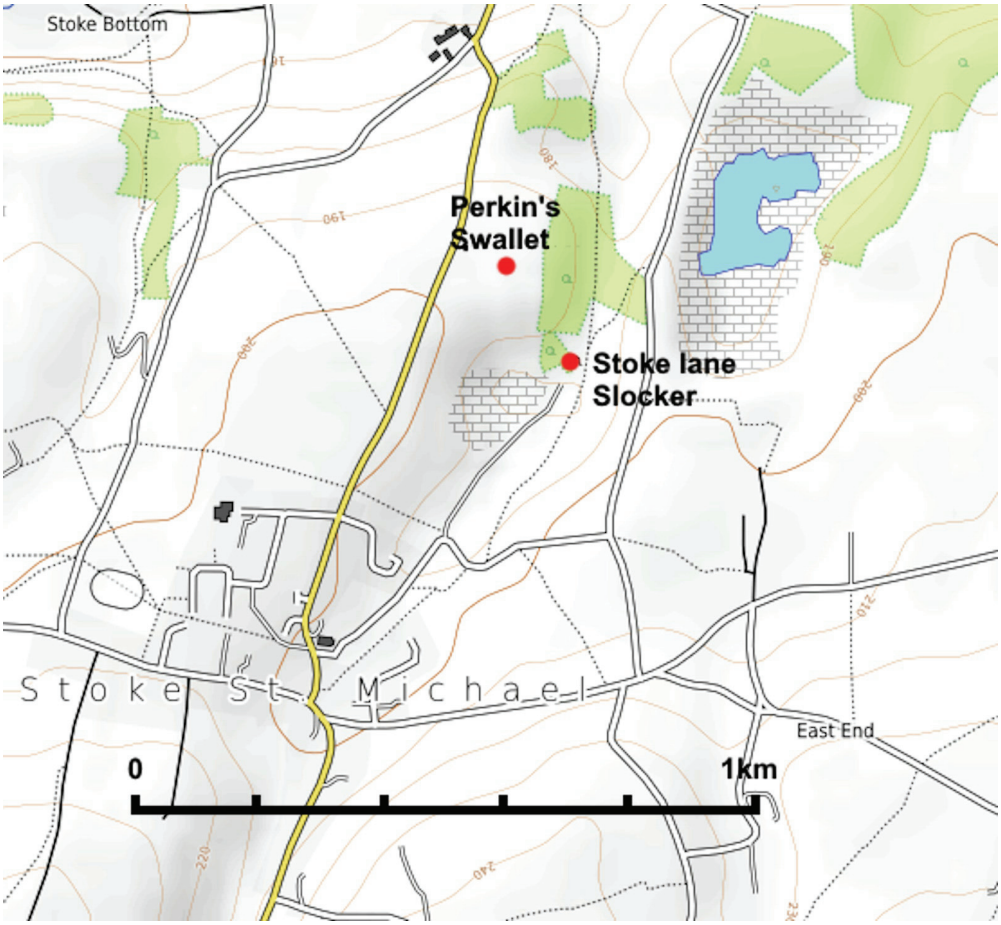

Figure 1. *Map showing the location of Stoke Lane Slocker, Somerset.*
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prepared by Tratman after his visit to the cave but has not been located. A brief summary was written by Max Unwin (1961), a copy of which is in the UBSS archive, and Tratman summarised the finds in 1974 (Tratman, 1974) but no other detailed appraisal of this material was published. Mason (1950) indicated that the collection was to be sent to F.S Zeuner at the Institute of Archaeology but it is not known whether this actually happened. No mention is made of it by Unwin. Peter Fowler's check list of archaeological material in local museums (1968) mentions fauna from caves at Stoke St Michael, but makes no mention of any human material in Shepton Mallet Museum at that time.

Shepton Mallet Museum closed in 2001. The majority of the assemblage seems to have been transferred Taunton Castle Museum at that time and is now in the care of the South West Heritage Trust. In 2021, several cranial fragments were located in the stores at Frome Heritage Museum by volunteer researcher Andrew Green and brought to the notice of Colin Wisbey. This discovery was the impetus for this research. These are the most likely specimens

to have been put on display, which provides a plausible reason for their separation from the bulk of the assemblage.

Little or no recording seems to have taken place in the cave prior to the removal of the bones, but the records indicate that charcoal and/or ash was also present in the Bone Chamber. The exact nature of this deposit is unknown, and it has to be said that Tratman (1975) stated with certainty that the charcoal was a recent deposit derived from burnt newspaper.

THE BONE CHAMBER

The large chambers discovered above the Stoke Lane Slocker Streamway in 1947 come as a surprise to the explorer after the low, fairly constricted stream passage that leads to them. They are broadly oriented along the strike and appear to have formed by upward stoping along favourable horizons in the steeply dipping bedrock. Much of the collapse debris will have been removed by solution in the active stream passage below. The collapse chambers reach close to the surface and may have reached the surface at Perkins Swallet, below. There are other, smaller, chambers further downstream which probably have a similar origin and also reach within a few metres of the surface.

The Bone Chamber is the largest chamber in the cave. It is oriented broadly east-west and at the eastern end the floor slopes up to almost meet the roof (Figure 2). This end of the cave comes very close to a depression on the surface above, labelled as ‘Pit (dis)’ on the OS maps, at NGR ST 66761 47589 It is probable that this was the site of an earlier entrance to the chamber and the cave and was the route whereby the bones entered the cave. A photograph of the depression is labelled Perkins Swallet in the Browne’s family photo album held by Frome Heritage Museum. This is the name by which the site is now listed in the Mendip Cave Registry.

There is now no obvious sign of the bone deposits, though the floor has never been excavated so it is unknown whether the deposit was superficial or extends deeper into the boulder floor. The charcoal deposits were found on and around a large block just west of the centre of the chamber and also just in front of some large stalagmites in the ‘Throne Room’ an adjacent chamber opening off from the south of the Bone Chamber. The bone was found throughout the chamber, not at any specific spot. It is now impossible to say how the bone entered the cave.

THE HUMAN REMAINS

Material curated at Frome Heritage Museum

Human skeletal remains from Stoke Lane Slocker were examined at Frome Museum on 14.06.2022. The remains consist of cranial vault fragments representing the skulls of a minimum of two individuals. These specimens may correspond to the two skulls described as having been removed from the cave by members of Shepton Mallet Caving Club in 1947 (Ellis, 1999). The remains had been marked in ink with the numbers C1, C2, C3 and C4. Fragments C2 and C3 adjoin along an ancient break so they are described here as a single specimen “C2/C3”.

C1: This is a partial cranium (‘calotte’) consisting of articulating frontal bone, left and right parietal bones, the upper part of the occipital bone and a small part of the left sphenoid.

Figure 2. *The Bone Chamber, Stoke Lane Slocker. The figure* **is** *looking upslope towards the choked connection to Perkin's Swallet. The bones were found scattered across the boulder floor.*

Photo: © Steve Sharp.

There is a thin layer of flowstone partially encrusting the outer surface of the specimen and a few flecks of what may be sawdust, material which was reported to have been used to package the bones for transport out of the cave (see Ellis, 1999). There is no evidence of injury or other pathological changes on the bones. The cranium is likely to be of an adolescent or young adult as none of the cranial sutures have fused. The maximum length and breadth of the cranium are 167 mm and 138 mm respectively. The small size and general gracility of the specimen suggest that it is more likely to be of a female individual.

C2/C3: These conjoined fragments form the posterior part of a cranium around the junction of the sagittal and lambdoid sutures, including parts of the left and right parietals and the upper part of the occipital. The cranium C2/C3 is of similar overall size to the corresponding regions of specimen C1. There are numerous Wormian bones along the sagittal and lambdoid sutures, and the thickness of the bone is 6 mm adjacent to lambda.

Figure 3. *Left lateral view of cranium C1 from Stoke Lane Slocker.*
Photo © Andrew Chamberlain.

C4: This is a fragment of frontal bone preserving part of the coronal suture. The specimen is of similar size to C1, and although it does not articulate with C2/C3 it is reasonable to assume that it could be part of the same individual as C2/C3. The thickness of the bone is 4 mm adjacent to bregma.

Material curated at the Somerset Heritage Centre, Taunton

Human remains from Stoke Lane Slocker were examined at the Somerset Heritage Centre on 1.11.2022 and on 9.8.2023. The remains were contained in 11 bags which had been given the Somerset Heritage Centre accession numbers in the range 101/2001/A140 to A155. This material is highly fragmented and in some of the bags the human remains are mixed with fragments of animal bone. The material does not appear to have been identified previously with the exception of bag A152, which contained exclusively disarticulated teeth.

The majority of the identifiable human remains are from adult individuals, consisting of 11 fragments of cranial bone, 6 fragments of postcranial bones and 17 permanent teeth. The smaller number of juvenile human remains include 1 fragment of cranial bone, 2 fragments of postcranial bones and 7 deciduous teeth.

A136*	Two fragments of human bone: the neural arch of a vertebra and a small piece of cranial vault bone with cranial suture along one edge.
A137*	Adult maxilla with sockets for molar teeth; left side petrous temporal; fragments of sphenoid and temporal squame; frontal fragment with nasal suture; long bone fragments.
A140*	Left temporal bone (probable male adult); fragments of thick cranial vault bone; fragments of ilium (adult).
A148*	2nd rib of an older child.
A149*	Fragments of thick cranial vault bone of an adult, including part of left parietal with squamous suture.
A150	Fragment of cranial, thin (?juvenile) with speleothem adhering to external surface.
A151*	Fragment of left frontal with cribra orbitalia in the roof of the orbit. Also right zygomatic (?adult).
A152	Teeth, accompanied by a museum display label. The individual specimens were formerly arranged in arcades and set into hardened resin, presumably for display purposes. *Deciduous teeth*: upper left dM^1; upper deciduous canine; upper left dM^2; upper right dM^2; upper left dM^2 (2nd individual); upper right dM^2 (2nd individual). *Permanent teeth*: lower left canine (with linear hypoplasia); upper canine; 3 upper premolars; upper left M^1; upper M^3; lower left M_1; lower right M_1, lower left M_2 (with developing root); lower left M_2)
A153	Left maxilla of an adult with molar sockets; right maxilla with heavily worn I^2, P^1, P^2; juvenile right maxilla with dM^2, M^1 and M^2.
A154	Proximal fragment of juvenile left tibia with unfused epiphysis; midshaft fragment of adult humerus.
A155	Fragment of the proximal shaft of an adult humerus.

*bag also contains animal bone.

Table 1. *List of Human Remains from Stoke Lane Slocker curated at the Somerset Heritage Centre.*

Adult remains

Cranial remains of at least two adult individuals are represented in the assemblage. They include a left side maxilla (A137) with sockets for the roots of the 2nd and 3rd permanent molars and another left maxilla (A153) with sockets for all three permanent molars. There are also two left temporal bones (A137 and A140). The few adult postcranial remains are small fragments of humerus, femur, hip bone and vertebra.

Juvenile remains

The juvenile cranial remains represent at least three individuals, all three being older children whose ages at death were estimated to be between 6 to 12 years on the basis of their dental development. The juvenile postcranial elements are a second rib (A148) and a tibia (A154) which are of sizes that are consistent with ages at death in older childhood.

DISCUSSION

The human bone material from Stoke Lane Slocker held at Frome Museum and at the Somerset Heritage Centre appears to be consistent with the reports of the original discoveries at the cave as described above. The small number of adult cranial remains in the assemblage curated at the Somerset Heritage Centre include bones of the face, the jaws and the base of the skull that are missing from the skulls curated at Frome Museum. Some of the teeth in the collection at the Somerset Heritage Centre may be from the "jawbone of a child" that was reportedly amongst material removed from the cave (Ellis 1999).

Two specimens from the Frome Museum assemblage were selected for radiocarbon dating and were submitted to the University of Bristol's facility. Specimen C1 was dated to 3472 ± 27 BP and specimen C3 to 3787 ± 27 BP both dates fall into the Early Bronze Age, specifically the Beaker period, see Figure 4. These dates are comfortably within the date range established for Beaker period burials in Britain, this range being 2400 BC to 1700 BC calibrated (Parker Pearson *et al*. 2019).

Sample ID	*Element*	*Lab no.*	*^{14}C BP*	±	*Cal BC*	*$\delta^{13}C$*
C1	cranium	BRAMS-6337	3472	27	1883-1738 (88.9%)	-19.5
C3	cranium	BRAMS-6338	3787	27	2298-2136 (94.4%)	-21.3

Table 2. *Radiocarbon dates on Human material from Stoke Lane Slocker.*

Due to the highly fragmented and incomplete nature of the human remains there is little additional information that can be obtained through macroscopic observation of the material. The fragmentation of the bones appeared to be due to dry bone breakage that occurred long after initial deposition, and no evidence was detected of peri- or post-mortem processing (such as cut-marks, gnaw marks, burning etc). One fragment of frontal bone in the Taunton collection (A151) showed cribra orbitalia, a developmental condition that has been attributed to childhood anaemia. A lower canine tooth (A152) has enamel hypoplasia, a minor condition that is attributable to a physiological interruption of tooth growth in early childhood.

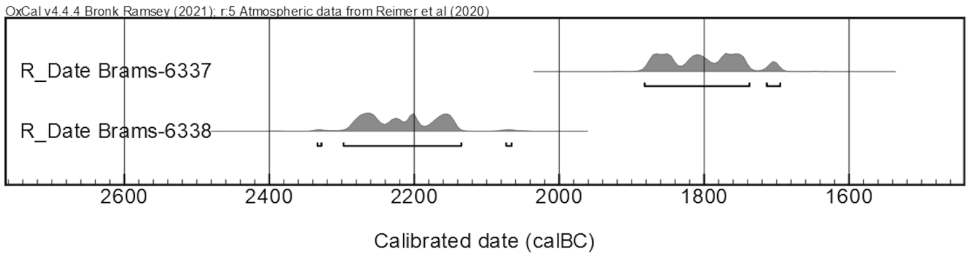

Figure 4. *Plot of calibration curves, calibrated in OxCal v4.4 (Bronk Ramsey 2009). Atmospheric data from Reimer* et al *(2020*). *The plot shows spans for 94.5% probability and the range (calibrated error bar) for each sample..*

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