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# A Roman dog from Conistone Dobb, Wharfedale, and its palaeohydrological significance

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Conistone Dobb is a dry valley on the eastern flank of the glaciated trough of Wharfedale. The dry valley joins Wharfedale at the site of the hamlet of Conistone between Kettlewell and Grassington (Figure 1). It is considered to be a product of glacial meltwater formed when underground drainage was impeded (Waltham *et al.* 1997) and contains a narrow sinuous gorge section at its downstream end referred to as Gurling Trough. The gorge is less than one metre wide at its narrowest part and has fluvial potholes and swirl pool sites on the bends. The now relict gorge illustrates the important role of fluvial incision plays in valley formation in a glaciokarst setting.

During 1957 young cavers Peter Huff and Paul Reinsch were searching for blocked cave entrances in the area. They identified an undercut in the gorge as one possible such site and began a dig looking for new cave (Figure 2). On finding bones they changed their approach from that of exploratory caver digging to an archaeological dig. Having laid out a grid a careful excavation of the area was then undertaken. Human (MNI 2 adults, 1 juvenile – Chamberlain 2019) and ox bones (Anon 1998 p23) were recorded as being recovered from the site. Identification was undertaken by Dr A Raistrick who suggested the assemblage may have been washed into place from archaeological sites known higher on the valley side. Jackson (1962 p317) reports over 500 bones were found, mostly severely fractured remains of domestic animals, and also suggested the bones may have washed into place. The dig proved to not be a sediment blocked cave entrance but a swirl pool in the gorge wall (Anon 1998 p23).

A box of bones preserved by the family of the original discoverer was found to contain, amongst other items, two metatarsals (left second and third) of a domestic dog which are fused together by some pathological process and are identified with the hand inked catalogue number A10. The catalogue number was confirmed by Peter Huff as having been applied by himself on recovery of bones from the dig in Conistone Dobb thus confirming the provenance of the material. Radiocarbon dating of the dog bones has given a date of 2020±26 BP (uncalibrated) 92 BC – AD54 calibrated (95.4% OxCal 4.3.2 IntCal13) proving a Roman age for the animal. The possibility of the material having been washed into place by a food as proposed by Dr Raistrick is an interpretation which still appears valid today considering the location and rather confused nature of the assemblage. This suggests the now totally relict rock cut gorge of Gurling Trough was occupied by a stream, at last during flood events, as recently as when the Romans ruled over the region.

Notes: The bone site is named as “Conistone Fissure, Conistone with Kilnsey” in Chamberlain (2019), as “Conistone Dibb/Gurling Trough, Conistone with Kilnsey” in Murphy (2019) and as a “fissure or shelter in the limestone cliff at Conistone” in Jackson (1962). The grid reference (SD) 984676 is given in Jackson (1962). This is a separate site to the Conistone Dibb Cave mentioned in Edwards *et al.* (2014) and O’Connor and Lord (2017).

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#### References

Anon 1998 A Gofer's View. pp 22-24 in: UWFRA. *Anytime...Anywhere. The first fifty years of the Upper Wharfedale Fell Rescue Association*. UWFRA/Dalesman, Skipton.

Chamberlain A T 2019. *Gazetteer of caves, fissures and rock shelters in Britain containing human remains*. Available at: <http://caveburial.ubss.org.uk/>

Edwards C J, Ho S Y W, Barnett R, Coxon P, Bradley D G, Lord T C. and O'Connor T 2014 Continuity of brown bear maternal lineages in northern England through the Last-glacial period. *Quaternary Science Reviews*, 96. pp. 131-139.

Jackson J W 1962. Archaeology and palaeontology. In Cullingford C H D (ed) *British Caving*. London, Routledge and Kegan Paul. pp 252-346.

Murphy P J 2019. *A gazetteer of vertebrate remains from caves in the Yorkshire Dales referenced in caving club journals and allied literature*. Available at <http://bonecaves.ubss.org.uk/>

O’Connor T and Lord T 2017. Cave Palaeontology. Chapter 15 (Volume 1) pp225-238 in: in: Waltham T & Lowe D (eds): *Caves and Karst of the Yorkshire Dales*. British Cave Research Association

Waltham, A C, Simms, M J, Farrant, A R and Goldie, H S, 1997. *Karst and Caves of Great Britain*. Joint Nature Conservation Committee. pp 95-98

Figure caption:

Figure 1. Looking eastward across Wharfedale into the dry tributary valley of Conistone Dibb. Houses forming part of the village of Conistone are in the middle ground.

Figure 2: The cavers digging in Gurling Trough. Left to right: Paul reinsch (feet), Len Huff, Jack Sletcher, Kurt Reinsch. Photograph taken by Peter Huff.

Figure 2: The bone assemblage recovered from the dig. Photograph taken by Peter Huff.