

EXPLORING PREHISTORIC COOKING

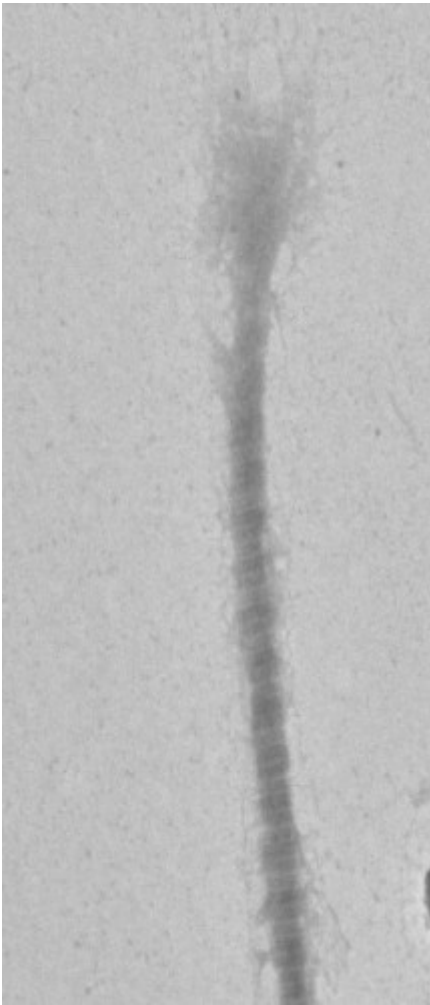
July 24, 2015 Rmadgwick Environmental Archaeology, Explore
Posts, Osteology, Prehistory Bioarchaeology, prehistoric cooking, Zooarchaeology

Exploring Prehistoric Cooking

It grows stronger every year! Great to see Day of Archaeology come round again!

For me today will be a lab day – nowhere near as exciting as most posters on here, but still a bit of a treat for me. I'm a British Academy Post-doctoral Fellow at Cardiff University. My current project focuses on mobility and feasting in Late Neolithic Britain, involving a blend of isotope analysis, zooarchaeology and a number of other bioarchaeological methods. It only has six months to run so I'm spending most of my time analysing data and writing up results at the moment. That's why a lab day is a treat!

Today I'm working on a different project – a pilot study into the use of Transmission Electron Microscopy (TEM) on bone collagen to reconstruct prehistoric cooking practices. This approach was pioneered by Dr Hannah Koon at the University of York and involves high resolution microscopy of extracted bone collagen to look at the way that fibrils have degraded (a fibril image is attached to this post – the frayed end is characteristic of cooking). This can tell us whether meat was cooked on the bone, filleted first or in some instances discarded without being cooked at all. It has been shown to be successful for historic material but is unproven for prehistoric material, where fibrils may be so degraded that changes relating to cooking can't be recognised. I have two placement students employed on the project – George Foody ([who has posted to DoA too](#)) and Katie Faillace, both of whom graduated with first class degrees last week.



We have selected samples from Late Bronze Age/Early Iron Age feasting sites from Wales and Warwickshire and are getting more from Wiltshire on Monday. Touring museum stores is another fun part of the job! Today we are recording and photographing the bones and drilling small sections (c. 0.5g), which we will then crush and put in Ethylenediaminetetraacetic acid to demineralise. Within a couple of weeks and with some fiddly sample preparation the collagen should be ready to put into the TEM. The project aims to test whether the approach will work for prehistoric bone and will provide new insights into feasting practices. We hope to find out whether less desirable cuts of meat (to western stomachs at least) like pig's trotters were discarded or consumed in the feast and whether different animals were prepared and cooked in different ways.