

A DAY IN THE LIFE OF A ZOOARCHAEOLOGIST – PLAYING WITH BONES AT THE NATURAL HISTORY MUSEUM

July 29, 2011 LizzieW Day of Archaeology, Day of Archaeology 2011, Museum Archaeology, Prehistory, Science a day in the life, Andy Currant, Aurochs, Bone, Bovines, Britain, Cambridge, Cardiff, Copenhagen, Danish National Museum, denmark, Europe, Extinction, food, France, http, Italy, London, Mammal, Mammal Group, metal implements, National Museum of Wales, Natural History Museum, NHM Mammal Group, Palaeontology Department, Pilot, Poland, Portugal, Research, Roberto Portela, security guard, Spyridoula Pappa, The Skulls, The Star, Wales, Zooarchaeology, Zoology Museum

This week I have been at the Natural History Museum in London collecting data for my PhD project.

My project is looking at the size and shape change of the Aurochs across Europe over time. The Aurochs was the ancestor of domestic cattle, it appeared during the Middle Pleistocene and went extinct in Poland in 1627AD. In Britain they went extinct during the Bronze Age. This animal was quite commonly hunted by humans until domestication took place. The Aurochs was very similar to our modern day cattle, but larger. Some of the males were massive – often over 2 metres tall. Below you can see a couple of pictures of what they look like. You can imagine the amount of meat that you would get from one of these if you successfully hunted it, and you can see the size of the bones that I'm dealing with! My data collection consists of visiting Aurochs assemblages and taking measurements from the postcranial (limb bones) and teeth, as well as from the skulls.

The data collection part of my work has taken me to various places across Europe. So far I have visited Portugal, Denmark and Poland, and later this year I will also visit Italy and France. This summer I am concentrating on the British material. This will take me to a number of museums, including the Natural History Museum in London and the National Museum of Wales in Cardiff.

This blog post will talk about what I have been up to over the whole week, because then this gives you a sense of the different material I have been working on.



Me with an Aurochs at the Zoology Museum in Cambridge



An Aurochs displayed at the Danish National Museum in Copenhagen

through.

Next I met up Roberto Portela from the mammal group who organised my security pass. Only then was I allowed loose on the bones. In the mammal group you aren't allowed to take any bags or food down to the stores, you have to take everything you need down in a plastic box, so this always takes a little while to sort out. Then we went down to the basement. I was given a desk in the centre of the mammal collections surrounded by tall cupboards full of bones, and glass cases with articulated skeletons. There was no one else down there and it might have been a bit scary if it wasn't for the fact that I was thoroughly distracted by the bones.

I had visited the NHM very briefly before so I knew pretty much what to expect, however you never know what you might find in hiding away there, so I was pretty excited about my visit. At the start of the week I was booked in to look at material held by the Mammal Group, then later on in the week I visited the Palaeontology Department too. The general rule is that the Palaeontology Department deals with anything up to the end of the Pleistocene, and then the Mammal Group keeps material from the Holocene (the Mesolithic onwards), with a few exceptions.

When you first arrive at the NHM you have to go through a number of security checks and they issue you with a security pass so that you can get 'behind the scenes' so to speak. I arrived at the Fleet theatre entrance on Exhibition road with a lot of stuff – I had all of my equipment, and other stuff to keep me going for the week. The security guard wanted to search all of my bags and was especially intrigued by the metal implements that I had with me. These included two pairs of callipers. One smaller pair for taking smaller measurements, and a larger pair curved callipers which I had brought in order to take measurements from massive skulls. In the end he seemed satisfied that I wasn't going to try and kill anyone with them and let me go

In the mammal group I was primarily interested in material from the site of Star Carr, a Mesolithic site in Yorkshire. A lot of aurochs were excavated from here, along with a large amount of Red Deer, and other wild animals. I was given access to the appropriate cupboards and then it was up to me to have a rummage through to see what I could find. Often it takes longer to find good bones to record than to actually record and measure them. Every museum (or even museum department) has a different system and many museums do not have an electronic database so you have to check things manually. This can be annoying, but also exciting because you could always randomly come across things that you weren't expecting.

I managed to track down all of the material I needed and by the end of the day I had made a good start on it. On Tuesday I was able to get going a lot earlier because I didn't have to deal with so much security and working was much faster once I had got into a rhythm.

The way that zooarchaeologists record bones can differ depending on their project. Some people try to identify every piece of bone if they can, but this can be very time consuming, especially if you have a very large number of bones. One way of getting round this is to decide on specific parts of bones that you will record. Because primarily I am interested in measurements, my protocol focuses on the parts of bones that will be able to provide me with that information. For example the distal end (the bottom end) of long bones, because these provide very useful information. I record all of my bones in an access database which, along with excel, I will later use to do my statistical analysis.

By the end of Tuesday I had finished recording most of the aurochs bones from Star Carr and a few other sites with less material. These included Thatcham, and East Ham. On Wednesday morning I only needed to come back to measure 3 skulls – these were in great condition, and absolutely massive. This may have something to do with the fact that they were much older than a lot of the bones I have been looking at – they were from the Pleistocene.

By Wednesday afternoon I was finished in the Mammal Group so I phoned Andy Currant in the Palaeontology Department and went over there to see what stuff they had. I spent the remainder of Wednesday afternoon and the whole of Thursday there.

The Palaeontology department had material from a site called Ilford in Essex. This material has been dated to the late middle Pleistocene so is much older than the Star Carr stuff, and much bigger! Surprisingly, considering it's age, this material was also in much better condition than that from Star Carr, with many complete bones. Complete bones take longer than partial bones to record because there are more measurements to be taken so it actually took me a fair while to record all of the bones. There were a number of skulls found at Ilford, some with complete horncores. These were neatly packed into a cupboard but were extremely heavy and difficult to get out. We spent a long time figuring out what was the best way of moving them.

After I had recorded all of the bones from Ilford I had a hunt around to see if there was any other material that could be useful. The staff in the Palaeontology department were extremely helpful, and provided me

with a list of potential sites, and cupboard numbers. Still, I had to hunt through quite a few cupboards and drawers before I eventually found another assemblage that would be useful. The material was from a site called Grays Thurrock. This stuff was less complete than that from Ilford, but there were an awful lot of teeth, which took a while to record.

Finally at 4pm on Thursday I finished with all of the material in the Palaeontology Department, and treated myself to some tea and cake in the museum cafe (I recommend the lemon drizzle – a real treat!).

So that brings us to the end of your whirlwind tour of my time at the Natural History Museum. If you have been inspired by zooarchaeology and want to find out more about the kinds of things that we do, then go here to the webpage of my research

group: <http://www.sheffield.ac.uk/archaeology/research/zooarchaeology/>

I would like to thank the NHM Mammal Group, especially Roberto Portela, and the Palaeontology Department, especially Andy Carrant and Spyridoula Pappa for their help with access to the collections and their general enthusiasm during my week at the Natural History Museum.