

Association for Environmental Archaeology (AEA): Spring Meeting, University of Sheffield, 22nd March 1995

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The AEA runs two annual meetings: a thematic conference lasting several days in the autumn, and a much more informal one-day meeting in the spring. This short gathering is an opportunity to present recent results or discuss a methodological issue with other bioarchaeologists. This year's meeting attracted a bumper turnout of 20 speakers and an audience of 80: a tribute to Sheffield University's high reputation in this field.

Don Brothwell (York) got us off to a queasy start with 'Castration in fowls', a graphic account in which Quentin Tarentino met Beatrix Potter. Drawing on copious illustrations and experimental archaeology (practiced on a dead bird), we discovered just how difficult it is to castrate a chicken. It turns out to be very difficult indeed, often leading to infection or incomplete castration of the affected parts. Don was then able to turn to the archaeological record and suggest that castration as a route to plumper chickens is unlikely to have been common in the past. I'd like to thank Don Brothwell for reminding me why I decided to go into archaeobotany rather than ancient bones in the first place. John Hamshaw-Thomas (Sheffield) had studied bones from the Mediaeval College of the Vicars in York. These offered a good chance to look at the diet of a small, well-documented sub-section of mediaeval society, but served only to show that the mediaeval vicars ate much the same as everyone else. One pleasing discovery was the presence of seal bones: as a 'sea-food' these were acceptable as Friday fare in a religious community. Continuing on the theme of bones, Pippa Smith (Southampton) looked at an early eighteenth century pit from the Tunsgate pub on Guildford High Street. The contents of the pit are consistent with a single deposition, and contained large amounts of cattle, sheep, pig and goose-bone. By quantifying the bones in terms of joints of meat, Pippa was able to compare these with documentary evidence for the staggering quantities of food consumed by Peter the Great and his retinue as they passed through Surrey at about this time. This was an entertaining talk that raised questions about consumption - a welcome contrast to the more usual emphasis on production. In a more technical presentation Adrienne Powell (Southampton) asked why some cattle jawbones lacked particular teeth.

One great advantage of this kind of mixed meeting is exposure to new topics. In this case, I was not the only one to have my eyes opened to the uses of insects as more than just environmental indicators. Nicki Whitehouse (Sheffield) enthused on the uses of saproxylic invertebrates, i.e., insects which live in dead or dying trees. Once humans begin to manage woodland, these dramatically decline in frequency - to the point of extinction in the case of many European species. Neolithic and Bronze Age peat deposits from Thorne Moors, in northern England, contain large numbers of saproxylic insects, many otherwise known only in southern Europe. These assemblages are interesting both because they point to an undisturbed landscape at a fairly late point in prehistory, and because they show how climatic limits for species are partly determined by the existence of suitable habitats. In two other talks that looked at environmental change in Britain, Ben Geary (Plymouth) showed us preliminary results of pollen cores from Bodmin Moor, and

Jane Sidell (Museum of London) discussed the impressive series of brushwood trackways that are turning up all over the northeast floodplain of the Thames Valley. These seem to be related to a drier climatic phase that allowed trackways to be pushed out into the marshes.

Talks on fodder had been invited for the afternoon session. A good variety of approaches was demonstrated. A series of beautiful green landscapes formed the background to the talk by Paul Buckland (Sheffield) on work in Icelandic byres. Animals are stalled through the winter on litter made of hay and peat. The beetle fauna of ancient stable litter shows a consistent pattern, which changes completely with the introduction of agriculture to Iceland. What was puzzling was that the beetle fauna from modern byres had no resemblance to the ancient faunas, though the agricultural practices and the buildings themselves seemed unchanged. The answer was a recent change to improved pasture, which decays in litter at a different temperature from traditional *Carex*-based hay, resulting in a different beetle fauna. The moral here is that superficially similar ethnographic parallels may in fact be divergent from ancient practice. David Smith (Birmingham) followed the haystack beetles of a modern Yorkshire farm from the field, via the stables to the midden. The question of the extent to which particular components of stable waste have particular faunas was also explored by Harry Kenward and Allan Hall (York) in a largely theoretical discussion. Peter Skidmore (Sheffield) introduced us to the joys of fly puparæ, a hitherto curiously neglected area. These survive well and are highly diagnostic of different environments. In a welcome illustration of how this kind of data can be used for more than environmental reconstruction, we were shown how the puparæ varied between different rooms of a Greenland farmhouse according to function. We were left to imagine the possible explanations for a bedroom in which temperatures had fallen dramatically and puparæ of carrion-eating flies dominated the assemblage.

Sabine Karg (Basel) was the only speaker to integrate different forms of bioarchaeological evidence. Four-metre thick deposits of organic remains have been found under the lake village of Fivavé in Italy. These contain both the remains of fodder (as wood, seeds, vegetative tissues and pollen), and the dung pellets of the goats and sheep that were eating the fodder. Comparison of the different types of evidence is still in progress but this should produce a neat case study of integration. Liliana Janik (Cambridge) was also a fan of deconstructing faecal remains. The presence of fish-bone in Neolithic pig dung in Baltic Russia suggests husbandry of pigs, although the animal bones give no hint of domestication. Another neglected approach to fodder was addressed by Ingrid Mainland (Sheffield) who described promising results from dental microwear of sheep and goats.

Paul Halstead (Sheffield) showed us more photogenic landscapes, this time from Greece, as he looked at the ethnography of leafy fodder. Branches are stripped on a short (3-5 year) cycle from oak and beech trees and stored as winter fodder. This kind of frequent cutting leaves a rather unclear pattern in tree-rings and may be difficult to pick up in the archaeological record. Michael Charles (Sheffield) looked at some of the problems involved in interpreting charred seeds from dung-fueled fires.

In a day dominated by faeces, castration and the bug fauna of decay, the botanical contributions somehow seemed more low-key. Delwen Samuel (Cambridge) used her experimental work on emmer wheat processing at Amarna, Egypt, to re-examine the role of mortars and querns, and questioned the necessity of parching spikelets. Ann Butler (London) highlighted the possible role of legumes in animal feed,

and Glynis Jones (Sheffield) drew on her ethnoarchaeological work in Greece to show how the distinction between human food and animal feed could be flexible. Carol Palmer (Leicester) looked at livestock and crop management in contemporary Jordan. Her well-documented case-studies of exactly how changes in crop husbandry relate to changes in animal husbandry, and *vice versa*, were welcome examples of how in practice we might seek to integrate data from ancient bones and ancient seeds.

It's difficult to sum up such a wide range of topics, but three thoughts spring to mind. Firstly, almost all of the speakers made it clear that thorough understanding of modern-day processes was essential to understanding ancient assemblages. Ethnoarchaeology and experimental archaeology are fully integrated into most people's research programmes. Secondly, I had become rather alarmed at just how much of the work, especially on insects, was completely new to me. The answer doesn't just lie in my ignorance, but also in the fact that much of the work presented today was derived from water-logged deposits. This is the case particularly with insects, which simply don't survive in the Near East, where I work. To what extent is bioarchaeological work in Britain biased towards those boggy corners where evidence survives best? Thirdly, it is worth noting that speakers were limited to ten minutes each. Virtually all managed to convey the thinking behind their main point, and virtually all were interesting. Significantly, the only two speakers to lose their way and any hope of reaching a conclusion were the two who wildly over-ran their time. In the light of this, I can't help wondering if ten-minute talks (backed up by pre-circulated papers) are the solution to the kind of boring, verbose presentations that I associate with more formal conferences?