New finds at Star Carr

Recent press reports have highlighted research on the location of Britain's earliest house. Chantal Conneller, Nicky Milner and Barry Taylor provide further information on the British Academy-supported excavations at Star Carr.

Between 2006 and 2008 the British Academy funded excavations at the Mesolithic site of Star Carr, North Yorkshire.¹ The site dates to between 9000 and 8500 BC, a time immediately after the end of the last ice age, but when temperatures had risen to levels similar to the present day. At this time Britain was still joined to continental Europe and sites with strong cultural similarities are known from northern Germany and southern Scandinavia. People lived by hunting and gathering; the only domesticated animal was the dog. Animal remains from the site include deer, elk, wild cattle, pig and water birds, as well as animals that were probably hunted for their pelts such as bear, pine marten, beaver, fox, hare and badger.

Earlier excavations

Star Carr was first excavated by Grahame Clark between 1949 and 1951, and has dominated archaeologists' understanding of the Mesolithic period in Britain. The site is waterlogged and, conserved in peat, Clark's excavations uncovered an extraordinarily well preserved array of finds: large quantities of butchered animal bone, barbed antler projectile points, elk antler mattocks, bone scrapers, beads, and even several masks made from red deer skulls and antler. Clark suggested these may have been worn in ritual dances or acted as disguises designed to aid hunting.²

Hall suggest that Star Carr played a unique role in the lives of the people who lived there. The sites located by Tim revealed lots of evidence for Mesolithic activity, but none of the finds – the antler masks, beads and barbed antler points – that had made Star Carr so famous in the first place. This may support recent ideas that Star Carr, rather being a typical domestic base camp as Clark supposed, was actually a site where certain rites also took place, involving the ritual deposition of antler barbed points and frontlets into the waters of the lake.

Recent findings

Our work started with a programme of fieldwalking, which revealed a continuous spread of stone tools and manufacturing debris stretching for over 150 metres and tripling the known extent of the site. Testpitting and more extensive excavations have followed. These have revealed evidence for dense occupation on the dryland areas of the site, with intensive flintknapping and the processing of animal bones.

By far the most exciting find on the dryland has been the Mesolithic house, the earliest so far known from Britain, dating to at least 8500 BC. This structure consists of a ring of 18 posts enclosing an area about 3.5 metres in diameter (Figure 1). Clusters of postholes suggest the house may have been repaired during its lifetime. Within the posts, a pit 2.5 metres wide had been dug into the ground. This contained very dark sediments, and micromorphology by Charly French has revealed that these were composed of decayed organic matter, perhaps reeds or grasses. These would have created a soft floor for the inhabitants. The upper layers of the pit contained large quantities of domestic debris:

Additional small-scale excavations at the site in the 1980s uncovered part of a platform of worked aspen timbers on the edge of the lake (Lake Flixton) on which Star Carr sat, the earliest evidence for systematic carpentry in Britain. These excavations also revealed both that the site was much larger than originally thought, and that it had been repeatedly occupied over a period of around 300 years.³

New work at the site, undertaken by the Universities of Manchester and York, recommenced in 2004. Despite all the previous work at the site, we felt that many important questions remained to be answered. For example, none of the previous excavations had ever opened up extensive dryland areas (the kind of location where people were likely to have lived), focusing instead on the boggy but well-preserved water-logged areas. Furthermore the wooden platform discovered in the 1980s was only known from a narrow trench 2 metres in width, making it difficult to understand how it was used. Finally excavations of sites around the edge of Lake Flixton by Tim Schadla-



Figure 1. Excavation of the Mesolithic house.

stone tools and animal bones. People were making tools such as arrow points, repairing arrows, making or using scraping tools, and working bone and antler. Three axes – tools that are relatively rare – were also found in the house. The sediments did not preserve charcoal, but the house contained burnt stone tools and manufacturing debris, suggesting it once contained a hearth. In the vicinity of the house were external hearths around which further activities were focused.

In the wetland area of the site a key aim was to discover the extent and function of the timber platform. Excavations to the east of the 1980s excavations in 2006 did not encounter any traces of it, though clusters of worked antler and stone tools were found amongst brushwood at the edge of the lake. However, a trench opened up 20 metres to the west in 2007 did reveal a row of planks along the edge of the lake (Figure 2). This was overlain and reinforced with natural brushwood. During this season's excavations we opened up a trench between these two areas, and again encountered wooden planks, suggesting that it represents a single continuous structure, stretching at least 20 metres along the edge of the lake.

Significance of the structures

This evidence for substantial structures at the site is significant. The people who lived at Star Carr were some of the earliest migrants back to Britain after the last cold phase of the last ice age. Classic stereotypes of hunter-gatherer behaviour state that they are very mobile, with few possessions and thus leave few traces in the landscape. What we see at Star Carr is different. There appears to be considerable investment in modifying the local environment: the platform is extremely large, necessitating considerable amounts of labour; the house is relatively substantial.

Environmental analysis undertaken by Petra Dark in the 1990s also demonstrates that people were using fire to change the appearance of the local vegetation. In particular, the reeds that fringed the lake were being burnt. This would have encouraged fresh shoots that would encourage animals to browse. Since reeds can grow very tall, the burning would also open up the site and make it visible across the lake.

It seems then that the post-glacial immigrants to Britain were very attached to particular places in the landscape, and the evidence indicates that they returned to them again and again (at least 300 years in the case of Star Carr). This seems to strengthen the idea that Star Carr was a special place in the landscape, perhaps one associated with ritual activity.

Decay

One of the most important findings of the recent excavations is how much organic preservation has deteriorated in the 60 years since Clark dug at the site. Bone and antler finds are extremely poorly preserved and need expert conservation to survive. Drainage over the years has lead to peat shrinkage and the site drying out. Work by Steve Boreham and Andy Needham (funded by English Heritage) has revealed that the sediments are now highly acidic (as low as pH 2.67) and that this acidity is concentrated at the level of the organic artefacts. It is clear that much of the bone and antler that has made the site so famous has decayed; specialist work indicates that the wood is also in an extremely



Figure 2. Excavation of the wooden platform.

fragile state. It seems to be only a matter of time before this material decays entirely.

We hope to continue work at the site in order to gain as much information as we can before it is too late. This is, however, dependent on us securing funding for future excavations.

Notes

- 1 As well as the British Academy we would also like to thank NERC, English Heritage, the Vale of Pickering Research Trust and the Universities of Manchester and York for funding these excavations. We would also like to thank all those who have worked on the site over the years.
- 2 J.G.D. Clark, Excavations at Star Carr (Cambridge, 1954).
- 3 P. Mellars and P. Dark, Star Carr in context (Cambridge, 1998).

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