People of the Heath

Understanding and Conserving Petersfield's Prehistoric Barrows

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First radiocarbon dates for Petersfield Heath

The People of the Heath project has just received its first set of radiocarbon dates for samples recovered during the September 2014 excavations. One sample was submitted from each of the three sites excavated and each result has cast important light on their dating. Some preliminary thoughts on significance are given here; much may change as more evidence comes to light.

The date for the Mesolithic site (Site 23) is based on a charred hazelnut shell. After calibration (an essential procedure because of natural atmospheric variations over time in the abundance of the radioactive carbon isotope relative to the stable ones), the hazelnut dates to the late 8th millennium BC and points to an early Mesolithic occupation of the ridge at the north end of the Heath. Hazel, an early coloniser of immature soils after the retreat of tundra conditions at the end of the last ice age, would have remained an important species in some environments for thousands of years. Where it was not closed in by taller trees, it continued to offer abundant and nutritious food to communities dependent on the natural resources around them. Whether Site 23 was longer-lived than the date range given cannot be assessed from either this single dated sample or the flint implement types recovered in the excavation.

Finding suitable carbon-based material for scientific dating from excavations is not guaranteed. Most sites have complex histories, incorporating materials that derive from very disparate periods. Excavate enough soil and you will eventually find material capable of being radiocarbon dated, but is it from a helpful context? Is the sample closely related to some critical event on the site that cries out for that independent scientific opinion? Having completed our trench into Barrow 11, immediate prospects for scientific dating did not look especially rosy. There is undoubtedly surviving organic material in the turves that made up the mound; these were well sampled for palaeo-environmental studies including radiocarbon dating, but without highly sophisticated and costly analysis it is unlikely that one could be sure that any dates obtained would relate definitively to the construction of the monument rather than some earlier activity. A different kind of concern surrounded the remains of the 'coffin' at the centre of the barrow; needless to say it would be highly desirable to date the wood of the very coffin, but its traces were so ephemeral that one doubted whether any original organic component had survived.

Fate, however, came to our rescue. Laboratory inspection of the ephemeral remains of the coffin lid at Reading University revealed associated charcoal – it is suspected that this represents partial charring of the lid and, if this is correct, the resulting radiocarbon date is for the wood of the coffin itself. Of course even this wood may be a little older than the event we wish to date – the presumed burial of a person – but in this case it is likely to be a small discrepancy within the timescales we are considering. Provisional thinking is therefore that

the date of the burial deposit fell within, or only a little after, the period 1900 – 1700 BC. This is in reasonable accord with the grave goods recovered (bronze dagger, perforated whetstone, flint fabricator, blanks for flint arrowheads and two blocks of ironstone), some of which already pointed to a date within the second half of the Early Bronze Age. Even so, the result may offer some new light on the chronologies of these particular artefact types.

Possibly the biggest surprise was the date for the oval enclosure, Site 24. The form of this site, insofar as we understand it, is not characteristic of any of the various monument types we know as 'barrows', nor of any other kind of contemporary monument. An Early Bronze Age date was one of the least expected results, yet this is the date returned. The sample dated was in an excellent context, the primary fill of the ditch, a fill which probably occurred not long after the act of digging. Moreover, it was one of the best kinds of samples – twiggy material that must have been of very recent growth at the time of its deposition in the waterlogged layer responsible for its long-term survival. Although there are theoretical complications, such as the re-digging of an earlier ditch, we can say with confidence that the enclosure was constructed or re-constructed at some point during the 19th to 18th centuries BC. This is important for at least two reasons. Firstly, the majority of the flint assemblage recovered from Site 24 is much earlier, being a blade-based industry characteristic of the Mesolithic and earlier Neolithic periods. Even if there was no physical demarcation at this earlier time, there was significant activity that left material traces. Secondly, the date range is almost identical to that obtained from Barrow 11. This does not mean they have to be exactly contemporary (there are two centuries of latitude), but it does show that the enclosure was an active element of the barrow cemetery phase and this therefore begs fundamental questions of the relationship it had to the nearby barrows.

These modest first results already begin to refine our understanding of the chronology of human use of the Heath and they also, at a stroke, show the presence of an unsuspected component of the barrow cemetery phase in the Early Bronze Age.

The results

Submitted to Scottish universities Environmental Research Centre, East Kilbride, via Professor Nick Branch, University of Reading

Site and context	**Material**	**Laboratory reference**	**Radiocarbon age**	**Calibrated date (95% probability)**
Site 23, 8	charred hazelnut shell	SUERC-57806 (GU36294)	8176 ± 50 BP	7325 – 7060 cal BC
Barrow 11, 30/29	charcoal (unidentifiable, but *not* oak)	SUERC-57807 (GU36295)	3461 ± 30 BP	1885 – 1690 cal BC
Site 24, 209/46	unburnt twig of birch (waterlogged)	SUERC-57808 (GU36296)	3476 ± 30 BP	1890 – 1695 cal BC

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