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**The radiocarbon dates from Tollgate, Gravesham,
Kent**

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1 THE RADIOCARBON DATES FROM TOLLGATE, GRAVESHAM, KENT

The aim of the radiocarbon programme was to date specific the use of saltworking (briquetage) and the occurrence of specific Iron Age pottery forms and vessels that occur in pits at Tollgate to facilitate comparison with comparable events, activities and pottery forms on other sites, in particular Eyhorne Street, Northumberland Bottom, White Horse Stone and Cuxton. Strict selection and scrutiny of material was made in an attempt to ensure that all items dated specific events (cf. Allen and Bayliss 1995; Allen *et al.* 2004) and were not just datable items. In this case sooting and residue on the interior of pottery vessels from pits were dated. Two radiocarbon results were obtained and are presented in Table 1 and Figure 1; both have been calibrated with the atmospheric data presented by Stuiver *et al.* (1998) and performed on OxCal ver 3.9 (Bronk Ramsey 1995; 2001) and are expressed at the 95% confidence level with the end points rounded outwards to 10 years following the form recommended by Mook (1986).

The two events dated were very specific. In pit 374 evidence of saltworking was present in the form of a small amount (2 fragments, 19g) of briquetage. The associated pottery (three slack-shouldered jars R9, F2, one quite large (C.24, PRN 1214, 1222 and 1223); a long-necked shouldered jar R3, S1; (PRN 1214, 1222 and 1223; and a round-shouldered bowl, R20 F2, PRN 1193) is considered to date to about 400-200 cal BC (Morris pers. comm.), and on stylistic grounds to be later than that in pit 372, and if so may indicate repeated use of the site over a period of nearly two centuries. A second pit (pit 387) contained pottery forms and fabrics which are variants of those in nearby pits 372 and 274 and include long-necked shouldered jars, R3, F2 (PRN 1288), shouldered jars R1, SI (PRN 1254) and other forms R10 considered to date to 500-250 cal BC (Morris pers. comm.).

The questions posed are:

- Is the use of pits on this site (i.e. pits 374, 372, 274 and 387) relatively short-lived; that is less than 100-150 years? The La Tène I brooch from pit 372 suggests a Middle Iron Age date of 400-200 cal BC, and pottery from pits 374 and 387 is considered to date to c. 500-200 cal BC.
- Do the variations in fabric and forms in the two dated pits suggest the repeated use of the site over a period of 100 to 150 years?
- Is this activity, or activities, contemporary with pits on other sites such as Eyehorne Street, Northumberland Bottom, White Horse Stone and Cuxton?

In pit 374, the result from sooting on PRN 1186, a plain body sherd, form A1 (fabric S1), which was assumed to be Middle Iron Age (400-200 cal BC) was 2624±35 BP (NZA-22880)

calibrates to 845-760 cal BC indicating a clearly Late Bronze Age to Early Iron Age date for the pottery form, and for saltworking on the site. This compares well with the determination of 2741 ± 30 BP (NZA-21143) calibrating to 980-820 cal BC from sooting on a Bronze Age shouldered jar with heavy sooting, at Cobham Golf Course which was also associated with evidence of saltworking, and produced a date very late in the Late Bronze Age, rather than one of Middle Bronze Age as expected. Nevertheless, both the dated assemblages at Cobham Golf Course and here are contemporary with plain Late Bronze Age assemblages from Runnymede Bridge.

In contrast in pit 387 the result from sooting on PRN 1264 (plain body sherd, fabric F2) which was assumed to be Mid to Late Iron Age (500-250 cal BC) gave a result of 2384 ± 35 BP (NZA-28866) calibrating to 760-380 cal BC. Unfortunately this result falls on the Early Iron Age radiocarbon plateau giving a very large range. Nevertheless we can see that it is clearly Late Bronze Age to Early Iron Age rather than Mid to Late Iron Age, and the distributions (Figure 1), indicates the probability that the result lies around 500 cal BC. Although this result is not, therefore, very useful it does indicate that the activity represented by vessels in pit 387 is later than those vessels and the saltworking activity in pit 373. They also suggest that the pits may represent activity occurring over possibly four hundred years, rather than the tighter timescale of 150 years postulated.

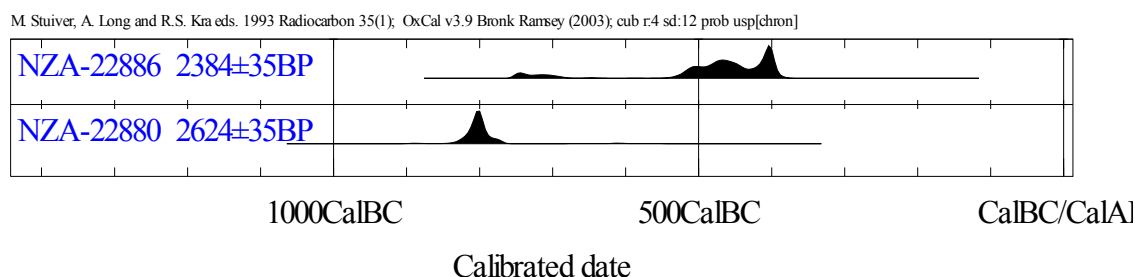


Figure 1. Radiocarbon distributions from Tollgate.

The results here indicate activity (pit 387) contemporary with settlement, metalworking and pits at White Horse Stone (e.g. pits 2119, 2130, 2155 4067, 4561, metalworking in pits 7009 and 7011, four post structure 4391), Littlestock Farm (skull in pit 2441, inhumation in 2031), and Northumberland Bottom (pit 156). Activity represented by pit 374 is the only dated event of this time, and thus none of the dated events at Tollgate are contemporary with dated events at Cuxton or Eyehorne Street.

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Table 1. Radiocarbon results from Tollgate

<i>Feature</i>	<i>context</i>	<i>context details</i>	<i>material</i>	<i>result no.</i>	<i>δC^{13}</i>	<i>result BP</i>	<i>cal</i>	<i>estimated</i>
pit 374	373	Single dumped fill with Iron Age brooch	PRN 1186	NZA-22880	-28.4	2624±35	850-760	400-200 BC
Pit 387	389	Near basal fill	PRN 1264	NZA-22886	-28.8	2384±35	760-380	500-250 BC