

Radiocarbon dating archaeobotanical remains from the Anglo-Saxon settlement at Sedgeford

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Between 2007 and 2016, excavations by the Sedgeford Historical and Archaeological Research Project discovered Mid to Late Saxon settlement remains in Chalkpit Field, Sedgeford, Norfolk (Faulkner 2022). Stratigraphic information and ceramic finds – principally Ipswich Ware and Thetford Ware pottery – supported a five-part chronology for the development of this settlement:

- Phase 3: *c.* AD 650/700–725
- Phase 4: *c.* AD 725–?775/825
- Phase 5: *c.* AD ?775/825–850/925
- Phase 6: *c.* AD 850/925–?900/950
- Phase 7: *c.* AD ?900/950–?975/1025

Extensive environmental sampling produced a large archaeobotanical assemblage from the settlement, a rare occurrence in north-west Norfolk (McKerracher and Caroe in prep.). This assemblage was of interest to the Feeding Anglo-Saxon England project (FeedSax), which aimed to investigate developments in early medieval crop husbandry using bioarchaeological evidence such as charred plant remains. To assess the chronological scope of the assemblage, and hence its capacity to reveal diachronic trends, FeedSax submitted charred grain samples from two contexts to the Oxford Radiocarbon Accelerator Unit for radiocarbon dating: rye (*Secale cereale* L.) grains from the earliest Anglo-Saxon phase, and free-threshing wheat grains (*Triticum* L. free-threshing type) from the latest. The grains were selected and photographed by the author, and the photographs are included at the end of this report. Although in the event there was not scope for further analysis of the charred grains from Sedgeford within the FeedSax project, the dating results are included here in the digital archive as an integral part of the FeedSax dating programme.

The results have been calibrated using IntCal20 (Reimer *et al.* 2020) and OxCal 4.4.2 (Bronk Ramsey 2009) in the table below and the figures at the end of this report.

Results

context	grains	lab no.	original phase	age BP	calibrated years AD (confidence)
15187	2 x rye	OxA-38567	3 (<i>c.</i> AD 650/700–725)	1193±19	774–887 (95.4%)
15467	3 x wheat	OxA-38512	7 (<i>c.</i> AD 900/950–975/1025)	1174±20	772–793 (16.7%), 800–896 (69.5%)

It can be seen that, despite having been assigned to different phases, samples from both contexts have returned very similar radiocarbon date ranges. While the results for the later sample (15467, OxA-38512) would allow for an early/mid-tenth century date (with 9.3% probability), there is a much higher probability that both samples date from between the late eighth and late ninth centuries (see calibration graphs below). This need not mean that the samples are contemporary, and it remains possible that the samples from 15187 and 15467 represent successive phases within this period. The

discrepancy between the original phasing and radiocarbon date range for 15187 is particularly conspicuous, and it is worth noting that the Phase 3 settlement is relatively poorly represented in the archaeological record. Faulkner (2022) describes a ditched trackway/droeway, whose ditches were re-cut at least three times, dated by handmade grass-tempered pottery (and a corresponding lack of Ipswich Ware) to before *c.* AD 725. It may be, therefore, that the charred plant remains represent a late backfilling of the Phase 3 ditches, and are not indicative of their original construction date. Alternatively, it could be that Ipswich Ware did not arrive at Sedgeford immediately in *c.* AD 725, such that the pre-Ipswich Ware activity of Phase 3 might have continued into the later eighth century, and thus compress the chronology of the later Phases 4–7.

At the time of writing, full publication of the settlement excavations is in preparation.

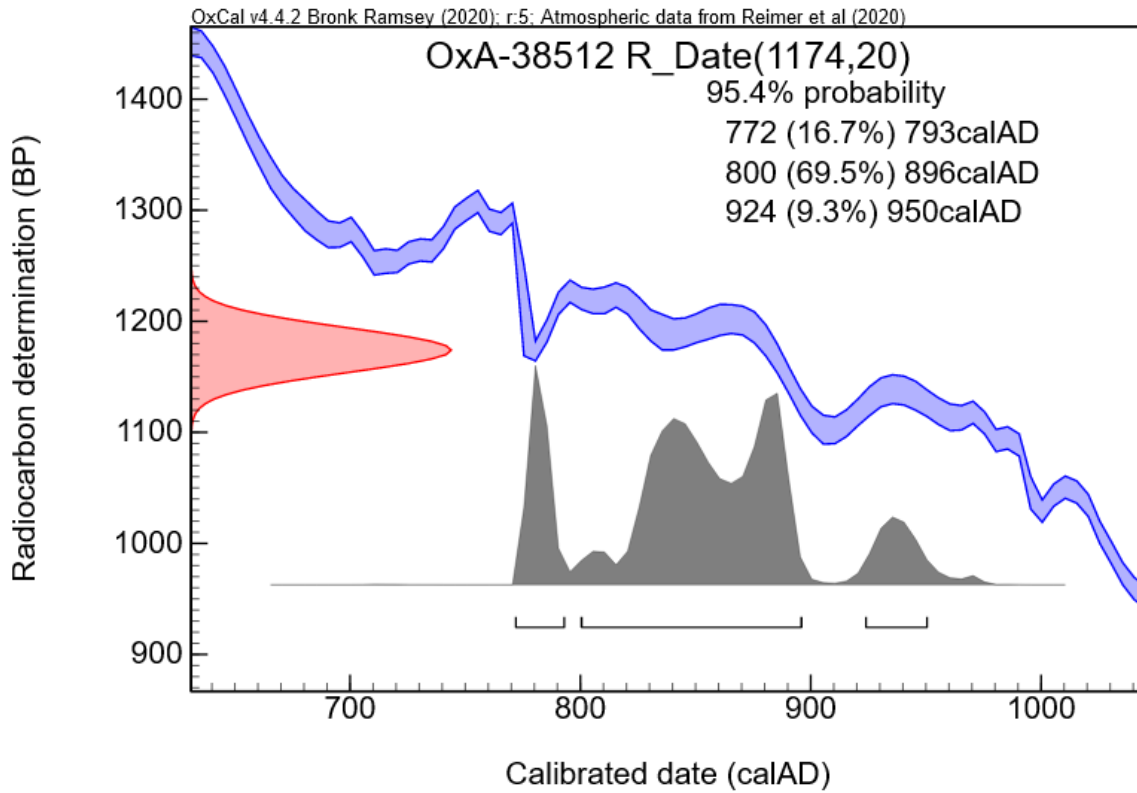
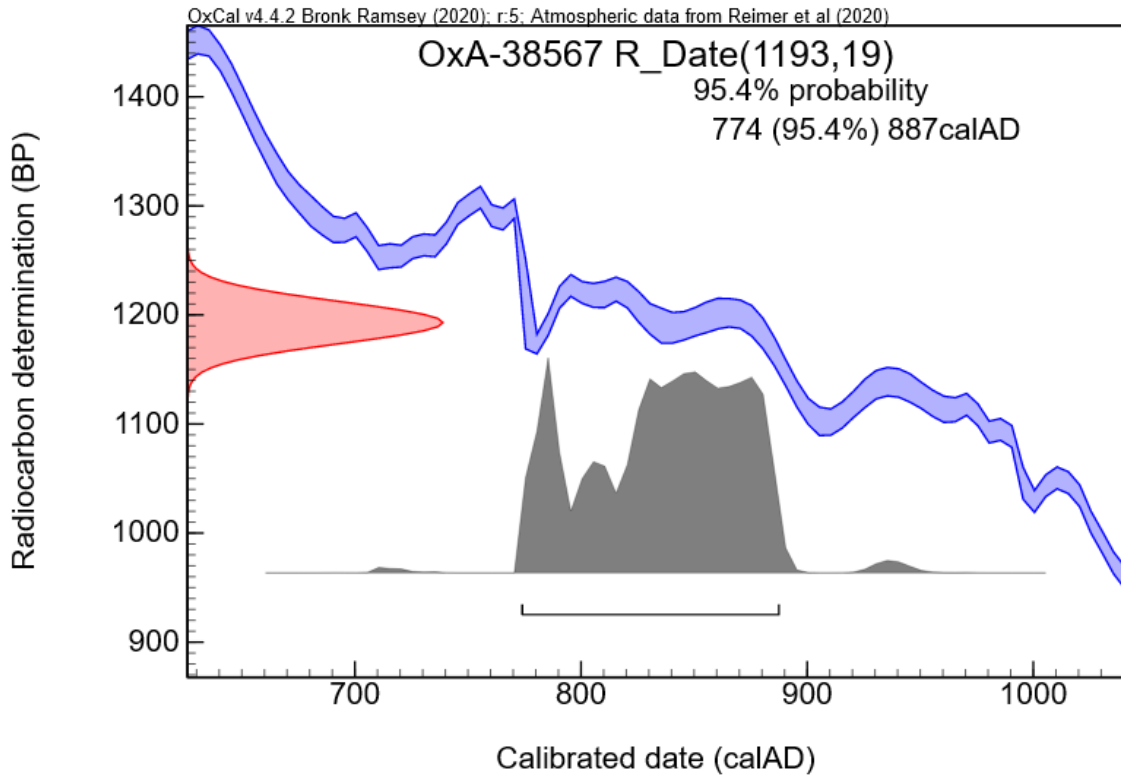
Acknowledgements

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References

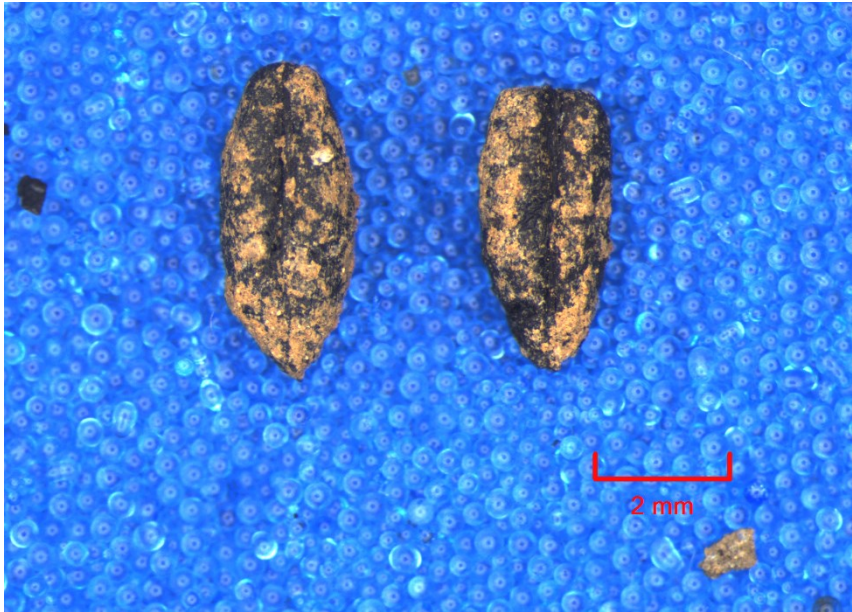
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Calibration of radiocarbon determinations



Photographs of dated grains

Grains from 15187



Grains from 15467

