Archaeological monitoring

Peter Murphy

The Sussex coastline has changed enormously over the last million years. During low sea level stands the area of the present English Channel was land, and a major river system (the Channel River) flowed along it, east to west. At other times there were icebergs in the Channel which carried exotic rocks to the shoreline. They are commonly seen today. In the postglacial period, (the Holocene), the islands of Southsea, Hayling, Thorney, Medmerry and Selsey extended further south, protected by an offshore shingle barrier: the Anglo-Saxon place-name suffixes (-sea, -sey, -ey and -y) indicate an island. They have subsequently been truncated by marine erosion. Most have a core of relatively solid geology. The Palaeogene sediments underlying the beach at Medmerry are of the Bracklesham Group, mid Eocene, comprising glauconitic silty sands, silts and sands (Curry et al. 1977; Hopson 2009) but they have been weathered in periglacial conditions and are dissected by Pleistocene and Holocene palaeochannels. Excavations were undertaken by Archaeology South East, (ASE), in the Managed Realignment area, and they also defined a former lagoon landwards of the modern beach by auger survey (Stephenson 2014). Since the beach and shingle ridges are no longer maintained artificially the beach level is lowering and the shingle ridges are moving inland, exposing archaeological sites, which are being recorded by volunteers from the Chichester and District Archaeology Society (CDAS). Digital 3D images of some of the beach structures are available on our website: www.cdas.info. Other local observers have kindly reported finds to us.

The sequence exposed is as follows.

1. The earliest remains on the beach comprise the roots of an oak tree, which penetrates the Palaeogene sediments, (a former land surface), pre-dating the known archaeology, as well as an organic ‘peaty’ basal sediment. The tree itself provides evidence of local vegetation prior to the local transgression. Basal humified saltmarsh peats from the ASE excavations date to 4330-4050 and 4260-3990 cal BC.¹

2. Bronze Age burnt mounds. A linear string of these sites, comprising spreads of heat-shattered flint, extends along the shore on both sides of the breach. Some are in situ, resting on Palaeogene deposits, others are spills within intertidal sediments. The shoreline sites have not been dated by radiocarbon, but six samples from the excavations by ASE fall within the overall date range 1740-1490 cal BC. There have been no artefactual finds from the beach sites, but a left humerus of the Great Northern Diver (Gavia immer) has been found. Sites of this type are very widespread across the UK and were used to produce hot water. What use was made of the hot water is unknown, but the sites may have been used for bathing (including a steam bath), cooking or malting/brewing.

3. An Iron Age skeleton was found by Mrs Cathy Dennis and lifted by the police who did not have the time to consult archaeologists. Lifting was done very rapidly, on a rising tide, and so the only record of context is a single photograph. The police obtained a radiocarbon

¹ Radiocarbon (¹⁴C) determinations require calibration to take account of changes in atmospheric ¹⁴C through time. The result is a probability range of actual dates. They are presented as cal BC or cal AD. The results presented here are at 95.4% probability, which makes them very reliable, but with a wide range of possible calendar dates. Radiocarbon determinations are expensive so a volunteer team has to rely on dates provided by other organisations. We do not have enough.
determination calibrated to 760-410 cal BC – just in case it had been modern. The skeleton is of a male, aged 25+, probably middle aged, with arthritis of the spine, *cribra orbitalia* in his orbits, indicating poor diet, tooth wear and pre-mortem loss, calculus and periodontal disease. He was not a healthy or affluent man. The grey coloration of the surrounding sediment, in the photograph we have, strongly indicates a Holocene intertidal creek fill in this location and also shows dark stripes around the head which are degraded remains of wooden planks, indicating that the skeleton was associated on a planked structure – a platform or even a boat. The skeleton might represent an accidental drowning in a creek or could be a ‘placed’ deposition (a “bog body”): placing bodies in wet places was a common Iron Age practice.

4. Late Saxon and medieval wooden structures. A wattle fence cuts across one of the burnt mounds and is probably a continuation of similar structures in the ASE excavations, dating to the Late Saxon to 14th-15th centuries. A fish basket or the base of an eel trap has also been recovered, dated to 1449-1635 cal AD. Two large braced linear timber structures with associated wickerwork have also been planned and recorded. They are probably fish traps. \(^{14}\text{C}\) dates are awaited.

5. 18th century leather slow match pouch. This was found by Mr Darren Screech, and has been donated to the Portsmouth Museum of the Royal Navy for conservation and display. It provided a safe means of igniting grenades and other munitions aboard Royal Navy ships. It *might* have come from the wreck of the HMS Hazardous prize in Bracklesham Bay (1706). Ship nails from that wreck, or another one, litter the shore.

6. Thorney Farm.\(^2\) In January to April 2016 flint and brick walls of part of this farm were exposed and then destroyed by erosion, leaving scant time for recording. The farm was certainly there by 1810, appearing on a map of that date. A map regression shows that it survived until the late 19th century and then was over-ridden by the shingle bank moving inland. By 1914 the only buildings left were “two dilapidated huts inhabited by four or five men who made a hundred tons of wonderful hay … “ (Heron 2015). There was no sign at all of 19th century ceramics or glass bottles, implying that this part of the farm, now exposed on the shore, was a farmyard area, not domestic. A chalk-lined well and another well of brick and timber construction were also recorded. Other parts of the farm, and perhaps a predecessor to it, are expected to be exposed in future. Marshland drainage ditches of 19th century date are becoming increasingly well-exposed on the beach. These will best be planned from aerial photography.

7. Concrete anti-tank blocks and beach scaffolding, part of the ‘coastal crust’ defences from 1940, are visible on the beach. The survival of the scaffolding (originally strung with barbed wire) is unusual: in more accessible places it has been recycled. Exploded (and occasionally unexploded) munitions relate to the air-to-ground gunnery range (1943-1954) are also common. An early modern or modern French-pattern shrimp/prawn trap, weighted with interwoven flints has also been lifted, probably of relatively recent date, though it is of a traditional form, dating back to the 19th century.

CDAS will continue to monitor this beach for the indefinite future. The sites are being publicised through an organised walk for the RSPB and a presentation will be given at the CITiZAN (Coastal and Intertidal Archaeology Network, Museum of London Archaeology)

---

\(^2\) Thorney (also known as Thorny) Farm was not on Thorney Island in Chichester Harbour, but at Medmerry. The place name is Saxon in origin and simply means ‘an island with thorn bushes on it’. It is a common Anglo-Saxon place name, occurring also in Essex.
conference in Bristol in October 2016. A full archaeological report, properly accredited, will be submitted for publication in *Sussex Archaeological Collections*.

**References**

Bone, D.A. and Tracey, S. 1996  

Curry, D., King, A.D., King, C. and Stinton, F.C. 1977  

Heron, M. 2015.  
*100 Years at Thorny [sic]*. RSPB Chichester Group Newsletter.

Hopson, PM. 2009.  

Stephenson, P. 2014  

**Acknowledgements**

The writer is extremely grateful to the CDAS Coastal Monitoring Team for their stalwart work, often in awful conditions; to Hugh Fiske for producing Sketchfab rotatable digital 3D images on the CDAS website; to Peter Hughes of the RSPB for providing vehicle access and for observations on the beach; to James Kenny, for the map regression and professional support; to ASE likewise and additionally for a $^{14}$C determination; to Dr Paola Ponce for her report on the Iron Age skeleton; to Michael Lobb for interpretations of the ‘fish baskets’; to Polydora Baker (Historic England) for bird bone identifications; and to Alex Belisario and Lauren Tidbury of for training, support and further $^{14}$C determinations.