

NOTES

Archaeological Work in Oxford City, 2009

It has been a productive few years for archaeology in Oxford. In 2008, for example, our understanding of the Prehistoric landscape between the Cherwell and Thames rivers was transformed by the discovery of a substantial ‘henge’ monument between St Giles and Parks Road. This note summarizes findings from some of the most important work carried out in 2009. It includes the major investigation at the former Radcliffe Infirmary site, which has provided further evidence of the extensive Prehistoric ritual and funerary complex on the second gravel terrace. A selection of other, smaller projects which have produced new insights and posed new questions about the city and its environs are also mentioned.

SELECTED PROJECTS

Radcliffe Observatory Quarter

Large-scale redevelopment at the Radcliffe Observatory Quarter (ROQ) is currently underway to provide new accommodation for a number of university departments. The archaeological potential of the 3.7-hectare site, located between Walton Street and the Woodstock Road, was previously indicated by stray finds suggesting nearby Saxon activity. It was also of interest because of a twelfth-century reference to a ‘croft of the three barrows’ located north of Little Clarendon Street.

Evaluation trenching by Museum of London Archaeology began in February, following an unsuccessful attempt at radar surveying. Remarkably, the trenching confirmed the presence of three truncated ring ditches, presumed to be former barrows. It also identified evidence for Saxon settlement in the form of a sunken floored building close to the Walton Street frontage. Finds included bun-shaped loom weights and a sixth-century decorated pottery sherd. Subsequent excavation in June to September confirmed that the ring ditches were heavily truncated and unfortunately ‘ecofact and artefact poor’.

Nevertheless, the open area excavation recorded the striking morphology of the three large ring ditches, one with a double ditch. Two of the ring ditches appear to align with a possible further three ring ditches recorded as parch marks in the University Parks, previously suggested to be part of an east-west linear barrow cemetery.¹ One ring ditch at the Radcliffe site produced associated cremations and was found to encircle the truncated remains of a Neolithic rectangular enclosure.

The ROQ excavation also revealed a range of other undated and later remains, including linear boundaries, post hole clusters, a ditch containing medieval pottery and animal bone, and features and finds relating to the eighteenth- to twentieth-century infirmary and its grounds. These included building foundations, bedding trenches, decorated bed pans, and urinals.

University Parks

In February Wessex Archaeology excavated a number of pits and ditches prior to construction of water attenuation tanks in the University Parks. The features were associated with a stock

¹ T. Hassall, ‘Archaeology of Oxford City’, in G. Briggs, J. Cook, and T. Rowley (eds.), *The Archaeology of the Oxford Region* (Oxford, 1986), pp. 116–17.



Fig. 1. View of the Radcliffe site in September 2009, looking north. Photography by author.

enclosure and confirm the presence of a middle Iron-Age to early Roman farming community in the vicinity of the University Parks and University Science Area.

Oxford Castle

In late July to early August Oxford Archaeology (OA) undertook a small research excavation on the castle motte for the Oxford Preservation Trust (OPT). The work followed a geophysical survey of the site by Stratascan in April. It is likely that in the eleventh century a wooden keep was added to the motte, replaced by a stone keep in the twelfth century. The investigation was designed to investigate the condition of the keep foundations and provide a centre piece for the 2009 Festival of British Archaeology event organised by OPT.

The trenches further defined the extent of the former keep, exposing sections of the limestone foundations. A soil horizon was revealed in the centre of the motte, which was overlain by a compact gravel surface in the stone keep. The surface was cut by a probable robber-trench for an internal stone tower, thought to have been in ruins by the fourteenth century. Evidence for the refortification of the motte during the Civil War was also revealed.

Jesus College

A small excavation by OA in February-March 2009 for a lift pit at Jesus College revealed a line of late eleventh-century post holes, which were interpreted as the back of a property fronting onto Market Street. A series of inter-cutting eleventh- to thirteenth-century pits, characteristic of a medieval tenement yard, were recorded to one side of the post line. Above these deposits were structural and occupation remains related to a post thirteenth-century structure associated with White Hall and the subsequent post-medieval college. Whilst working at the Jesus College site, OA also managed to produce a salvage record of early street surfaces revealed by emergency sewer repairs in nearby Market Street.

Christ Church

A long-running watching brief by John Moore Heritage Services at the new Blue Boar Quad, Christ Church, came to an end in March 2009. Pits and wall lines relating to medieval and post-medieval structures were recorded, including thirteenth-century remains that may be associated with Eagle Hall. Works for a new lift for disability access to the main hall began in October 2009, revealing part of the foundations of Wolsey's Tower. Recording was undertaken by the Cathedral Archaeologist, Graham Keevill.

Osney Abbey

In June OA carried out an archaeological evaluation within the surviving scheduled building of Osney abbey. The evaluation encountered a possible medieval dry mortar floor with a trample layer above containing one piece of fourteenth- or fifteenth-century pottery.

Acland Hospital

July saw an OA evaluation at the former Acland Hospital site on Banbury Road. The trial trenches revealed a large pit containing a sherd of tenth- to twelfth-century pottery sealed by plough soil. Another large 'pit' containing seventeenth-century pottery was interpreted as part of the Royalist Civil War defensive line.

Ship Street

Between December 2008 and January 2009 a trial trench recorded a stretch of medieval city wall to the rear of the bastion at No. 2 Ship Street (RCHME, Bastion No. 4). OA also completed a building record of the Victorian warehouse built against the bastion.

DAVID RADFORD, CITY ARCHAEOLOGIST

Archaeological Work in the County, 2009

This note provides a flavour of the broad spectrum of Oxfordshire sites investigated within the planning process in 2009. It highlights work which has yielded particularly interesting and important results, including smaller as well as larger projects. Some investigations were completed during the year after long periods of assessment, evaluation, and excavation.

SELECTED PROJECTS

Whiteland Farm, Bicester

Excavations by Wessex Archaeology at Whiteland Farm, south-west of Bicester in 2009 completed a major programme of evaluation and excavation beginning in 2006 and investigating an area of over five hectares. The evaluation confirmed the physical survival of two crop-marked Bronze-Age ring ditches. These are both to be preserved beneath made ground under the playing fields of the new school. The subsequent excavation also revealed an early Beaker inhumation located approximately 200 m south-west of the ring ditches. The vessel found with the burial places it at the beginning of the Beaker period and the other grave goods (bone toggle, bone point, and flint knife) mark this out as a relatively rich grave.

The excavation also revealed extensive areas of middle to late Iron-Age occupation and especially late Iron-Age/Romano-British activity, including domestic activity, semi-industrial features, and possible evidence of quarrying. Late Iron-Age/Romano-British features included four-post structures, trackways, pits, a posthole alignment, and corn driers or ovens. Stone-lined Romano-British tanks were associated with water-management features, including a stone-lined and capped culvert with sluice gate system constructed of limestone slabs. These structures may have been used to process grain for brewing. Two settlement areas were probably abandoned by the beginning of the Roman period, reflecting similar evidence from two other excavated sites in the vicinity of Bicester. This may suggest that the military occupation caused a shift in the focus and form of local settlement.

Winterbrook, Wallingford

Another large site was investigated at Winterbrook, south of Wallingford, where 24 hectares were earmarked for construction of 500 houses. In the southern part of the site a double concentric ring ditch and a further oval/circular enclosure were already known from cropmarks and geophysics carried out in 1997. Other linear cropmarks were known from the northern part of the field, and information on a single inhumation (then assumed to be Roman) and Roman pottery from a gas pipeline constructed across the site in 1948 is held in the Historic Environment Record. A new geophysical survey was carried out by Stratascan using both gradiometer and earth resistance techniques. This proved highly successful, clarifying and extending the cropmark evidence to reveal a complex of trackways, enclosures, and fields predominantly in the north and north-west. The trenches dug in August-October by Thames Valley Archaeological Services confirmed this to be the focus of extensive later Bronze-Age/early Iron-Age activity, consisting of an organised agricultural landscape. A lesser presence dating to the middle to late Iron Age and continuing into the Romano-British period was confirmed.

Two early Beaker infant burials were also found, one of about eight years of age and the other about four or five years. Beaker vessels accompanied both. The pathology of the elder child showed an old injury to the neck that had caused bone necrosis, and also evidence of iron-deficiency anaemia probably due to malnutrition. A third inhumation was found further to the west of the Beaker graves, and a possible Saxon date has been postulated for this. Pathology showed that this individual had met a violent end. A male of about forty-five or more years of age, the skeleton



Fig. 1. A stone-lined water tank at Whiteland Farm, with a drain at the north-eastern corner (top left).
Copyright Oxfordshire County Council.

displayed four unhealed defensive wounds to the left arm, and five similar wounds to the upper part of the left leg, one fracturing the femur. The body had been unceremoniously dumped face down in a poorly dug grave.

Brightwell-cum-Sotwell

In June John Moore Heritage Services carried out a watching brief in Bell Lane, Brightwell-cum-Sotwell, where an existing building was demolished for the erection of a new dwelling. It was considered that medieval deposits could survive on the plot. In fact, the watching brief proved far more fruitful and period rich than expected. The earliest feature was a pit containing late-Neolithic flint work (a worked flake and a complete chisel arrowhead). A large re-cut ditch between 1.5 to 2 m wide that ran diagonally across the site was unfortunately undated, but was postulated as Roman due to residual Roman pottery found. A boundary ditch and several pits filled with burnt material confirmed eleventh- and twelfth-century occupation. Roof tile was used to form the base of pits interpreted as corn drying kilns.

Abingdon

Another relatively small but significant piece of work was an evaluation and geotechnical investigation undertaken by Oxford Archaeology during March in advance of an application for a new lift shaft and lowering of the basement floor at Abingdon Museum. Four small test pits were enough to reveal once again the complexity and longevity of the deposits surviving below

the centre of Abingdon. In the two pits dug against the exterior walls of the building undated but possibly Iron-Age pits or postholes were overlain by a compacted soil containing second-century pottery, and also by a probable sequence of metalled Roman road surfaces. The road surfaces were in turn overlain by later Roman and twelfth- to thirteenth-century soil horizons. The truncated remains of probable early Roman pits were recorded in two test pits cut through the basement floor.

The primary road surfaces were well constructed and showed evidence of careful resurfacing. The later surfaces, however, were crudely repaired and the excavators suggest that this might have been due to the road falling into disuse in the late Roman and early Saxon periods. A build up of 'dark earth' suggests that the structure had fallen out of use by the fourth century, by which time the site may have reverted to horticultural or agricultural use.

Headington, Oxford

Here a section of the major Roman road between Dorchester and Alchester was investigated because of a County Council proposal for extensive redevelopment of Bayard's Hill Primary School. The road was known to run roughly north-south through the school grounds. Stratascan carried out a detailed gradiometer and earth resistance survey over a 0.3 hectare area of the playing fields south of the main school building. This identified a number of anomalies, including two very prominent parallel ditches approximately 16 m apart on the same alignment as the Roman road. The line of the eastern ditch corresponds almost exactly with the projected alignment of the Roman Road shown on OS maps.

Targeting the geophysical anomalies, Thames Valley Archaeological Services then carried out trial trenching. This confirmed that the eastern ditch measured 2.75 m wide by 0.94 m deep, while the western ditch was 1.5 m wide and 0.62 m deep. Both ditches contained pottery of the 2nd to 3rd or 4th centuries. Surviving fragments of the road surface consisted of very compact limestone within which were patches of dark brown sandy clay where the road surface had been eroded away or removed. A patch of small cobbles was also observed at the northern end of the trench. Several shallow linear features were interpreted as possible wheel ruts. The road surface produced a large sherd of Oxfordshire colour-coated mortarium (Young's form C100) dating from the later third or fourth century.

PAUL SMITH, COUNTY ARCHAEOLOGIST

Sir William Herschel: the Originator of Fingerprinting and Oxford All-Rounder

Sir William Herschel, Bt. (1833–1917) is acknowledged as the originator of fingerprinting. Less well known is that after a career as a colonial administrator, he lived for some twenty years at Lawn Upton House in Littlemore. During his time in Oxford Herschel took an undergraduate degree in Theology and went on to play a very active part in civic life. His activities in and around the city were in many ways a natural complement to his earlier career and provide a fuller picture of a modest but energetic Victorian philanthropist, scholar, and science enthusiast.

Sir William was the eldest son of Sir John Herschel (first baronet), the astronomer and chemist.¹ He was born at Observatory House, Slough and educated at Clapham Grammar School and the East India Company's college at Haileybury. From 1853 he served in Bengal where he held various posts, including commissioner, district judge, and magistrate. Over a period of fifteen years from 1858 he developed a practical method of fingerprinting to prevent impersonation and combat fraud; crucial to this was his realization that, besides being unique, the ridge and furrow patterns of each individual's prints never changed.² On the death of his father in 1871 he succeeded to the baronetcy. Herschel had married Anne Emma Haldane, daughter of Alfred Hardcastle of Surrey, in 1864. Sadly, she died at the birth of their younger son Arthur in 1873, leaving Herschel to look after the baby and three other children. At the end of the 1870s he returned to England, having received little official support for his discoveries, though his work laid the basis for the formal adoption of fingerprinting in India in 1897. He left behind a reputation among Bengalis as a kind and incorruptible administrator with a strong sympathy for ordinary Indians.

Soon after arriving back in England, Herschel moved to Oxford. Perhaps his most remarkable achievement there was his attainment of a first-class degree in theology, three years after he became a non-collegiate member of the university in 1879. A friend wrote in his obituary that in keeping with his modest disposition he was willing 'to clothe himself in a commoner's gown'.³ From 1868 men had been permitted to become students and members of the university without being members of any college or hall.⁴ This was a means of enabling poorer students to gain a university education. They could live in houses or licensed lodgings within a fixed radius of Carfax. This also helped mature students who preferred to live at home. By the time Herschel came up there were some 300 non-collegiate students. He is listed as gaining his BA degree in Michaelmas 1881, at the age of forty-eight.⁵

Herschel subsequently lectured at Hertford and wrote *A Gospel Monogram*, published by Society for Promoting Christian Knowledge in 1911, which consisted of a comparison of the four gospels.⁶ It was said in his obituary that his experience as an administrator in India gave a fresh meaning to much of the Bible narrative, including the feeding of the five thousand, which he likened to the distribution of rice during famine relief operations.⁷ Similar comparative texts had been written since the mid eighteenth century, but Herschel's work seems to have been good enough to be a set book for ordinands for some time afterwards. On a more practical level, he was honorary treasurer of both the Diocesan Conference and of Lady Margaret Hall (1897–1904),

¹ Michael J. Crowe, 'Herschel, Sir John Frederick William, First Baronet (1792–1871)', *ODNB*, online edn (accessed 30 June 2010).

² A. Spokes Symonds, 'Herschel, Sir William James, Second Baronet (1833–1917)', rev. Katherine Prior, *ODNB*, online edn (accessed 30 June 2010).

³ *Oxford Magazine*, 2 November 1917, p. 36.

⁴ *Oxford University Calendar*, 1948, p. 755.

⁵ *Oxford University Calendar*, 1882, p. 350.

⁶ W.J. Herschel, *A Gospel Monogram. The Texts of the Gospels in a Parallel Harmony* (London, 1911).

⁷ *Oxford Magazine*, 2 November 1917, p. 36.



Fig. 1. Sir William Herschel and his fingerprints: Bodl. MS Top. Oxon. b. 248/4, no. 86.
 Used by permission of the Bodleian Library, University of Oxford.

where his support of women's university education in its early days was much valued. He was also an active supporter of the ragged school in Oxford.

Herschel's first Oxford residence was 15 St Giles, but after a short time he moved to Lawn Upton House in Littlemore, three miles south-east of the city centre. Here, characteristically, he took an enthusiastic interest in the affairs of the village. An obituary in the *Oxford Magazine* stated that 'there was scarcely any good work to which his sympathy did not go out'.⁸ He was a poor law guardian, church warden, and school manager, and even assisted with the village flower show. He was also honorary treasurer of the local cricket club and even levelled part of his land so that the local boys could play cricket there.

Perhaps his main local interest, however, was the Littlemore branch of the Church of England Temperance Society. His older daughter Carry wrote a weekly newsletter called the *Chronicles of Littlemore* which included sketches, some of them showing activities of the society.⁹ One of her drawings shows Herschel, holding a banner, leading a group of men and boys in a procession

⁸ Ibid.

⁹ Bodl. MS Top. Oxon. d. 443 ('The Chronicles of Littlemore', 1885).

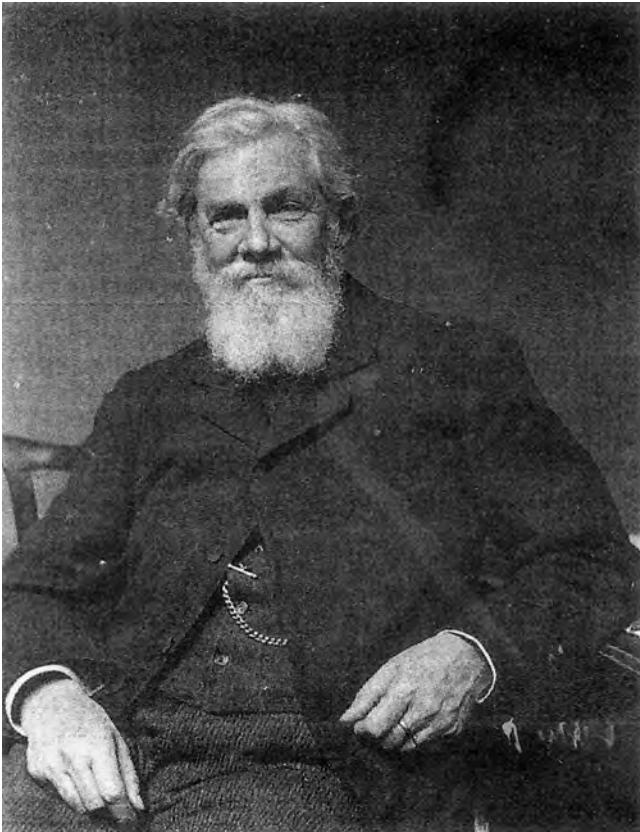


Fig. 2. Sir William Herschel, photographed by Miss Sarah Acland, c.1900: Bodl. Minns Collection 92/5. Used by permission of the Bodleian Library, University of Oxford.

during a Temperance Society festival in Oxford in July 1886.¹⁰ When he left Littlemore for 92 Woodstock Road in about 1901, local people showed their appreciation of what he had done there. He was presented with a silver tea service and a clock, as well as a book of 165 contributions.

Herschel was also active in local government, representing Littlemore on Oxfordshire County Council between 1895 and 1904. Perhaps because of his popularity in the village, he was returned unopposed in every election in which he stood (1895, 1898, and 1901). The county council in those days was very much an upper-class institution, consisting of peers of the realm, MPs, and retired military officers.¹¹ The duke of Marlborough was chairman for part of the time, and other members included the earl of Jersey, Lord North, and Lord Saye and Sele. Herschel himself was a member of the standing joint committee and the technical assistance committee.

Herschel also found time for his major hobby, photography. His father had been one of the pioneers of photography, and this may account for William's own interest in the subject. Herschel became friends with Sarah Angelina Acland, a noted pioneer of colour photography; about 400 of her photographs, including many colour transparencies, can be seen at the Museum of the History of Science in Oxford. Some copies of their letters, beginning in 1897, are preserved in the Bodleian Library.¹² He also seems to have had some contact with the American Frederic Ives (1856–1937), another leader in developing colour photographs, presumably during Ives's tour of Europe in

¹⁰ Bodl. MS Top. Oxon. d. 444 ('The Chronicles of Littlemore', 1886).

¹¹ *Oxford Chronicle*, various edns, especially 6 April 1889 and 9 Nov. 1889.

¹² Bodl. MS Top. Oxon. e. 447.

1898. The pictures which Herschel took of Ives's assistant, Mr Robinson, are now in the Museum of the History of Science.

Sir William was for a time the President of the Oxford Camera Club.¹³ In 1901 a national photographic convention was held in Oxford and Herschel was invited to preside. The conventions, gatherings of amateur and professional photographers, were held annually at different locations and lasted about a week. In his presidential address he spoke about some of the new developments in colour photography, including those of Ives.¹⁴ Herschel gave a garden party in Worcester College for the delegates, and a picture of this event appeared in *The Sphere* magazine on 27 July 1901. Some delegates came to the convention from Germany and at the dinner in Oxford both the German and French national anthems were sung. On his death sixteen years later, delegates still remembered 'Herschel's charm and courtesy during his presidential week'.¹⁵

It is interesting that under 'recreations' in *Who's Who* Herschel gave just one word: 'scientific'.¹⁶ Presumably he looked upon his practical gifts as providing him with a hobby. Apparently, he never mentioned fingerprinting to anyone in Oxford, and it was not until the year before his death that he published his book *The Origin of Fingerprinting*.¹⁷ Herschel moved to Warfield (Berks.) in 1908 and died at the Rectory House there in 1917. There is a tablet to his memory in the parish church, but he is buried in the family vault at Hawkhurst, Kent.

ANN SPOKES SYMONDS

¹³ A. Spokes Symonds, 'Herschel's "Retirement" Years', *Fingerprint Whorld*, October 1990, p. 42.

¹⁴ *The British Journal of Photography*, 12 July 1901, p. 42.

¹⁵ *Ibid.* 2 Nov. 1917, p. 560.

¹⁶ *Who Was Who, 1916–1928* (London, 1929), p. 491.

¹⁷ W.J. Herschel, *The Origin of Fingerprinting* (London, 1916).