

# Excavations at the Medieval Leprosy Hospital of St Mary Magdalen, Winchester, 2008–2013

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*Since 2008 extensive archaeological excavations have been conducted at the former hospital and leprosarium of St Mary Magdalen, Winchester, Hampshire, England. This work represents the first wide scale excavation of an English leprosarium and cemetery dating to the later 11th century. Research at Winchester has allowed for the cross-comparison of different forms of archaeological data, including cemetery, artefactual and structural material, and provides an important insight into the origins and development of one of the earliest excavated hospitals in the country. This paper provides the first detailed interim report of the results of these important excavations to date. Little is known about the form of early leprosarua, and despite limited documentary references, there is no archaeological evidence for such institutions prior to 1100. This paper also considers the importance of such research in its wider context.*

In 2007, the Department of Archaeology at the University of Winchester initiated the Magdalen Hill Archaeological Research Project (MHARP) with the aim of studying the history and development of the former medieval hospital and almshouse of St Mary Magdalen, Winchester (Roffey and Marter 2010a; 2010b) (Fig 1). The site, commonly known as ‘Morn Hill’ (from Magdalen) and ‘Hospital Field’, had previously been subject to limited archaeological investigations which had largely focused on the later phases of the site (see Roffey 2012 for an overview). In late 2007 and early 2008, MHARP carried out an evaluation and desk-based assessment of the site including field and geophysical surveys, together with an assessment of primary and secondary documentation. The geophysical (resistivity) survey indicated a range of features that clearly related to the former hospital complex as well as features relating to the later use of the site (Fig 2). Consequently, excavations commenced in the summer of 2008 and focused on the area of the main hospital and later almshouse complex identified by these results.

*Fig 1  
Excavations in 2013 looking west towards Winchester  
(Photo: MHARP)*

relating to the foundation of the hospital at Winchester, and the first reference to the ‘Lepers on the Hill’ comes from the 1148 Winton Domesday (Roffey 2012). However, it is clear from the archaeological evidence discussed below that a hospital predates this reference by some decades, and the Domesday reference may actually relate to a second or re-foundation at this time. The surviving documents from the mid-12th century onwards indicate that the bishops of Winchester had a long-term influence on the institution, and it is likely that one of these bishops was the initial founder in the decades following the Norman Conquest.

### *The hospital and its development*

The evidence for the first-phase hospital, pre-dating the documentary record, consists of a small masonry chapel, a range of timber structures and a planned cemetery. The former structures are represented by substantial linear beam slots, post pits and post holes, as well as a large ‘cellared’ or sunken-featured structure underlying the 12th-century medieval infirmary. It is not yet clear whether this latter feature was ever part of the Norman hospital, as it appears to interrupt the first phase of the site, described below, before being replaced and covered by the later 12th-century foundation. It may represent the base of a tower structure erected during the Anarchy period to guard the eastern approach to the city. There is a possibility that it was built by Henry de Blois, Bishop of Winchester at that time, and one of the major antagonists in the civil war. However, it appears only to have been in use for a short time, as it was quickly backfilled and partially sealed by the mid-12th century infirmary.

The cemetery comprises a large group of burials that were located to the north of a small masonry building. The north-east corner of this structure was excavated in 2008 and pre-dated the later medieval chapel. This building may therefore represent an earlier phase of the chapel (Fig 3). The cemetery, timber structures and chapel were sealed by later medieval buildings dating from the late 12th century onwards. These burials were of men, women and children and over 85% displayed signs of leprosy, as well as evidence for tuberculosis, hydrocephalus and possible malnutrition (Roffey and Tucker 2012) (Fig 4). One individual also showed signs of amputation of the lower left leg. Here there was very little evidence for infection, probably indicating that the individual received a degree of medical treatment for the injury. The unusual inclusion of two almost

Fig 2

*Resistivity plot from 2007. The H-shape outline of the hospital complex can be clearly seen with chapel to the south, infirmary/almshouse to the north and interconnecting Master’s Lodge. The later 17th-century precinct wall can also be seen encircling the complex. (MHARP)*

The site of Magdalen Hill is presently used for arable farming and is located 1.6 km (1 mile) east of the city of Winchester, Hampshire. The hospital’s extra-mural location is typical of *leprosaria* and many other hospital foundations, a pattern that can also be seen, for example, at Chichester, London, Norwich and Southampton (Roffey 2012). The field is bordered on its southern side by the Alresford Road, which, in part, follows the line of the old Winchester to London road, and to the east by Fair Lane, which once led to the medieval fair held to the lands south of the hospital. The former hospital is situated on a high downland ridge above the city and the area today is still known as ‘Magdalen’ or ‘Morn’ Hill. This hilltop location is notably favoured by other comparable early leprosy hospitals, such as Harbledown (Canterbury, Kent) and Mont-aux-Malades (Rouen, Normandy) (Roffey 2012). Such hilltop locations may represent a particular topographic characteristic of some early foundations (Roffey in prep). There is no documentary evidence

Fig 3

*St Mary Magdalen, Winchester, looking north. Note post pits and beam slots of former timber buildings in the north edge of the trench (1) and the cemetery to the south (2). Evidence for the later masonry phase of the hospital can also be seen (3).*  
(Photo: MHARP)

of early stage leprosy, likely a pilgrim due to the presence of a scallop shell in the burial, provided a date range of cal AD 1020–1162 (95% probability). The radiocarbon dating, when considered alongside comparative archaeological evidence including associated ceramics, suggests that the first-phase cemetery was in use between the mid-late 11th century and the early 12th century. All of the dead were buried in anthropomorphic graves cut into the chalk bedrock. They all had head niches and were probably marked, as very few graves were truncated. The type and layout of the graves suggests that a certain level of consideration went into their construction, which may further imply a level of status that challenges traditional views of leprosy sufferers being classed as social pariahs (see Roffey 2012 and Roffey and Marter 2012 for further discussion). Taken together with the dating sequence and ceramic record this would suggest that the first phase of burials and associated buildings date from the first few decades after the Norman Conquest.

The hospital was probably re-founded or rebuilt in the second half of the 12th century and it is this phase that may relate to the 1148 reference. Archaeologically, this phase was represented by a substantial masonry hall infirmary (constructed directly over and aligned with what appears to be a previous timbered hall) and construction of a new masonry chapel (Fig 5). At some stage after this initial construction a north aisle or range was added to the hall. Examination of the

Fig 4

*Burial in St Mary Magdalen cemetery (late 11th/early 12th century). Note anthropomorphic grave cut with ledge and head niche.* (Photo: MHARP)

whole pottery vessels in the grave may have been some form of medical apparatus or associated paraphernalia or personal food bowls, and may suggest that the individual received day to day assistance in feeding (Roffey and Marter 2012; Roffey 2012).

Significantly, C14 dates for one burial which presented evidence for leprosy provided a calibrated date of AD 980–1160 (95% probability). Another sample from a second burial provided a dateline of cal AD 1010–1160 (95% probability) (Roffey 2012, 211). A further sample from the former individual corroborated these findings, presenting a date of cal AD 890–1040 (95% probability and 90% within AD 940–1040). Another associated burial with evidence

Fig 5

*The hospital from the late 12th to the 14th century, with aisled infirmary (1) and parallel chapel and cemetery to the south (2)* (MHARP)

building materials of the infirmary and the medieval chapel to the south indicate that they were probably contemporaneous. Both buildings were constructed of flint-faced walls with rubble cores and a chalk foundation. A new cemetery to the south of the chapel was also initiated during this phase, and a number of burials present evidence for leprosy. The documentary evidence from the 13th century onwards depicts a hospital subject to varying periods of decline and renewal, not unlike other similar institutions of the time. Late in the 13th century the Register of Bishop Roger of Pontoise (1280–1304) refers to St Mary Magdalen in a list of benefices of which the Bishop of Winchester had been a long-time patron. The hospital was still functioning as a *leprosarium* during the 14th century, as it is referred to as such in Bishop Stratford's Register of 1325 (VCH 1903, 197–8). However, subsequent years witnessed a change in fortune and the hospital may have experienced financial difficulties. In 1334, the keepers of the 'temporalities' of the see of Winchester were ordered to pay the master and paupers of the hospital the '*arrears of a certain fixed sum for their maintenance*' (VCH 1903, 197). Only two years later, we hear that the hospital was '*so slenderly endowed that its goods hardly sufficed for the maintenance of the masters and brethren and sisters of the hospital, and the weak and infirm there, and for other alms according to the foundation*' (VCH 1903, 197). The hospital's decline at this time may have led to a subsequent re-foundation sometime in the mid-14th century as a *maison dieu*, again probably reflecting a general reform of hospitals at this time and the notable decline of the disease of leprosy. This change in purpose likely also prompted considerable spatial and physical reorganisation of the hospital, and the institution appears to have attracted renewed endowments from this point on (VCH 1903, 197–8).

Archaeological evidence at this time is largely represented by the addition of an adjunct structure attached to the south aisle of the infirmary. The foundations of this building are largely comprised of flint with chalk and reused stone. Internally, it contained a centrally-placed tiled hearth with associated floor deposits and late medieval pottery. This structure may represent an earlier master's lodge, or one of the documented 'houses' referred to in contemporary documents. Excavations also revealed some fragmentary evidence for further masonry buildings to the south east of the infirmary and a range of large and extensive rubbish and latrine pits toward the north, and downslope, of the infirmary. These pits were

substantial endeavours, cut with vertical sides into the chalk at depths of several metres. Inside the south aisle of the chapel a series of graves also relates to this phase, including a plaster-lined tomb with a Purbeck marble slab, the contents of which had later been robbed. The remains within the earliest of these graves has been radiocarbon dated to the late 14th century and may be indicative of re-foundation and a consequent increase in patronage and lay burial. It is clear from the surviving documents from this period that the hospital was in relatively good health at this time. Bishop Wykeham's inventory of 1400 records fourteen acres of land and pasturage for 101 sheep, as well as the arrangements for oblations and offerings received which were to go toward the fabric, or divided amongst the inmates. A significant list of rich ornaments for the chapel is also cited and includes chalices, crosses, vestments and a missal worth 100 shillings. In particular a beautiful green tapestry or carpet is described as being '*powdered with birds and roses*'. The hospital also continued to own town property through the 15th century, as in 1417 the hospital was a landlord of a tenement of eight cottages and a garden in the city (VCH 1903, 199; Keene 1985, 201).

St Mary Magdalen, like some other contemporary hospitals, appears to have escaped official dissolution and it was still receiving endowments throughout the mid-16th century (Keene 1985, 1050). In 1535, *The Valor Ecclesiasticus* gave the hospital a reasonably healthy gross income of £42 16s. This had little changed in 1545 when the Chantry Certificate valued the hospital at £41 6s 8d (VCH 1903, 199–200). Archaeological investigations revealed that the hospital underwent some changes during this period, as the infirmary was largely converted to an almshouse range. The medieval plan of the hospital was still largely adhered to, although the infirmary building was structurally reorganized. Internal brick walls now divided the hall into individual 'houses', with internal corridors and brick fireplaces on the back walls. The attached masonry master's lodge to the south was rebuilt in brick and extended to join the medieval chapel to its south. This building had evidence for internal partitions, a fireplace and joist beam slots for a boarded floor. To the east of the building was an adjunct brick-lined and tiled latrine. This direct relationship between the medieval and post-medieval phases suggests some level of continuity. Certainly the continuity of documentary records over the period, as noted above, implies there was no formal institutional break.

Throughout the 17th century, however, the fortunes of the institution were in sharp decline. The hospital buildings were reused as an encampment for the Royalist Lord Hopton's troops in the early 1640s and later a prison was initiated for Dutch prisoners in the wars of 1660/70 (Roffey and Marter 2010a). Archaeologically these post-medieval phases were represented by a mass of prison rubbish which comprised mostly animal bones, clay pipes and broken bottles. Part of a circuit wall was also excavated and may represent the prison's curtain wall. Subsequently, the buildings were largely ruinous by the 1780s and were consequently demolished by order of the Bishop of Winchester. The site was later the location of one of Hampshire's largest First World War bases. In this phase the excavations revealed evidence for former military buildings, including part of a stable block and wooden bases for bell tents, as well as drainage trenches and gravel paths. On another area of the site, the brick foundations of the camp cinema/theatre were also uncovered. Today, however, nothing of the former institution survives above ground.

### Conclusion

In medieval England, over a quarter of all hospital foundations were dedicated to the care of people with leprosy. It is therefore surprising that, in contrast to a number of important historical works on leprosy, comparatively little archaeological work has been conducted on medieval leprosy hospitals (see Roffey 2012 for an overview). Since 2008, excavations at St Mary Magdalen, Winchester, have achieved the most extensive excavation of a British leprosy hospital to date. Analysis of the medieval cemetery indicates skeletal evidence for leprosy in over 85% of excavated examples, a much larger percentage than has previously been recorded in any British material. Current archaeological excavations at Winchester have also provided valuable insight into both the form of early institutional care and the nature and status of its community from a relatively early date. The evidence confirms that the hospital is possibly the earliest excavated example from Britain, if not western Europe (c AD 1070–90) (Roffey in prep). Moreover, it is argued that the *leprosarium* may have represented a particular form of religious community and one that emerged as a direct response to the spread of the disease of leprosy, which was only properly formalised in later years (Roffey in prep). This idea is

further supported by recent genome research using the samples from St Mary Magdalen in comparison with other European examples. This research has revealed a Middle Eastern origin for medieval leprosy, and suggests that the disease spread during the Crusades (Taylor and Tucker, et al 2012; Schuenemann, et al 2013). It might also be linked to an increase in pilgrimage and the establishment of international routes, especially to the Holy Land, during this time. Here the burial of the pilgrim, one of the latest burials in the cemetery and dated to around c1100, may be of some significance.

Next season (2014), excavations will focus on a possible claustral range to the north of the infirmary which may date to the re-foundation of the hospital in the later 12th century. The human remains will continue to be the subject of scientific analysis, including a DNA analysis of the pilgrim burial and stable isotope analysis of the cemetery population. This will provide important information concerning dietary histories and geographic origins of the cemetery population. Overall, such work will provide further insight into the nature of the early community at Winchester as well as levels of care and treatment. St Mary Magdalen will also form the basis for a wider study, funded by the Wellcome Trust, which will investigate the origins and early form of medieval *leprosarum* and the relationship between the foundation of such communities and the Norman Conquest of England (Roffey in prep).

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### Acknowledgements

Thanks are due to staff and students of the University of Winchester, particularly David Ashby, Nathalie Barrett, Dr Paul Everill, Dr Katie Tucker and Dr Nick Thorpe, as well as Duncan Green. The project has been funded by the Society of Antiquaries, the Royal Archaeological Institute, the Hampshire Field Club, the British Academy and the Wellcome Trust.

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