

EXCAVATIONS BENEATH THE GREAT YEW, ST MARY'S CHURCHYARD, SELBORNE

by DAVID ALLEN and SUE ANDERSON

ABSTRACT

Small scale excavations were carried out following the fall of the Great Yew in Selborne churchyard during the storms of January 1990. The remains of seven articulated skeletons were uncovered, together with disarticulated bones from at least twenty other individuals. There were few other finds. Pottery associated with the earliest burial in the group suggests a medieval or later date for all the excavated graves.

INTRODUCTION

The Winter storms of January 1990 caused much destruction throughout the county. Possibly one of the oldest casualties was the Great Yew in St Mary's Churchyard, Selborne, NGR SU742 338 which blew down on 25 January. The tree had reputedly been standing on the spot for a millenium, and had been recorded by the eminent naturalist Gilbert White (1720–93), in *The Natural History and Antiquities of Selborne* (1789). Consequently, the whole village was deeply saddened by its apparent loss. The vicar, Rev James Anderson, undaunted, made arrangements for the re-erection of the huge tree. At this point, since human remains had been uncovered by the fall, the Hampshire County Museums Service were invited to make further investigations in advance of the restoration attempt.

CIRCUMSTANCES OF THE EXCAVATION

The tree stood due south of the church tower (Fig 5), and fell to the east, knocking a few tiles off the roof of the porch as it went down. It left an irregular semi-circular hole, c 3 m x 2 m x

0.5 m deep, on the west side (Figs 1, 2). The roots of the tree remained in place on the eastern edge of the hole, although the tree moved laterally during the fall. For this reason, it was necessary to enlarge the hole to ease the 're-potting' operation.

The human remains exposed in the root bole and in the loose earth in the hole were removed soon after the fall. Since the enlargement of the hole was expected to disturb further bones it was decided that these should be uncovered archaeologically. Four days were allowed for this work, but due to appalling weather conditions for a third of this period, two more days were needed. Excavations actually continued right up to the start of the attempt to winch the tree back into position.

EXCAVATION

An area of approximately 10 square metres was excavated to a depth of 0.75 m, during which exercise four in situ burials were discovered (Fig 1, 1–4). Skeletons 1, 3 and 4 were in the sections around the edge of the hole, and were extremely shallow burials. Skeleton 2 was only slightly deeper, being just below the surface of the floor of the hole. There was no indication of the grave cuts for these burials.

With the completion of this initial work, and following drying of the site after a heavy and prolonged rain storm, a semi-circular patch of grey-brown sub-soil was evident just off-centre of the eastern edge of the trench. This was presumed to have been the area occupied by the Yew in its youth, since a greater rate of growth would be expected to the west and

SELBORNE

Great Yew Excavation

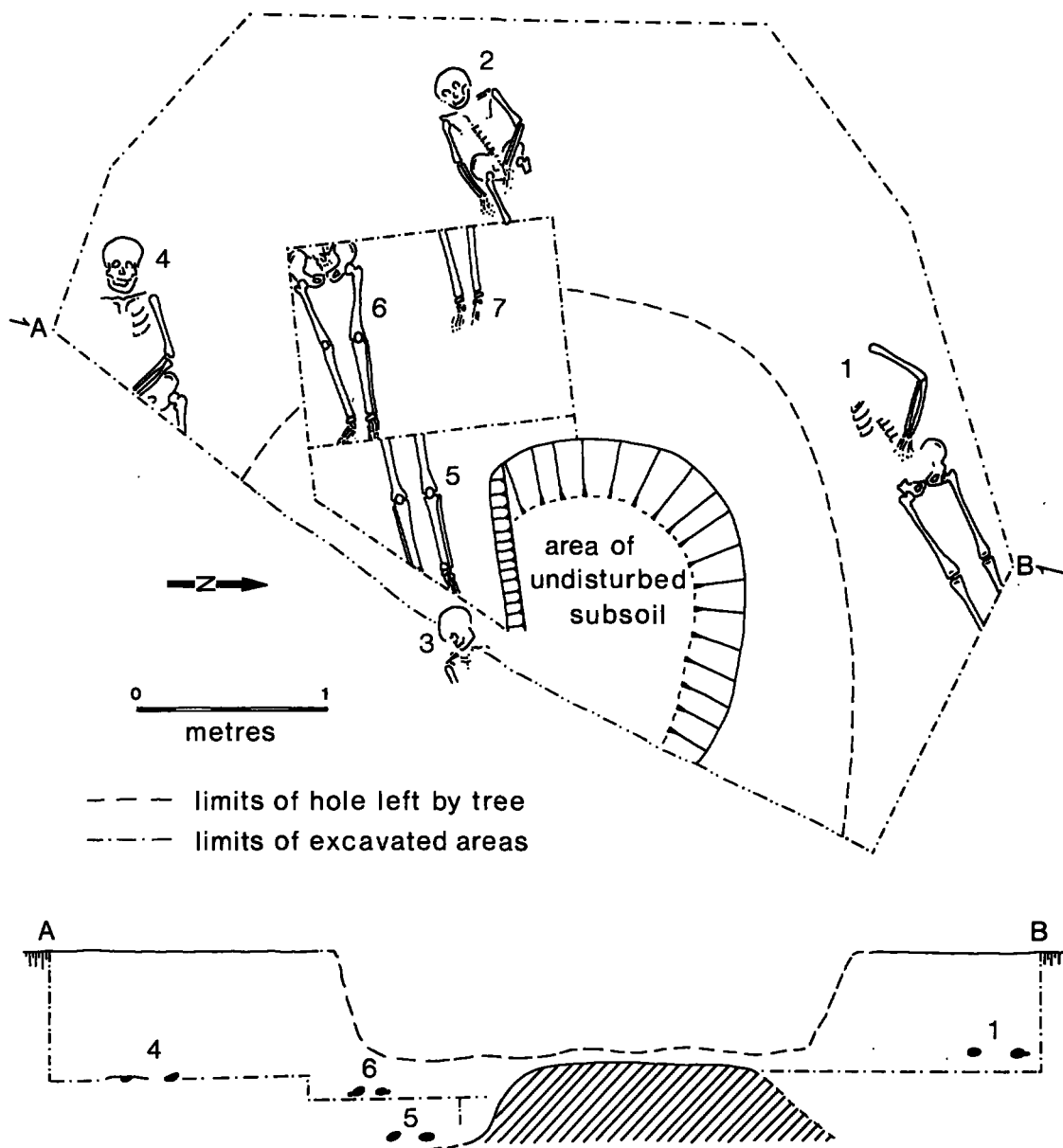




Fig 2. View from the church tower showing the extent of the excavations

south (information supplied by Allen Meridith). This patch was delimited to the south by a cut feature, which was examined with a trial trench (*c* 1.4 m wide). Three more *in situ* burials were revealed during this work (Figs 1, 3). Skeleton 5 was at a depth of 1 m, and was overlain by Skeletons 6 and 8, at a depth of 0.8 m. None of these skeletons was lifted, but a limited study was made of the visible bones.

THE FINDS

Large quantities of post-medieval and modern tile were noted in the topsoil around the trench, and some of these had fallen into the hole during the soil movement caused by the Yew's fall. These fragments were not retained. Much disturbance had occurred in the upper part of the excavated area, some of it probably

as a result of the fall, but some presumably due to root and animal activity over the centuries. This is the most likely reason for the lack of any identifiable grave cuts, except in the case of grave 5. Large quantities of disarticulated human bone were collected during the excavation, and the scattered nature of these remains confirms that associations of some of the other finds with graves are secondary.

Tile

Four of the seven fragments of tile were found with Skeleton 4. Three of these were oxidised, and coarsely made with large gritty inclusions. The fourth was a corner fragment of reduced tile with large gritty inclusions, and with fragments of glaze adhering to the upper and lower surfaces and one edge. Grave 6 contained a fragment of red tile similar to those in Grave 4, and also a fragment made from a finer fabric, oxidised but with a grey core (probably modern). One other fragment of



Fig 3. Close up of burials 6 and 5, from the west

oxidised tile was found at the northern edge of the site.

Pottery

Nine sherds were recovered. Seven of these were body sherds, but there was also one rim sherd and one handle. They are divisible into four fabrics, as follows:

Fabric 1 (6 sherds): Medium sandy, hard, micaceous, grey unglazed. Generally oxidised on at least one surface, although one rim sherd is completely reduced.

Contexts: Grave 5 (3 sherds, Fig 4, 1–2), Grave 6 (1 sherd), Clearance (2 sherds, Fig 4.3).

Fabric 2 (1 sherd): Fairly coarse sandy, some iron

oxides, creamy white, slightly oxidised, green-glazed. Decorated strap handle.

Context: Grave 5 (Fig 4.4).

Fabric 3 (1 sherd): Fairly coarse sandy, medium-soft matrix, dark grey, unglazed, reduced. Context: Clearance.

Fabric 4 (1 sherd): Fine sandy, some iron oxides, creamy white, green glazed. Similar to Fabric 2, but apparently finer.

Context: Grave 5.

The two sherds representing Fabrics 3 and 4 are very small, and it is difficult to say anything further about them. The larger sherds of Fabric 1 appear to represent cooking vessels and jars/jugs, whilst the handle of Fabric 2 probably came from a large flagon or pitcher. All the sherds are likely to be medieval or early post-medieval in date and of local manufacture. The green-glazed strap handle (Grave 5; Fig 4.4) and the cooking pot rim (clearance; Fig 4.3) can be more precisely dated, to the 13th/14th centuries.

Iron

Fragments of twenty-one nails were found. Some were from the area of the individual graves but only in the case of Grave 5 (seven nails some with wood pseudomorphs) did they appear to represent a coffined burial.

Copper Alloy

Five small fragments of copper alloy were recovered, none of them identifiable as objects. Three were found in Grave 5 and two came from the north-west clearance.

Shells

Fragments of five oyster shells were found. They were recovered from the fills of Graves 5 and 6, and from north-west and west clearance.

Animal Bone

Most of the ten fragments of animal bone found are of sheep/goat and cow. It is likely that they represent domestic rubbish intrusive to the site. The small assemblage consisted of butchered fragments of scapulae and humerus, skull, mandible and sacral fragments, a tarsal bone, and a small femur

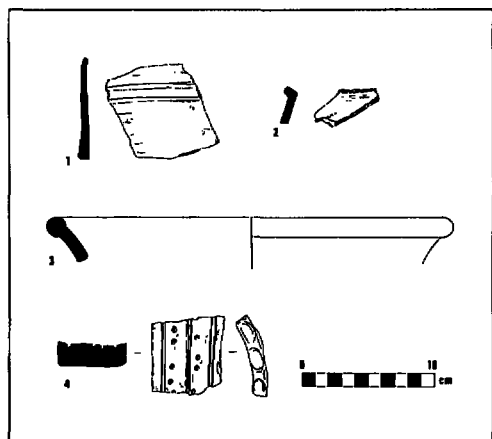


Fig 4. Ceramics

(hare/rabbit?). They were scattered over the whole site.

The Human Skeletons

Introduction

The majority of bones recovered during this excavation were in fair or good condition and it was possible to take a number of measurements from each of the four articulated skeletons. Seven *in situ* burials were uncovered during the excavation, but three of these were not lifted. A large quantity of disarticulated bone was also recovered, and this was thought to represent a minimum of twenty other individuals.

Due to the small number of skeletons represented by the bones, and to their scattered distribution, any statistical comparison would be invalid. A few general observations can be made, however.

Age and Sex

Of the seven articulated skeletons seen, four were adult and three were immature. The disarticulated remains represent perhaps ten other adults and ten other children (distributed as follows: 3 infants, 5 juveniles and 2 sub-adults).

Unfortunately, it is not possible, using current methods, to sex the skeleton of a child before it reaches puberty (which for this purpose can be said to occur at approximately 14–15 years of age). It is

Table 1: Suggested ages and sexes for the articulated skeletons

Skeleton No	Estimated Age	Sex
1	16–18 years	?Female
2	6–8 years	Not sexable
3	c 12 years	Not sexable
4	50+ years	Male
5	Adult	Male
6	Adult	Female
7	Adult	Unsexed

sometimes possible to sex an individual aged between 14 and 18 years, depending upon the state of preservation of the pelvis and the amount of sexual dimorphism shown by a particular person at that age. Skeleton 1, a sub-adult of c 16–18 years, has been tentatively sexed as female, but none of the other juveniles could be sexed. Of the adult *in situ* burials (Table 1), two were male (Skeletons 4 and 5), one was female (Skeleton 6), and one was unsexable (Skeleton 7). Unless they were part of the pelvis, the sex of disarticulated adult bones could only be determined by their size, which is not necessarily a good indication. Based on this, it is suggested that the adult disarticulated remains consisted of four men, two women and four unsexable individuals.

Metrical and Morphological Analysis

Only one articulated adult skeleton was available for measurement. The estimated height of this individual (Skeleton 4) was 177.9 cm using the right humerus (Trotter 1970). This is within the normal range of male statures found at contemporary sites.

Three cranial indices were calculated for Burial 4, who was found to have a medium-high and narrow skull (dolicho-, ortho- and acro-cranial). Without other crania from the same population it is impossible to draw any conclusions about these findings.

Morphological traits (Brothwell 1981) were seen in the skulls of Skeleton 2, 3 and 4. In the cases of 2 and 3, these were very common traits, respectively a parietal foramen and lambdoid wormian bones. Skeleton 4 showed both these traits, but he also had a number of anomalies of the cranial sutures. The metopic suture was unfused (normally fused at c 2 years of age), a bregma bone had formed in the sagittal suture (a rare trait in most populations), a parietal notch bone was present on the right, and there was a right asterionic ossicle. A precondular tubercle was also present. Unfortunately the group

was not complete enough to allow for the establishment of familial relationships.

Lists of measurements taken from the excavated skeletons and disarticulated bones are deposited with the archive report at the Hampshire County Museums Service.

Dental Analysis

The jaws were available for study in three articulated skeletons. Disarticulated jaws were also recovered and these are included in the study on the grounds that they are probably all from different individuals. The remains available were as follows: fragments of 2 adult maxillae and 2 adult mandibles, 3 juvenile maxillae and 3 juvenile mandibles, representing 3 adults and 5 children. For the adults, a total of 46 tooth positions, including 12 teeth, were present. 26 teeth had been lost ante-mortem (all from Burial 4), and 2 teeth were carious (in a mandible found near Burial 2). The juvenile jaws provided 36 positions, containing 13 permanent teeth and 16 deciduous teeth, for study. Two of the permanent teeth were carious (both lower second molars of Burial 3). The proportions of dental disease (caries and ante-mortem tooth loss) are obviously quite high in this group, but it would be wrong to make any conclusions about this because of the small quantity of material available, and the fact that pathological changes were confined to only three individuals out of the eight represented.

Pathology

A number of interesting pathological conditions were encountered in this small group. Skeleton 1, a female aged c 16–18, was affected with two pathological lesions. Spina bifida occulta (a congenital defect in which the sacral canal remains open) affected the second to fourth sacral segments (the fifth was not available for study), and possibly the first, although this was damaged. This fairly common genetic defect was unlikely to have had a detrimental affect on the life of this girl, and it is probably that she would have shown no signs of having such a condition. The open neural canal would have been protected by cartilage in life. A cartilaginous exostosis, or osteochondroma, was present on the posterior surface of the metaphysis of the right tibia, just below the epiphyseal plate. This is a well-known and frequently occurring position in which to find this benign bone tumor. Although there may have been some pain associated with a slight lump under the skin, the tumour would not have caused any problems had the girl

lived, since it would probably have stopped growing once the epiphysis had fused (Cotta 1980).

The old man, Burial 4, showed a number of pathological and degenerative changes on his bones. Schmorl's nodes (a sign of physical stress on the spine) were present on the T6–L4 vertebrae. Osteophytosis (bony lipping) of the vertebral bodies affected the C4–7, T5–12 and L1–5 vertebrae. These osteophytes were large and rounded on the T6–S1, and had fused on the 9th to 12th thoracic vertebrae, a condition known as ankylosing hyperostosis. Although this would have caused some stiffness in life, the fact that the disc space was intact and that the posterior articular facets remained unfused means that the almost total immobility of the spine associated with ankylosing spondylitis (a more well-known but less common complaint) would not have occurred.

Ankylosing hyperostosis is often associated with bony growths on other joints and at ligamentous attachments throughout the skeleton, in which case the diagnosis is modified to one of 'DISH' (diffuse idiopathic skeletal hyperostosis) to encompass all the observed changes. The calcified thyroid and costal cartilage seen in this individual could be a symptom of this disease, and it was probably the case of new bone formation seen around most of the joints, in particular the hips, elbows and shoulders. Unfortunately, both knees were inaccessible.

Osteoarthritis was seen on the articulating surfaces of the bodies of the 4th–7th cervical vertebrae, with new bone formation (sclerosis) and pitting. The temporo-mandibular joints were also affected (perhaps not surprisingly in a toothless individual), as were the lateral ends of the clavicles, the lateral ends of both scapula acromions, and both scapular glenoid cavities. The neural arch of the third lumbar vertebra was detached and showed signs of arthritic change (pitting, lipping).

A few small fragments of new bone in the maxillary sinuses suggested that the individual was also affected by sinusitis to a minor degree. The skull base of this individual appeared slightly asymmetrical, the left occipital condyle being larger and protruding down further than the right. This might be suggestive of a slight scoliosis of the spine, which may have been one case of the large number of degenerative spinal lesions seen in this skeleton.

Evidence of periostitis, an infection of the outer layer of bone, was seen in an unstratified adult right tibia, but a more chronic bone infection was observed in a left tibia and part of a fibula from the west edge of the excavation. The tibia was greatly enlarged around the centre of the shaft, although

the cortical bone was very thin, and there was a possible cloaca forming inside the bone near the proximal end. Marked graining and new bone growth was present over the surface of the shaft. The appearance of the bone, together with the presence of a similarly affected fibula, is consistent with a diagnosis of osteomyelitis.

Discussion of the skeletal evidence

A limited analysis of this group of skeletons was possible, but only excavation and examination of the entire cemetery would allow detailed study of the medieval and later population of Selborne. However, it is interesting that half the individuals represented by the bones found in this small section of the churchyard were under 18 years of age when they died. This could be explained by the proximity to the church, since burial of children around the church building is known at other sites. Alternatively, the Yew itself might have provided some sort of burial focus.

The presence of an individual of arguably high status (Burial 5, cofined) might also suggest preferential burial in this area of the churchyard. However, since we know nothing of the contemporary residents of the rest of the burial ground, it is impossible to know whether this small group forms a representative sample of the whole, or whether it is a special case. Family burial plots might be another reason for clustering of burials. This is hinted at by Gilbert White in his letters (see below), although of course by 'ancestors' he is not necessarily implying genetically related predecessors. Preference for the south side of the church is a more obvious cause.

Unfortunately, it was not possible to suggest even tentative family relationships for these skeletons (although Skeleton 1 and Skeleton 4 shared congenital disorders of the spine, spina bifida occulta and detached neural arch respectively, which might suggest some genetic link). All that can be said with any certainty is that one individual was of average height for the period, and had the normal bone diseases associated with old age, whilst three others died of unknown causes before reaching adulthood. Nothing seen in this group of skele-



Fig 5. Excavations in progress – St Mary's Church tower in the background

tons was particularly unusual for an archaeological population from a medieval churchyard.

CONCLUSIONS

All the *in situ* burials were East–West oriented Christian burials in a churchyard which is presumed to have been in existence since Domesday (1086), and was certainly, from architectural evidence, in being by the 12th century. The deepest, and stratigraphically earliest burial (5) was of an adult male apparently in a coffin. Sherds of pottery, particularly a green-glazed strap handle, from the fill,

suggest a date of c 1200–1400 AD. This grave cut into the area of undisturbed sub-soil which is presumed to have been occupied by the Yew Tree at this time. The tree could have had a diameter of 1.0 m (3 ft), suggesting an age of 2–300 years. An age of 1000 years or more therefore seems possible for the Great Yew. It should also be noted that the fill of Grave 5 contained disarticulated human bones. Clearly it was not the first grave in this general area.

The other burials and the disarticulated bones, from at least twenty individuals, represent additional medieval and later burials. The disturbed nature of many of the finds is not surprising; space was at such a premium in churchyards, particularly on the south side of the church, that re-use could take place within a few generations. Indeed Gilbert White himself records in the 'Antiquities of Selborne' letter IV:

'Considering the size of the church and the extent of the Parish, the church-yard is very scanty;

expecially as all wish to be buried on the South-side which is become such a mass of mortality that no person can be there interred without disturbing or displacing the bones of his ancestors.'

ACKNOWLEDGEMENTS

Our thanks are extended to Rev James Anderson and to the Chancellor of the Winchester Diocese for permission to carry out the excavation work. Ms Jenny Streeter of the Gilbert White Field Study Centre provided much appreciated hospitality and other facilities. Irena Lentowicz and Phil Copleston of the Norfolk Archaeological Unit gave advice concerning the pottery, and Dr June Chatfield provided the Gilbert White reference. Merrist Wood College, under the guidance of Mr John Whitehead did all they could to assist our investigations and Mr Allen Meredith told us much about the place of the Yew in folk-lore. Last but by no means least, the people of Selborne provided much encouragement with their genuine and sympathetic interest.

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Authors: D Allen, and S Anderson, Hampshire County Museum Service, Chilcomb House, Chilcomb Lane, Bar End, Winchester.

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