

four lecturers who will be concerned with the teaching of archaeology: Dr D. C. A. Shotter, a Roman specialist with interests in architecture and numismatics, Mr M. J. Osborne, a Greek specialist with particular interest in epigraphy, Dr T. W. Potter, an Etruscan and Roman archaeologist and Mr H. M. Blake, a medieval archaeologist with research interests in North Italy. In addition, there is a graduate assistant, Mr D. M. T. Longley, who is concerned primarily with draughtsmanship. Lancaster is also fortunate to have a number of specialists in other departments who will contribute to the archaeological courses, including Dr D. J. Blundell, a geophysicist who has carried out some very successful surveys with the proton magnetometer and resistivity meter on sites in the North-West, and Dr Frank Oldfield, who analysed the pollen samples from the neolithic site of Storrs Moss.

The Lancaster courses, which include both a Part I and Part II, will lead to either a Combined Major or Minor degree in Archaeology. With further staff appointments, it should be

possible to offer a Major degree. The scope of the courses will lie primarily in later prehistory, Classical and medieval archaeology, particularly in the Mediterranean, and the main emphasis will be upon a field archaeological rather than art historical approach. Already, this Easter, Lancaster has participated in a rescue excavation mounted by the Italian authorities on a major Etruscan, Roman and medieval site in the Viterbese. However, it is also felt that there should be a strong commitment to fieldwork in North-West England and this academic year rescue operations have been undertaken at three Roman sites, Bowness-on-Solway, Burrow-in-Lonsdale and in Lancaster itself. Other projects are planned including a large-scale research excavation of the Roman fort at Watercrock, near Kendal, and a major field survey of the Lune Valley. Laboratories are being set up at Lancaster to deal with the material from this fieldwork, which should do something to extend our knowledge of what is still an imperfectly explored region.

T. W. POTTER

Cropmarks near the Sutton Courtenay Saxon site

PLATE XXVII

During the preparation of a survey of cropmarks in the (new) Oxfordshire Upper Thames Valley (Benson and Miles, 1974), several photographs taken by Professor St Joseph in 1962 attracted particular attention, since they appeared to add new dimensions to the well-known and much-discussed Saxon settlement at Sutton Courtenay, excavated by E. T. Leeds between 1921 and 1937. (Leeds, 1923, 1927, 1947; Radford, 1957).

The site of these excavations and the area to the south were photographed by Major G. W. Allen in 1933 and 1934, revealing extensive prehistoric features, notably the Drayton Cursus with a terminal to the south-west and a number of ring ditches. These photographs also showed the gravel quarrying which prompted Leeds's work on the Saxon site.

Notwithstanding the clarity of the cropmarks of the cursus, ring ditches and irregular periglacial features on Allen's photographs, no features which could be interpreted as of

Saxon origin were identifiable. Leeds discussed the area of prehistoric features separately from the area of his Saxon site (Leeds, 1934a,b). Re-examination of Allen's photographs provides no apparent trace of Saxon features, but the photographs by St Joseph are much more revealing and two of these are published here (PL. XXVII).

PL. XXVIIa taken from the south-west, gives an impression of the setting of the site. The cropmarks (centred SU 486506) lie some 1.2 km. south-east of Drayton village and occupy a level portion of the Summertown-Radley gravel terrace, at a height of 175' OD. This terrace falls away to the north and north-east with a distinct scarp down to the wide plain of the Thames. (The river may be seen indistinctly at the very top right edge of PL. XXVIIa.) This area, despite the work of the Thames Conservancy, was extensively flooded at the time of a recent visit (February 1974). To the south the level terrace containing the

cropmarks is bounded by the meandering Mill Brook (PL. XXVIIa bottom right); to the north-east by the scarp of the gravel terrace; to the north-west by a small stream. These boundaries thus define a roughly wedge-shaped plateau, now bisected by the north-south road to Milton and the east-west road, Drayton East Way. Leeds's Saxon site effectively occupied the north-eastern part of this wedge, spreading also into the area of the modern road crossing, and appears on the photograph as scrubland over the backfilled gravel pits, though much is now occupied by buildings. Leeds's excavations were in Sutton Courtenay parish, but the cropmarks to the south-west are in the parish of Drayton, the boundary running for the most part along Drayton East Way. In this note the whole complex is referred to as the Sutton Courtenay/Drayton complex.

It is evident from the photographs that the gravel terrace here provided a focus for Neolithic and Bronze Age activity. Amongst these cropmarks, however, a series of rectangular enclosures may be seen (PL. XXVIIb centre) in two alignments, forming an 'L' shape. The plan (FIG. 1) has been drawn up by eye from oblique photographs; the scale, orientation and location of the cropmarks should not be treated as exact.

The upper part of the long arm of the 'L' is formed by the largest of the enclosures (A), overlying (?) a ring ditch. The enclosure is c. 25 by 8 m. with its long axis east-west. West of this is a smaller rectangle (B), c. 9 by 6 m. on the same alignment and axis. The north-west corner of this enclosure appears to impinge upon the east ditch of the cursus. The foot of the 'L' is formed by three rectangular enclosures lying within the cursus. Enclosures C and D are both c. 9 by 6 m. with an east-west long axis. The north-west corner of C appears to overlap a smaller rectangular enclosure, though the sequence is not clear. South of these the end of the 'L' is formed by a rectangle (E) c. 16 by 6 m., aligned on C and D, but with a north-south long axis. The cropmarks suggest that E may have an internal subdivision at its northern end, or that it may coincide with another enclosure of a different period. There is evidence also for an entrance on its east side.

In addition to these enclosures, the prehistoric features and frost cracks, the photographs show an irregular scatter of small sub-rectangular or subcircular marks stretching across the whole of the gravel terrace as far south as Mill Brook, where concentrations are most obvious. Smaller marks are distributed amongst the rectangular enclosures, with one lying inside enclosure B and in two cases, C and B, apparently impinging upon them. The sizes of the subrectangular marks are difficult to estimate, but they appear to range from about 3-5 m. in length.

It is suggested that both the rectangular enclosures and at least some if not all of the small subrectangular marks may be assigned to the Saxon period. As Radford has emphasized (Radford, 1957), Leeds's excavations were carried out under salvage conditions and the full extent of the site was not established. Thirty-three 'house-sites' (FIG. 1) were planned, consisting mostly of sunken huts averaging in size 3 m. by 2.75 m. The small subrectangular cropmarks plotted here conform to this size.

Interpretation of such marks as *Grubenhäuser* must be somewhat speculative and often depends upon their association with, or proximity to Saxon settlements and cemeteries known from excavation. Given cropmarks and air photographs of sufficient quality, the characteristic shapes of *Grubenhäuser* and their dispersed nature (compared, for example, with groups of Iron Age pits) are now sufficiently well known (St Joseph, 1972) to encourage positive interpretation of such sites from air photograph evidence alone. More than 30 new sites have been suggested by such means in the Oxfordshire Upper Thames Valley (Benson and Miles, 1974). Locally, for example at Barrow Hills, Radley and Bishop's Court, Dorchester, recent excavations have confirmed aerial identifications (Avery and Brown, 1972; Benson and Miles, 1974, 57, 68).

The rectangular enclosures may be best interpreted as representing timber buildings with closely set post-holes, perhaps in a continuous trench. The whole layout resembles the arrangement at Charlton, Hants (*Current Archaeology*, 37, 1973, 59). Structures AZ1 and

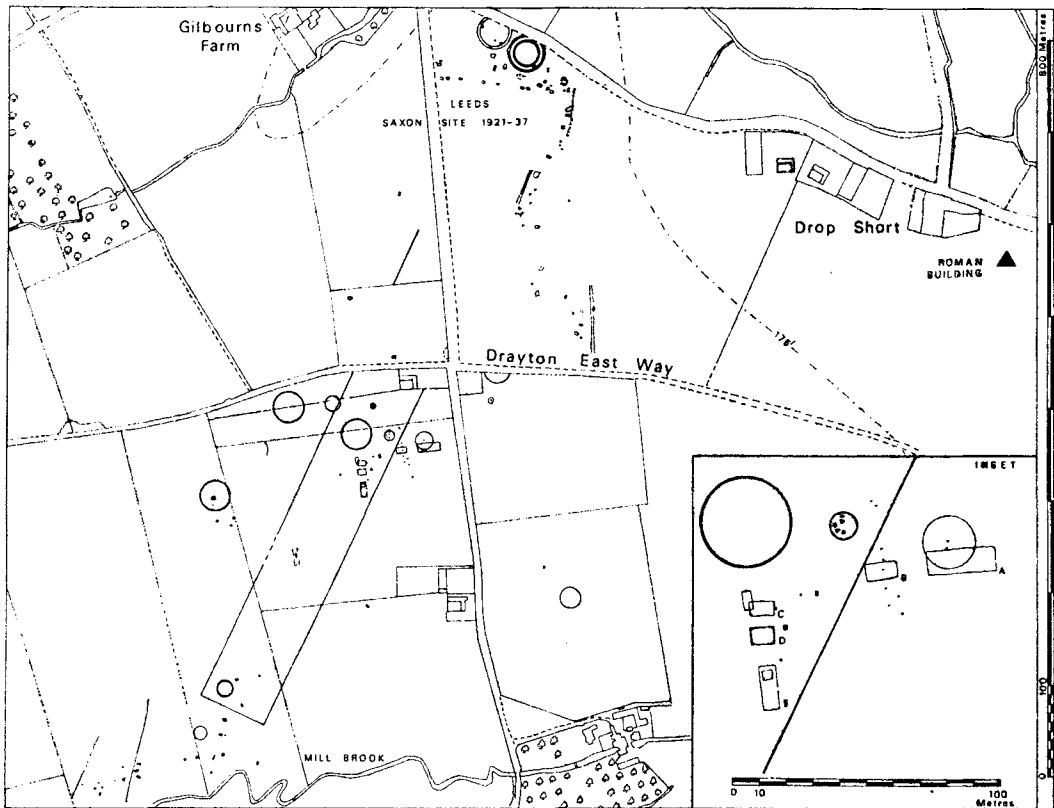


Fig. 1. Cropmarks around the Sutton Courtenay Saxon site. Central group insert

At that site match enclosures E, B, C and D very closely in size. The unusual feature at Sutton Courtenay/Drayton is enclosure A, which is much larger than any buildings at Charlton. Another parallel is the site at Hatton Rock, near Stratford-upon-Avon, where a combination of the evidence of aerial photography, documentary sources and observation, and finds made during the cutting of a pipe trench suggest the existence of a Saxon palace (Rahtz, 1970; Hirst and Rahtz, 1973). Features here are of a similar range of sizes and of a similar overall orientation. Feature K (about 24 by 9 m.) is closest to the Drayton enclosure A (c. 25 by 8 m.). The aerial photographs of Yeavinger show cropmarks (St Joseph, 1966, Pl. 61) some of which bear a close similarity to the rectangular enclosures of Sutton Courtenay/Drayton, and have since been proved by

excavation to be timber buildings. Radford has also drawn our attention to Warendorf with its longhouses with sizes ranging from 14–29 by 4·5–7 m.

Whether Leeds's Saxon site, the rectangular enclosures and the other possible *Grubenhäuser* distributed over the gravel terrace, can be regarded as a part or perhaps the whole of one unitary settlement cannot yet be determined. The post-hole structures, partially recorded by Leeds (House XXII and House XIV) may suggest that the northern section of the complex should be viewed as a separate entity, perhaps of an earlier period than the 'L' shaped arrangement of substantial timber buildings to the south-west. Radford, in his perceptive discussion of Saxon buildings, drew attention to the 'poverty stricken nature of the finds from Leeds's site' (Radford, 1957), but this

need not be a true reflection of the wealth or status of the inhabitants. It is worth noting that the Saxon cemetery at Milton, only 650 m. south of Mill Brook, produced rich jewellery (Peake, 1931, Fig. 27), but it is not possible at present to associate these finds with one or indeed any parts of the Sutton Courtenay/Drayton settlement complex.

Whatever the function and status of the individual sites within the complex, we can now point here to an intriguing geographical relationship between a range of different types of structure—*Grubenhäuser*, post-hole structures and large timber buildings, a relationship which should be elucidated by excavation. The discoveries must also be viewed against the background of the importance of the Upper Thames Valley at the time of the consolidation of the West Saxon monarchy in the later sixth century, and the continuing political importance of the region into the late seventh century. Work on relevant Saxon charters and on the later manorial boundaries and settlement patterns may help to elucidate problems of the cropmark evidence presented here. At the beginning of the Saxon period too, attention needs to be paid to the relationship of the complex to the nearby Drop Short Roman villa—a geographical relationship which is common to several Saxon and Roman sites in the Upper Thames Valley. Here Professor St Joseph has provided a new context within which Leeds's Sutton Courtenay site—once

the archetype of a squalid Saxon village—can now be reviewed yet again.

DON BENSON and DAVID MILES

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Pollen counts in North China

Professor Richard Pearson of the Department of Anthropology and Sociology, University of British Columbia, has sent us the following note on pollen counts and the North Chinese neolithic environment. Professor Pearson has previously written for us 'Radiocarbon dates from China' (1973, 141–3).

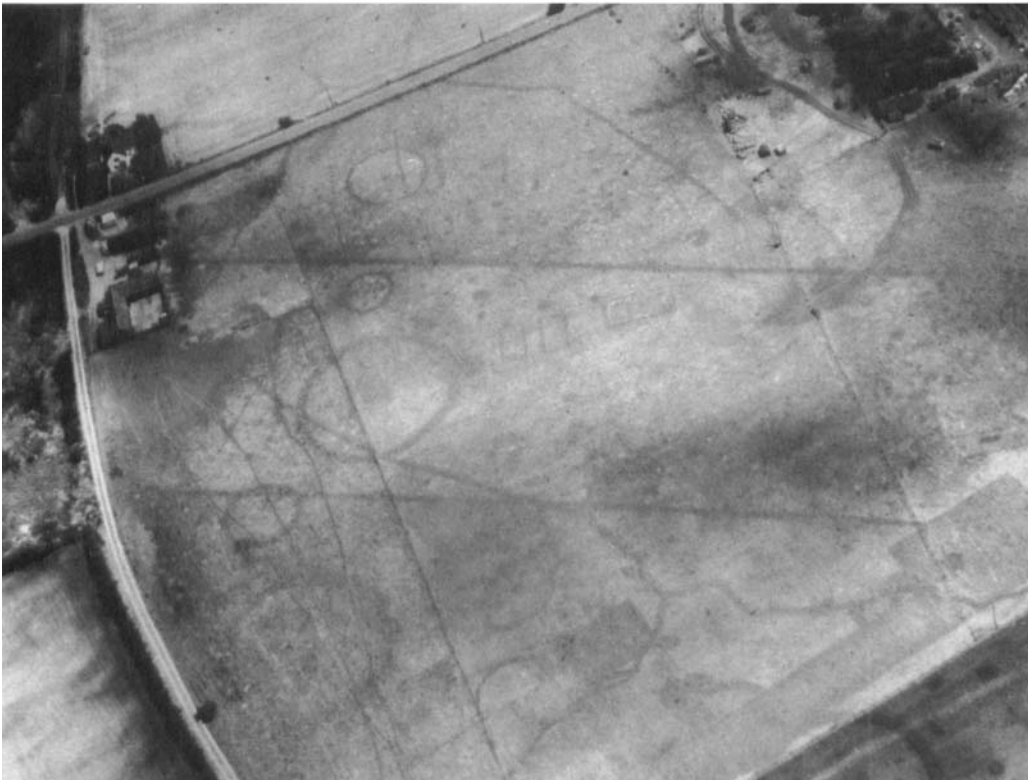
On the basis of remnants of natural vegetation, Wang (1961) has divided the vegetation of China into four major formations,—the montane boreal forest formation, the deciduous broadleaved forest formation, the evergreen broadleaved forest formation, and the grassland

desert formation. These are vegetation types, built on records of observations in many restricted areas. 'These generalized types embody the essential features of all of the individual observations but represent the exact conditions of none' (Wang, 1961, 9).

Early agricultural activity has been ascertained for two of the forest formations, the deciduous broadleaved and the evergreen broadleaved (Ueyama, 1969). Within these major formations, a number of vegetation types have been isolated, one of these being the deciduous broadleaved forest dominated by



a



b

PLATE XXVII: CROPMARKS NEAR THE SUTTON COURTENAY SAXON SITE

(a) Cropmarks SSE of Drayton. General view of sites from SW, R. Thames at top right. Possible Grubenhäuser centre foreground. (b) View of site from NW showing rectangular enclosures

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