

Recent Fieldwork at Maiden Bower

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SUMMARY

A geophysical survey of Maiden Bower near Dunstable has revealed a previously unsuspected prehistoric enclosure within the interior of the Iron Age hillfort. Previous discoveries and the recent survey work illustrate a long sequence of often quite intensive activity at the site, complementing a picture which has been emerging through rescue and salvage excavations along this stretch of the Chiltern ridge since the turn of the century.

INTRODUCTION

The Iron Age hillfort of Maiden Bower is situated on a plateau overlooking the northern edge of the Chiltern scarp, at a height of 150 m OD, 2.5 km to the north-west of Dunstable (NGR SP 996225). The hillfort presently survives as a single circuit of bank, 220-250 m in diameter and up to c 3 m in height. All surface traces of the accompanying external ditch have been obscured by ploughwash. The erosion of a quarry edge has removed much of the Iron Age ditch and bank along its north-western side. A break in the circuit on the south-eastern side marks an original entrance; other gaps in the bank being of relatively modern origin (Smith, 1915).

PREVIOUS EXCAVATION AND FIELDWORK

The monument has been the focus of sporadic antiquarian and archaeological interest since the 17th century (Camden, 1695, 289; Stukeley, 1776, 115). Between the 1890s and 1915, Worthington George Smith recorded several prehistoric and Romano-British features in the process of destruction during the encroachment of a chalk quarry upon the north-western side of the site. Amongst these were a small early Roman cremation cemetery (Simco, 1984, 107) and at least three lengths of segmented ditch, which produced material subsequently recognized as of earlier Neolithic date (Piggott, 1931, 90-2; 1954, 21).

A limited excavation was undertaken around the south-east entrance of the hillfort in 1913 by Worthington Smith and the then owner of the site, Mr Dan Cook (Smith, 1915, 154-160). Several features were located, including possible post pits and a palisade slot, which probably formed the

western wall of a timber gateway (Smith, 1915, Fig 5). A substantial pit, 4.3 x 2.5 m, was found centrally within the entrance immediately to the north. Its relationship to the other features is unclear from the published account, but the presence of tile and iron nails within its fill could indicate a post-conquest rather than Iron Age date. The disarticulated remains of around 50 individuals were recovered from the lower fill of the pit, clearly forming a deliberate deposit. An interpretation of this feature as the mass grave of battle victims (Hawkes, in Matthews, 1976, ix) seems premature, especially given the disarticulated nature of the human remains which implies re-burial. Similar charnel deposits belonging to the final Iron Age or post-conquest period are known from hillforts in Wessex, and seem more likely to be related to funerary or boundary maintenance rituals than evidence of warfare (Sharples, 1991b, 82).

Continued weathering of the edges of the disused chalk quarry has exposed further longitudinal and oblique sections of the bank and ditch of the Iron Age hillfort, in addition to underlying Neolithic features (Matthews, 1976).

Rescue excavations by C L Matthews and others between 1937 and 1951, near the northern entrance to the site, uncovered several inhumations lying within the primary silts of the hillfort ditch, along with a crouched burial surrounded by chalk blocks at the base of an earlier feature of possible Neolithic or early Iron Age date (Davies 1956, Matthews, 1976, 160-162).

Aerial photographs in the possession of the Manshead Society appear to show a series of small curvilinear cropmarks in the northern and south-eastern area of the hillfort interior. A large trapezoidal feature (c 80 m in length), aligned north-east - south-west can also be identified on the same set of photographs, situated centrally within the hillfort (cf. Matthews, 1976, Pl. 1). The cropmarks appear to represent archaeological features. However, a degree of caution should be exercised in their interpretation as such since they apparently follow the pattern of cultivation, they appear only on photographs taken on a single occasion, and similar features were not observable during a recent geophysical survey.

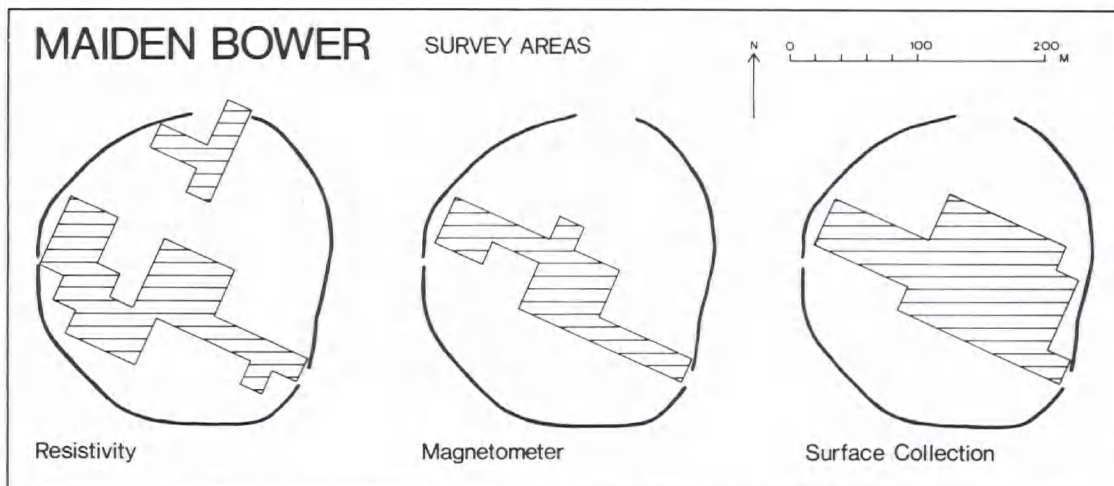


Fig 1. Location of the geophysical survey and fieldwalking areas.

THE NEOLITHIC ENCLOSURE

The possible existence of an earlier Neolithic enclosure underlying the Iron Age hillfort was first entertained by Curwen in 1930, largely on the evidence of finds from the site published in the *Victoria County History* (Curwen, 1930, 41). A year later, Piggott recognized and published surviving earlier Neolithic pottery from the segmented ditch sections excavated by Smith between 1897 and 1900 (Piggott, 1931, 90-2, Fig. 6).

In a study of regional variation in causewayed enclosure morphology Palmer (1976, 185) listed the site under his category of 'suspect or uncharacteristic interrupted ditch enclosures'. However, the character and length of the recorded segmented ditch segments, along with the range of material recovered from them, remains entirely compatible with their interpretation as part of an early Neolithic enclosure.

Amongst material from the Worthington Smith collection in Luton Museum are surviving earlier Neolithic sherds of Abingdon/Mildenhall type (Smith, in Matthews, 1976, 9), fresh flintwork (including scrapers, knives and microdenticulates), antler, animal bone (domestic and wild) and human cranial fragments from the ditches of the causewayed enclosure. An antler comb, comparable to early Neolithic examples from Windmill Hill (Smith, 1965, 125-7), is illustrated in the *Victoria County History* (VCH 1904, 169, Fig. 60). Drawings of other pieces of splinter-and-groove worked antler, including part of a second comb, survive in Smith's scrapbooks in Luton Museum,

though the objects themselves cannot be traced.

SURVEY WORK, OCTOBER 1991

Limited fieldwork was undertaken at Maiden Bower by the authors in October 1991, with the generous assistance of a grant from the Robert Kiln Trust. The primary aim of the survey was to locate and establish the extent of surviving features belonging to the earlier Neolithic enclosure. In addition it was hoped to gain an insight into the character of the later prehistoric and Romano-British activity at the site. Non-destructive survey techniques (geophysics and surface collection) were employed as an economical and relatively rapid means of examining the range and sequence of activity presented by the monument.

GEOPHYSICAL SURVEY

The geophysical survey was conducted with a Geoscan FM36 Fluxgate Gradiometer and RM4/DL10 Resistivity equipment. The survey was based on 20 x 20 m grids. Twenty-one grids (0.84 ha) were measured with the Gradiometer, and 34 grids (1.36 ha) with the resistivity. Most grids were measured with both sets of equipment, and about 1.48 ha of the hillfort was surveyed (approximately 32% of the total area) (Fig 1).

GRADIOMETER. Little was found using the Gradiometer. This is interesting because the equipment has generally produced good results on chalk sites. The magnetic survey showed few signs of the features recorded by the resistivity. The most

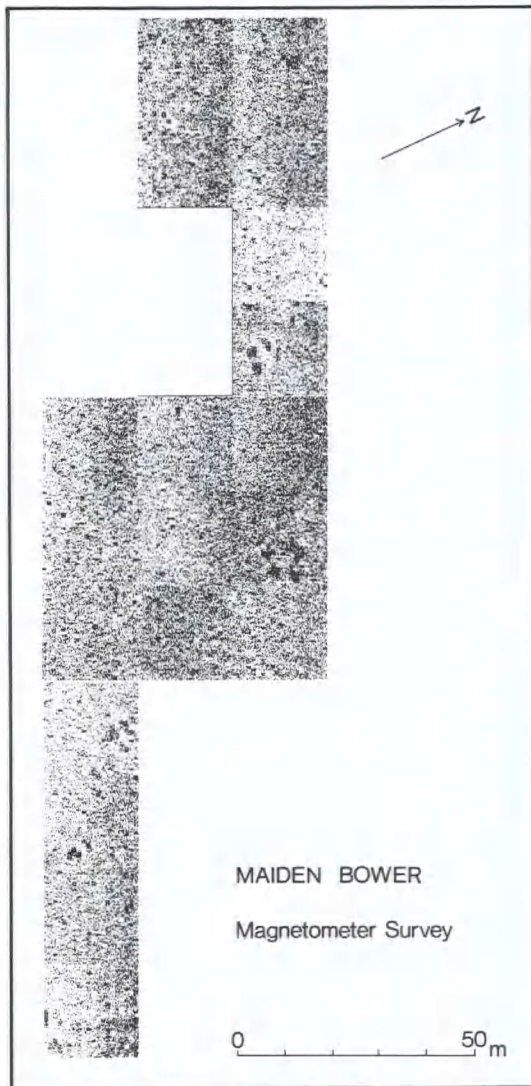


Fig 2. The magnetometer survey.

visible features were three small groups of anomalies. Each consisted of a central negative area and a surrounding ring of three to five positive blips. Each feature covered an area of between 5-8 m square (Fig 2). These anomalies look most unlike the normal signature of buried iron, and may represent clusters of pits, or areas of burning.

RESISTIVITY. There had been some rain in the week preceding the survey, and it rained once during the course of the survey. The soil was very dry, and one effect of this was a higher resistance

reading when taking a measurement on ridges left by ploughing. These higher readings explain some of the lines running diagonally across the transects.

Provisionally, a number of features have been identified (Figs 3, 5):

1. The most obvious feature located was a band of low resistance which consistently ran *c* 25 m behind the hillfort bank (Fig 3). It was located in three different areas, and probably 40% of its circumference was traced. This appears to be an inner ditch with a diameter of *c* 180 m. The feature had an interior edge marked by a sudden rise in resistance. Generally, the exterior edge was also distinct, but sometimes rather amorphous (principally opposite the south-east and northern entrances). There is no obvious entrance through the ditch in the areas surveyed, but there were some apparent breaks. It is not clear if these are genuine or merely the result of masking by later features.

The site is ploughed in a series of circuits immediately inside the hillfort bank, and then transversely on a roughly north-south axis. The circumferential ploughing may explain why the feature has not been recognized on aerial photographs, since it would run concentrically with the line of cultivation. Given the strength of the feature it seems highly unlikely to have been produced by such ploughing.

The feature could represent a quarry for the hillfort bank. However, the gap of *c* 25 m between the inner ditch and the bank seems excessive; the feature appears too regular to have simply been a quarry, and a substantial external ditch is known to accompany the hillfort bank. It is also worth noting that no gap is observable in the inner ditch corresponding to the original south-east entrance of the hillfort.

2. Most of the printouts show an almost cellular pattern, with frequent, roughly circular, low resistance areas of 4-9 m square (Fig 4). These are probably pits or scoops. Several especially distinct 'pits' seem to form a line running down the centre of the site on a north-east - south-west axis. However, it is possible that these features are distinct because of a drop in the background resistance, in which case the line may be fortuitous. Comparison might be made with the recently published geophysical survey of the interior of Maiden Castle, Dorset (Sharples, 1991a, Fig. 30), where the presence of numerous pits and hollows is indicated by a similar chequer-board pattern.

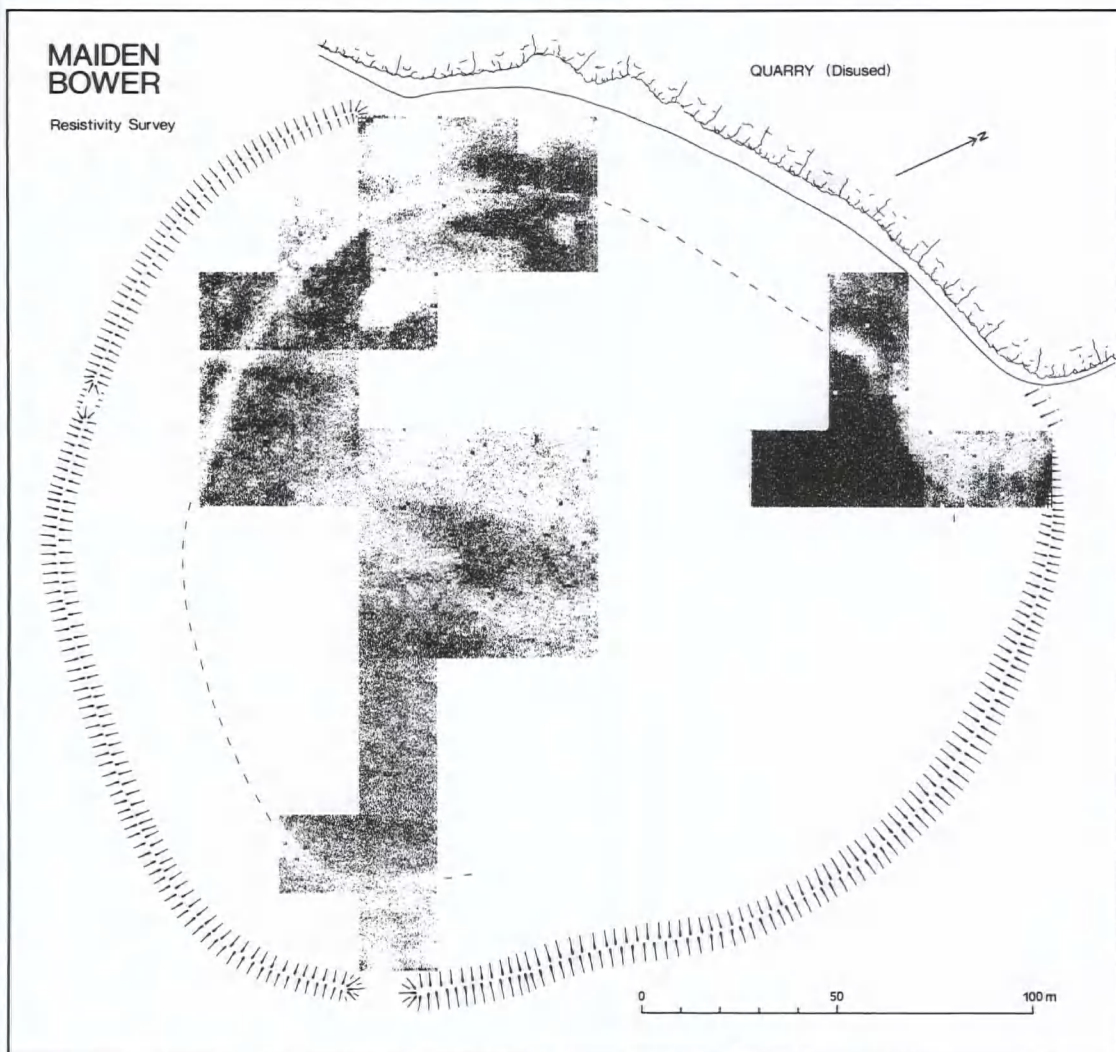


Fig 3. The resistivity survey.

3. The western-most grids show several high and low resistance linear features with very sharply defined edges. Unfortunately, the overall effect is difficult to make sense of, but may suggest the remains of wall trenches and rubble spreads belonging to a building.

4. There are a large number of features in the central grids which may be man-made, and which could represent further lengths of ditch.

Other, very broad, features are possibly of geological origin. One high resistance linear feature on an east-west axis could mark a metallised surface.

5. Against the edge of the Iron Age bank there were a number of low resistance areas, tentatively identified as quarry pits related to the hillfort.

6. In the northern-most grids there was a sharply defined linear feature which approximates to the position of a medieval or post medieval trackway, leading to the Sewell Greenway, observed by Smith (1915, Fig 2).

7. An area of low resistance inside the south-east entrance appears to agree with the site of Dan Cook and Worthington Smith's excavations of 1913 (Smith, 1915).

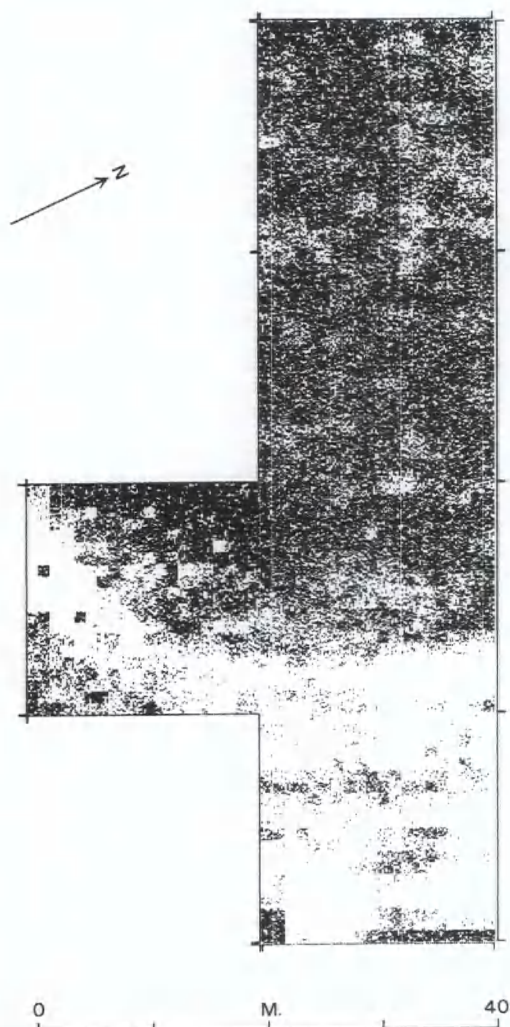


Fig 4. Detail of the south-east area of the resistivity survey showing possible pits.

FIELDWALKING

Fieldwalking followed the grids laid out for the geophysical survey. One metre wide transects, spaced at 10 m intervals and divided into 10 m lengths, served as the basic collection units. The area covered comprised a 10% sample of 15,200 square metres across the interior of the hillfort (Fig 1). Completion of the 100 m wide transect was prevented by sowing of the field during the survey.

All man-made material was collected, with the exception of post-medieval pottery, glass, tile, and so on. A total of 465 pieces of prehistoric worked and burnt flint, and 95 sherds of Iron Age and

Romano-British pottery were recovered. The greatest density of worked flint occurred towards the centre of the enclosure, roughly corresponding to a band running south-west to north-east. A secondary concentration was recognized at the western end of the transect, in close proximity to the area of the exposed Neolithic ditch sections in the quarry edge (Fig 6a). Diagnostically early Neolithic flintwork clustered around the eastern end of the transect. The distribution of later prehistoric and Romano-British pottery shows a light coverage throughout the area walked, though with a particular concentration in the western quarter of the site (an area where the geophysical survey suggests the possibility of a building) (Fig 6b).

The relative paucity of worked flint and pottery on the eastern edge of the transect, around the headland behind the Iron Age bank, may be a product of the increased depth of ploughsoil in this area.

The lithic assemblage shows both earlier Neolithic and later Neolithic or Early Bronze Age affinities (Table 1). The small earlier Neolithic component (perhaps contemporary with the causewayed enclosure) includes a number of carefully struck narrow flakes and blades, several core rejuvenation flakes, blade cores, three fragmentary leaf-arrowheads and a possible laurel leaf (Fig 7). Over 300 hard-hammer struck flakes and a transverse arrowhead (Fig 7) can be assigned to an intensive later Neolithic and possible Bronze Age phase of activity. Cortical core preparation flakes account for only 5% of the debitage, indicating, together with the relative frequency of rejuvenation and trimming flakes, an emphasis upon the final stages of core reduction. This would be more in accordance with a domestic origin for the assemblage, prepared cores having been brought in from an off-site quarry or surface source and then worked down and discarded on-site.

The pottery recovered from fieldwalking was extremely fragmentary, making identification difficult. Sherds in Iron Age, 'Belgic', Romano-British and Medieval fabrics were present. Romano-British sherds account for around 90% of the pottery recovered. Locally produced wares in sand and grog tempered fabrics predominate, though there are also sherds from shell tempered vessels and six small fragments of samian.

Identifiable rims are illustrated in Fig 7; 7.B13, 7.C20iii and 7.D20 belong to first century 'Belgic' forms, and 7.A19 and 7.F12 are from grooved-rim jars of first or second century date. A simple rim in

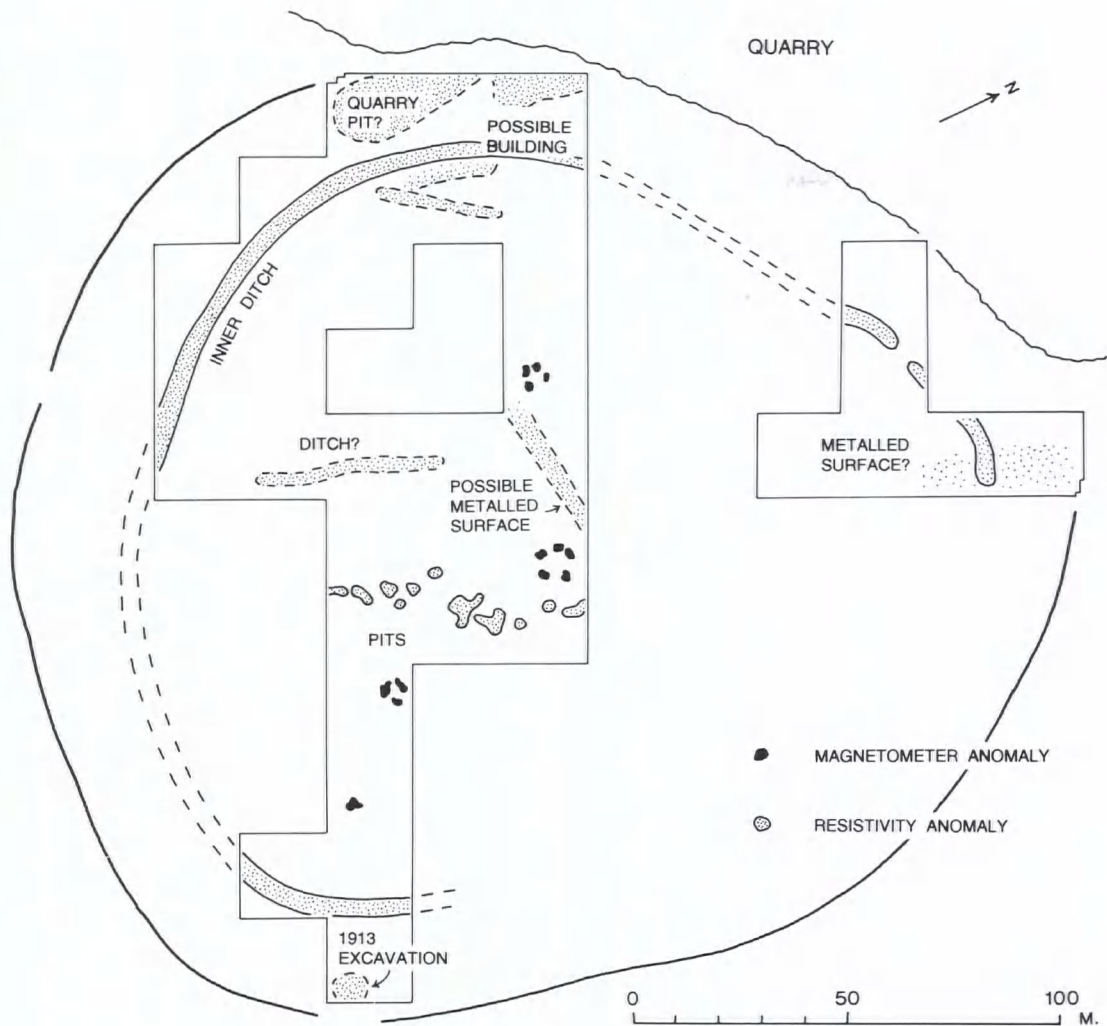


Fig 5. Interpretation of the geophysical survey.

a sandy fabric (7.C20i) compares with vessels of Matthews (1976) ceramic groups 3 and 4, and is probably of middle Iron Age date. The relative paucity of later prehistoric sherds is almost certainly due to their poor survival in the ploughsoil, rather than being a true reflection of past depositional practices.

DISCUSSION

Undoubtedly, the most important result of the survey is the discovery of a substantial earlier enclosure within, and running concentric to, the defences of the Iron Age hillfort. Without excavation it remains impossible to date this feature,

beyond the observation that it pre-dates the hillfort, and therefore can be accommodated somewhere within a span from the earlier Neolithic to the earlier part of the Iron Age.

Various possibilities for date and function can be proposed. The inner ditch could represent an earlier hillfort, of later Bronze Age - early Iron Age date, which was superseded by the present earthwork. Parallels for such a sequence can be cited from Ram's Hill, Berkshire, Maiden Castle, Dorset, Figsbury and Yarnbury, Wiltshire, for example (Cunliffe, 1984). However, in each of the examples cited there is a triple or quadruple increase in area in the second phase. With Maiden Bower the

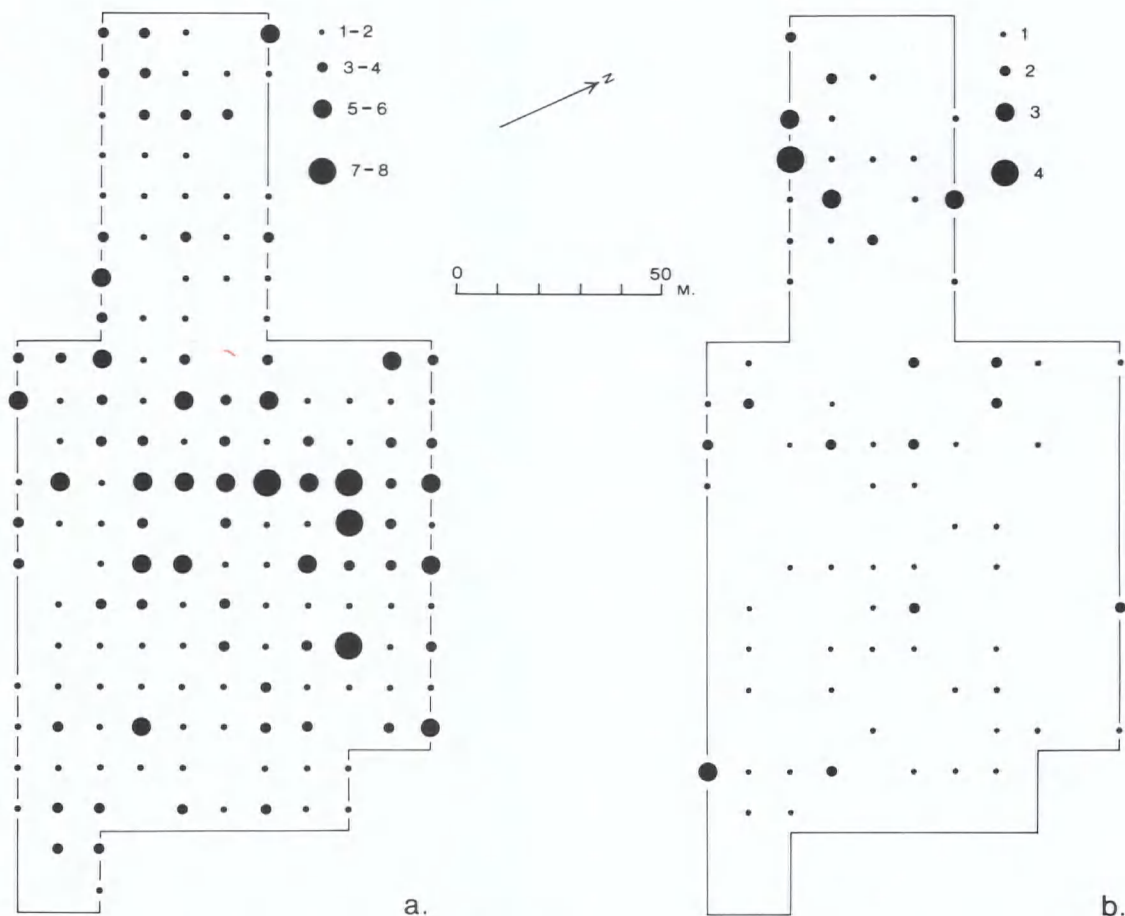


Fig 6. Distribution of (a) worked flint and (b) later prehistoric and Roman pottery from fieldwalking.

difference is not as marked; the surviving bank encloses roughly 4.9 ha, compared with 2.7 ha contained within the inner ditch.

Regional patterns may be more significant. Support for an early Iron Age date for the inner ditch could be adduced from the sequence at two other Chiltern hillforts - Boddington Camp near Wendover, and Wilbury Hill near Letchworth - both of which developed from earlier, less substantial, enclosures (Dyer, 1965, 14; Moss-Eccardt, 1964, 46).

Alternatively, the earlier ditch may be a surviving element of the causewayed enclosure complex partly destroyed by the chalk quarry on the north-western side of the site. The survey does not show any definite breaks or causeways in the inner ditch circuit, though narrow gaps would not necessarily be picked-up by the survey. It is worth

noting that the area enclosed by the ditch (c 2.7 ha) would be comparable with that defined by the earlier Neolithic enclosures of Etton and Great Wilbraham, Cambridgeshire (Evans, 1988, 143).

Sections of Neolithic ditch are still visible in the quarry edge, though it is extremely difficult to establish the angle at which they are aligned. Consequently, their relationship to the features recorded by the geophysical survey must remain uncertain. The possibility must be entertained that the causewayed enclosure was situated in the area outside the Iron Age hillfort, to the north-west, and that almost its entire circuit, with the exception of small surviving remnants visible in the quarry face, has been destroyed. No continuation of the ditches seen in the quarry edge was noted in the geophysical survey. If this is indeed the case, then the excavation of the surviving Neolithic ditch sections, which are

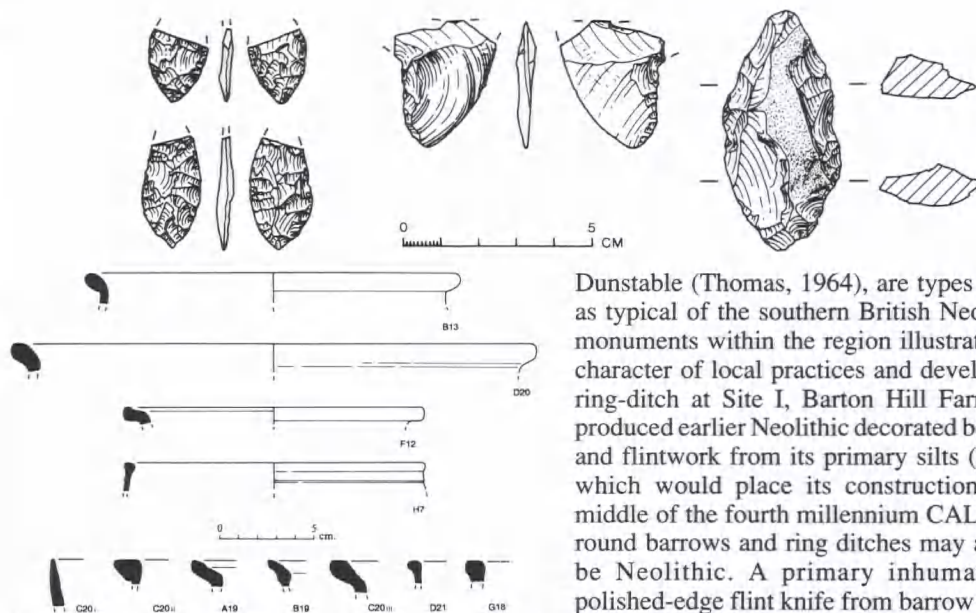


Fig 7. Worked flint and pottery from fieldwalking.

being continually eroded, must be a priority (if only to obtain material for dating and environmental samples).

Both the geophysical survey and surface collection have provided additional information on the later prehistoric and Romano-British use of the site. The interior of the hillfort appears to contain numerous pit clusters, perhaps indicating quite intensive or prolonged Iron Age settlement. Romano-British activity is seen to focus on the western part of the hillfort interior, where the geophysical survey indicates the possible existence of a substantial building. It is worth noting that the first-second century cremation cemetery recorded by Smith was situated outside the hillfort immediately adjacent to this area (Fig 5). The cemetery, sherd scatter and possible building could represent a small farmstead, though excavation would be necessary to clarify this issue.

THE SITE IN ITS LOCAL CONTEXT

The scale, extent and duration of Neolithic settlement across this part of the Chiltern ridge remains poorly understood. Like so many areas in southern England, our knowledge of the fourth/third millennium CAL BC landscape is dominated by monuments.

The causewayed enclosure at Maiden Bower and possible long barrows, such as that at Union Street,

Dunstable (Thomas, 1964), are types of sites seen as typical of the southern British Neolithic. Other monuments within the region illustrate the unique character of local practices and development. The ring-ditch at Site I, Barton Hill Farm, Streatley, produced earlier Neolithic decorated bowl ceramics and flintwork from its primary silts (Dyer, 1962), which would place its construction around the middle of the fourth millennium CAL BC. Further round barrows and ring ditches may also prove to be Neolithic. A primary inhumation with a polished-edge flint knife from barrow 5 of the Five Knolls (Dunning and Wheeler, 1931) is closely analogous to a later Neolithic burial at Stanton Harcourt, Oxon. (Grimes, 1960). Furthermore, whilst it is possible to view the massive Grooved Ware associated enclosure at Waulud's Bank, Leagrave (Dyer, 1964), as part of a later Neolithic tradition of ceremonial enclosure construction, its form and the apparent absence of internal settings are difficult to parallel amongst contemporary henge monuments.

Analogy with other more intensively studied regions could present a picture of small-scale and perhaps relatively mobile settlement within the earlier Neolithic. Maiden Bower, as appears to be the case with a number of causewayed enclosures (Sharples, 1991a, 255), could have been peripheral to major foci of settlement, functioning as a point of episodic gathering for widely dispersed groups.

The large later Neolithic component of the flint scatter at Maiden Bower suggests an intensification of activity along this part of the ridge in the second half of the third millennium CAL BC; a pattern which might be more general to judge by the number of Grooved Ware associated pit groups which have been discovered in the vicinity (Matthews, 1976, 3-18). Evidence for Bronze Age activity in the area is largely limited to a series of ring ditches and round barrows, including the Five Knolls barrow cemetery on the high-down to the west of Dunstable. A mid-late second millennium CAL BC settlement is known from Totternhoe (Matthews, 1976, 36-43), otherwise evidence for occupation during this

period is elusive.

Excavations along the Chiltern ridge suggest a pattern of dispersed settlement during the first millennium BC (Matthews, 1976), with a series of regions or territories being definable by the regular spacing of hillforts and multiple linear ditch systems (Dyer, 1961). Iron Age settlements are known within 2.5 km either side of Maiden Bower, at Totternhoe and Puddlehill (Matthews, 1976), though their relationship to the hillfort is difficult to establish without detail on the chronology and character of activity at Maiden Bower. Field systems of possible Iron Age or Roman date are known from cropmarks to the south and west of the site (Dyer, 1965, 17), and could be taken to indicate intensifying arable cultivation within an increasingly organized landscape.

Finally, it should be stressed that the position of the Iron Age hillfort at Maiden Bower adjacent to the causewayed enclosure, or over part of the complex if the newly identified inner ditch proves to be Neolithic, need only reflect the geographical desirability of the location. Continuity of settlement or sanctity between the fourth and first millennia BC is both inherently unlikely (Bradley, 1981) and unsupported by the available evidence.

TABLE 1. Worked flint recovered during fieldwalking.

TYPE	No
Flakes/broken flakes	318
Blades/broken blades	22
Rejuvenation flakes	27
Chips (<15mm)	17
Cores and flaked pieces	20
Scrapers	7
Leaf arrowheads	3
Misc. retouched	6
Burnt flint	45
TOTAL	465

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