Chapter 4 - Animals and the South Cadbury Landscape

The insights of the previous chapter will now be applied to one particular landscape. The South Cadbury area is one of the most extensively explored prehistoric landscapes in southern Britain. Cadbury Castle, Somerset is a multivallate hillfort with underlying Neolithic and Bronze Age activity and subsequent Roman, post-Roman and early medieval reuse. The surrounding landscape contains extensive evidence of settlement and utilisation contemporary with the various phases of activity on the hill.

4.1 Cadbury Castle and the South Cadbury Environs Project

Following limited investigation in the late 19th and early 20th Century (Bennett 1890; St George Gray 1913), the seven hectare hillfort (Figure 16) was excavated by Leslie Alcock between 1966-70 and in 1973, revealing not only the sequence of the main Middle and Late Iron Age construction and occupation, but numerous Neolithic features, earlier first millennium BC use, and later features.

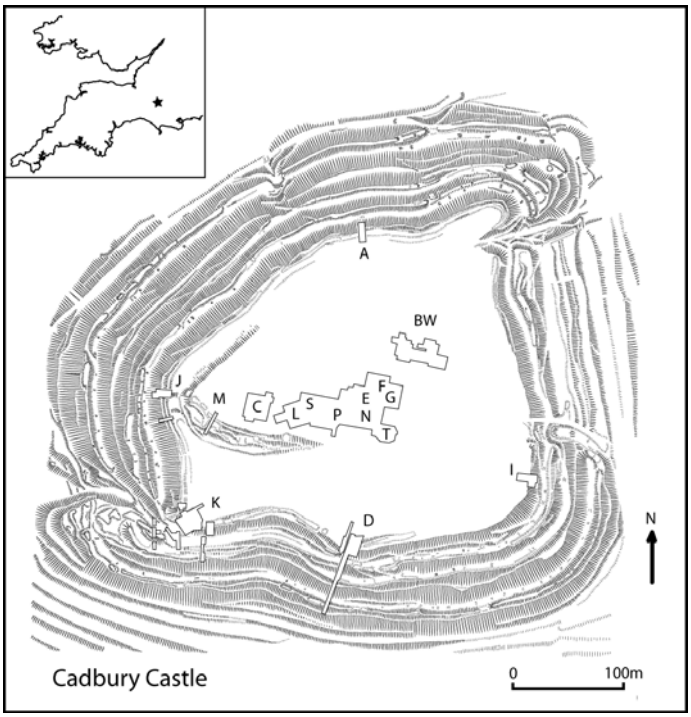

Figure 16: Cadbury Castle within the south west of Britain and the layout of Alcock's excavation trenches (After RCHME survey Barrett *et al* 2000:16).

A number of interim reports and a popular account were published (Alcock 1967; 1968a; 1968b; 1969; 1970; 1971; 1972; 1980), and final report for the Post-Roman material (Alcock 1995). An English Heritage funded project in the 1990s covered analysis of the material of the 1st millennium

BC (Barrett *et al* 2000). The Neolithic material still awaits examination. The South Cadbury Environs Project was founded in 1992 to carry out a study of the prehistoric landscape immediately around the hillfort. It was initiated in order to better understand how the hillfort developed within its landscape context, and has examined a number of sample areas within a 64 km² square centred on Cadbury. Using geophysical survey, systematic plough-zone sampling, test pits, and excavation, SCEP has identified a variety of field systems, boundaries, settlements and ritual monuments that were previously unknown (Tabor 2002; 2004a; 2004b; 2008). Many sites are closely adjacent to and contemporary with the various phases of activity on the hill. These sites have produced several animal bone assemblages and provide the opportunity to study the hillfort assemblage in the context of immediately surrounding contemporary sites.

4.1.1 Topographical, ecological and archaeological setting

Cadbury Castle occupies a steep-sided limestone hill, to the north of a limestone escarpment, surrounded by steep valleys on Yeovil Sands and to the west in particular, clay soils. A simplified topographical map, with the SCEP sample areas overlaid, is shown at Figure 17. To the north and west of the hillfort, the land drops away to a low lying and relatively level landscape that overlooks the Somerset Levels. Springs rise in several locations around the central hill, and on the slopes of the escarpment to the south; streams encircle the hill. Geophysical evidence south west of the hillfort (Randall 2009a), indicates these streams shifted in the past.

Early first millennium use of the central hill comprised a cluster of post-built buildings, occupation debris, and evidence for metalworking. The Middle Iron Age was the most intense period of use, but occupation continued to the end of the Iron Age. Features consist of postholes and gullies associated with houses, numerous pits, and areas of horizontal stratigraphy reflecting roadways, surfaces and rubbish accumulation (Barrett *et al* 2000:162). The site archive is in the care of Somerset Museums Service, with the paper and photographic archive at Somerset Record Office. The dating scheme used since Alcock's initial assessment (with some modifications (Woodward 2000)), relies on the ceramic sequence and is internal to the site itself. The complexity of deposits and the degree of possible resolution, especially for the mid and later first millennium BC led to the development of the terms Early, Middle and Late Cadbury.

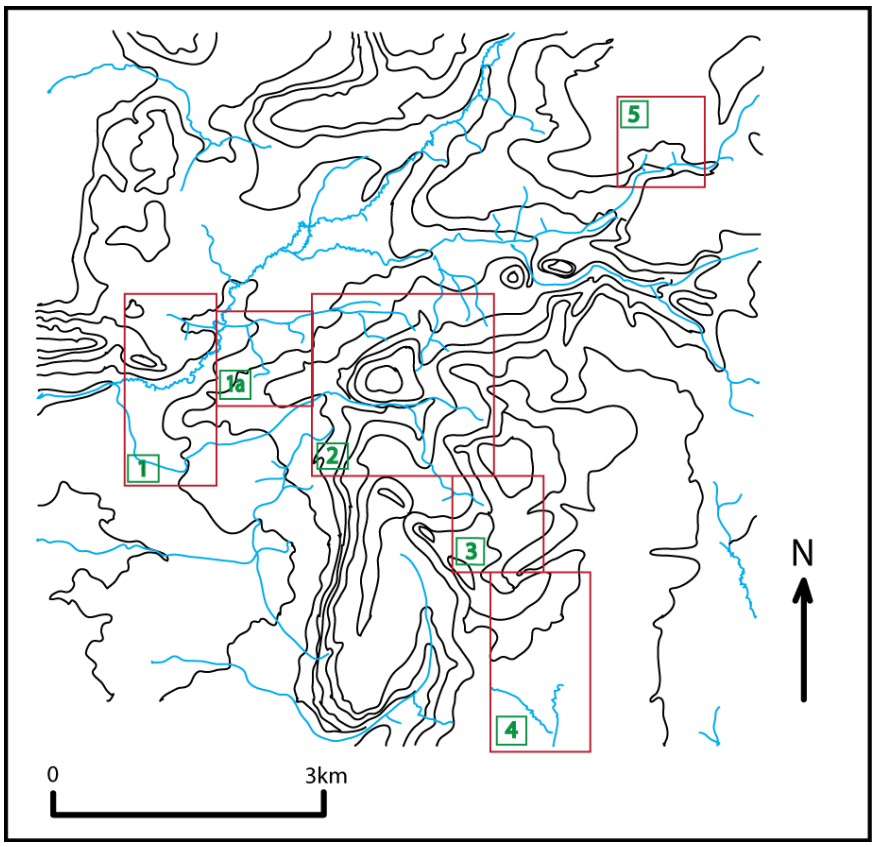

Figure 17: Topographical map of Cadbury/SCEP area showing the sample areas selected from the study zone. (After Tabor 2002:12). Localities were positioned on differing terrain: 1 = Sparkford. Low lying undulating land on clay, 1a = Weston Bampfylde Ridge. Lowlying clay ridge, 2 = Cadbury Castle's immediate surroundings. Yeovil sands and clay 3 = Sigwells. Limestone and sandstone ridge at c200m OD, 4 = Poyntington Down. Limestone downland, 5 = Woolston Manor Farm. South facing slopes and valleys. Clay and limestone.

Early Cadbury represents everything prior to *c*350BC, Middle Cadbury from then to the first Century AD, and Late Cadbury after that, but with degrees of overlap (explained in detail in Woodward 2000:42-3). This works for the site, although the end of 'Middle Cadbury' obscures changes at the end of the Iron Age noticeable in the pottery (personal observation and R.Tabor pers.comm.). It also makes it difficult to compare assemblages with other sites in the locale and further afield. Despite the problems of defining periods within the Iron Age, common usage and absence of more widespread absolute dating renders them the only current method of studying change. Therefore here, material has been assigned to more commonly understood periods (described in Appendix 2), although as will be seen below, the Middle and Late Iron Age, which largely equate to 'Middle Cadbury', indicate little variation in the faunal assemblage which may vindicate its use as a chronological descriptor.

The South Cadbury Environs Project has identified a series of landscapes, from the Neolithic to the Medieval period, comprising land division, stock handling features, tracks and settlement, by

gradiometer survey, dated/sequenced with test pits and excavation. These are discussed in detail below. The development and operation of the sampling regime is described in some detail by Tabor (2008:23-39). The excavation of test pits at every 100m on the same grid as the geophysical survey has provided a series of phased distribution maps of diagnostic material. These indicate in a broad sense how the landscape was being occupied. Targeted test pits and excavations have dated development phases of the landscape components themselves. Despite the area covered, over 300ha to date, this is still only a sample of the hillfort hinterland, albeit the most complete in England. Additionally, the gradiometry survey probably provides only a partial view of field systems, their distribution and change. Firstly, features need to have accumulated enough magnetically enhanced material to make them 'visible'; peripheral areas of ditch systems may have 'disappeared' or lost coherence away from areas of active settlement and disposal. Secondly, landscapes were bounded and divided in various ways. Hedges and fence lines currently elude us unless excavated. However, it is clear that bounding land was a frequent activity, the landscape going through several re-orientations and re-designs. Site names and locations within the SCEP study area are shown in Figure 18.

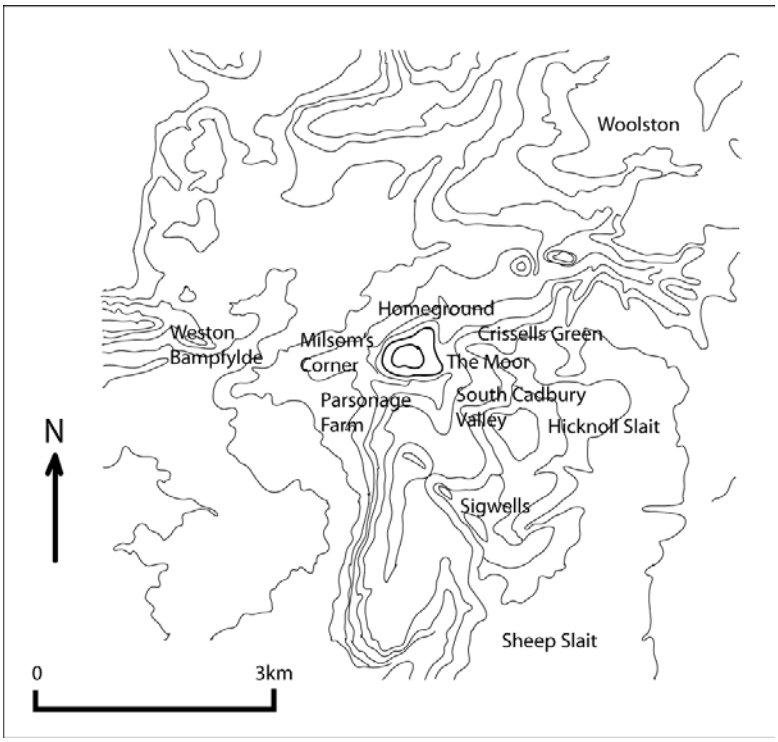

Figure 18: Sites in the SCEP survey area.

This study largely follows the dating adopted by SCEP's creator and previous director, Richard Tabor. Much of which follows references his various publications on the SCEP (Tabor 2002; 2004a; 2004b; 2008; Tabor and Johnson 2000), but also draws on unpublished comments, presentations and conversations. It also utilises my personal experience of working on sites and the archive

since 2002. Where we differ on the nature of a feature or system, or where I have developed concepts or interpretation, I have endeavoured to make this clear. The project archive is currently in the possession of the South Somerset Archaeological Research Group (Home Farm, Sutton Montis, Yeovil) and is being prepared for publication.

4.1.2 Fields and field use

Despite the extensive field systems identified in all parts of the landscape in the SCEP study area, direct evidence for the use of the land is scant. There are no pollen diagrams or other palaeoenvironmental data which cover this part of Somerset (Straker *et al* 2008:110), although a core recently obtained from a Roman or earlier pond at Castle Farm, South Cadbury may provide this in future. Virtually no environmental data were obtained from the Alcock excavations of Cadbury Castle; the molluscan evidence indicated, unsurprisingly, that the hillfort had been constructed in an open grassland landscape (Rouse 2000:79). Molluscs, survive poorly in most of the soils in the SCEP area. Unfortunately, the areas which preserve them best were generally excavated before a more systematic sampling regime was implemented by the author in 2005. The range of species of small mammals identified in the Middle-Late Iron Age pits at Sigwells indicate an open, possibly grassland landscape (Randall 2006:63-4). Small mammal assemblages from other SCEP sites produced the same range of species, but not in the same abundance, probably due to the types of feature investigated.

Since 1995, and in particular between 2003 and 2007, in excess of 1800 bulk samples were taken from excavations and test pits and processed to recover charred wood and plant macrofossils. Some have been examined as part of undergraduate dissertations at Bristol University, but the entire assemblage is currently under study as part of a PhD project by Danielle De Carle, University of Sheffield. Some of her initial findings are alluded to below, as she has kindly made the information available. However, in general terms, whilst cereals are frequent components of samples from the Middle Bronze Age to the Late Iron Age, they are not represented in large numbers other than in a very few samples. This attests to the use of cereals in the South Cadbury landscape but cannot be taken to indicate a heavily agrarian economy. The wood charcoal examined so far from contexts from the Early Neolithic to the Romano-British period attests to a persistent oak dominated woodland in the area. Hazel is also common and this can exist as an understory, whilst the proportion of oak may also be indicative of grazed woodland which favours oak. The presence of *Prunus* and Pomoideae as well as less frequent incidences of rose and other

occasional scrub species, may be indicative of hedges, but is yet to be proven (De Carle forthcoming).

On the steep slopes of the Milborne Valley to the south east of Cadbury Castle, test pits identified a hillwash, *c*30cm thick, containing flecks of burnt clay and small fragments of charcoal, that was stratigraphically dated to the Middle Bronze Age (R. Tabor pers. comm.). This indicates a period of soil instability, and may relate to clearance. However, the gradiometer survey of the hilltop above did not reveal any linear boundaries, although the ring ditch of a barrow was identified and produced earlier Bronze Age flint (Tabor 2008:52). Other features, including an ovoid enclosure, had been so badly damaged by modern ploughing that they were almost obliterated, so we remain uncertain of the conditions under which this apparently Bronze Age colluvium was created. Direct evidence of cultivation has also been hard to find. Two areas in the base of the South Cadbury Valley, in The Moor and Crissells Green, produced evidence of ploughing in the Romano-British period, which overlie prehistoric features. Cross-ploughing marks in The Moor are sufficiently distinct that others should have been recognised if they had been present. Crissells Green (Randall 2009b) did not produce cultivation features, but a probable early Romano-British buried soil, which contained randomly distributed and heavily comminuted pottery and charcoal flecks, may be indicative of manuring. In addition, geophysical survey to the south of Cadbury has recently produced evidence of possible buried lynchets of un-ditched small rectilinear fields, but excavation of these has not yet been possible and they remain undated. The fields and systems are discussed below. They frequently incorporate tracks and stock handling features, which appear to facilitate movement between enclosed and unenclosed landscapes. Although arable agriculture was taking place, the form of fields was apparently designed with livestock in mind.

4.1.3 The animal bone assemblages

Some of the Cadbury Castle assemblage was originally examined by Barbara Noddle, but analysis was not completed and the methods used superseded. As a result these data were not used as part of the 'final' publication. Part of the assemblage was re-examined (Hamilton Dyer and Maltby 2000), but the analyses were limited, due to time constraints, to a selection of Middle Iron Age pits and the Middle-Late Iron Age 'Rubbish Layers' and associated animal burials from the central plateau area of the hillfort. Residuality in the later prehistoric contexts was regarded as rendering additional analysis problematic (Hamilton-Dyer and Maltby 2000:278). However, reconsideration for this study of the stratigraphic information and a large proportion of the pottery has clarified this issue. A combination of greater understanding of fabrics and forms in the later Iron Age developed by the South Cadbury Environs Project and reconsideration of the stratigraphy,

indicates that residuality is less of a problem than previously assumed. The full potential can now be realised, and the entire animal bone assemblage was recorded for this study. In excess of 130 boxes of pottery were also recorded to enable dating of a large number of features of the hillfort interior not examined as part of the 'final' report. This is not discussed here, but has provided the phasing information that was applied to the animal bone. The dates assigned to the ceramic periods follow the scheme used by Woodward (2000:42), with division of periods as mentioned above. Only contexts which could be confidently assigned a date stratigraphically, because of the dateable material they contained, and/or using previous research where it exists, have been used in the analysis; contexts which showed a high level of residuality were excluded, although these were few.

The Cadbury Castle animal bone assemblage, re-recorded for this study, comprised a total of 103,282 fragments, of which 71,217 have been assigned to the Late Bronze Age - Late Iron Age periods. For the purposes of this study, this assemblage has been divided into groups of contexts assigned to the Late Bronze Age (*c*800-600BC), Early Iron Age (*c*600-350BC), Middle Iron Age (*c*350-100BC) and Late Iron Age (*c*100BC-AD50). Additional groups include material that could only be assigned to the Middle-Late Iron Age. This includes the 'Rubbish Layers' and their associated animal burials, although these are probably late in the sequence, and material from the South West Gate area that can be associated with the final part of the Iron Age (referred to as the 'Massacre' period after the supposed massacre dated to the mid first century AD) (Woodward 2000). The majority of the faunal material dates from the Middle and Late Iron Age, with emphasis on the Middle Iron Age, and reflects the change in the importance and use of the site and its development into a hillfort. It therefore covers a similar span as the Danebury assemblage (Cunliffe 1995:16-7), but continues beyond 100BC and into the first century AD. The Cadbury Castle assemblages contained a variable representation of unidentified fragments, also noted by Hamilton-Dyer and Maltby (2000:278). This probably results from the various stages in processing that the archive has undergone since the late 1960s. The proportion of fragments not identified to species is therefore not discussed as the results are likely to be misleading. In general terms the preservation of the bone is either very good or excellent, with preservation of butchery, other taphonomic indicators and pathological markers, likely to be relatively representative of the original incidence.

The SCEP excavations produced a number of animal bone assemblages from Bronze Age and Iron Age sites. Some of these are multi-phased, and their scale varies considerably. Some of them provide detailed data, whilst others can only allow basic descriptive information and confirmation

of patterns seen in the larger assemblages. Table 26 gives a summary of the SCEP sites which have provided animal bone assemblages.

Table 26: Numbers of fragments recovered by period from SCEP sites. Most sites also yielded Romano-British period assemblages that are included in Appendix 2, but are not covered here. The Crissells Green material may be Early Bronze Age, and currently awaits a radiocarbon date.

Site	Description	EBA	MBA	LBA	EIA	MIA	LIA
Milsom's Corner	Settlement, enclosures, boundaries	3	135	329	394	1182	35
Sigwells BA enclosure	Enclosure, building, boundaries	36	1010			109	28
Crissells Green	Barrow		43			120	
Sheep Slait	Ringwork				1515	707	
West Sigwells	Enclosure, pit scatter, tracks and linears	12			21	2833	7771
The Moor	Field boundaries					305	474
South Sigwells	Enclosure and pits						126
Homeground	Enclosure and building						1046

The full report of the findings of the analysis of the Cadbury Castle and SCEP faunal remains offered here is provided in Appendix 2 and Appendix 3. The findings are summarised here, period by period, and the animal bone data considered alongside the structure and use of the landscape to examine the way in which animals were husbanded and utilised, both practically and ideologically.

4.2 Animals, landscape and people: The Early Bronze Age

4.2.1 Having herds

Probably the earliest indication of structuring the Cadbury landscape to facilitate livestock husbandry is a 15x15m sub-square ditched enclosure at Card's Piece, Woolston, of probable Beaker date (Tabor 2008:53) (Figure 19). There were no structures within it and the minimal finds did not suggest settlement. A role in stock management was the preferred interpretation (R.Tabor pers. comm.). The apparent three-way entrance at Point A may have functioned as a sorting gate, and the size of the enclosures are commensurate with cattle or sheep. This could have been utilised for overnight penning or for close handling. However, the issue remains as to whether it was earlier than, or contemporary with, a linear system in the same area. If it existed in an unbounded landscape then it would sit well with a semi-nomadic, transhumant or other extensive system of management. Unfortunately, without indications of settlement location, determining this is presently not possible.

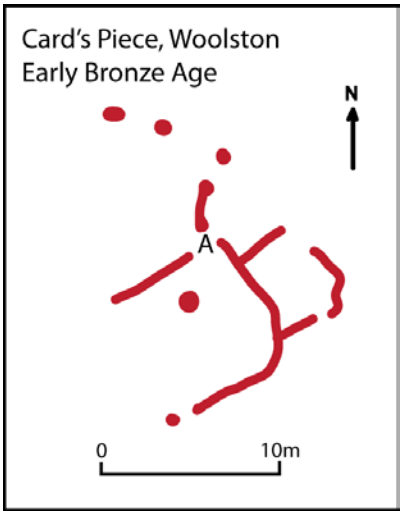

Figure 19: Card's Piece EBA enclosure (After gradiometer survey, SCEP archive). Point A may represent a three-way sorting gate.

No animal bone dating to the first half of the second millennium BC has been identified from Cadbury Castle. SCEP has excavated several areas utilised in the earlier Bronze Age but these have yielded very little animal bone for the excavated volume (Appendix 3 Sections 4, 5.1 and 8.1). There is a general lack of evidence for settlement and all material excavated comes from ditches or, at Milsom's Corner, a human burial. In the latter case, the three animal bone fragments may be redeposited Early Neolithic material. The 36 fragments of bone from a linear ditch on eastern Sigwells (TR8-10,19) produced small numbers of cattle, sheep, pig, dog and horse fragments. A section across the other end of the same linear on West Sigwells produced 12 fragments, one a sheep/goat tooth. Whilst limited, these small assemblages establish that domestic livestock were present.

Early Bronze Age flint and pottery was generally widely distributed in the landscape in small quantities and there appears to be denser distribution on the valley sides and lowland (Tabor 2008:48-9). Importantly, there are also a number of large-scale, parallel linear ditch systems that appear to date to the first half of the second millennium BC (Figure 20). There seems to be a preference for locations on slopes or higher ground and lighter soils; Tabor observes that topographical location alone is not enough to indicate arable agriculture and considers long linear boundaries to be consistent with livestock management (2008:51,54). Cereals were being produced, with charred grains of barley, oats and emmer and spelt wheat from Crissells Green and Sigwells. However, these were not in large quantities, whilst the weed seeds were chiefly Chenopodiaceae, with docks, bedstraws and knotgrasses (Benson 2008) indicating disturbed ground and pasture.

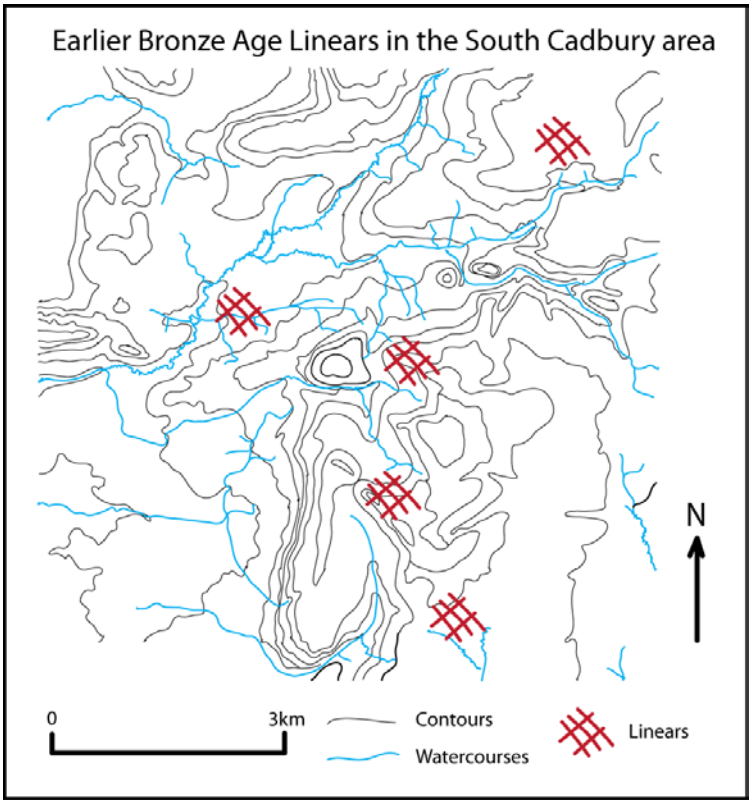

Figure 20: Early Bronze Age boundaries in the Cadbury landscape.

A fragmentary system possibly related to probable Early Bronze Age funerary monuments occurred on Seven Wells and Poyntington Down, to the south of Sigwells (Tabor 2008:51). However, the long linear systems were not confined to higher ground, but also seem to have occurred in the valleys and on low ground. An early ditch was excavated beneath a ring ditch at Crissells Green, in the South Cadbury Valley (Tabor 2004:58-61; Appendix 3 Section 6), likely to relate to a levelled barrow (Tabor 2008:52). This was confirmed by excavation by the author in autumn 2008 (Randall 2009b). Wood charcoal deposits were dominated by oak, but also included species such as hazel, rose, blackthorn, ash, as well as *Acer* and Pomoideae (D De Carle pers. comm.), which might relate to hedging as well as scrub . Although damaged by modern ploughing, linears at Card's Piece, Woolston, to the north west of Cadbury, may also have related to barrows. To the west, on low-lying land around Sparkford and Weston Bampfylde, long boundaries, on a north west to south east alignment may also have originated in this period and been related to barrows, such as the ring ditch identified by Tabor at Worthy (2008:51). This covers an area of particularly heavy soils (Tabor 2008:56), and lends weight to the view that land division was not principally related to arable agriculture. However, none of the excavated ditches were particularly deep or broad and may not have been stock-proof on their own. Nevertheless, the areas enclosed are large, and do not appear to have been sub-divided, although a fragmentary cross-ditch aligned on the North Barrow at Sigwells, may provide this. The linears

probably came into being in a largely cleared landscape although environmental data is not presently available. However, in a number of locations there were a series of early hillwashes, well sealed under later prehistoric activity (R. Tabor pers.comm.). The degree to which arable agriculture or tree clearance on light soils contributed to this is not currently understood.

The Sigwells system (Figure 21) consists of widely spaced, long, parallel ditches. Excavation (at point 'A') demonstrated that the northernmost ditch was cut by the Early Bronze Age Sigwells North barrow. The linears were shallow (Appendix 3 Section 5); another was part in-filled but visible when an enclosure was aligned upon it in the 12th Century BC. Wood charcoal from this ditch not only contained oak, hazel and ash, but scrub or hedging plants, rose and significant quantities of *Prunus* and Pomoideae (D De Carle pers.comm.). Spaced about 100m apart and extremely straight, the divisions run west-north-west to east-south-east across the ridge, a distance exceeding 600m. To the east, faint traces on aerial photographs extend the system by at least another 400m and it probably extended far in excess of the 18ha modern field. It lies on the flat escarpment, but the boundaries continue across sloping terrain. The linears occasionally incorporated stock handling features. Point B shows an arrangement of ditches, traced by gradiometer, and partially excavated. A parallel length of segmented ditch lies alongside the main linear for a distance of around 20m, separated by *c*2m. This could allow passage from one side of the linear to the other, and would facilitate the handling of animals. It effectively comprises a race, as described in Chapters 2 and 3. Tabor suggests that with the use of hurdles this could have been utilised in marshalling sheep (2008: 49), but the width implies either extremely large numbers of animals being handled at one time, or that it was intended for cattle. The opening is oblique to the main linear, but not much wider than along its length, so some additional, more ephemeral or temporary boundary would be needed, even if large numbers of people were available. There is no reason why it could not have functioned well with robust hurdle fencing.

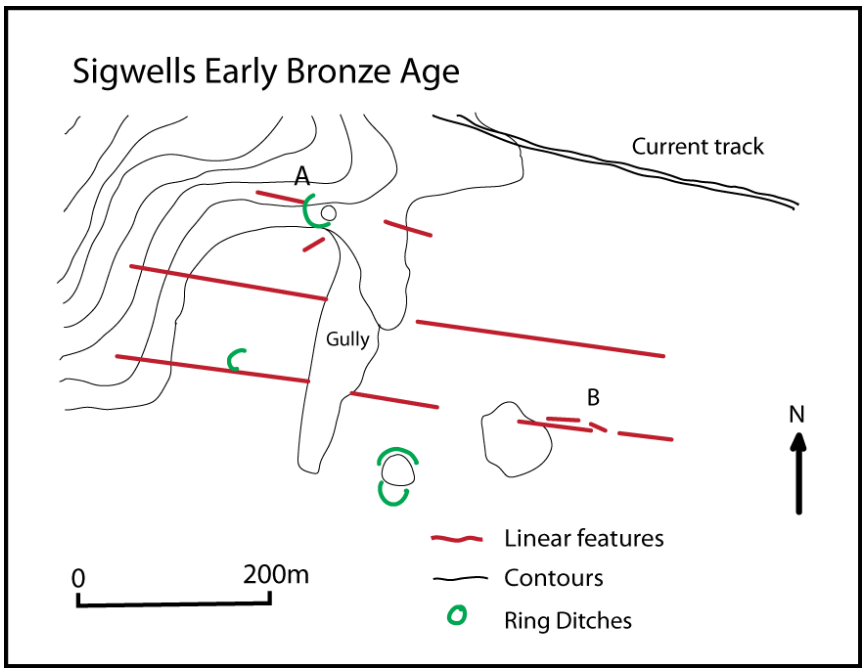

Figure 21: Linears on Sigwells, Charlton Horethore. Excavation at point indicates the linears may have been laid out before the construction of the north barrow, dated to the Early Bronze Age. The track on the northern boundary of the modern field is almost parallel with the linear immediately to its south. A possible race is shown at point B (after Tabor 2008:50; SCEP archive).

Tabor identified a hollow way in the South Cadbury Valley that may have earlier Bronze Age origins. It led between the valley stream onto the hilltop to the east (2008:54). A similar track on Seven Wells Down (Figure 22), led from the source of the river Yeo onto the downland. It is likely that these tracks were common in the numerous steep-sided valleys that characterise the area, and were a vital component of it. The distances are short, and well within the range of daily movement of livestock. These fragmentary but numerous systems indicate that large areas, regardless of terrain, were systematically divided up in the earlier part of the Bronze Age. This layout could function equally well for the extensive running of both sheep and cattle. It may have been designed to regulate and make more effective use of grazing, but still enabled animals to range freely for fodder, and get access to water without needing close supervision. Given that there is no evidence of nucleation of handling pens and settlement, it seems that the approach was highly extensive. There is no clear evidence of gathering animals in a single location for exchange or other communal activities. There is also little that indicates how goats or pigs could fit into the system. The scraps of bone available do not confirm that goats were present, and they would have been very difficult to manage on a 'free range' basis. This does not mean that they were not kept, just that we have no evidence and the landscape does not offer an obvious location for them. Similarly it may be reasonable to see the few pigs as semi-feral or loosely husbanded, existing outside of the main system of land use.

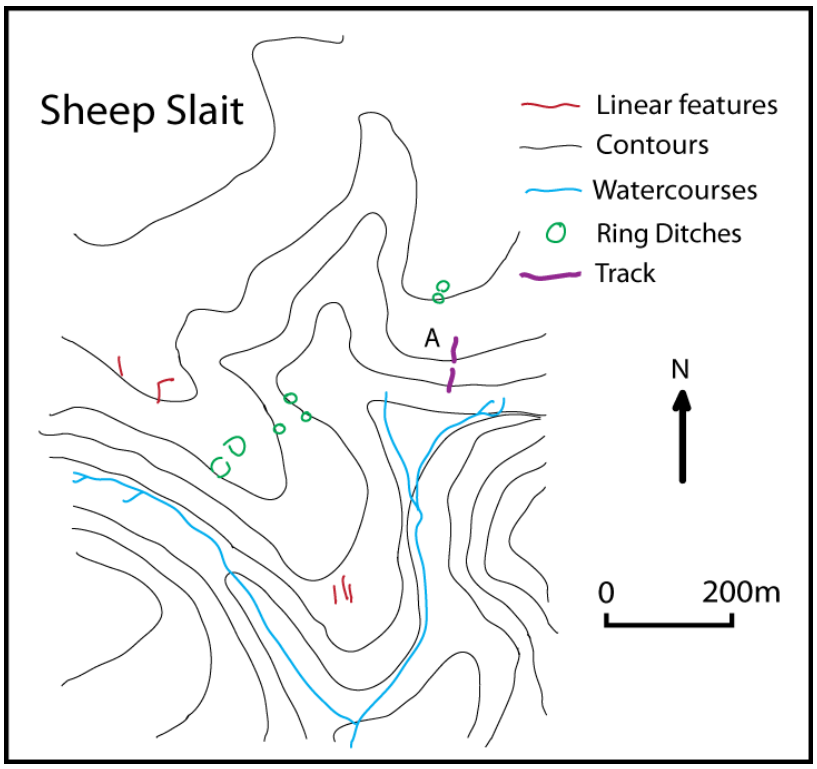

Figure 22: Sheep Slait, Poyntington, Fragmentary possible Earlier Bronze Age linear boundaries, trackway and ring ditches (after Tabor 2008:51; SCEP archive). Point A is a track way linking the high ground to the north with the head of the River Yeo.

4.2.2 Using herds

The animal bone evidence is extremely limited, relating to the excavated material having come from ditches some distance from settlement. The Sigwells bone was very heavily fragmented (Appendix 3 Section 5), with a high proportion of loose teeth. A butchered, gnawed cattle mandible, seems to represent discarded and scavenged waste, and may have been deposited some way from its point of origin. Some material may be the result of manuring, but as there is no direct evidence of use of land for arable, this would relate to grassland management. There is the possibility that it may represent the fragmented remains of fallen stock, subsequently decomposed and scavenged.

4.3 Animals, landscape and people: The Middle Bronze Age

4.3.1 Having herds

A small collection of bone from an area associated with 14th-13th Century BC settlement and field systems at Milsom's Corner, and an enclosure on eastern Sigwells, supply Middle Bronze Age data (Appendix 3 Sections 4 and 5). The eastern Sigwells assemblage came from a short-lived enclosure used for metalworking (Tabor 2008:61-69; Randall forthcoming). Middle Bronze Age pottery and

Wilburton Phase weapon moulds, date the site to the 12th Century BC (Tabor 2006:67). Species representation is given in Table 27.

Table 27: Species representation, SCEP sites, Middle Bronze Age.

Species	Milsom's Corner		Sigwells TR8,9,10,19	
	NISP	% Main Species	NISP	% Main Species
Cattle	10	NA	55	27.36
Pig	2	NA	27	13.43
Sheep/Goat	14	NA	119	59.20
Dog	2		5	
Large Mammal	10		104	
Medium Mammal	10		183	
Unidentified	86		504	
Total main	**134**		**997**	
Red deer			2	
Bird	1		6	
Small mammals			2	
Amphibians			3	
Total	**135**		**1010**	

The Milsom's Corner material indicates that cattle and sheep/goat were probably the most important species, possibly relatively evenly represented given the similarity of large and medium mammal numbers. Only two fragments were identified as pig and two dog fragments are supplemented by a number of canid-gnawed fragments. The eastern Sigwells assemblage has more sheep/goat, with cattle and pig in lesser quantities. One feature, dubbed the 'cooking pit' during excavation, provided a large proportion of the site assemblage. If this is discounted, the proportions between species are more even, as shown in Figure 23.

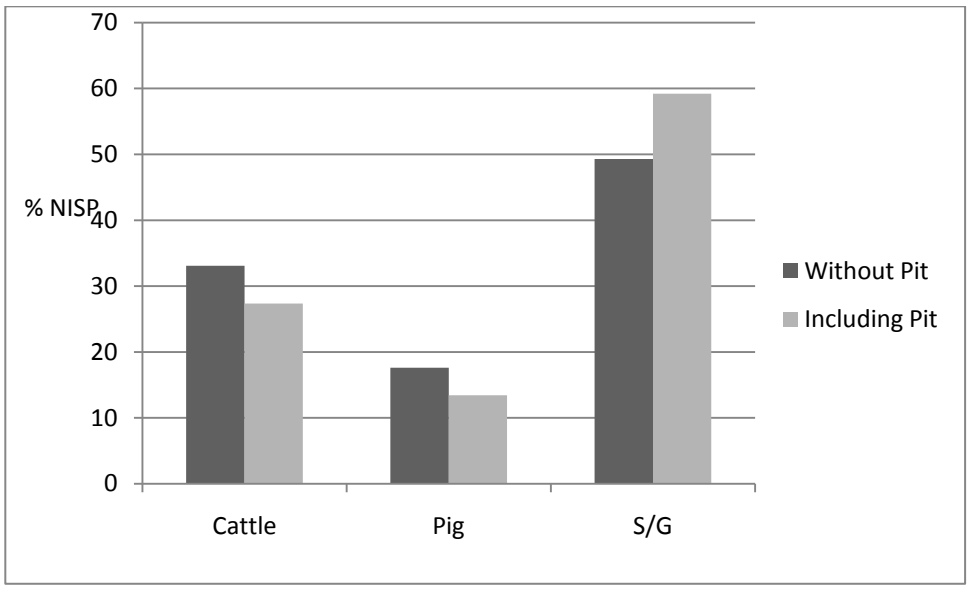

Figure 23: Percentages of the three main species from eastern Sigwells, including the contents of the 'cooking pit' and without it (Cattle N= 55 and 47 respectively, Sheep/goat N = 119 and 70, Pig N= 27 and 25)

Nevertheless sheep/goat (no goat fragments were identified) represent the most frequent species from the NISP calculations, although MNIs are more even (sheep/goat = 5 MNI, cattle = 4 MNI). The assemblage is too small and fragmented to make too many claims for understanding herd and flock structures, and given the nature of the enclosure, the proportions and ages of the animals are more likely to represent consumption preferences. There was almost no porous bone, possibly related to the degree of fragmentation. Milsom's Corner likewise failed to provide any porous bone and limited ageing data, probably due to the hostile ground conditions. Consequently we remain ignorant of the aims and strategies applied. If the material is actually representative of live herds and sheep and cattle were present in relatively even proportions, we might see provision of both large and smaller scale handling features within the contemporary field systems.

The linears established in the earlier Bronze Age appear to have largely fallen into disuse. The Sparkford boundaries probably have an earlier origin but may date to the Middle Bronze Age, and the Sigwells linears were still visible enough to enable the alignment of the enclosure upon it (Tabor 2008:57). However, these ditches were largely filled by this time; the Sigwells Middle Bronze Age enclosure re-cut the filled ditch. It has been argued elsewhere (Randall forthcoming) that the enclosure was deliberately placed 'outside' the earlier system. Although the systems were still recognisable, the almost filled ditch would not have been stock-proof. The wood charcoal from the Sigwells enclosure was mainly oak and ash, and may have related to structural timbers rather than fuel ash (D De Carle pers. comm.). New Middle Bronze Age boundary systems or settlement are comparatively rare in the study area. A small enclosure of 16m² on an upland plateau at Lady Field, Woolston, 3km to the north east of Cadbury, appears to have enclosed a building, part of the floor producing Middle Bronze Age pottery (Tabor 2008:61). This however yielded no animal bone and confirms the clean nature of these sites (*cf* Brück 1999). This enclosure seems to have existed in a generally unenclosed landscape.

The area immediately around Cadbury on the northern and western flanks of the hill produced a denser distribution of finds in test pits (Tabor 2008:58), coinciding with boundaries and probable burnt mounds in Homeground, and settlement and field systems at Milsom's Corner. The arrangement of these boundaries (Figure 24) is enlightening. The Middle Bronze Age arrangement cuts across earlier ditches on a new alignment (Tabor 2008:58), indicating that they had fallen into disrepair and disuse. The organising principle of the new landscape layout had changed. Tabor sees its creation as an indicator of authority, prestige and prosperity, the apportionment of territory and control of access (2008:71). This may well be the case, but it is of far more limited

scale than the abandoned systems, and more locally focussed. A series of enclosures, drove ways and stock handling features arranged around a spinal linear (Point A) covered an area of at least 12ha. Settlement was dispersed with houses (B) spread within the fields. The central linear acted as a route way for at least part of its length. The degree to which the layout was the result of a single episode of construction or developed over time in an accretive fashion is not entirely clear, as a limited area has been sampled. However, the coherence of the layout and apparent lack of intercutting implies much of it was in contemporary use. The fragmentary appearance of the system has been suggested by Tabor to be explicable by later destruction or lack of detectably magnetic material in the fills (2008:58). It seems that 'visible' parts of the system are closer to settlement. The repeated use by, or close confinement of animals, filled features with the magnetic residues of human activity and organic animal by-products.

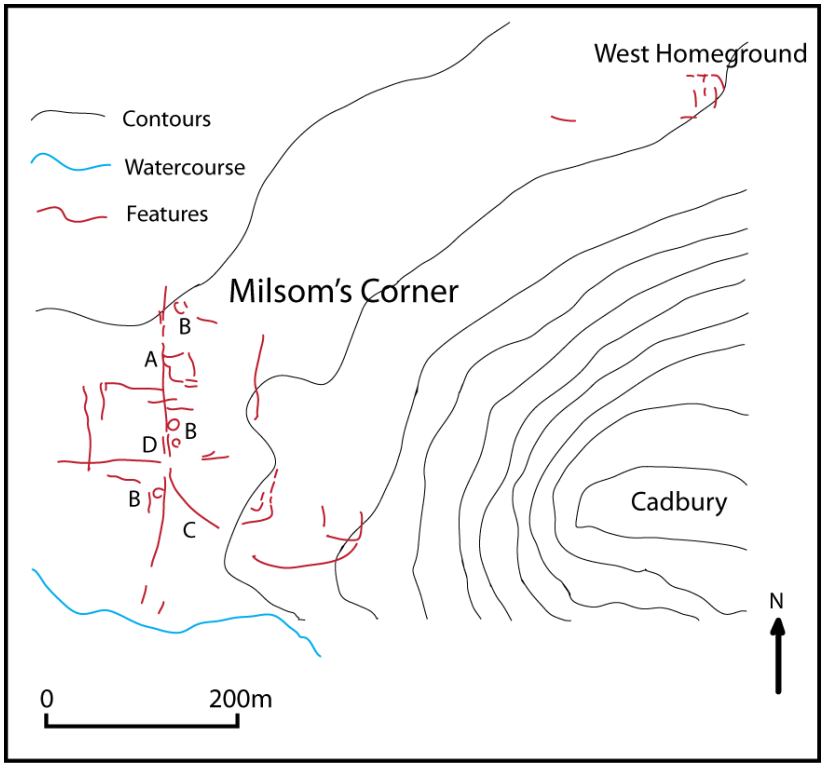

Figure 24: Middle Bronze Age field systems, Milsom's Corner (After Tabor 2008:58; project archive).

Tabor has suggested that the houses were bounded in '*a manner suggesting apportionment of land in family plots, but with ready access between plots suggesting a wider sense of community*', and that a smaller structure may be ancillary and possibly used as shelter for animals over winter (2008:59). However, the system is relatively open with no close bounding of the individual buildings. The houses are widely spaced (70-120 metres apart), and the governing principle of their location is proximity to the track. The general layout indicates separation of the enclosed space from the 'outside'. The south eastern end is a long curvilinear boundary that skirts around the base of a natural knoll (Point C). This respects the lie of the land, and deliberately 'includes'

the knoll. At the western end, it curves around to meet the north-south linear, and forms the eastern side of a broad funnelling entrance to the spinal track from the south. Recent gradiometry in fields to the south of this area (Randall 2009a) have failed to locate any indications of the continuation of an organised landscape on the alignment seen in Milsom's Corner, despite locating numerous features that probably relate to the medieval period and the Late Iron Age. The land is low lying and cut by a stream, the shifting palaeochannels of which are discernable in the gradiometry (Appendix 3 Section 4) Given the alluvial build up, it is likely that this low-lying damp land provided productive summer meadow grazing. The funnel entrance is a commonly recognised method of gathering and droving animals from open areas.

The system occupies a gentle west-facing slope bounded on the south, west and north by lower ground. The layout is governed by three, or possibly four, parallel north-south ditches 80-100m apart. The land parcels are square or rectangular, *c*1ha in extent with additional sub-divisions. The field size is ideal for folding of livestock, and efficient rotation of grazing for parasite and grass management. The entrance to the system on the south side occurs where several boundaries converge but do not meet, creating a series of corner gates (D). These are a recognised feature of animal orientated systems discussed in Chapter 3. One leads into a *c*1ha square parcel to the west, which appears to have been formed by the intersection of several linears, but also contains additional sub-divisions and has a sharp dog-leg entrance on the north-western corner. This area may have served specifically as a collection point for animals, having access from both ends of the system and the central track, and overlooked by all three of the known buildings. The central trackway does not appear to continue as a double ditched feature beyond this point to the north, but as a single boundary. At its northern end, opposite the most northerly house, an area of segmented and slightly overlapping ditches form a short, narrow funnel leading into a land parcel to the south of the building. This is a much narrower entrance than many of the others, and may have been specifically designed for smaller livestock. The land parcel into which this leads contains, aligned on and close to the central trackway, a small sub-square enclosure *c*25m x 25m, with no obvious structures within it. It has entrances in the north-east and south-east corners and half way along its southern side, where it opens into a track along the side of the field. The scale of this space and entrances is in keeping with handling sheep, and may have facilitated gathering. It is tempting to see these land parcels as offering specific facilities for cattle and sheep.

It seems that the Middle Bronze Age Cadbury landscape was largely unenclosed. The Milsom's Corner system is focussed in one location, whilst utilising the surrounding unbounded land. This implies a change in the daily round of tasks, being brought close to home, and offers the

possibility of increased housing of animals and integration with cultivation. The evidence for cereals in the Middle Bronze Age contexts are however scant (D. De Carle pers.comm.). Movement into and out of the enclosed space would, however, be a regular necessity. The Sigwells enclosure existed in a largely unbounded landscape and there was a hiatus in the formation of colluvial deposits in the later second millennium (Tabor 2008:69), implying a cessation to soil disturbance on the hills. Small numbers of pigs occur in both assemblages and they may have been kept in fields or penned in small paddocks at Milsom's Corner. Pigs are likely, as in the Early Bronze Age to have been a minor enterprise, which may have been penned or housed, whilst arable agriculture was probably been small scale and integrated with a more extensive pastoral regime that relied on cattle and sheep. Extensive rough grazing remained an important element.

4.3.2 Using herds

The general paucity of finds from Milsom's Corner has suggested a non-domestic use (Tabor 2008:59). However, this is not unusual for sites of this period. The unidentified material and very small fragments of animal bone (Appendix 3 Section 4) in the floor levels are consistent with the building being kept relatively clean when in use, with small fragments trodden in. It seems that refuse was being disposed of away from the building. Although some material ended up in the ditch, it may be that waste was disposed of or utilised elsewhere. There is a hint of preference in the disposal of cattle fragments in the surrounding ditch. Two weathered cattle mandibles probably lay exposed for some time before deposition.

The animal bone has assisted in understanding the use of space within the Sigwells metalworking enclosure (Appendix 3 Section 5). Tabor suggests that other craft-working took place, describing the enclosure as the location for peripatetic workers to mount 'craft fairs' (2008:65-6). The current author believes that the evidence for other crafts is slight (e.g. there is no waste from bone or antler working, or evidence of textile production). The ephemerality of the enclosure and its careful deconstruction need not be explained as the concealment of trade secrets by travelling craftsmen as suggested by Tabor (2008:66). It is equally feasible that the activities within the enclosure were carried out by local people with the motivation of containing and excluding a possibly 'dangerous', liminal or polluting activity from the pastoral landscape (further explored in Randall (forthcoming)). The site was, however, a consumer of local produce and unlikely to be involved in animal production and husbandry. The metalworking area produced very small amounts of bone, but one feature referred to as the 'cooking pit', contained an apparently rapidly formed assemblage, the results of a single event of consumption (Appendix 3 Section 5). It

contained decorated pottery broken *in situ* and almost exclusively sheep/goat bone and capped off in an act of closure, probably related to the deliberate dismantling of the site. The choice of sheep meat may indicate a preference for this meat for this type of event.

4.4 Animals, landscape and people: The Late Bronze Age

4.4.1 Having herds

The Late Bronze Age Cadbury Castle (Appendix 2 Section 4) and contemporary SCEP assemblages (Appendix 3 Sections 4 and 7) are an important addition to the available material of this period in southern Britain. Species representation is shown in Tables 28 and 29.

Table 28: Species representation, Cadbury Castle, Later Bronze Age.

Species	NISP	NISP %	MNI	MNI %	% Main Species
Cow	280	18.06	9	27.27	41.5
Pig	95	6.13	8	24.24	14.1
Sheep/Goat	300	19.35	14	42.42	44.4
Dog	8	0.52	1	3.03	
Horse	17	1.10	1	3.03	
Large mammal	283	18.26			
Medium mammal	234	15.10			
Unidentified	333	21.48			
Total main	**1550**				
Red deer	1				
Bird	1				
Amphibian	1				
Total fragments	**1553**				

Table 29: Species representation, SCEP sites, Later Bronze Age. ABGs at Sheep Slait are not included.

Species	Milsom's Corner LBA		Sheep Slait LBA/EIA transition	
	NISP	% Main	NISP	% Main
Cattle	14	22.95	85	25.60
Pig	14	22.95	132	39.76
Sheep/Goat	33	54.10	115	34.64
Dog			3	
Horse	1		6	
Large mammal	30		175	
Medium mammal	55		306	
Unidentified	181		684	
Total main	**328**		**1506**	
Red Deer			1	
Weasel	1			
Small mammals			6	
Bird			2	
Total	**329**		**1515**	

No associated bone groups (ABGs) were noted at 9-10th Century BC Milsom's Corner or in the 11th-7th Century BC material from the hillfort. Associated fragments from probably 8th-7th Century BC Sheep Slait relate to disposal of butchery waste and are discussed below. These assemblages are dominated by domestic species. The Cadbury Castle material (Appendix 2 Section 4) has a

relative equality between cattle and sheep NISP. Sheep are not a clear majority, and given their smaller body size were probably not the primary economic consideration. All of the sheep/goat elements that could be differentiated were sheep, although this does not necessarily preclude the presence of goats. Pig appears to have suffered slightly greater fragmentation than other livestock, and may be slightly over-represented. The material from this phase at Milsom's Corner (Appendix 3 Section 4), was from the apparently rapid and deliberate (Tabor 2008:84) fills of the enclosure ditch constructed earlier in the Bronze Age, and associated floors and other features. Sheep/goat comprised half the assemblage with an even split between pig and cattle. This pattern is supported by the proportion of large and medium mammal fragments.

Sheep Slait, Poyntington Down, Dorset is a ringwork on the limestone ridge 4km south of Cadbury Castle. The vast majority of the faunal assemblage (Appendix 3 Section 7) came from the fills of the final re-cut of the ditch terminal (1498 fragments compared to 17 from elsewhere), probably occurring at the Bronze Age/Iron Age transition. The proportion of the three main domestic species is given in Figure 25. This site was unique in producing three teeth of pike from sieved samples (Feider 2008).

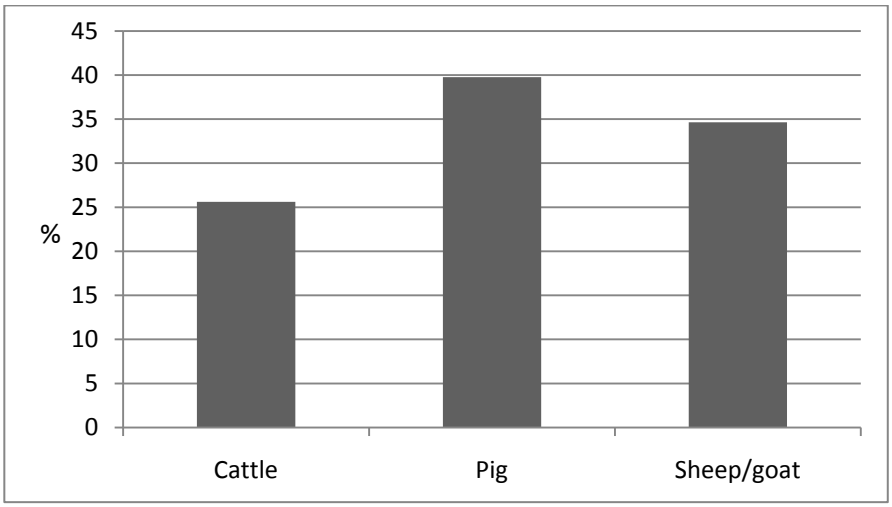

Figure 25: Species representation, percentage of NISP for the three main species, Sheep Slait (Cattle N= 85, Pig N=132, sheep/goat N=115).

The increased amount of pig may relate to chronology or consumption and disposal. The relative proportions between cattle and sheep in the Sheep Slait material is 43% to 57% respectively, and it is likely that whereas through the later Bronze Age there was a relatively mixed cattle and sheep herd, this may have been beginning to change, presaging changes to come in the Early Iron Age. The Cadbury Castle sheep were small animals and remained so until the end of the Iron Age. The mortality profile (Figure 26) comprises the full range of age groups with an emphasis on deaths at Payne Stage C (6-12 months). The presence of neonatal animals implies that lambing took place in

the vicinity. There was active management of the flock with retention of animals to become breeding stock and produce secondary products. It is similar to later periods and marks the beginning of a pattern of sheep exploitation that remained stable for a millennium.

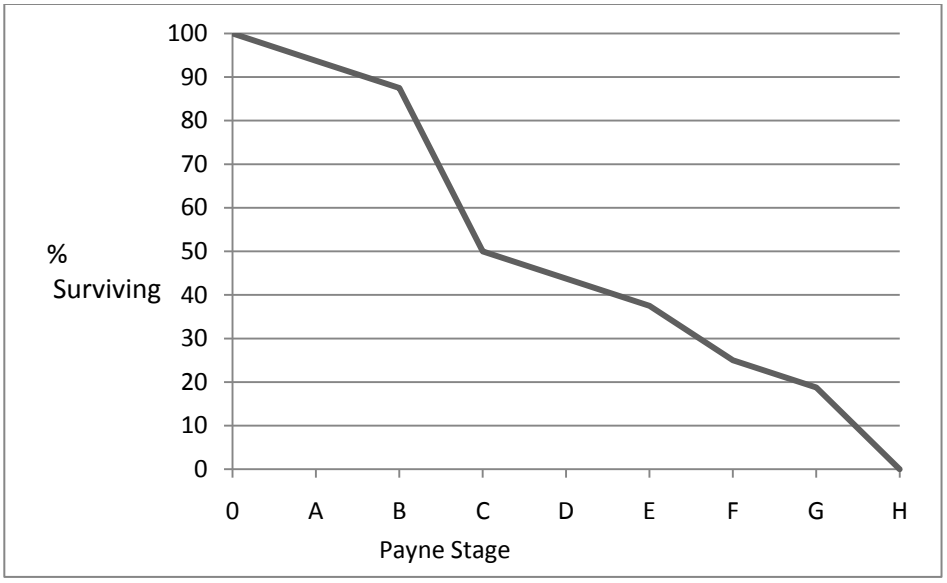

Figure 26: Cadbury Castle sheep/goat kill off profile using Payne Stages, Late Bronze Age. N=16.

The Milsom's Corner material contains evidence of young sheep/goat as well as much older individuals, and fits with the picture provided by the Cadbury Castle assemblage, and reflects active husbandry occurring close by. The slightly later sheep/goat assemblage from Sheep Slait provides a very high proportion of animals under two years of age at death, with four of the seven individuals calculated in the MNI being juveniles, two mandibles with wear at Payne Stage C and D (6-24 months), and some porous bone. Virtually all later and late fusing elements present are unfused. This does not appear to indicate that there were differences in aim or approach between individual sites.

There is limited information on the age structure of the Cadbury Castle cattle herd. A single mandible provided a MWS of 20 (18-24 months). However, the presence of older animals is indicated by two loose third mandibular molars indicating Halstead Stages E, F and H (>40 months). A younger individual is indicated by a first mandibular molar that equates to Stage B (>6 months). There are 20 porous fragments (9.26%). Fusion data similarly indicates the presence of a range of ages, from less than one year to a minimum of 3 ½ -4 years. A range of age groups are also likely at Milsom's Corner. The Sheep Slait cattle may have been mature, given a single mandible at Stage G (>40 months) and numerous fused elements. There is however evidence of

young individuals from two porous fragments. Cattle also presented slightly more cases of pathological change, and given that most of these are likely to have some relationship to age, support the idea that most cattle were fairly mature. We cannot postulate a particular strategy, but a considerable proportion of animals were retained into older age groups, and probably utilised for milk and other products, rather than being primarily sources of meat. Most of the pigs from Cadbury Castle were, unsurprisingly, young. There are no neonatal pigs, but one old adult (>36 months) is present, and it is not clear if farrowing occurred on the hill. The four mandibular canines recorded were all female, although this may not be representative. The Sheep Slait pigs' peak in deaths was at Hambleton Stage D (15-20 months). A fair number of porous fragments were present but the fusion data indicate that the majority were older juveniles and subadults. Little can be said about dogs, apart from the fact that they were present on Cadbury in the Late Bronze Age. There is no porous dog bone and the only indication of age is a single unfused vertebral body. Similarly, the horse assemblage is limited. However, the represented individuals are almost exclusively mature adults.

Tabor noted (2008:77-8) the narrow distribution of diagnostic Late Bronze Age pottery in the landscape. It is limited to the hill and its immediate surroundings, including Milsom's Corner, Poyntington Down, and Woolston. The wood charcoal from Milsom's Corner, whilst still containing oak, also contained ash, *Prunus* and *Pomoideae* as well as small amounts of dog rose (D De Carle pers. comm.). At Milsoms Corner, the Middle Bronze Age enclosure ditch on the knoll, had filled to less than 30cm deep (Tabor 2008:84). This seems indicative of a long period of reduced use in this area. At this point however there was a '*brief episode of intense activity in and around the enclosure*', which involved a series of complex deposits, discussed below. It attests to activity near the emerging community on Cadbury, but occurs in a less bounded landscape, in which the boundaries of the past were being marked and consigned to ancestral history.

Whilst earlier land divisions may have continued in use into the early first millennium BC, this has only been demonstrated in a couple of locations, and new constructions were rare. Woolston Manor Farm has long linears associated with possible double ditched tracks defining a narrow ridge (Point A, Figure 27), suggested to represent a defended hilltop (Tabor 2008:57). There is little suggesting associated division of the adjacent land. These boundaries may be broadly territorial in nature, defining control of movement through the landscape by people and animals, but not directly relating to daily husbandry. Point B, however, has a correspondence of boundaries with the route of one of the streams, and they may relate to control of access to water. This needs considerably more fieldwork, to refine the chronology of construction, and

offers the possibility of an additional focus of hilltop settlement or use contemporary with Cadbury.

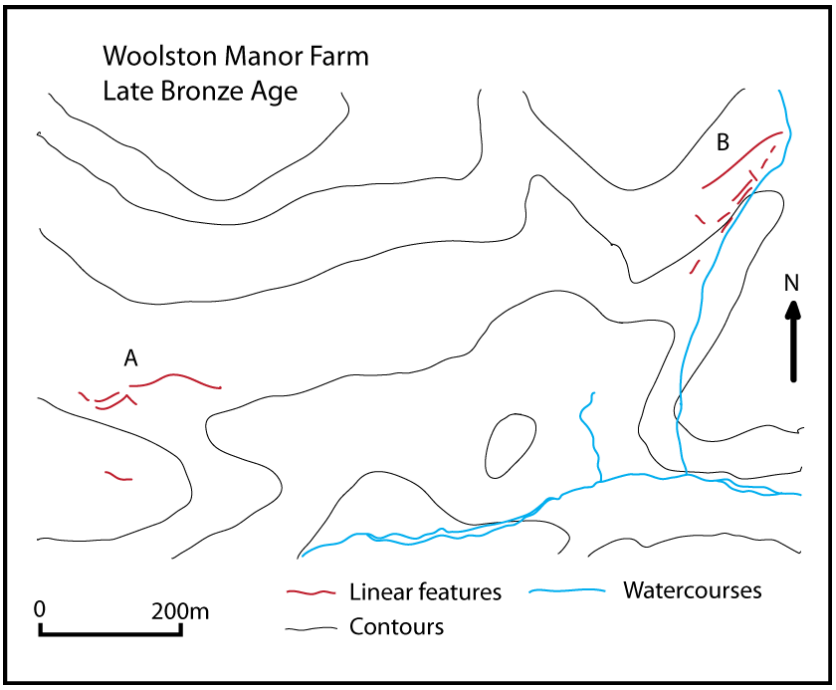

Figure 27: Woolston Manor Farm linears (After Tabor 2008:79; SCEP archive).

At Worthy, Weston Bampfylde, west of Cadbury on low-lying heavy clays (Figure 28), Early Iron Age pottery came from a linear ditch that may have Bronze Age origins and indicates considerable longevity in landscape use. Several ancient ditches continued to exist as gullies into which Late Iron Age and Romano-British pottery accrued in due course (Tabor 2008:102-103), and the implication is that they remained visible, and still functional in some cases. The system is rectilinear, does not appear agglomerative, and incorporates a double-ditched trackway that leads south from the field system towards the location of an ancient palaeochannel that may have supplied water for stock. Strikingly, the ditches are aligned perpendicular to the modern field boundaries that surround them, one joining the back garden wall of Weston Bampfylde House. As the area is relatively flat this does not appear to be caused by the land form dictating the organisation of the landscape, and it is possible that further boundaries are fossilised in the current hedgerows. This system included at least one smaller rectilinear enclosure, attached to a longer boundary. About 50m square although only traced on three sides, it would be a suitable space for close work with livestock.

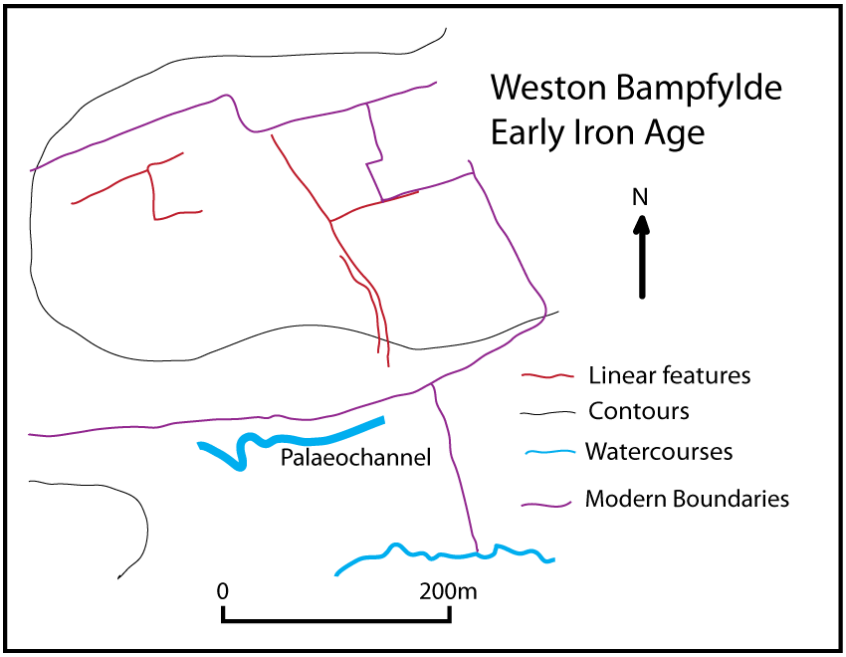

Figure 28: Bronze Age-Early Iron Age boundaries, Weston Bampfylde. The NW-SE linear may have origins in the Earlier Bronze Age (after Tabor 2008:102; SCEP archive).

At Sheep Slait, Poyntington Down (Figure 30), a 50m diameter ringwork (Point A) occupied a high promontory above the upper reaches of the Yeo. This broadens the distribution of a type of site found more frequently in the Thames Valley and eastern England (Tabor 2008:93-4), that has been regarded as an indication of aggrandising behaviour by elites in the richer southeast (*cf* Yates 2007: 122-8). The Sheep Slait ringwork aligns on existing field systems (*cf* Hornchurch (Guttmann and Last 2000:352)); it has an internal bank (*cf* Great Baddow, West Harling and Springfield Lyons (Brown and Lavender 1994; Buckley and Hedges 1987; Clark and Fell 1953); the single building is placed centrally (*cf* Thwing, Mucking South and West Harling II and III (Manby 1980; Clark 1993)); the northern enclosure ditch terminal contained deposits of pottery, bone and other material and a post-built structure stood in the entrance (*cf* Hornchurch (Guttmann and Last 2000:326-27)). Sheep Slait is however far outside of the accepted ringwork distribution. south western sites that offer insight into this period of change.

At Sheep Slait, Poyntington Down (Figure 29), a 50m diameter ringwork (Point A) occupied a high promontory above the upper reaches of the Yeo. This broadens the distribution of a type of site found more frequently in the Thames Valley and eastern England (Tabor 2008:93-4), that has been regarded as an indication of aggrandising behaviour by elites in the richer southeast (*cf* Yates 2007: 122-8).

The enclosure may date to the very end of the Bronze Age and its eastern entrance was aligned on the same axis as a probably Late Bronze Age rectilinear field system that spread at least 600m x 600m to the north and east over the upland promontory and onto adjacent hills and valleys at Milborne. This is emphasised in the earliest ringwork phase by the construction of a fence line through the entrance. At least one possible corner gate can be identified within the field system, taking into account movement of livestock. In some places there are hints that spaces were divided into strips as little as 50m wide, which make utilisation for arable agriculture feasible. However, the linears cross the contours, enclosing slopes and low-lying areas around the water source, and would make greater sense as part of a primarily livestock-focused system. The wood charcoal from Late Bronze Age/Early Iron Age contexts within the ringwork contained some oak, hazel and ash, with only small amounts of *Acer*, *Prunus* and *Pomoideae* (D De Carle pers. comm.), either indicating a reduction of scrub of hedge species or reflecting most of the wood having come from structural members rather than fuel ash. Flexible control of pasture enabling rotation of stock between grazing seems likely. What is lacking, however, is any indication of drove ways into the valley.

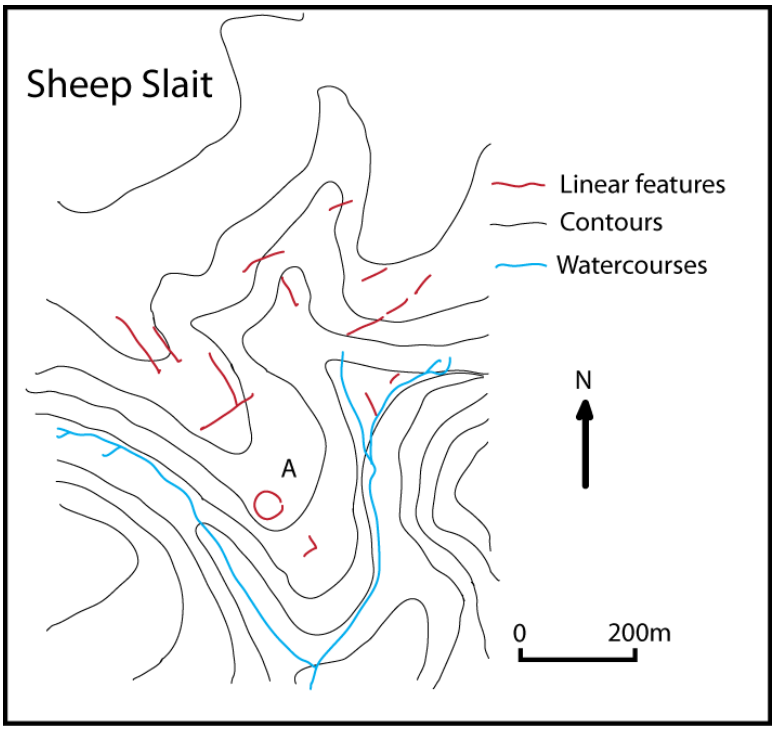

Figure 29: Sheep Slait, Poyntington Down (after Tabor 2008:94; SCEP archive).

The ringwork itself occupies the false crest of the hill at the edge of a steep drop to the dry valley to the west, and it seems isolated. There may have been further landscape division in this area that has been completely lost due to the heavy ploughing on the hilltop. The enclosure ditch was

re-cut at least twice, relating to redesign and elaboration of the enclosure including the construction of a screening concentric interior palisade and a building in the centre (Tabor 2008:96). The vast majority of the animal bone recovered relates to events toward the end of the enclosure's life. The unusual quantity of pig bone it contains may not have been produced in the bounded landscape, which may have fallen out of use. If contemporary, pigs are unlikely to have been managed within the large scale divisions within the purview of the ringwork. They would have necessitated smaller land divisions or may have been run in areas of woodland, scrub and rough pasture beyond the formalised system. The animal bone and field systems are therefore, on the face of it, at odds, but if we understand the accumulation of the Sheep Slait animal bone as the result of defined consumption events within or associated with a type of enclosure that has elsewhere acquired the aura of elite occupation (Yates 2007:18), we may postulate that pig was a desirable meat because it was different to the normal cattle and sheep based subsistence regime. If pigs were from beyond the organised landscape, that was the arena for daily livestock husbandry, they may have attained a more 'special' series of connotations in their consumption and disposal. The preponderance of sheep and cattle in the Cadbury Castle assemblage would be consistent with either the unenclosed land around the hill, or with the large scale linear system at Sheep Slait. The lack of evidence for goats cannot be unequivocally taken that they were not kept, but they are problematic to husband unless closely confined, and there is no evidence of small paddocks or housing (the possibility of fencing notwithstanding), but rather large, open space. The general picture is of an extensive pastoral system.

4.4.2 Using herds

As mentioned above, whilst some sheep and cattle were utilised for meat (indicated by butchery), herds and flocks were also managed to produce milk and other secondary products. Fewer cut marks were noted on sheep/goat bone than cattle and this relates to the greater need to joint larger animals for cooking. Pigs were a minor element in the Cadbury Castle assemblage, and unsurprisingly most of them were killed before reaching full maturity, with juveniles predominating. All areas of the body of cattle, sheep and pigs are represented on Cadbury (Appendix 2 Section 4), implying that slaughter took place there. The remains of all three species are heavily fragmented, but there is little evidence of butchery with cut marks noted on only two sheep/goat bones. The working of leather on Cadbury Castle during this period is suggested by a number of single-pointed awls (O'Connor 2000). There may be a degree of selection in the horse elements with a lower representation of axial and limb bones, and apparent over-representation

of head elements. Whilst this may be taphonomic in origin, it is more likely that it indicates either a slightly different treatment of, or different disposal strategy relating to horses.

Whilst intra-site analysis of depositional practice has not been carried out for the Cadbury Castle bone, at Milsom's Corner (Appendix 2 Section 4) there is slight evidence for disposal of more cattle fragments in the ditch, whereas other contexts favoured sheep/goat. This period is one with other evidence of structured deposits at Milsom's Corner, including the curated leg bone of an Early Bronze Age human burial that had been cut by the Middle Bronze Age ditch (Tabor 2008:84-5). A Yetholm type plate bronze shield (Coles *et al* 1999) was placed face down in the corner, and had had a stake driven through it several times. Disparity between a radiocarbon date of 1050-830 cal BC obtained from adjacent bone and the alloy type, means that it may have been old at the time of deposition. It was found in association with a large mammal pelvis fragment, reportedly red deer, but no longer present in the animal bone assemblage. The ditch was subsequently backfilled and covered by a house surrounded by a fence. Tabor argues for a special use of this building based on the cleanliness of the area and the previous special deposition (Tabor 2008:86-92), but as has previously been pointed out, neither are unusual occurrences.

The animal bone assemblage at Sheep Slait (Appendix 2 Section 7) came from a limited number of contexts in the ditch terminal, associated with an unusual density of decorated pottery and other objects, including worked bone, quern fragments, copper alloy, an imported quartz crystal, and the base of a red deer antler placed close to an oddly shaped piece of local limestone that mimicked its branching shape. The lack of animal bone from other locations in the ringwork interior provides a general insight into the use of the site and its cleanliness. Pottery and other finds were scarce in these features and it is clear that refuse was not deposited within the enclosure. The material deposited in the eastern ditch terminal (and not replicated in the western one), appears to have had a specific origin. This indicates that there was a view of the appropriateness of the location, but begs the question as to where general refuse was deposited. As mentioned above, pig predominates, although pig remains may have been more highly fragmented. There was a preponderance of cranial fragments and loose teeth, but pig was still in the majority by MNI. There was a collection of associated foot bones of a neonatal or young pig. These appear to represent butchery waste comprising the front feet of the animal. Whilst only one cut mark was noted, it seems that this assemblage is the result of a sequence of specific high profile, possibly high status, episodes of consumption and deposition.

4.5 Animals, landscape and people: The Early Iron Age

4.5.1 Having herds

Of a total of 1381 fragments from Cadbury Castle dated to the Early Iron Age, 968 could be identified to species (Table 30). Additional Early Iron Age material was recovered from Milsom's Corner and from a hollow way on West Sigwells that may date to the this period (Table 31). There appears to be a change between the Later Bronze Age and the Early Iron Age faunal assemblages which should be considered in the light of the Late Bronze Age/ Early Iron Age material from the ditch at Sheep Slait described above.

Table 30 Representation of species Cadbury Castle, excepting ABGs, Early Iron Age.

Species	NISP	NISP %	MNI	MNI %	% Main Species
Cow	265	19.25	6	16.22	28
Pig	247	17.95	7	18.92	26
S/G	437	31.76	22	59.46	46
Dog	6	0.44	1	2.7	
Horse	10	0.73	1	2.7	
Large mammal	62	4.51			
Medium mammal	135	9.81			
Unidentified	214	15.55			
Total main	**1376**				
Wild species	5				
Total fragments	**1381**				

Table 31: Species representation SCEP sites, Early Iron Age

	West Sigwells		Milsom's Corner	
Species	**NISP**	**% Main Species**	**NISP**	**% Main Species**
Cattle	1	NA	24	31.58
Pig		NA	17	22.37
S/G	4	NA	35	46.05
Dog	1		1	
Horse			1	
Large mammal	1		17	
Medium mammal	4		69	
Unidentified	10		230	
Total fragments	**21**		**394**	

The most obvious element in the Cadbury Castle material (Appendix 2 Section 5) is the importance of sheep/goat, with cattle and pig relatively equally represented. These proportions are also reflected in the large and medium unidentified mammal categories. The change between cattle and pig appears to be a combination of a loss of importance for cattle and an increase in pig numbers. A few goat fragments have also been positively identified. The small collection of faunal material from West Sigwells (Appendix 3 Section 8) was in poor condition and heavily fragmented, with single fragments of cattle and dog, and four identified as sheep/goat. Whilst this attests to the species presence, it is difficult to know where the material originated, although its condition makes sense given its location. Early Iron Age material from Milsom's Corner (Appendix 2 Section

4) appears fairly similar to that from the Late Bronze Age. The sheep/goat NISP forms around half of the identified assemblage, although medium mammal fragments outnumber large mammal (69 fragments to 17), implying a slightly greater emphasis on sheep/goat. Despite the differences in scale of the Cadbury Castle and Milsom's Corner assemblages they show a strong similarity (Figure 30), in which the more even representation between cattle and sheep in the Late Bronze Age, is replaced by sheep being numerically dominant. This change appears to form a transitional point which established a regime that became further exaggerated in the Middle Iron Age.

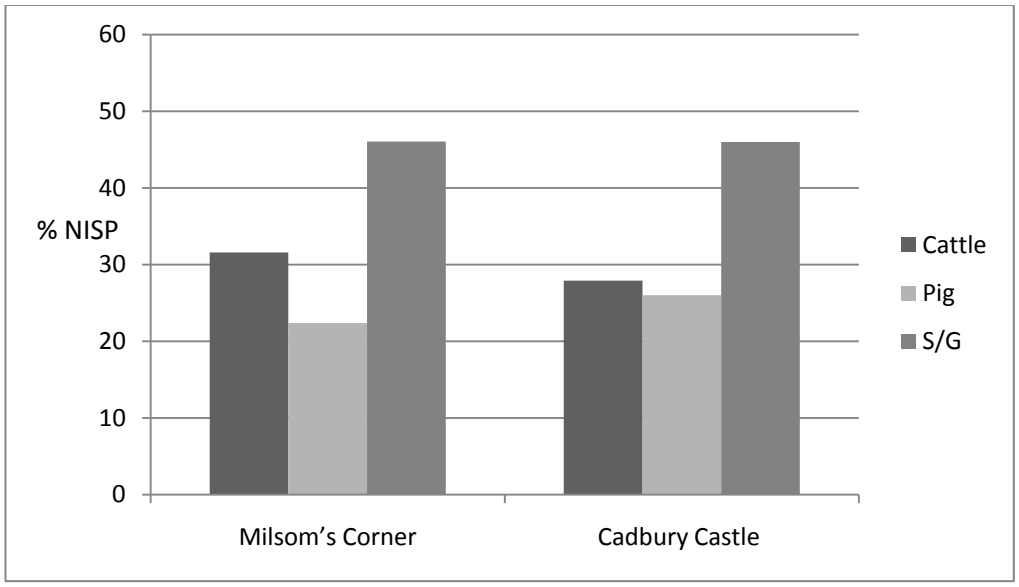

Figure 30: Percentage of NISP of the three main species, Milsom's Corner and Cadbury Castle, Early Iron Age (Milsom's CornerC N=76, Cadbury Castle N=749).

The pattern of sheep/goat culling in the Cadbury Castle assemblage is similar to that noted in the Bronze Age. The concentration of sheep/goat mandibles at Payne Stage C (6-12 months) reflects organised flock management, with individuals also falling into adult and old adult categories. The majority of first mandibular molars reflect wear from Payne Stage D (12-24 months) onwards, but given the greater degree of fragmentation of sheep/goat in this assemblage, one might expect differential destruction of porous mandibles. Several neonatal-size porous fragments were recorded, with several metapodials unfused along the midline. Sheep/goat mandibles in the Milsom's Corner assemblage represent sub-adults and adults, whilst porous bone indicates the presence of younger animals. The evidence of a number of fairly old adults in these assemblages implies the retention of animals for wool production or herd management through breeding reliable ewes. A selection of pathological conditions were recorded, mainly oral disease, but including a well healed fracture which could represent a valued breeding animal, and a case of

'penning elbow'. These are all consistent with the types of disease seen in the later assemblages but prevalence cannot be calculated with confidence.

The small Cadbury Castle cattle assemblage provides an indication of the likely herd structure. Whilst most of the tooth wear information indicates animals in the sub-adult to old adult stages (Appendix 2 Section 5), the presence of a considerable number of unfused early fusing elements (e.g. acetabulum and glenoid) indicates the presence of much younger individuals, so a full range of ages is suggested, with greatest emphasis on the very young animals and mature adults. This pattern is similar to that seen in the later Iron Age (discussed below). The cattle mandibles at Milsom's Corner are from sub-adults and adults (Appendix 3 Section 4). The majority of pigs in the Cadbury Castle assemblage were killed at a young age (Appendix 2 Section 5). There is no toothwear data, but a considerable proportion of the assemblage was porous bone and where fusion information was present appears to indicate the retention of pigs beyond 24 months was rare. It is not certain if the animals were kept or farrowed in or near the hillfort. Three mandibular canines were female, and five male, but is too limiting a sample to clarify this issue.

The small amount of material assigned to the Early Iron Age is symptomatic of the much reduced number of Early Iron Age sites in the Cadbury Environs. There are a number of problems with identifying activity of this period, including continuity from earlier landscapes. There is a marked paucity in the general pottery distribution. However, lack of refined understanding of the ceramic sequence and absolute dates are exacerbated by the similarity of pottery fabrics in the Cadbury area into and throughout the Middle Iron Age (Tabor 2008:100). This has also prevented chronological refinement of the material from Cadbury Castle itself. The Early Iron Age phase at Milsom's Corner includes a roundhouse and areas of industrial activity. The line of the earlier enclosure was reworked with a fence line, attested by postholes and a bedding trench, with two more substantial posts at a gap in the bedding trench probably representing a gate positioned between the house and the slope leading up to the top of Cadbury Castle (Tabor 2008: 110-111). These types of features were evidently present in the landscape and had in some cases superseded ditched boundaries. The lack of visibility of land division of this period may therefore be due to a change in construction preferences. After all, the construction of large structures in timber on the hill had been defining space since the Late Bronze Age.

Notwithstanding the continued utilisation of the Bronze Age landscapes at Woolston and the Weston Bampfylde system referred to above, Tabor feels that in the Early Iron Age occupation

contracted to the area around the community on Cadbury and its immediate locale (2008: 105). At this point the community on the hill was burgeoning, with an increasing number of round houses and rectilinear post built buildings and other features (Barrett *et al* 2000:159). It is possible that the first in the sequence of ramparts was constructed at this time, following the sequence established by Woodward (2000), in the light of experience of the pottery chronology (Tabor 2008:108). Tabor suggests a retreat from agricultural (presumably arable) use of the wider landscape, proposing that greater efficiency of local crop production may have supported the population (2008:106). There is however no evidence for suitable land division, land use or crops from this period in the Cadbury Valley or immediately around the hill. There is however evidence for the organised movement of animals within the wider landscape, from the possibly Early Iron Age track on West Sigwells, a hollow way *c*10m wide working its way from the edge of the limestone escarpment, down the side of the valley, and which may be preserved in earthwork form on the steep valley side below. This would be suitable for moving all types of livestock and could accommodate large numbers. It appears that whilst habitation nucleated within Cadbury Castle, a greater emphasis on sheep husbandry occurred in a largely unbounded landscape, or utilised established, and in some cases ancient, boundaries. This is a fully extensive system, and would have required daily herding, supervision of, and attendance on livestock.

4.5.2 Using herds

The flock and herd structures discussed above indicate that, as in the Bronze Age, animals were actively managed to ensure continuation of the breeding stock, as well as producing meat. The production of milk from the cattle is likely, given the presence of the very young and old. A handful of cut marks were noted on a few of each of the cattle, pig and sheep/goat bones from Cadbury Castle (Appendix 2 Section 5). There are slightly more by percentage on the cattle bone (2.26%, 1.62% and 1.14% respectively), which is probably a result of the need for greater portioning of the larger carcase. No spindle whorls from the hillfort were dated to this period and a number of antler and bone decorated combs, possibly used in weaving and described as of ' Early Iron Age type' (Britnell 2000a; 2000b:181-3) probably date to the later Iron Age, so the working of textiles is not proven in this area for this period.

The utilisation of pigs for meat is a given, but the proportion and age groups in the Cadbury Castle assemblage must be considered in the light of the structured deposition of pig in the LBA/EIA transition deposit at Sheep Slait (discussed above). Although pig was still a minority species, we should consider that on Cadbury Castle as well, it may have been associated with specific acts of consumption. Most of the Early Iron Age Cadbury animal bone came from a series

of ‘refuse’ layers in the central plateau area which also produced considerable quantities of decorated pottery. All areas of the body are represented for the three main species, but the material is dominated by loose teeth and is otherwise heavily fragmented. There are also differences in the sheep/goat NISP and MNI, which hints at sheep/goat having been more fragmented than the other species, a different pattern from other periods, and it is unclear why this taxon was affected disproportionately. This hints at some particular consumption practices leading to the formation of the deposit. It contrasts with the Milsom’s Corner material (Appendix 2 Section 4), which was distributed through a number of feature and context types, most of it coming from general horizontal stratigraphic layers. It appears to be general settlement debris, and as such may provide a general idea of normal consumption.

4.6 Animals, landscape and people: The Middle Iron Age

4.6.1 Having herds

The Middle Iron Age Cadbury Castle material (Appendix 2 Section 6) provides a much expanded volume of faunal data reflecting the zenith of the hillfort. It comes from all areas, contexts and features, including bank material, ditches, pits and postholes. Activity also intensified at Milsom’s Corner, with more numerous faunal material from field boundaries and settlement (Appendix 3 Section 4). The Sheep Slait ringwork was reused (Appendix 3 Section 7); when the enclosure ditch was almost completely filled, and probably only just visible, a round house was constructed on the footprint of the original. A number of pits were dug, and rapidly backfilled with rubble. Field boundaries and small features at The Moor and Crissells Green in the base of the South Cadbury Valley produced small assemblages (Appendix 2 Section 6 and 10), as did boundaries on eastern Sigwells (Appendix 3 Section 5). A large area of western Sigwells began to be covered in pits containing amongst other things a moderate-sized bone assemblage (Appendix 3 Section 8).

Species representation

The Cadbury Castle assemblage (Appendix 2 Section 6) consists of 31,398 fragments (20,318 identified to species) (Table 32,) plus a further 8,484 fragments from a single pit, D817 (Table 33), which is dealt with separately (Appendix 2 Section 7) and discussed in more detail below. All comments about the ‘main’ assemblage exclude the contents of D817. Although there is a considerable amount of unidentified material, this varies through the assemblage, and probably affected by a previous retention and disposal policy. Six SCEP sites also produced faunal remains (Tables 34 and 35). The main domestic species, cattle, sheep/goat and pig, are heavily dominant

in these assemblages. In the Cadbury Castle material the total numbers of wild species and birds are very low, predominantly represented by frogs and small mammals.

Table 32: Species representation, Cadbury Castle, excluding ABGs and pit D817, Middle Iron Age

Species	NISP	NISP %	MNI	MNI %	% Main Species
Cow	4038	12.99	71	12.14	20.46
Pig	3807	12.24	116	19.83	19.29
Sheep/Goat	11890	38.24	386	65.98	60.25
Dog	163	0.52	6	1.03	
Horse	392	1.26	6	1.03	
Large Mammal	2542	8.18			
Medium Mammal	4379	14.08			
Unidentified	3883	12.49			
Total main	**31094**				
Red Deer	4				
Roe Deer	6				
Deer	4				
Hare	9				
Fox	1				
Cat	4				
Bird	62				
Small mammal	117				
Amphibians	97				
Total fragments	**31398**				

Table 33: Species representation, Cadbury Castle, Pit D817, Middle Iron Age.

Species	NISP	NISP %	MNI	MNI %	% Main Species
Cow	356	4.38	7	10.14	9.18
Pig	355	4.37	12	17.39	9.15
Sheep/Goat	3167	38.97	50	72.46	81.67
Dog	73	0.90	4		
Large mammal	200	2.46			
Medium mammal	2412	29.66			
Unidentified	1566	19.26			
Total Main	**8129**				
Bird	2				
Total fragments	**8131**				

Table 34: Species representation, SCEP sites (except West Sigwells), Middle Iron Age.

	Milsom's Corner		Sigwells TR8,9,19		Crissells Green		Sheep Slait		The Moor	
Species	**NISP**	**MS %**	**NISP**	**MS %**	**NISP**	**MS %**	**NISP**	**MS %**	**NISP**	**MS %**
Cattle	54	21.95	7	NA	11	NA	23	13.37	25	40.32
Pig	46	18.70	1	NA	1	NA	21	12.21	4	6.45
Sheep/Goat	146	59.35	10	NA	1	NA	128	74.42	29	46.77
Dog					1				2	
Horse	3		2				13		2	
Large mammal	56		3		7		54		213	
Medium mammal	202		12		2		194		27	
Unidentified	671		73		97		251		86	
Total Main	**1178**		**108**		**120**		**684**		**302**	
Small mammal	1						17		1	
Amphibian	1						6		2	
Bird	1		1							
Cat	1									
Total fragments	**1182**		**109**		**120**		**707**		**305**	

Table 35: Species representation, excepting ABGs, West Sigwells, Middle Iron Age.

Species	NISP	NISP %	MNI	% Main Species
Cattle	82	3.01	4	11.42
Pig	92	3.37	5	12.81
Sheep/Goat	544	19.96	17	75.77
Horse	12	0.44	1	
Large mammal	83	3.04		
Medium mammal	577	21.17		
Unidentified	1334	48.94		
Total Main	**2726**			
Small mammals	99			
Amphibians	6			
Bird	2			
Total fragments	**2833**			

Red and roe deer are the most frequent wild mammal species, but still only provide a total of 14 fragments. All but two of these were antler, probably debris from antler working. One was naturally shed, implying that it was collected rather than the result of hunting. Hare comprises the next most common species, with a total of nine fragments from a minimum of two individuals. Four cat bones, three of which probably represent a single individual, are assumed to be wild in the absence of any evidence to the contrary. A single fox mandible was noted. Bird bones include small numbers of seabirds, ducks (teal and pintail types), buzzard and predominantly ravens. The latter species were probably resident in the immediate area. Two bird bone fragments were recovered from West Sigwells (Appendix 2 Section 8), both from ducks, possibly pochard and northern pintail types. At Milsom's Corner (Appendix 3 Section 4) a single fragmentary cat tibia may or may not be domestic.

Although sheep/goat numbers increased in the Early Iron Age, the major step change occurred in the Middle Iron Age. The predominance of sheep/goat increased considerably in the Cadbury Castle material, and cattle and pig reduced proportionately. This occurs in both NISP and MNI counts, but cattle are markedly in the minority when the MNI is considered. Cattle bones suffered a greater degree of fragmentation, implied by the loose teeth percentages (Appendix 2 Section 6). At Milsom's Corner sheep/goat were predominant, also reflected in the counts for medium mammals. Cattle and pigs remain a significant proportion of the assemblage in roughly equal numbers. The Middle Iron Age Sheep Slait material has sheep/goat well represented also with a large proportion of medium mammal-sized fragments. However, at The Moor only 20% of the small assemblage was identified to species. The proportion of sheep/goat appears relatively low and the cattle high, which probably relates to virtually all of the Middle Iron Age material coming from ditch fills. The material from the West Sigwells pits and boundary ditch is heavily fragmented with a high proportion of loose teeth (Appendix 3 Section 8). Sheep/goat were a very clear majority of the identified species, supported by the large number of medium mammal

fragments. The proportions of the main three livestock species in the main Middle Iron Age assemblages are shown in Figure 31. Excepting The Moor, there is a general consistency between assemblages of all sizes. Sheep/goat were firmly dominant in the animal economy. A possible slight influence of landscape location is discernable. Milsom's Corner and Cadbury Castle have a lowland and valley location, whilst the even greater emphasis on sheep/goat at Sheep Slait and Sigwells might possibly relate to their downland location on the top of the limestone ridge.

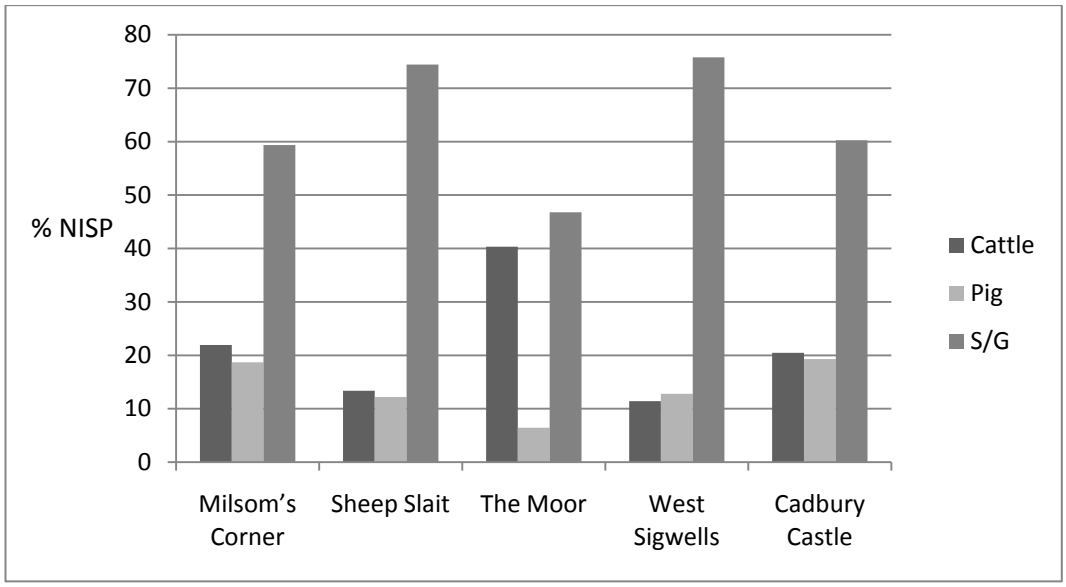

Figure 31: Percentage of NISP of the three main species, by site, Middle Iron Age (Milsom's Corner N= 246, Sheep Slait N=172 , Moor N= 58 , West Sigwells N=718, Cadbury Castle, excluding Pit D817, N= 19735).

Nevertheless, this appears to indicate the widespread application of a particular husbandry regime. This is important because the similarities indicate that the hillfort assemblage is probably a fair reflection of the activity in the surrounding landscape, and not overly skewed by the consumption and disposal choices of the inhabitants. However, given the degree of contemporary activity and occupation identified and excavated in the wider Cadbury landscape, the excavated sites have yielded generally very small assemblages. This contrasts with the large amount of material deposited within the hillfort, and seems to confirm the hillfort in a role where its occupants consumed the produce of its hinterland.

The husbandry of sheep and goats

Goats are a small but constant component of the Cadbury Castle assemblage, although they probably never exceeded 5% of the flock (Appendix 2 Section 6). At Sheep Slait it could not be determined whether sheep or goats were present (Appendix 3 Section 7), whilst only sheep have been identified at The Moor and West Sigwells Appendix 3 Section 8 and 10). Figure 32 gives

sheep/goat mortality curves for the hillfort, West Sigwells and Sheep Slait. The greatest proportion of deaths in the Castle material occurs at Payne Stage C, (6-12 months old). The pattern is largely replicated at West Sigwells with the majority dying at Stages B and C (2-12 months old). A single individual at Stage A (0-2 months) attests to lambing somewhere in the vicinity. Sheep Slait is similar in the early stages, confirming the pattern of deaths at Stages B and C. A lack of animals dying at stages D and E (24-36 months) may be a function of sample size at West Sigwells, reflect lack of culling at this age, or the removal and separate husbanding of a cohort of sub-adult sheep. Fusion information and the number of porous fragments indicates that a range of ages were present in the assemblage. At The Moor, three individuals were identified at Payne Stage C (and the same mandible wear stages) and two at Stage G (4-6 years) (Appendix 3 Section 10). Milsom's Corner produced porous and adult bone (Appendix 3 Section 4). A single neonatal sheep humerus seems to represent rearing on or near the site.

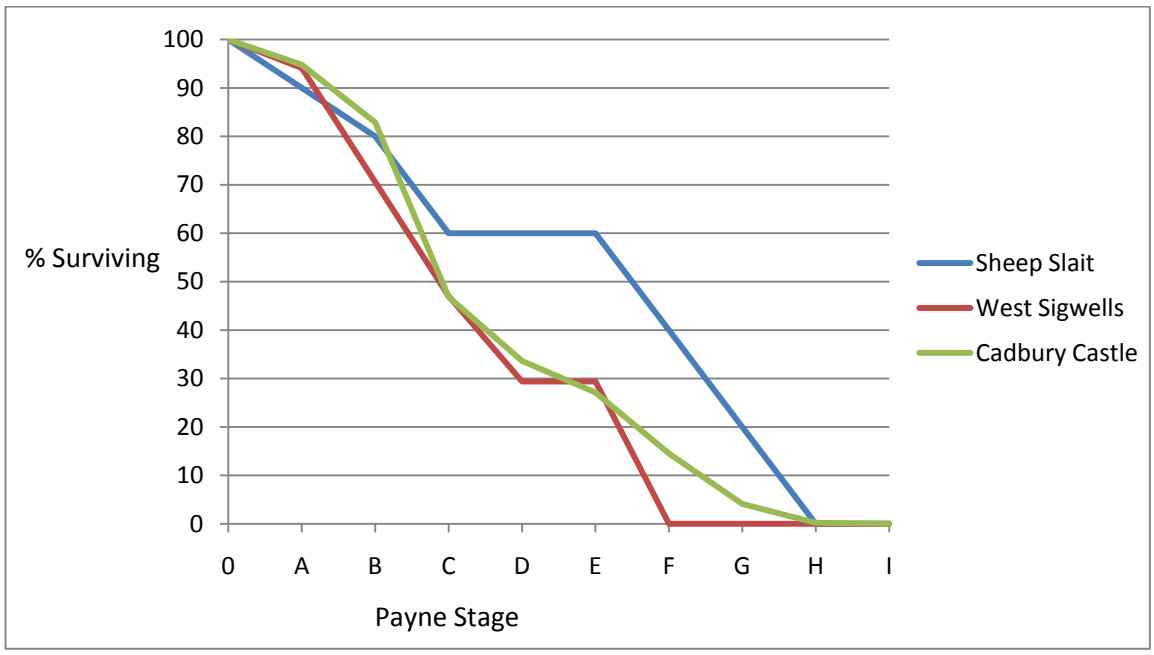

Figure 32: Payne mortality curves for sheep/goat, Cadbury Castle, Sheep Slait and West Sigwells, Middle Iron Age (Sheep Slait N=10, West Sigwells N=17, Cadbury Castle, excluding Pit D817, N=461).

There is a sharp peak in the Cadbury Castle assemblage at Grant MWS 8. However, high numbers culled at MWS 9-12 may imply either an elongated lambing period or an extended slaughter period, although variation in tooth attrition may also contribute. One of the main purposes of the flock was probably to provide a supply of meat over the winter months. We are able to further explore this by considering the contents of pit D817. The circumstances of this one feature are discussed below; it appears to derive from a single slaughter event, which included a range of species, but focussed on sheep/goat. This removes the spread of age groups resulting from an

accumulated assemblage of animals culled at different times, and importantly enables consideration of the cull timing and the duration of the lambing period.

Figure 33 compares the D817 mortality profile with that of the main assemblage. The main age of death occurs earlier in the D817 material, during Payne Stage B (<6 months), as opposed to Stage C (6-12 months). This may indicate variability in flock management practice, possibly between individual shepherds, although we have already noted the general similarity of practice. The mandibles give two notable peaks, shown in Figure 34, one at MWS 3-5, a second at MWS 19-21, with some older individuals. This seems to indicate that the individuals died at a particular time of year. Assuming a single cull event, the spread of wear stages in the two peaks can be explained by a 1-2 month duration lambing period. If this duration was the norm, the spread of wear stages in the main Cadbury Castle assemblage results from the lambing period combined with the cull length; if the lambing season was short, animals must have been dying over several months in early winter. The D817 deposit may be comprised of surplus lambs and yearlings (mainly unwanted males and females not selected for breeding) removed prior to tupping. Older individuals may have been rejected for further breeding for a variety of reasons or culled from the herd on the basis of age, infirmity and previous infertility. However, this deposit appears to represent the killing of animals considerably earlier in the year that that represented in the rest of the Middle Iron Age sheep/goat assemblage.

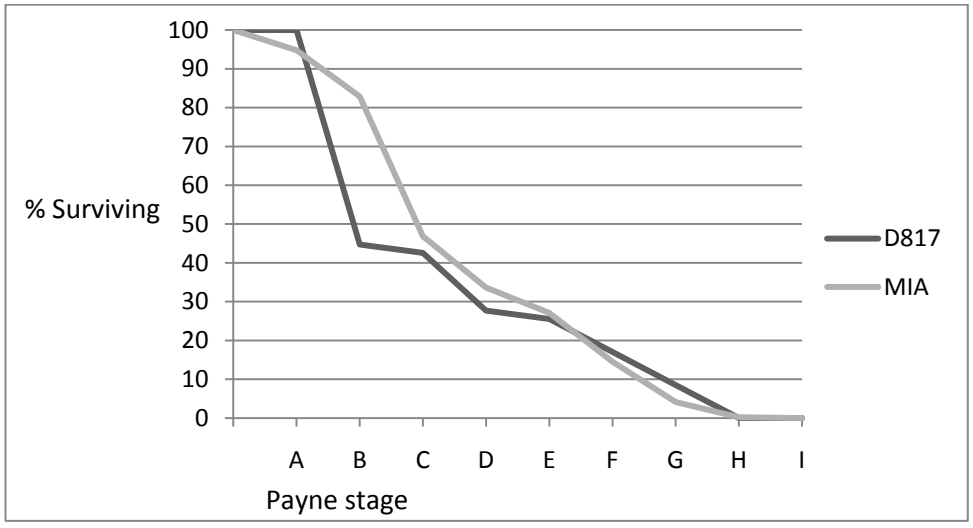

Figure 33: Cadbury Castle D817, sheep/goat kill-off profile using Payne wear stages, compared to general Cadbury Castle Middle Iron Age (MIA N=461 , D817 N=47).

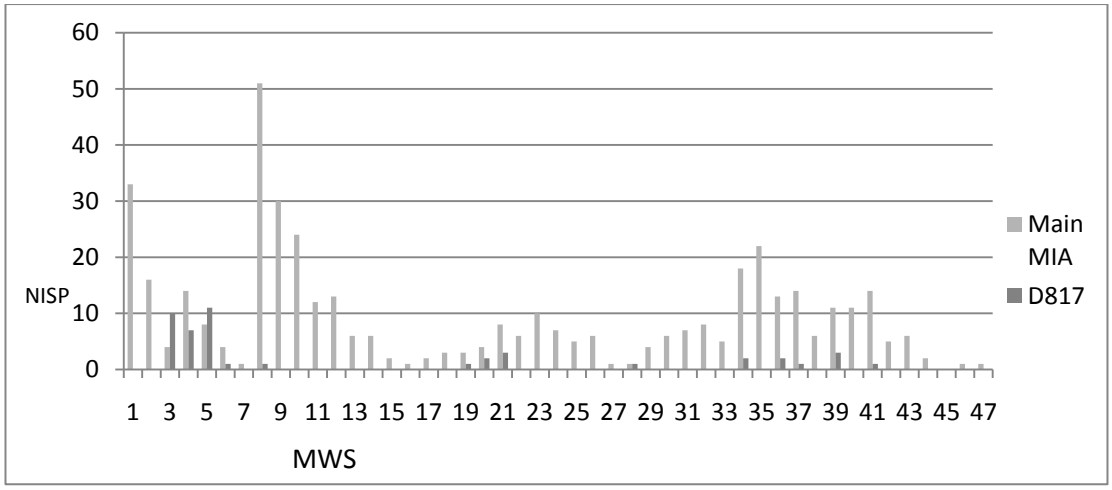

Figure 34: Grant Mandible Wear Stages for sheep/goat, D817 main bone deposit compared to the main Middle Iron Age N = 437, D817 N =46

If young animals were being removed purely to manage a ewe flock farmed for secondary products, the steepest point on the curve would probably occur at Stage A or B (0-6 months). There is a seasonal element in culling but it seems unlikely that this resulted from consistently unsuccessful foddering and overwintering. It is more likely that the pattern results from conscious management of breeding and resource utilisation. Selection of animals to be retained in the flock or become replacement breeding stock would be likely made at the point when lambs were weaned and tupping was about to commence. At this point, subjective considerations such as the perceived health and fertility of individuals, and whether they were good mothers, would be made. The length of the cull seems to indicate that not only was suitable forage available for the flock and replacement ewes, but to a proportion of the 'spare' animals. Lambs were being conserved and utilised over winter as a source of meat, but with little apparent concern for retention until reaching full meat weight. This may reflect a pragmatic choice. Animals were kept longer than necessary, if removal from the herd was the only aim, but did not have too much invested in them. The presence of a considerable number of older animals implies a wool producing flock but also indicates breeding management. One reason for the removal of animals in the autumn is the necessity of seperating intact males from the ewes. This reduces disruption and controls the genetic makeup of the flock. Whilst castration was certainly an option, seperation would be less labour intensive, especially if animals were intended for slaughter. Breeding stock were probably retained for a number of lambings. Proportions of the sexes from distal metacarpal metrics (Appendix 2 Section 6) seems to indicate clustering with a larger group of smaller animals probably female, and a looser group of more robust animals possibly rams or castrates kept for wool. The sheep economy was one in which longterm management of the flock

provided replacement animals, a good supply of secondary products, and an annual winter crop of lambs.

We can begin to explore how the animals were kept using pathological data in the Cadbury Castle assemblage (Appendix 2 Section 6). The scarcity of non-specific infections or fractures implies that they either occurred at very low levels or that affected animals were dispatched before a bone response could occur. 'Penning elbow' accounted for 3.53% of recorded distal humeri, a level which does not seem to indicate grazing of animals on hard or steep land. However, a large number of animals died young, before changes would have started to occur. However, periodontal disease affected 6.67% of recorded jaws and calculus 9.46%. These levels are low, but significant given the early age at death of most animals, and may indicate grazing of scrub, overgrazing pasture, and/or deliberate selection of broken mouthed individuals for culling.

The husbandry of cattle

Figure 35 gives the Grant MWS for cattle in the Cadbury Castle assemblage. This is dominated by very young animals, many of them neonatal. Whilst there were some older calves and a smattering of sub-adults, the second most common category comprises adults and old adults. In addition, wear stages of loose fourth deciduous premolars, permanent fourth premolars and third mandibular molars reflects the emphasis on very young and older cattle. The pattern is further reflected elsewhere. Pit D817 produced four cattle mandibles (which may relate to only two individuals) at MWS 3, whilst adults were represented by a single jaw of MWS 45 (Appendix 3 Section 7). At The Moor, a single cattle mandible had a MWS of 4 (Appendix 3 Section 10). There is a single porous bone, but a later fusing element indicates older cattle. Milsom's Corner produced porous and adult bone and one mandible of MWS 4 (Appendix 3 Section 4). A single cattle mandible from West Sigwells (Appendix 3 Section 8) was assessed as MWS 18 and there were three porous fragments. A single unfused epiphysis relating to a later fusing element was present, but all other elements were fused, indicating animals over 24 months of age. There was virtually no information available for the Sheep Slait cattle population (Appendix 3 Section 7).

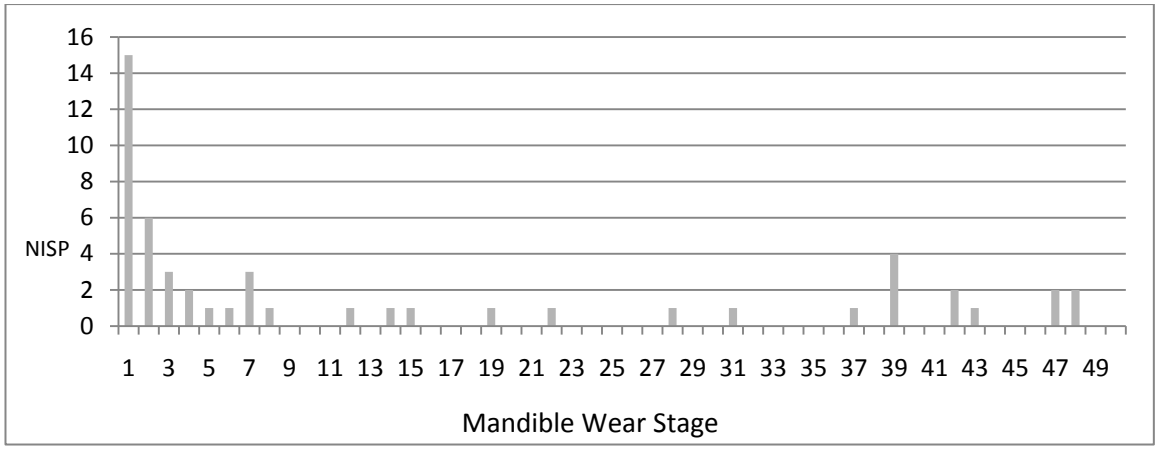

Figure 35: Grant Mandible Wear Stages for cattle, Cadbury Castle, excluding Pit D817, Middle Iron Age.

The cattle economy was one in which few animals were kept throughout a natural lifespan, and a large number of animals died or were culled soon after birth. There seems to have been an avoidance of culling juveniles and younger sub-adults. If we assume that cows had a reproductive life of about ten years (Chapter 2 Section1), and consider the proportion of old animals to neonates, the population could be sustainable. Although one would expect a proportion of neonatal deaths, the usual explanation for elevated young cattle deaths is an emphasis on dairying. The presence of large numbers of neonates in the main Cadbury Castle assemblage indicates that calving was taking in or close to the hillfort. The majority of adult animals were apparently cows (Appendix 2 Section 6), although bulls and steers were present, which supports this interpretation, with a lesser interest in meat production. The small number of deaths of young adults may relate to disease or the management of reproduction. A couple of bulls would be needed for breeding purposes, but the steers are likely to have been retained to provide traction.

The majority of the few pathologies affecting cattle in the Cadbury Castle assemblage (Appendix 2 Section 6) are degenerative joint problems and osteoarthritis; some of these are specific to traction. The most severe changes occurred in the hip and lower legs and feet. A number of fractures in large mammal rib fragments may result from handling methods. Fractures can occur due to the force required when handling larger animals. A single example of periostitis affecting the ventral rib surface may relate to a non-specific respiratory infection. It is interesting that this is the only instance recorded. If housed in damp atmospheres both cattle and horses are prone to respiratory illness and inflammation. The low incidence of such infections indicates that animals were not housed, were kept in well ventilated conditions, or in low numbers.

The husbandry of pigs

There are a range of ages of pigs in the hillfort assemblage with only a small number of neonates and very young individuals (Figure 36). These may indicate that farrowing took place within the hillfort or in the immediate vicinity. However, there are very few old adults, and the majority of animals died or were slaughtered in the late juvenile or early sub-adult stages, under two years of age. Eight pig mandibles from Pit D817 were at MWS 3, and as the bone was either porous or from unfused elements no old individuals were included. This again indicates a close timescale for killing. Very small amounts of porous bone and material from older animals were present at Milsom's Corner (Appendix 3 Section 4. Juvenile and sub-adult pigs were present at The Moor (Appendix 3 Section 10). A single mandible from West Sigwells (Appendix 3 Section 8) was from a sub-adult and one element indicates an individual over 36 months. Eleven fragments of porous bone were recorded, and the small number of unfused earlier fusing elements indicates that pigs were dying as juveniles. Unlike cattle and sheep/goat, there is no strong pattern to mortality or indication of seasonality, although the peak around MWS 8-10 may reflect this. The pattern is probably obscured by the possibility of multiple farrowings in a year, but unless animals were being retained for breeding purposes, slaughter may have been based on necessity or immediate management of resources, than on a longer term management strategy.

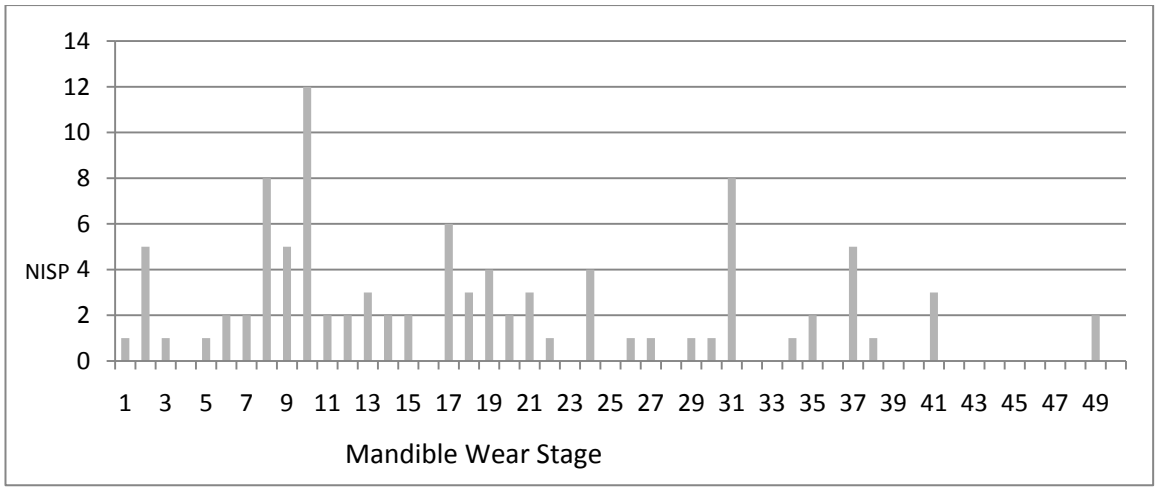

Figure 36: Grant Mandible Wear Stages for pig, Cadbury Castle, excluding Pit D817, Middle Iron Age.

At West Sigwells two lower canines were from a male and a female (Appendix 3 Section 8), but most of the animals deposited on Cadbury were males (Appendix 2 Section 6), and there does not seem to be a valid taphonomic reason for this. The discrepancy cannot be explained by the retention of females, which would then appear as older individuals. The age and sex profile can be

explained if many pigs were raised elsewhere and male animals not required for breeding were brought to the hillfort for consumption (and disposal); some animals may have arrived as partly prepared carcases. Metrically, the Cadbury Castle pigs appear more diverse than the other livestock species (Appendix 2 Section 12) . This could indicate less control of the breeding process, or hybridisation with a wild or feral population. From the high incidence of dental enamel hypoplasias (Appendix 2 Section 6), pigs also appear to have experienced nutritional stress, probably from having a less well regulated diet. Post-cranial pathologies possibly relate to traumatic injury, either inflicted by other pigs or by people. If pigs enjoyed a less integrated management, whereas cattle and sheep/goat were managed on a larger, possibly communal, scale, they may represent a more individualised or household enterprise, killed as and when meat was required, rather than to a prescribed timescale.

The other domestic species

Despite the larger numbers of bones of minority domestic species, it is still limited as to what can be said about them. Dogs appear to have been a constant but minor presence both within Cadbury Castle and in the wider landscape, and there is limited information on their relationship to people or utilisation as part of the husbandry regime, although they were consumed (see below). Both fully mature and younger individuals were represented at Cadbury Castle (Appendix 2 Section 6). The few dogs from The Moor were all skeletally adult (Appendix 3 Section 10), but a very young puppy was recovered from West Sigwells (Appendix 3 Section 8). Animals of varying sizes are represented, whilst the admittedly limited pathological data indicates that they may have attracted a greater degree of injury compared to the small livestock. It has been suggested (e.g. Teegen 2005b) that dogs attract injury due to closer relationships with people or use in herding livestock.

Most horses disposed of on the hillfort (Appendix 2 Section 6) were fully adult, and many were probably elderly, given the proportion of worn and very worn dentition. However, there were a few porous elements, and a limited number of individuals under 18 months old were indicated in the fusion data. Importantly the remains of a foetal horse were noted, demonstrating that in-foal mares were present. At The Moor, the few horse elements were all skeletally adult, with a similar situation at Sheep Slait. The handful of horse fragments from West Sigwells contained no porous elements. However, a single unfused distal metacarpal indicates an individual younger than 15-18 months of age. Other fused elements indicate an individual over 20-24 months (Appendix 3 Section 8). Limited variation in size was noted across the sites, and pathologies indicate use for

riding and pulling vehicles. The tentative indication of younger animals on these sites begins to challenge the view that horses were largely feral and not actively managed or bred. Where there is evidence of a highly regulated landscape and management strategy for other domestic species, it does not ring true that horses would be treated so differently, generating greater problems in breaking and training. Previous lack of detection may be a function of the small overall numbers of horse remains recovered, specialist function of particular sites, or a propensity for different depositional treatment of horse remains, discussed below.

The use of landscape

The distribution of Middle Iron Age pottery in the Cadbury environs has demonstrated activity adjacent to the hillfort and in its wider hinterland, that reached its zenith at this time (Tabor 2008:113-5; Barrett *et al* 2000:160). Numerous new boundaries were also created at this time but there was considerable continuity from the Middle Iron Age into the Late Iron Age, discussed below. There is an increase in *Prunus* and Pomoideae alongside the oak and ash in wood charcoal from various Middle and Late Iron Age sites, with more dog rose, holly and *Acer* (D De Carle pers. comm.). It might be tentatively suggested that the increase in scrub species may relate to increased hedging providing trimmings. The plant macrofossils from Middle Iron Age pits at West Sigwells produced barley, emmer and spelt wheat in order of frequency, as well as larger quantities of oats (calculated from Blenman (2006)), although whether these were cultivated or wild is a moot point. There were two bread wheat grains. The range of weed seeds identified is limited to bromes, bedstraw, and significant quantity of docks, with a single example of the blinks family (after Blenman 2006).

The continuity in landscape use is in some respects problematic to interpretation. Parts of systems have been dated firmly to the Middle Iron Age, whilst other areas have been allotted to the Late Iron Age due to the material recovered from them. This probably under-represents the extent of the Middle Iron Age systems, but simultaneously illustrates the gradual and organic growth and development of field systems. Ditches are only dateable to the point at which they fill up. If systems were actively maintained, and ditches cleaned out regularly, minimal evidence of either that cleaning activity or the date of foundation and use would result. It seems likely therefore that the majority were established in the Middle Iron Age, and developed slightly before filling up with refuse that choked it in the Late Iron Age. Tabor's two phases (2008:115,143), have therefore been combined in Figure 37. The way in which these systems functioned can also be conflated, with a few exceptions that are discussed below.

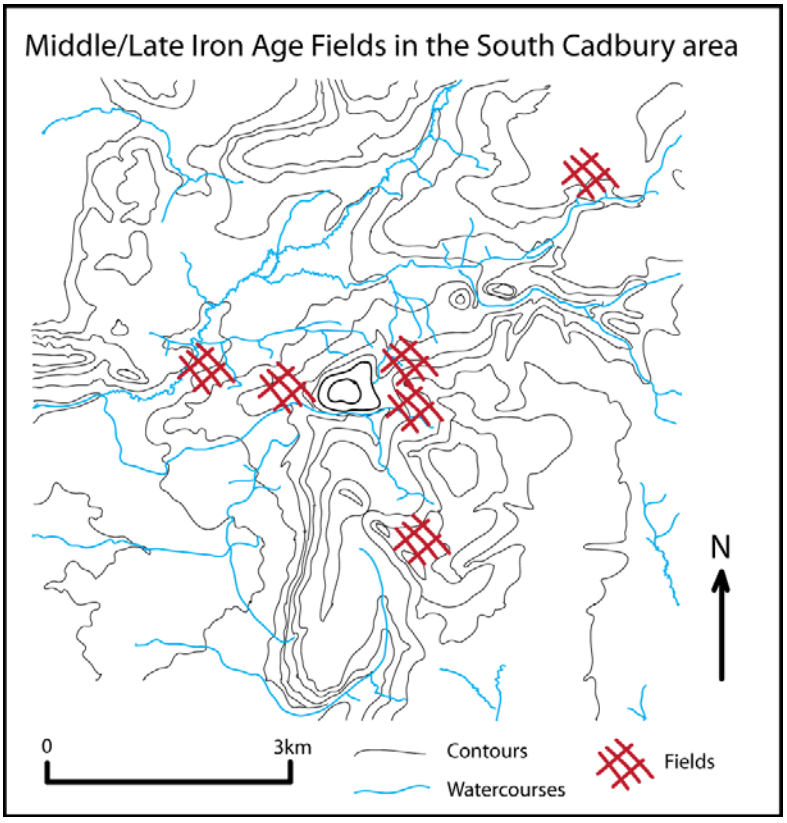

Figure 37: Middle and Late Iron Age fields in the South Cadbury Environs

The ditched boundaries generally define numerous rectilinear small fields, paddocks, tracks, and other features arranged around an axis common to each group, but normally agglomerative. Poyntington Down provides an exception, probably returning to unenclosed upland rough grazing or scrub. A summary of the features noted in various systems is summarised in Table 36.

Table 36: Summary of field system features in the South Cadbury landscape.

Site	Field shape	Size	Gate location	Other features
Sigwells	Square/Rectangular	Variable	Corner	Tracks, races, access to open land.
Milsoms Corner	Square/Rectangular	Variable	Corner	Track, races, access to water, open land
South Cadbury Valley	Square/rectangular	Variable	Corner	Small pens, tracks, access to water, open land
Woolston Manor Farm	Square/rectangular	Large	Unknown	Lynchets

Extensive systems were established on the north west facing slopes of Cadbury at Milsom's Corner (Figure 38), and stretched west, a double-ditched droveway leading along the clay ridge at Weston Bampfylde, and a small probable settlement attached to the remnants of an earlier linear (Tabor 2008:114). A long boundary on the south eastern upslope side (Point A) divides it from the hillfort. A track leading to the south west gate (B) enters the system at a 45° angle, possibly retained from an earlier period. The southern end of the system retains a curvilinear funnel system (C), a major component of the Middle Bronze Age layout. This continued to allow access

from open meadow grazing to the south. The larger, irregular parcel (D) adjacent to the centre of the system, with converging tracks opening onto it, may have been a collecting area or stockyard, possibly associated with the supply of the hillfort.

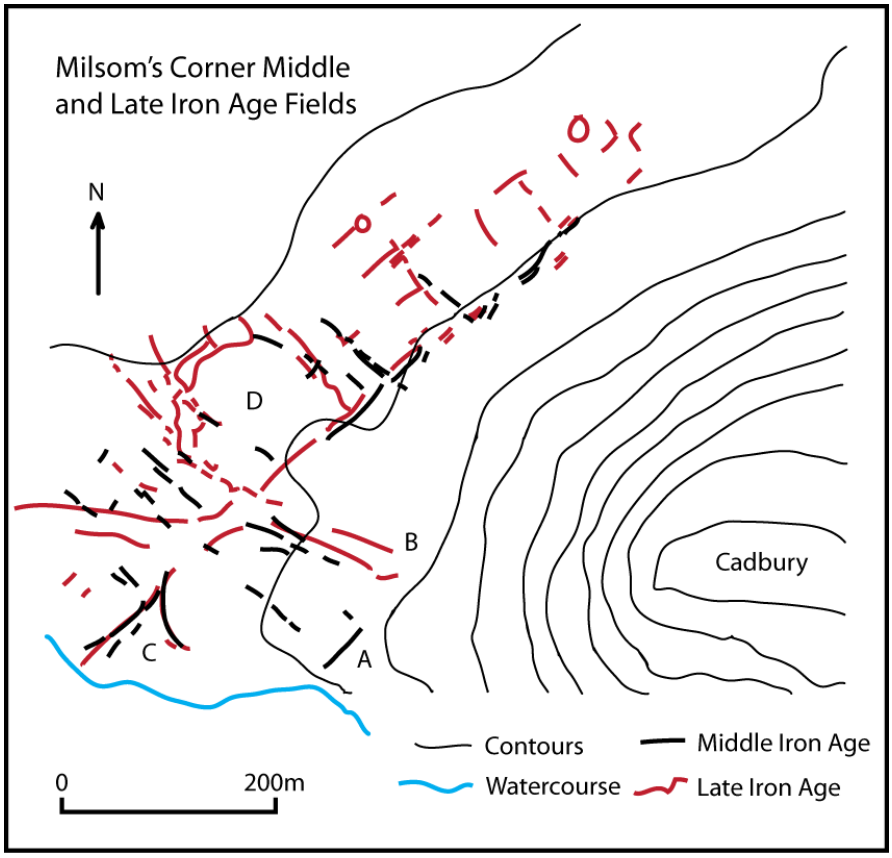

Figure 38: Milsom's Corner Middle/Late Iron Age fields (after Tabor 2008:115,143; SCEP archive). The systems components have been dated dependent on the finds from excavated portions, but given the general coherence, it seems possible that the layout as a whole has its origins in the Middle Iron Age.

The South Cadbury Valley system lay around the base of the hillfort extending across the watercourse (Figure 39). It has a broadly north west-south east alignment, but seems to have come into being as a series of individual units. Many are small, frequently 0.1-0.5ha, with few larger parcels. A group at the south eastern side provided an interlinking group of paddocks with corner gates, and a possible race on the eastern side, opening onto an area allowing sorting in two directions. Some of the very small enclosures with a corner entrances would be useful for penning smaller livestock, perhaps for sorting or lambing sheep, or providing confinement for pigs or goats.

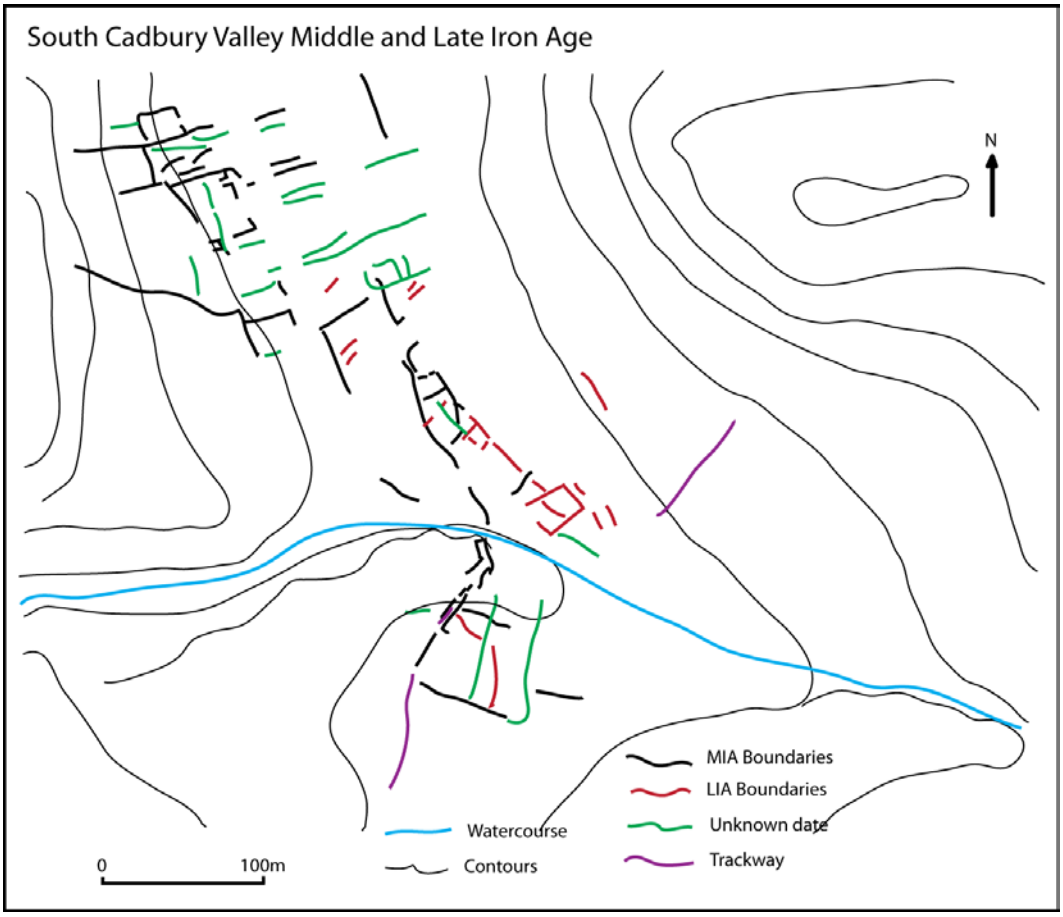

Figure 39: South Cadbury Valley Middle/Late Iron Age fields (after Tabor 2008:115,143; SCEP archive).

Tabor suggests that orientation of the Middle Iron Age Sigwells (Figure 40) system was influenced by the Bronze Age landscape (2008:114). Again, the system is agglomerative with infilling, but most of the components were probably generally contemporary. A large double ditched track way runs (B-D) through the centre of the system east-west. It turns north west toward the edge of the escarpment overlooking Cadbury Castle, and enters a less organised area, approaching an extensive scatter of pits and enclosure on western Sigwells. The pits are aligned on a track (F) that runs from the North Barrow in a south westerly direction, skirting the edge of the steep escarpment, and probably leads down into the valley. This track probably superseded an earlier hollow way on a slightly different alignment, dating to at least the Early Iron Age (Tabor 2004:44), which alerts us to the numerous landscape components of which we remain largely ignorant due to their slight or diffuse magnetic signatures.

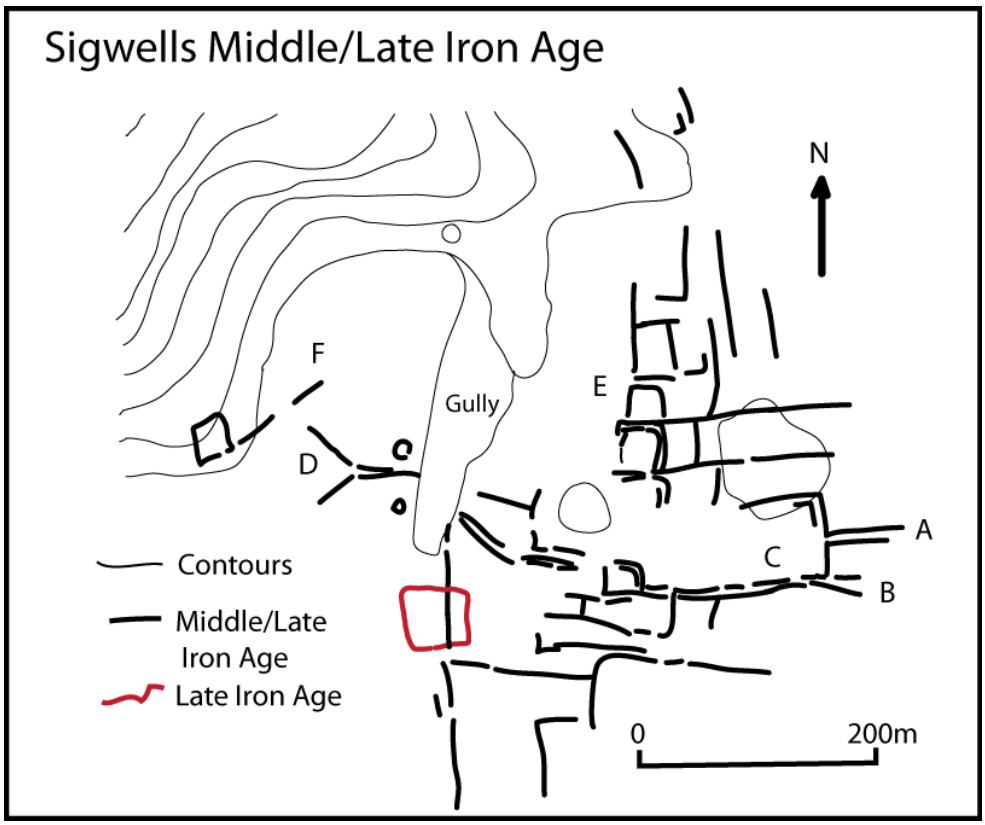

Figure 40: Sigwells, Middle/Late Iron Age Fields (after Tabor 2008:115,143; SCEP archive). The gully in the centre of the plan has been excavated in the post-medieval period, and it is likely that features were originally continuous. A = Double ditched track, B = Funnel entrance, C = Gates, D = Funnel entrance, E = interconnected parcels with corner entrances, F = Track.

At the eastern end of the Sigwells system, a double ditched track (A) led into a larger paddock, and on its southern side a funnel arrangement (B) entered the system at a corner. The apex of the funnel joined two land parcels at the entrances to both, and a lengthy narrow passage along the southern side of the larger one. The north and south ditch had several breaks (C). This may hint at further subdivision of the central parcel by boundaries which are not visible in the gradiometry. The funnel itself may lead from an extension of the system, or from open downland. It appears to represent a substantial animal handling feature, allowing examination and sorting of animals as they moved either from rough common grazing into the system, or between parts of the system. The scale of these features, with track ways and sorting area 2-3m wide, indicate suitability for both cattle and sheep. Settlement on Sigwells appears diffuse, with roundhouses scattered across the open areas of western Sigwells, although the dating of these is less certain and they may relate to the later period. The land parcels are rectangular-square, and small varying from 0.05ha to 0.8ha. Some entrances are apparently in the side of enclosures, but the majority are corner entrances (e.g. at Point E). In several places, boundaries are apparently double ditched around corners. This was probably not related to chronology, but enabled effective livestock movement; they are in the same layout and size as an arrangement used recently in the South Cadbury Valley

to bring cows in for milking without damaging the pasture of the field which they had to pass through.

At the north western end, south of the pit scatter, a double ditched track entered the corner of two ditches set at right angles to each other. This may be another land parcel, or perhaps a collecting point, funnelling animals from the steep land to the north and west into the system. The Sigwells pit group, which developed through the Middle Iron Age, intensifying in the Late Iron Age, had many of the pits open for a long period of time (Randall 2006:81). This seems to preclude the northernmost area from agricultural activity. In any case, both the Sigwells and Milsom's Corner systems demonstrate that moving animals within the systems, and in and out of them, was important. This would have utilised areas of land which were unsuitable for more intensive grazing or cultivation. People and animals would have lived in proximity but the layout and nature of the fields would enable husbanding without a constant human presence.

Despite cereals recovered from wet sieving, there is currently no direct evidence for arable cultivation of particular soils or fields, and opportunity for further study may be limited due to water table levels or heavy ploughing removing horizontal stratigraphy. The recent identification of (currently undated) non-ditched and probably lynchetted small square land parcels just to the south of Cadbury may represent cultivation during this period but awaits examination. What is apparent is that the ditched systems occurred on generally level or gently sloping land and lighter soils. At Sigwells and Milsom's Corner, their current peril from modern ploughing may be indicative of their use in the past; both current landowners say that these fields are amongst their best land. It is clear, however, that the layout and form were designed with animals in mind. The constitution of the systems, their layout, location and relationship with unenclosed areas suggests siting to utilise the most productive arable soils, with boundaries protecting crops from marauding livestock that were frequently pastured beyond the system, but also explicitly designed to enable rotational grazing and probably manuring within and beyond the systems. The evidence of use of animals for traction also supports an integrated and in some areas intensive mixed farming approach.

4.6.2 Using herds

Butchery and carcases

The majority of animals appear to have been utilised for meat. Cuts occurred on cattle, pig and sheep/goat bone at Cadbury Castle (Appendix 2 Section 6) at a rate of 3.71%, 2.39% and 1.65% respectively, indicating the greater portioning of the larger species. There were seven instances of butchered dog bone, and 14 butchered horse bones. This represents 4.24% and 3.57% respectively and, although of a smaller sample, seems to indicate a similar utilisation of these species as the generally accepted livestock. Common locations for cuts, which are generally light, in cattle, pig and sheep/goat are the carpals and tarsals, around the neck of the glenoid of the scapula, the distal humerus, and mandibular ramus. The few fragments of antler identified were off cuts for working, but there is no indication of butchery on the hare bone.

Sheep/goat appear to have been arriving at the hillfort entire, as all areas of the body are well represented with slight emphasis on the more robust elements (Appendix 2 Section 6). The consumption and disposal of whole sheep/goats appears to also be the case at Sheep Slait where fragmentation is less for sheep/goat than cattle and pig, with fewer loose teeth (Appendix 3 Section 7). At The Moor, however, the sheep/goat is heavily fragmented with a greater number of loose teeth and a smattering of other elements. Generally, however, pig, and especially cattle bone, suffered the greatest fragmentation (Appendix 3 Section 10). The Cadbury Castle cattle assemblage included all parts of the body (Appendix 2 Section 6.). Although the raw NISP count for head elements is elevated, this is probably due to greater fragmentation of skulls which were in actuality under-represented. The whole body is represented in the West Sigwells material (Appendix 3 Section 8) although there are a large number of loose teeth. Some generally robust limb bones are badly represented, but further interpretation is problematic given the sample size. The Castle and West Sigwells produced all parts of pigs with a high proportion of loose teeth, head fragments, mandibles. Foot bones were common on Sigwells but may be under-represented on Cadbury hinting at disposal elsewhere, or importation of prepared meat.

There is an elevated abundance of vertebrae of dogs in the Cadbury Castle assemblage (Appendix 2 Section 6) compared to other elements, possibly implying that dogs were deposited at least partly articulated. The disposal of horse remains on Cadbury seems to indicate preferential deposition of head and neck fragments and feet (Appendix 2 Section 6). This could be interpreted as bodies being disposed of elsewhere, or horse bone reaching the hill attached to skins. However, the horse bone seems particularly fragmented, and there are some similarities to the cattle assemblage. At West Sigwells the handful of horse fragments were dominated by loose teeth and feet, with a few limb bones. No cut marks were noted. At Sheep Slait, the small collection of horse bones, apart from a single femur fragment, entirely comprise metapodials and

foot bones (Appendix 3 Section 7). The majority are from two pits, with a single exception entire, and preservation recorded as 'good'. It appears that they were subject to a different taphonomic and depositional history to other species. Despite their completeness, several bones showed signs of butchery. One metacarpal indicated a concerted attempt to fracture it, presumably for marrow extraction.

The products of animals

The processing of wool and production of textiles are attested by various finds at Cadbury Castle. Decorated ceramic, bone and stone spindle whorls date to Middle Cadbury (Poole 2000; Bellamy 2000; Britnell 2000a). A number of bone and antler combs also date to this period (Britnell 2000b), whilst some of a number of bone 'pointed blades' may have been also used in textile production (Britnell 2000c). Leather working is suggested by a number of iron awls and punches (Saunders 2000). Animal bone was used to produce a range of tools recovered from Cadbury Castle, and blades and needles have been recovered from West Sigwells. A number of pots with perforated bases have been noted during the examination of the pottery for this study; these may have a role in dairy processing but this is yet to be examined.

Deposition, species and space

The majority of the material recovered from both the hillfort and the sites in the wider landscape is heavily fragmented. In some cases this can be explained by the context as at Milsom's Corner where the majority of material is from general and debris layers. The small assemblage from eastern Sigwells (TR8-10,19) (Appendix 3 Section 5) came from the ditches of a track way, some distance from contemporary settlement. Virtually all of the identified fragments were loose teeth, and may reflect redeposited material, the remains of fallen stock, or manuring of adjacent land. The handful of bone from Crissell's Green, mainly from the upper fills of the Bronze Age ring ditch, probably 'redesigned' during the Middle Iron Age (Randall 2009b), may have derived from the barrow.

Intra-site variation in deposition on Cadbury Castle has not been examined for this study, largely due to the scale of the dataset, and incomplete information on the other contents of features, or indeed structural and locational information. However, there are some apparent differences in disposal practices that can be detected at the SCEP sites. There was little difference in the representation of species between types of feature at Milsom's Corner (Appendix 3 Section 4). At Sheep Slait, smaller features contributed little to the assemblage (Appendix 3 Section 7); the majority of material was recovered from pits or floor layers and gullies associated with the

roundhouse. The small mammals and amphibians were from pits and probably reflect pit falls unable to escape. The greater proportion of unidentified material in the floor layers indicates likelihood of being trampled *in situ*. At The Moor there are signs of preferential deposition of cattle in ditches (Appendix 3 Section 10). The skull fragments probably relate to one fragmentary and two almost entire cattle skulls positioned in close association. A slight difference occurred between the ditches and pits on West Sigwells, with a greater amount of unidentified material, cattle, and large mammal fragments in the enclosure ditch, and less medium mammal fragments in comparison to the pits. Choice probably played a part in the disposal location of different species, but may also relate to the manner of disposal and the rate of incorporation. Some ditch contents may have accumulated slowly, and study has shown (Randall 2006) that many pit fills were rapid and probably deliberate. However, given that all species are heavily fragmented, fragment size at the time of incorporation may not be relevant, but may indicate the preferential location of activity relating to the two species.

'Special' deposits

Most associated bone groups (ABGs) on Cadbury (Appendix 2 Section 6) were articulating feet or portions of spinal column. There was only one Middle Iron Age ABG that appeared to relate to a whole animal, the foetal horse mentioned above, which may not have been selectively deposited. Articulating feet and vertebrae of cattle, sheep/goat, pigs and horses, generally small groups of bones, some showing butchery, probably represent waste, as do the few articulated limbs. Little material fits readily into a 'special' definition, and most of the material can be regarded as the result of general butchery practice. Two ABGs were recorded from Middle Iron Age pits at West Sigwells (Appendix 3 Section 8). A portion of pig lumbar spine is most likely butchery waste. The right and left portions of pelvis and the articulated right leg of a single cow (Randall 2010) had cut marks on the femur and calcaneus indicate that the leg had been butchered and the foot gnawed off by dogs. However, it was carefully arranged, draped over a pile of limestones with more stones on top. Other fills and contents of the pit indicate that deposition within it was deliberate. This indicates that the disposal of butchered material could be elaborate.

On Cadbury Castle, dog ABGs occur as heads, articulating vertebrae and limbs; some cattle and horse skulls occur associated with other objects or in groups, and as such may have some special connotation. They stand out when considered with the generally highly fragmented nature of cattle and horse skulls discussed above. The number of entire cattle skulls begins to redress the relative lack of cattle head elements expected from the general MNI. Skull deposits can therefore

be argued to be 'structured' whilst also part of normal herd management and slaughter practices. The consideration in deposition indicates a ritualised manner of disposal. It may be that given limited herd size, heavy regulation of that herd, and the longevity of some cattle and horses, that animals attained biographies of their own, and gained from humans a perception of personality which was retained after death.

As outlined above, a large amount of bone was deposited in a single event in Pit D817 (Appendix 2 Section 7). The deposit, some 30cm deep, was made in the upper fill of a pit. It consisted of over 8,000 fragments and included complete and partial carcases a minimum of 50 sheep, 7 cattle and 12 pigs. A very low percentage of loose teeth was recorded, and there was excellent preservation of porous bone. Whilst all areas of the body were represented, there are only about half of the bones there should be across all areas of the body, although this is not as low as for the general assemblage. Pig and dog carcases in particular were partial. There was also a notably reduced proportion of the sheep/goat and cattle foot bones. Of twelve sets of cut marks on sheep/goat, eight were light cuts transversely across the astragalus. Some sheep/goat had therefore been skinned, the feet removed and discarded elsewhere. The age profiles, seasonality, and likely rapidity of deposition have been discussed above. The deposit could be the result of a catastrophic event such as a disease outbreak in late summer, but given the involvement of multiple species and partially processed carcases, the animals were possibly consumed as part of a communal event.

The deposit itself is unusual. It was the largest single bone deposit within the hillfort, and matches, or possibly exceeds, the later calf burials in number of fragments. The partial remains of at least two adult and two juvenile dogs and lack of horse bone is also notable. Two wing phalanges of a raven, one left, one right, were noted. These were the only elements recovered and it is suggested that they may have been attached to feathers removed from the wing bones. If partial carcases were deposited after consumption, they were placed in a discrete location in a manner unlike the normal manner of disposal, with species which are generally rare in the main assemblage. However, as with the cattle and horse heads discussed above, there is no reason why material that was the result of a practical culling strategy might not be slaughtered or disposed of in a ritualised fashion. Nevertheless, the early timing of the cull may alert us to it having been carried out for a specific event or ritual purpose

4.7 Animals, landscape and people The Late Iron Age

4.7.1 Having herds

The number of features and buildings identified on the hillfort reduced in the Late Iron Age. However, an important additional group of material which can only be dated to the Middle-Late Iron Age is included here. The 'Rubbish Layers', occupied part of the central hillfort plateau and included a large number of cattle ABGs which are discussed further below. At The Moor, the Middle Iron Age field ditches were filling, presumably falling out of use, and activity at Milsom's Corner was much reduced. However, the western Sigwells pit scatter continued with an increase in features, and more material within them. New enclosed sites also came into being. South Sigwells, to the south of the enclosure and pits at West Sigwells, comprised another square enclosure, whilst Homeground on the northern flank of Cadbury Castle, barely 150m from the eastern entrance, comprises a small rectilinear ditched enclosure. It contained a roundhouse with intact floor levels. The species represented at these sites are given in Tables 37, 38, 39 and 40.

Table 37: Species representation, Cadbury Castle, Late Iron Age.

Species	NISP	% NISP	MNI	% MNI	% Main Species
Cow	2522	14.17	61	16.22	21.35
Pig	2284	12.83	80	21.28	19.32
Sheep/Goat	7006	39.35	225	59.84	59.32
Dog	108	0.61	5	1.33	
Horse	205	1.15	5	1.33	
Large Mammal	1221	6.85			
Medium Mammal	1956	10.99			
Unidentified	2502	14.05			
Total main	**17804**				
Red Deer	11				
Roe Deer	3				
Deer	2				
Hare	6				
Fox	2				
Cat	3				
Bird	34				
Small mammals	107				
Amphibians	33				
Total fragments	**18005**				

Table 38: Species representation in the Middle-Late Iron Age Cadbury Castle 'Rubbish Layers', not including ABGs (the 'calf burials').

Species	NISP	NISP %	MNI	% MNI	% Main species
Cow	877	22.78	16	19.51	25.64
Pig	823	21.38	22	26.53	24.06
Sheep/Goat	1721	44.70	42	51.22	50.3
Dog	16	0.42	1	1.22	
Horse	47	1.22	1	1.22	
Large mammal	149	3.87			
Medium mammal	165	4.29			
Unidentified	52	1.35			
Total main	**3850**				
Fox	13				
Cat	1				
Bird	2				
Total fragments	**3866**				

Table 39: Species representation for SCEP sites (except West Sigwells), Late Iron Age.

	Milsom's Corner		Sigwells TR 8,9,19		South Sigwells		The Moor		Homeground	
Species	**NISP**	**%**	**NISP**	**%**	**NISP**	**%**	**NISP**	**%**	**NISP**	%
Cattle	4	NA	2	NA	17	NA	21	12.28	47	25.40
Pig		NA	2	NA	1	NA	19	11.11	32	17.30
S/G	1	NA	3	NA	17	NA	125	73.09	106	57.30
Dog	2								2	
Horse							6		12	
Large mammal	3		1		27		38		54	
Medium mammal	8				21		110		83	
Unidentified	17		20		43		155		709	
Total main	**35**		**28**		**126**		**474**		**1045**	
Bird									1	
Total	**35**		**28**		**126**		**474**		**1046**	

Table 40: Species representation, West Sigwells Late Iron Age, not including ABGs.

Species	NISP	% NISP	MNI	% Main Species
Cow	358	4.69	9	18.04
Pig	276	3.62	10	13.90
Sheep/Goat	1351	17.71		68.06
Dog	33	0.43	4	
Horse	88	1.15	4	
Large mammal	320	4.20		
Medium mammal	1346	17.65		
Unidentified	3856	50.55		
Total main	**7628**			
Small mammals	49			
Amphibians	82			
Bird	12			
Total	**7771**			

In the Late Iron Age, domestic species are again of greatest importance. Domestic fowl makes its first appearance at West Sigwells, but was rare. In the Cadbury Castle material, most of the wild species were small mammals, with field voles, woodmice and frogs. Red and roe deer were the most frequent larger wild species. Deer remains comprised almost entirely antler; whether they had been naturally shed is unknown, but several had cut marks indicating that they were used in

working. Six hare bones from two individuals were recorded along with two fox fragments. Three cat bones, assumed to be wild, were non-porous, although the distal end of the radius was unfused. There was no indication of butchery on the hare, fox or cat bone. A small number of corvids and buzzards are likely to have been living in the vicinity of the site. Wild species were also rare in the 'Rubbish Layers', and there was no indication of butchery on them. They contained a single, probably wild, cat humerus and thirteen fox bones, spread through a number of contexts, representing the remains of at least two, probably adult, animals. It is possible that they represent intrusive material, but disturbance was not recorded, and they were spread throughout the 'Rubbish Layers'. Birds were represented by a buzzard ulna, and an almost entire carpometacarpus, possibly from a White Stork. The handful of bird bones from West Sigwells included buzzards, corvids and domestic fowl, the only instance found in the SCEP assemblages. All of the amphibians identified were frogs and the identified small mammal fragments were field voles.

The proportion of domestic species in the main hillfort assemblage is remarkably similar to that of the Middle Iron Age. Sheep/goat were again predominant, though slightly less well represented in the 'Rubbish Layers'. The relative proportions of species in South Sigwells, with sheep and cattle equal and a single pig bone fragment, are probably a function of the sample size. The greater number of the sheep MNI (four individuals to one cattle) may be more indicative. Sheep/goat remained dominant at West Sigwells, confirmed by the proportions of medium mammal fragments.

The husbandry of sheep and goats

Goats were very much in the minority in the main Cadbury Castle Late Iron Age and 'Rubbish Layer' sheep/goat assemblages with a handful of elements identified (Appendix 2 Sections 9 and 10). Goats also comprised a small minority at West Sigwells (Appendix 3 Section 8). Sheep but no goats were identified at Homeground and The Moor (Appendix 3 Section 10 and 11), but this does not preclude their presence. The sheep/goat flock was managed in an almost identical manner as in the Middle Iron Age, as can be seen in Figure 41. The Grant MWS plots are similarly close demonstrating an inherently stable system. This stability, over 400 years, argues against seasonal culling due to fodder shortages . Alternatives, such as limiting the size of the reproducing flock, might have been considered. However, given that this cull was a part of the conscious management of sheep, additional considerations are likely to have been important.

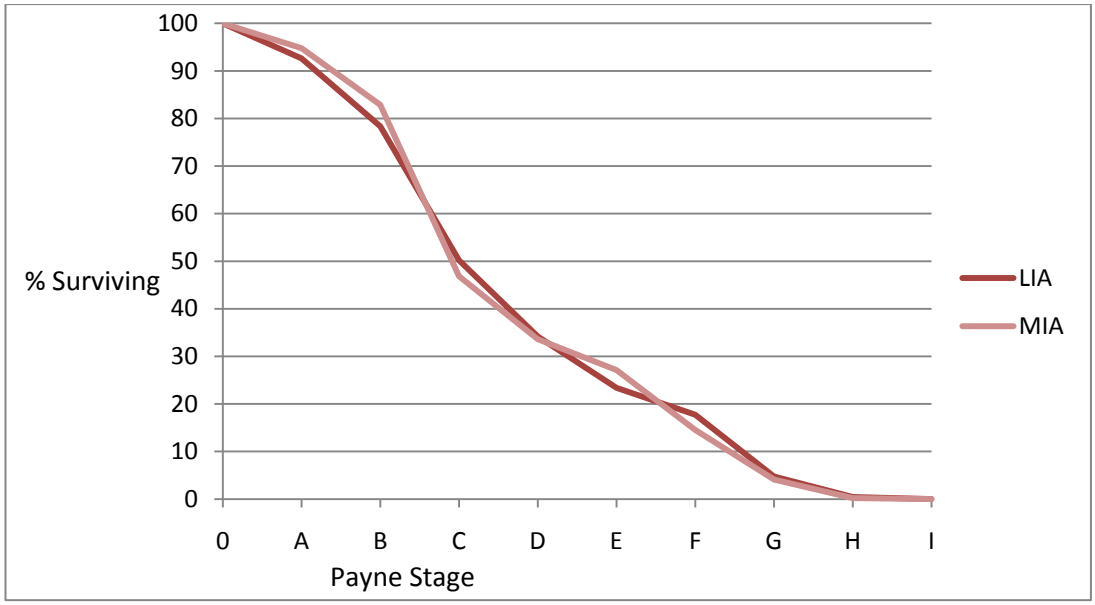

Figure 41: Payne stages for sheep/goat, Cadbury Castle, Middle and Late Iron Age, (excluding Pit D817) by percentage (MIA N=461 , LIA N=231).

There appears to be an emphasis on older individuals in the 'Rubbish Layers' (Figure 42) and this may be due to taphonomic effects, as the attrition is similar to other Middle and Late Iron Age Cadbury Castle assemblages in respect of older individuals. The lack of younger individuals may well reflect the fragmentation of porous elements.

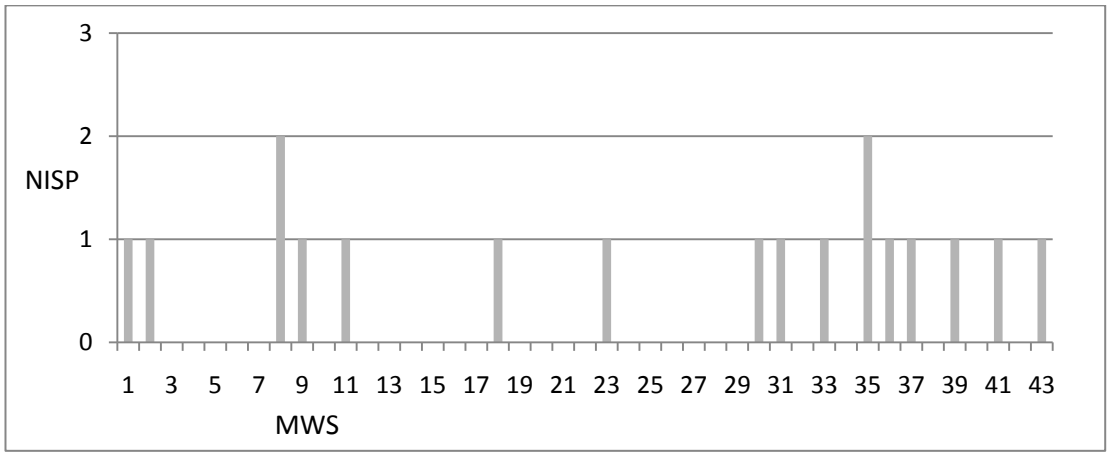

Figure 42: Grant Mandible Wear Stages for sheep/goat, Rubbish Layers. N = 18

A worn maxillary molar from South Sigwells indicated the presence of older sheep, and a porous fragment, juveniles. Two sheep mandibles from The Moor had a Grant MWS of 39 / Payne stage G (4-6 years), and one MWS 44 / Payne stage H (>6 years), but five porous elements were also present. Fusion information however does not indicate many young individuals. At Homeground, mandibles in Payne Stage D, E, and G (1-6 years) are present, but it is likely that there is a under-representation of younger individuals, caused by differential loss of porous juvenile mandibles; a

single medium mammal fragment was porous. All of the unfused elements are those that fuse late. The Grant mandible wear stages for sheep/goat from West Sigwells are given in Figure 43. Whilst there are a number of younger individuals represented, with an apparent peak at MWS 11, there are more adult animals. A lack of neonates might be a result of taphonomic processes, but this was not the case in the earlier phase, and probably not related to ground conditions.

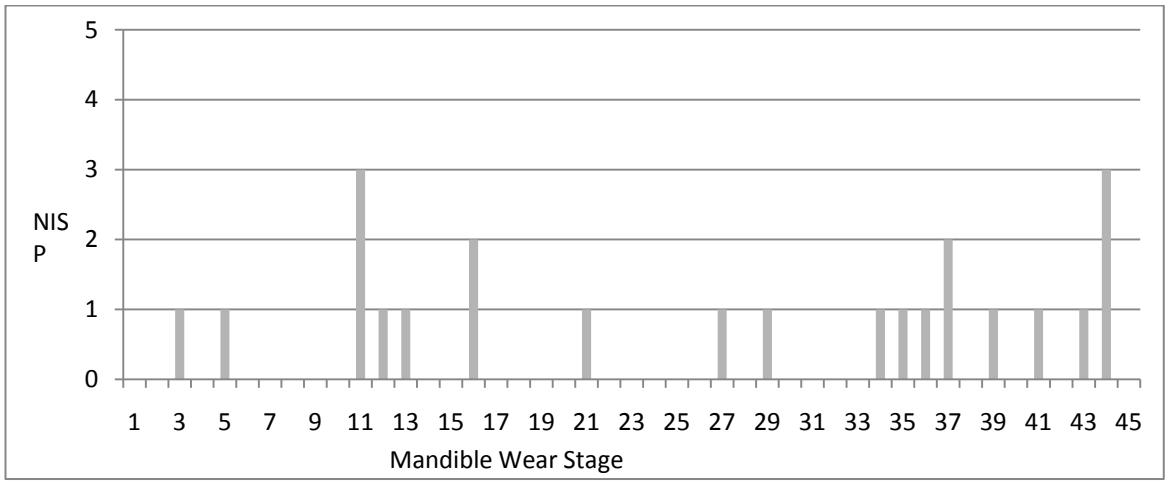

Figure 43: Grant mandible wear stages, sheep/goat, West Sigwells Late Iron Age. N = 23

The Payne mortality curve for sheep/goat at West Sigwells indicates individuals dying at stages B and C (2-12 months), and Stage G (4-6 years). The loose deciduous fourth premolars heavily outnumbers the permanent fourth premolars although they are generally well in wear. First molars have a broad spectrum of wear stages, with second mandibular molars having a more restricted range in the lower end of the spectrum. Third molars had a wide range of wear, with a notable peak which would equate with Payne Stage G or H (4-8 years). This seems to support the emphasis on older sheep. A lack of dp4s in the least worn categories seems to indicate that very young animals were absent or not being culled or deposited on this site; if fragmentation of juvenile mandibles caused the lack of mandibles at Payne Stage A, there should be slightly greater representation of unworn, or slightly worn deciduous teeth. Unfused early fusing elements are present indicating some animals under 10 months of age and a range of age groups. However the proportion of unfused later and late fusing elements is high, implying that the majority of animals were under 42 months at death (equating to Payne Stages E-F). This is not particularly different from the mandible information, but indicates that there may have been some differentiation in the deposition of body parts. If there were some differences in the age groups deposited in sites beyond the bounds of the hillfort, this may relate to division of the flock into cohorts and the emergence of specialised sites.

Changes in husbandry, if not in management strategy, are suggested in by pathological data from Cadbury Castle (Appendix 2 Section 10). Firstly, the prevalence rate of 'penning elbow', a condition of the humero-radial joint often attributed to standing on rough or hard ground, changes from 3.53% in the Middle Iron Age to 6.92% in the Late Iron Age. Although the aims and general management strategy was identical, animals may have been being pastured differently; they do not appear to have been living longer which would provide an alternative explanation. In addition, there is an admittedly smaller change in the prevalence of periodontal disease in sheep, decreasing slightly from 6.67% to 5.08%. Periodontal disease is frequently caused not only by advancing age (which cannot be the explanation here), but by the quality of forage available and in particular overgrazing, where injury to the mouth caused by thistles and chewing soil leads to gum disease. The prevalence of calculus which also links with pasture quality, and is a precursor to periodontal problems, also changes from 9.46% to 4.30% in the Late Iron Age. This may indicate that previously there was some reliance of pasture of lesser quality or that a degree of overgrazing occurred that was rectified in the Late Iron Age. Changes in the rates of both oral and joint conditions might be explained if grazing became more extensive in the Late Iron Age and animals were walking further, possibly on steeper slopes.

The husbandry of cattle

The Late Iron Age Cadbury Castle cattle comprised very young individuals, older sub-adults and adults (Appendix 2 Section 10). Very young and old cattle also predominate in the 'Rubbish Layers'. Five loose deciduous fourth premolars relate to MWS 1, whilst loose mandibular third molars were from young adults and adults. There were a considerable number of porous fragments, representing a minimum of seven individuals, compared to nine with non-porous bone. Two cattle mandibles from The Moor gave MWS of 4 and 16. The younger mandible represents the only porous cattle element from this phase (Appendix 3 Section 10). Fusion data indicated a range of ages whilst the handful of pathological conditions may indicate older individuals. This picture was similar at South Sigwells (Appendix 3 Section 9.. Two mandibles from Homeground were estimated to Grant MWS 1 and 38 (Halstead stages A and F respectively, 0-2 and >40 months). The former represented the only porous fragment of cattle bone. The maxillary loose teeth present were all from the permanent dentition and worn. Fusion data indicate skeletally mature adults. The Halstead mortality profile for West Sigwells is shown in Figure 44. There is a lack of the youngest animals, and there may be taphonomic reasons for this. Only seven fragments of cattle bone were porous. However, there was a clear group of deaths at Stage B (1-

10 months). This occurs after the dangerous neonatal period and contrasts with the general attrition indicated by the older mandibles.

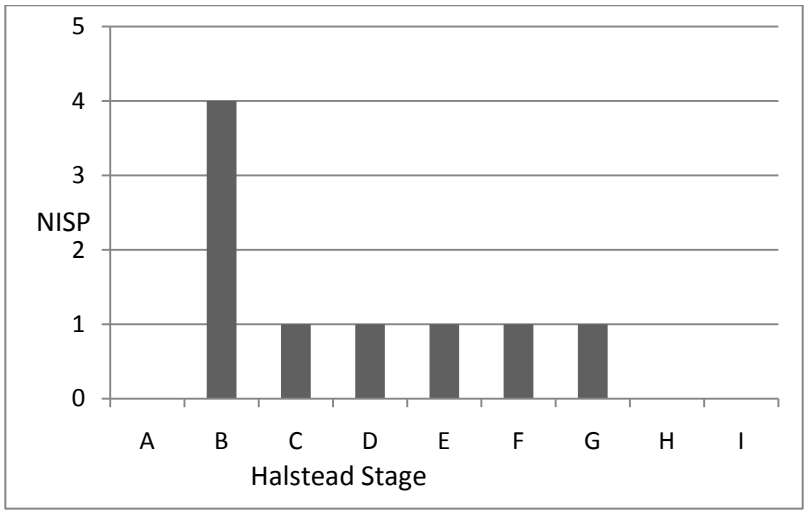

Figure 44: Ages of cattle mandibles, West Sigwells, Late Iron Age, by Halstead stages. Presented as histogram due to small sample.

If neonates were present at West Sigwells, but subject to high levels of fragmentation, one might expect high numbers of unworn deciduous fourth premolars. However, whilst there are two examples, most dp4s are well into wear and outnumbered considerably by permanent premolars. First molars have a range of wear stages, and second and third molars are generally well into wear, indicating a greater number of older individuals. The earliest fusing elements have few unfused examples (Appendix 3 Section 8). This could be related to taphonomic factors. There are also, however, very few animals in the oldest categories. While the youngest animals were not commonly deposited at West Sigwells, the oldest individuals were also badly represented. There is slight evidence of a deliberate cull of animals at Stage B, but other animals may relate to general casualties.

There is a slight difference between the hillfort cattle mortality in the Middle and Late Iron Age, (Figure 45). Active herd management was still apparently practised, and the presence of older animals and young calves may indicate dairying. However, a smaller percentage of the herd were dying at Stage A (0-2 months) and virtually none at Stages B and C (1-18 months),compensated for by greater numbers of deaths in Stages D and E (18-40 months). This may indicate that younger animals were not being deposited in the hillfort (not reflected in the data from the other sites) or that a different cull regime was in place. The increase in slightly older cattle represented may therefore indicate a slight change in emphasis in the Late Iron Age, where animals which would have been removed on an *ad hoc* basis were retained until they reached full meat weight. Choices

were made in the Late Iron Age that suggest that the production of greater quantities of meat were a consideration. The apparent increased number of males in the Late Iron Age pig assemblage may point to the same thing (Appendix 2 Section 10).

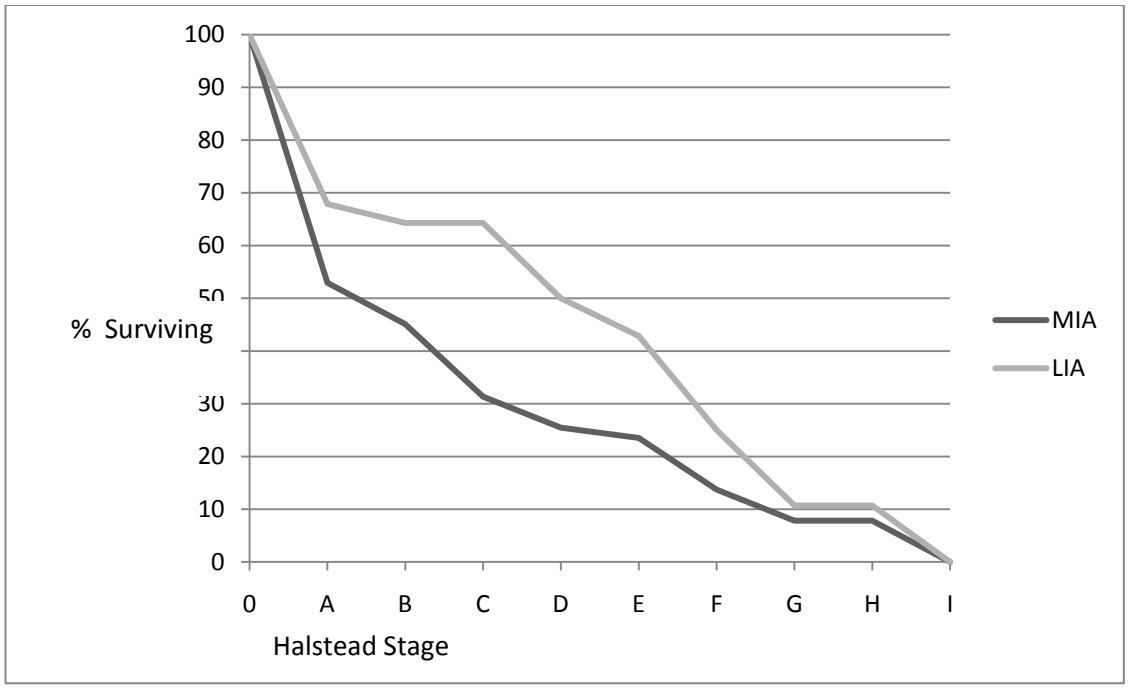

Figure 45: Halstead kill-off curve for cattle, Cadbury Castle, Middle and Late Iron Age (excluding Pit D817 and 'Rubbish Layers') (MIA N=51 , LIA N=28).

Three metacarpals from Cadbury Castle belonged to bulls, two to cows and one a steer, although most horncores were likely to relate to females (Appendix 2 Section 10), supporting an emphasis of older animals on dairy production. A single steer was also present at West Sigwells (Appendix 3 Section 8). The presence of castrates suggests use for traction. The majority of the few pathological cases involved either degenerative changes to hip, limbs and feet, or non-specific infections. The degree of degenerative disease may reflect the age profile of animals kept for breeding purposes and traction. A small number of pathological changes occurring in the Cadbury Castle 'Rubbish Layer' cattle bone also related to degenerative joint diseases, particularly the lower leg, foot, and the hip. Whilst only two cases were severe enough to enable a clear diagnosis of osteoarthritis, other degenerative changes may relate to earlier phases of this disease or other arthropathies. Whilst the incidence of degenerative disease in the main Cadbury Castle assemblage (Appendix 2 Section 9) remains the same in the Late Iron Age, the occurrence of osteoarthritis as a proportion of this reduces. This may reflect younger ages at death, although the proportion of the herd dying at stages H and I (>40 months) was almost identical; animals may have been used less for traction.

This may also highlight differences in perceptions of health and disease. In the Middle Iron Age, people may have been inclined to tolerate a higher level of joint problems; many of the cases of osteoarthritis were severe enough to have impaired movement. Retention may have related to the perceived value of particular animals and their individual biographies. However, the reduction in severe degenerative problems in the Late Iron Age could be explained by changes in husbandry practice, or attitude to the animals. More may have been removed from the herd before the impairment became extreme. A reduction in use of or need for traction animals, might indicate less area or intensiveness of arable production. However, whilst some infections occurred in limbs possibly resulting from trauma, three cases occurred in the pelvis, and a fourth on the scapula, which may be indicative of systemic infection, although the aetiology cannot be diagnosed. Disease may not have been affecting the animals to an extent that it was a cause for concern, or they may have been being retained in less than perfect condition, possibly because they were valued breeding stock. There was no indication of respiratory disease that might be indicative of housing.

The husbandry of pigs

The possibly *ad hoc* slaughter of pigs and emphasis on younger animals noted in the Middle Iron Age continues across the South Cadbury area in the Late Iron Age. The ages at death for the main hillfort assemblage, Figure 46, and 'Rubbish Layers', Figure 47, confirm their continued use as a reliable source of meat. The peak in the youngest animals implies pigs farrowed in or near the hillfort; juveniles of 8-9 months of age probably indicate attainment of a considerable proportion of their eventual weight. The peak at MWS 27-31 reflects young adults possibly used for breeding, producing a few litters before being slaughtered. The single old adult may have been a prized breeding animal. The lack of neonatal animals in the 'Rubbish Layers', may be explained by taphonomic processes, but the majority of animals died under two years of age. The few older animals presumably represent breeding stock. A single Hambleton Stage C mandible at The Moor, represents an individual of *c*12 months whilst an unfused distal tibia, one under 24 months. Two pig mandibles at Homeground were sub-adult (Hambleton Stage D). Two fragments were porous, and there was a single fused glenoid of the scapula (*c*12 months). Hambleton stages for West Sigwells are shown in Figure 48. It seems unlikely that the animals deposited at West Sigwells were farrowed in the immediate vicinity, given the lack of neonates. There is however a peak in sub-adults and young adults with which the loose teeth wear was consistent. 25 porous fragments

were recorded, but no unfused elements occur in the youngest category. The lack of fused late fusing elements confirms the lack of old adults.

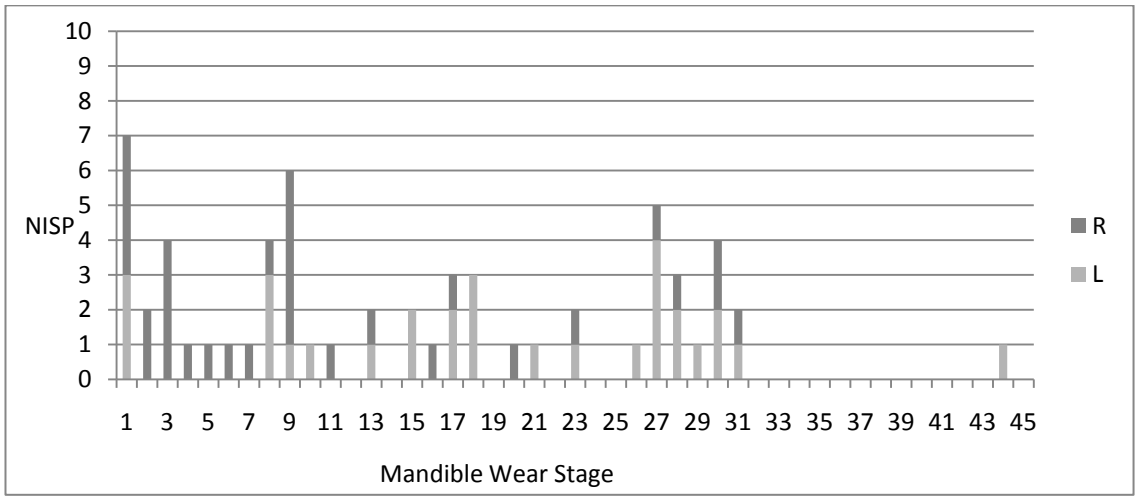

Figure 46: Grant Mandible Wear Stages for pig, Cadbury Castle main assemblage, Late Iron Age. N = 61

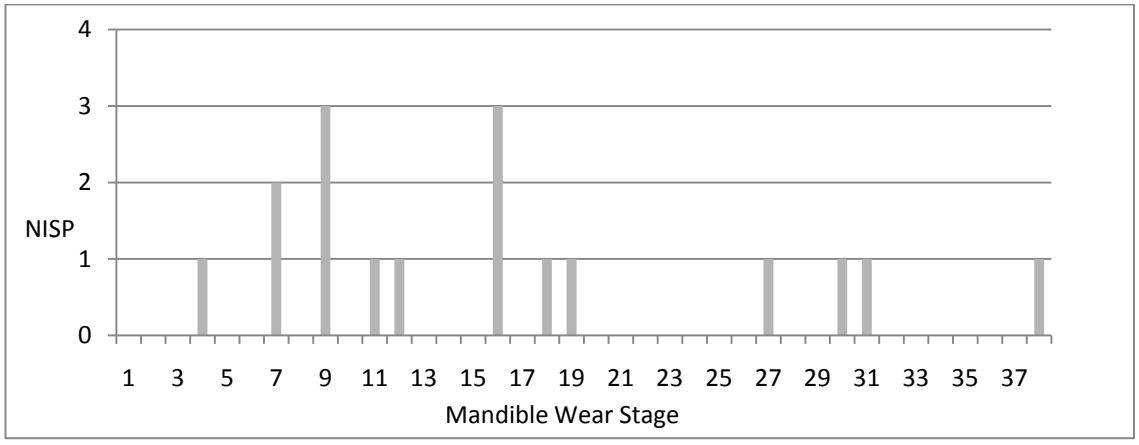

Figure 47: Grant Mandible Wear Stages for pig, 'Rubbish Layers', Late Iron Age. N = 17

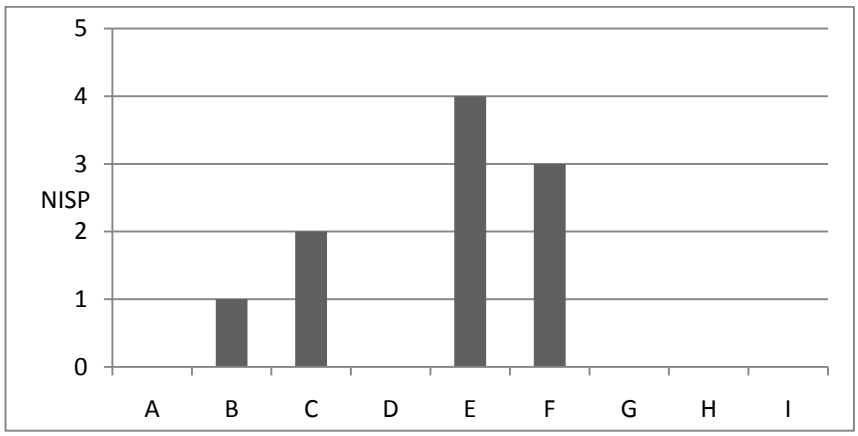

Figure 48: Hambleton stages, pig West Sigwells Late Iron Age. Presented as histogram due to small sample.

The proportions of the sexes of pigs on Cadbury Castle, indicated by canines, shows that males apparently heavily outnumbered females (Figure 49). Females were either killed before formation of the canine, or not present in or disposed of in the hillfort. Coupled with the lack of very young pigs the preferable explanation seems to be that females were kept elsewhere. The 'Rubbish Layers' pig bone, taking into account element distribution, age and sex, appears to also indicate the discard of butchery waste of young male pigs (Appendix 2 Section 9). Surplus young males may have been brought to the plateau of the hill for consumption or at least disposal. However, at West Sigwells, all five pig canines were also male (Appendix 3 Section 8).

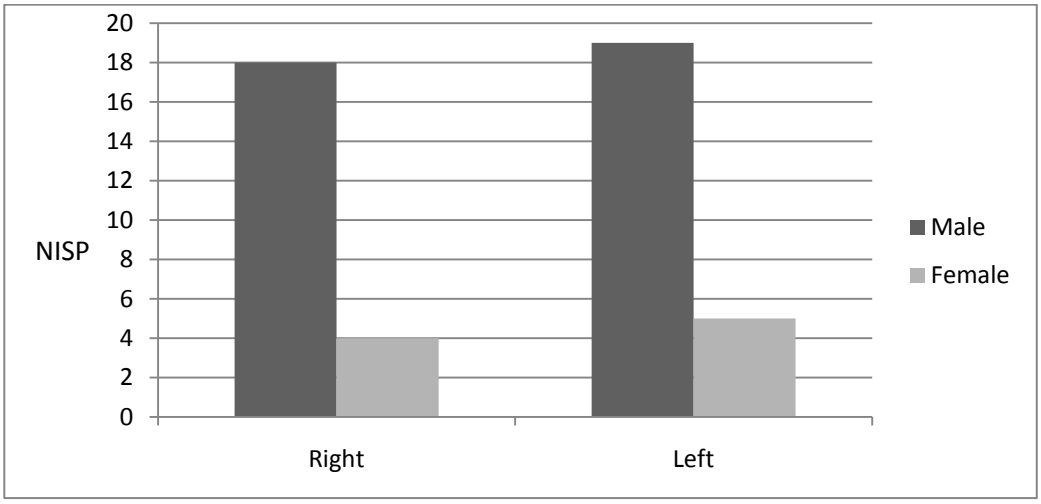

Figure 49: Proportion of male and female canines, pig, Late Iron Age. N = 46. 12 in mandible.

Dental enamel hypoplasias in the main Cadbury Castle assemblage indicate the continuance of nutritional or environmental stress (Appendix 2 Section 10). Fractures and non-specific infections continued to occur primarily in limbs, indicating that pigs were subject to trauma. This may have been inflicted by other pigs, and has implications for how they were being kept. More injuries occur when pigs are crowded or housed (Goodwin 1973:121,136; Bushby 1988:143,156). At West Sigwells, probable traumatic injuries are more frequent in pigs than in the other main domestic species (Appendix 3 Section 8). A fractured tibia from Sigwells is of particular interest. Not only is the injury well healed, but it is well aligned, with only minor angulation and little evidence of rotation. This implies that the fracture was reduced and immobilised long enough for it to heal. It has been suggested that fractures of the tibia may relate to hobbling or tethering pigs (S. Hamiliton-Dyer pers. comm.), but this cannot be demonstrated given the lack of unequivocal evidence of penning or housing. However, the care taken implies that the animal was of value, over and above its meat value, possibly as breeding stock.

The other domestic species

Late Iron Age Cadbury Castle had a limited assemblage of dog bones, 108 fragments representing a minimum of five individuals. As in the Middle Iron Age, most regions of the body were represented in the main assemblage, but considerable numbers of vertebrae might suggest individuals were deposited generally entire (Appendix 2 Section 10). Individuals of different ages were represented with porous, fused and unfused elements, and the metrics indicate variation in stature. This pattern is replicated in the 'Rubbish Layers' (Appendix 2 Section 9). At Homeground, dog was limited to a fragment of maxilla and a canine (Appendix 3 Section 11), whilst at West Sigwells the small selection is dominated by head elements and teeth, with a few limb bones (Appendix 3 Section 8).

The main Late Iron Age Cadbury Castle horse assemblage (Appendix 2 Section 10) was as heavily fragmented as the Middle Iron Age, representing a small number of animals. A large proportion of them were skeletally mature, and limited porous bone and deciduous teeth were noted. Most of the teeth were worn or very worn, indicating a high proportion of older individuals. Pathological changes related to joint disease, including osteoarthritis and spavin, reflect old age. Likewise, none of the 'Rubbish Layer' horse bone was porous and only worn or heavily worn permanent teeth were present. Several loose permanent teeth at Homeground (Appendix 3 Section 11) were worn and there were no porous fragments. However, two metacarpals were fused distally, which occurs *c*15-18 months, indicating skeletally mature individuals. Two instances of pathological change probably are related to advancing age. At The Moor (Appendix 3 Section 10) a horse radius, metacarpal and two metatarsals were all fused distally indicating animals over 42 months, 15-18 months, and 16-20 months respectively. A single horse incisor from South Sigwells showed considerable wear. There is no porous horse bone present at West Sigwells and all teeth were permanent and worn (Appendix 3 Section 8). All elements were fused, except a single proximal tibia of an individual under *c*36-42months. Three cases of pathological change were all age related. There is no evidence for the keeping of young animals.

The use of landscape

The fields established in the Middle Iron Age had a long currency. Tabor (2008:148-151) sees more 'intensive' use of land in the last decades before the Roman invasion. The distribution of pottery from test pits certainly indicates greater utilisation of the heavy soils to the west of

Cadbury Castle, but this should rather be interpreted as an expansion of the area of land used, although this does not appear to have been enclosed. The same areas that had been bounded in the Middle Iron Age were used in the Late Iron Age, with some areas apparently utilised for the first time, given the pottery distribution data. However, whilst the South Cadbury Valley, Milsom's Corner and Sigwells systems lingered on, with additional boundaries producing Late Iron Age dating material, it seems that many of them filled and fell out of use; the presence of datable pottery within them indicates they were not being cleaned out. A Late Iron Age context in a ditch at The Moor has produced a single wood charcoal fragment that may be alder buckthorn (D De Carle pers.comm.), a species suitable for hedging in wet conditions (Maclean 2000), which may well have been the situation, given the modern water table height in this area.

The double ditched trackway on eastern Sigwells, filled up with one ditch re-cut as a single field boundary in the Romano-British period. The animal bone, possibly redeposited, may result from manuring or fallen stock. The ditches at The Moor were filling and the extremely small assemblage from Milsom's Corner is indicative of the movement away from the active utilisation of the site. However, the pit digging on western Sigwells intensified and expanded, and several houses nearby may also be Late Iron Age in date. Tabor feels (2008:164) that the fields went out of use in a widespread and deliberate act at the time of the Roman invasion, many of them marked by deliberate depositions of pottery, and particularly human remains. However, the current author believes that many of the fills had already accumulated. Depositions marked boundaries that were already ceasing to have a practical function, although they may have retained an ideological one. This understanding of the landscape is easier to accept once a Roman attack on Cadbury Castle and resultant 'massacre' (Alcock 1972; Tabor 2008:156-163) is re-examined. Jones' work (2008; Jones and Randall 2010), has shown that rather than evidence of a single event or Roman attack the 'massacre deposit' is complex, probably accumulated over time, and may have had ritual connotations. In addition, at Woolston (Figure 50) the fields appear to have been expanded and continued into the early Romano-British period.

Accepting the reduction of use of some fields, land utilisation appears to have shifted, as the amount of activity in the hillfort also declined. Two possible pit scatters at Plain of Slait and Hicknoll Slait may, like the Sigwells examples have increased at this time, but remain unexamined. However, new square enclosures, unattached to fields, apparently placed in unenclosed land, came into being (Figure 51).

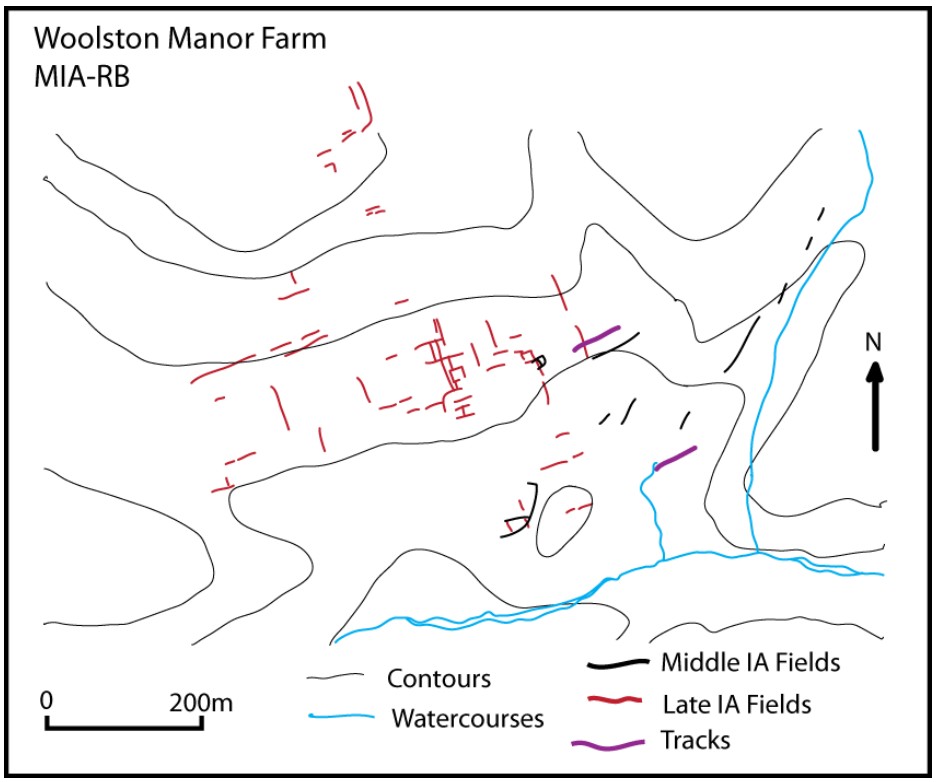

Figure 50: Fields at Woolston Manor Farm, Late Iron Age-Romano-British (after Tabor 2008:115,143; SCEP archive).

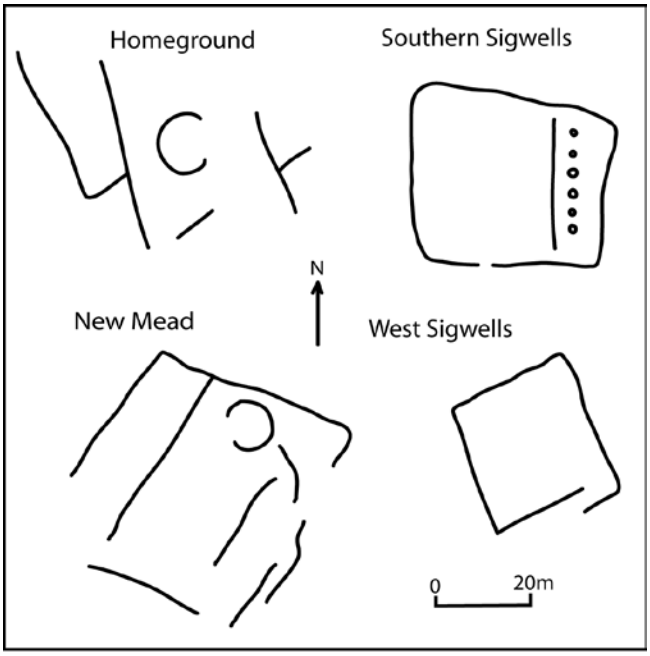

Figure 51: Square ditched enclosures, West Sigwells, South Sigwells, Homeground and New Mead (after SCEP archive; Randall 2009).

The function of some is unclear, and probably varied. The West Sigwells enclosure, remodelled from a predecessor, may have a purely ritualised function (Tabor 2008:140-142). The South Sigwells example has no interior building, is subdivided and contains a line of large empty pits.

New Mead may, however, contain a house, and Homeground certainly did. The Homeground roundhouse floor levels, comprised a 20cm thick layer of charcoal-rich highly organic fill that proved hostile in the extreme to bone. The deposits were rich in pottery which was also highly fragmented. Material may have been trampled *in situ*, but the layers that made up the footprint of the building may not have been the original floor. Neither may it have been a normal 'abandonment' layer. It is possible that the house was reused for stock housing or became the retaining walls for a manure heap. Notwithstanding this possible use, in an open plan landscape, the boundaries of these square enclosures may have been exclusionary both to people and animals.

We have more information on the arable economy from this period. Danielle de Carle's work (2006; in preparation) on the plant macrofossils from the drip gully at Homeground indicates the use of bread wheat and barley. Oats, bromes and vetches occurred in some numbers, which Tabor suggests were eaten (2008:155), but may well have represented fodder. Low growing weeds may also imply harvesting of the entire plant stalk, which could be used for fodder and bedding. The range of arable weeds indicate a likely range of exploited soils, wet and dry. The need of bread wheat for plentiful nutrients may indicate manuring (Tabor 2008:155). If the Homeground house was utilised as a muck heap we may be seeing the process in action. The implication is of an integration of the arable and pastoral economy. However, the plant macrofossils from a selection of pits at West Sigwells produced less material from the Late Iron Age features than the Middle Iron Age pits, despite there being more of them included in the sample. The Late Iron Age contexts produced the same range of species as the Middle Iron Age, with barley, spelt and emmer wheat in order of abundance, and a reduced proportion of oats. The weeds identified were bromes, bedstraw and docks (calculated from Blenman 2006), with no evidence of a change indicated in the location or method of cultivation. It is interesting however that the overall abundance of this material appears to have reduced, when the same pits produced more animal bone than in the previous period. It is possible that there was a reduction in arable production in the area, although, it is clear from Blenman's analysis (2006) that there was considerable variation between individual features and contexts, and this must await further analysis.

4.7.2 Using herds

Butchery and carcases

Cattle appear to display a disproportionate number of cut marks to sheep/goat and pig, at both West and South Sigwells and this probably relates to a greater need to portion the carcase during preparation. In the Cadbury Castle assemblage cattle, pigs and sheep/goat had cut marks at 4.40%, 2.22%, and 1.84% respectively, which bears this out. A number of horse bones at West Sigwells displayed cut marks but were relatively complete in comparison to other species. The similarly complete assemblage of horse bones at The Moor came from the ditch. 4.88% of the horse bones from the Late Iron Age Cadbury Castle contexts displayed cut marks, a similar rate to the cattle, and unsurprising given the similar size of the animals. However, this seems to indicate that the animals were treated similarly. 7.41% of dog bones from the Late Iron Age contexts had cut marks, more than any other species, and which may challenge our ideas of how dogs were viewed and utilised.

The hillfort sheep/goat were represented by all parts of the body. The 'Rubbish Layer' sheep/goat assemblage was, like cattle and pig, dominated by loose teeth, but suffered slightly less fragmentation with slightly elevated levels of robust elements. This is the same in the West Sigwells assemblage. The Moor had reasonable representation of head bones but a lack of axial elements, and whilst most limb bones are represented, distal limb bones dominate. This may represent the disposal of peripheral elements during carcase processing. The main hillfort and 'Rubbish Layers' cattle assemblages are dominated by the teeth and feet, but the rest of the body is well, and relatively evenly, represented. This also occurs at The Moor and West Sigwells. Similarly to the Middle Iron Age, heads may have been under-represented, the inflated NISP an indicator of the degree of fragmentation. The hillfort pig bones are also dominated by loose teeth and foot bones. Elevated numbers of head and mandible fragments might indicate disposal of primary butchery waste. Consideration of expected MNE percentages indicates the reverse, with skulls heavily fragmented. This pattern holds true for the 'Rubbish Layers'. Head fragments also dominate at The Moor and West Sigwells, with a few other elements. The small amount of horse in the 'Rubbish Layers' was dominated by loose teeth, with a few elements from the rest of the body. Horse elements at West Sigwells are also dominated by loose teeth, but contained most other areas of the body.

The products of animals

A number of spindle whorls (Poole 2000) and combs (Britnell 2000b) from Cadbury Castle date to the Late Iron Age. However, there is a reduction of the numbers of both assigned to this period. This may be a function of the generally reduced activity in the later part of the occupation of the

hill, rather than a reduction in textile working. Likewise, the implements used for working leather, appear to have only been assigned to the Iron Age (Saunders 2000), so analysis of the proportion of this type of craft activity is not possible. Likewise, the incidence of pots with perforated bases, should these have an association with dairy processing, has not, in the Late Iron Age deposits, been determined, although they are present in some Late Iron Age types. A couple of spindle whorls were recovered from Late Iron Age contexts at Sigwells.

Deposition, species and space

The majority of the material at South Sigwells came from the enclosure ditch. This was also the case at The Moor. Nearly twice as much identifiable material occurred than in the Middle Iron Age, possibly incorporated more rapidly. It may reflect change in depositional practice or in the use of the adjacent area. Slightly more identifiable material occurred in the Late Iron Age ditch fills at West Sigwells compared to pits and other features and may relate to changes in the rapidity of ditch filling. Fragments were also more evenly distributed, largely due to the increase in postholes, scoops and other structural features. However, material from pits still outnumbered the rest of the assemblage due to their large number. Sheep/goat were well represented in pits and other small features, but less frequent in the ditch, which contained a larger proportion of horse, pig, and in particular, cattle. As all fragments were small this may reflect a genuine preference in disposal. At Homeground the majority of material was recovered from the house gully, floor deposits and over-lying abandonment material. Relatively little animal bone was recovered from ditch contexts, probably largely indicative of the small volume excavated. The fragments from the house floors contained the lowest proportion identifiable to species, but with better representation of pig and sheep. This may indicate distribution of larger species in larger features, the smaller sample size for ditch contexts, or greater fragmentation and attrition of larger species in the floor contexts.

'Special' deposits

The entire 'ABG' assemblage on the hillfort was again dominated by heads and feet (Appendix 2 Section 10). The only partial body belongs to the only wild species, a fox. Butchery waste is a reasonable explanation for much of the material, especially small groups of foot bones. The proportions of cattle and horse skulls are similar to that in the Middle Iron Age and similar observations apply. The 'Rubbish Layers were associated with a remarkable series of burials and part-burials of cattle (Appendix 2 Section 9), two of which were adult females, the rest (MNI) 53

neonatal calves. Some of these were recognised as discrete individual or multiple burials, whilst others are concentrations of bones that equate to one or more individuals identified during reanalysis. These are the only ABGs recorded from the site that seem to have been afforded specific and discrete burial. Whilst they had a spatial relationship with the first century AD shrine (Barrett *et al* 2000:172-3), they commenced in the Middle Iron Age and continued through the Late Iron Age. They represent a long tradition of disposal that contrasts with general practice on the hillfort and indeed in the environs. However, the age profile mirrors that of the remainder of the herd. As the incidence of cattle skulls in slightly different locations in the Middle Iron Age suggested a greater coherence of identity, these burials may place greater social emphasis on the farming activity to which they relate. They increase the total numbers of animals to a degree, but the practice draws social attention to a part of the economy that numerically appears less 'important'. If they relate to dairy production, their disposal may represent a social acknowledgement of the perceived value of that activity, and its products, to the community.

In contrast, completely different practices developed in the wider Cadbury landscape. At Sigwells there is a notable density of ABGs (Appendix 3 Section 8). The relation of these deposits to other material, and the often complex sequences of deposition have been explored elsewhere (Randall 2006; 2010). However, while some material is probably butchery waste, some has very specific and elaborate practices involved in their deposition. There was some 'special' intention in their deposition and in all cases these occurred within pits, as is shown in Table 41. A range of species are involved with an over representation of those which are relatively rare in the general assemblage - dog, horse and raven – whilst sheep/goat and cattle only occur in two instances, and there is no pig. This seems to indicate new significances afforded to these species. The area also included articulated human adult and neonate burials in two pits. Disarticulated human remains occurred almost exclusively with animal ABGs or concentrations of animal bone (Randall 2006:49-50). The pit scatter at Sigwells appears to have produced a focus for a very particular treatment of animal remains that has not as yet been identified elsewhere in the area. Deposition was complex and features were open for long periods, in some cases marked by posts (Randall 2006:71), leading Tabor to suggest that the enclosed area was a shrine to rival that on the hillfort (2008:130-40). Whether or not this was the case, the activity at Sigwells, especially if replicated on a similar scale at Hicknoll Slait and Plain of Slait, appears to represent a reorganisation of the landscape at the end of the Iron Age (Jones and Randall 2010).

Table 41: Associated bone groups, Late Iron Age, West Sigwells. NB the two horse skulls are not included in the database for this site, as they appear to have been separated from the main bone assemblage. Photographs are shown in the interim site report (Tabor 2003:50-51).

Species	Body part	Feature type	Comment
S/G	Whole animal	Pit	Juvenile + part of second
S/G	Skull	Pit	Adult
S/G	Group of ribs	Pit	Juvenile Butchery waste?
S/G	Part of thoracic spine	Pit	Butchery waste?
S/G	Part of thoracic spine	Floor	Butchery waste?
Cow	Skull	Pit	Stones placed in eye sockets
Dog	Entire animal	Pit	Posthole in pit
Dog	Entire animal	Pit	Very young juvenile
Dog	Skull	Pit	Posthole in pit
Raven	Entire bird	Pit	Posthole in pit
Horse	Skull and mandibles	Pit	Separated by layer of stones, daub tongue
Horse	Skull and premaxilla, disturbed	Pit	Top layer of pit with entire adult dog

As occupation on the hill reduced, practices that were rooted in the past were altered and taken into the landscape, but carried out in places that still referenced that past. The evidence of personalisation of deposition, use of deposition as mnemonic, referencing the past and the ancestral landscape (Randall 2006:81), and an apparently altered understanding of the 'meaning' of particular species, coupled with changes to the use of Cadbury Castle and a landscape falling into disrepair attest to a changing world reflected both in the animal economy and its ideology.

4.8 Animals, landscape and people through time

The assemblages of all sites and periods in the Cadbury area are dominated by the three main domestic species. Dogs and horses are present only in very limited numbers in all periods with very low numbers of wild mammals and birds. Deer, both red and roe are the most commonly represented wild species, although this is mainly from fragments of antler. From the very beginning, the focus is on the controllable natural word; animal utilisation is domestic and domesticated. In the hillfort assemblages we see a trend through time (Figure 52), that is largely, and with the exceptions discussed above, replicated in the SCEP assemblages. The important shift in the pattern of animal exploitation is the change in the relationship of sheep and cattle (Figure 53) This shift occurs from the end of the Bronze Age and establishes a sheep dominated approach in the Middle Iron Age which then remains remarkably stable to the end of the Iron Age. It cannot be coincidental that this occurs with the emergence and creation of the hillfort, and the creation of a highly regulated landscape, in which the reproduction of animals, regulation of grazing and probable exploitation of manuring in arable farming was a consideration. The eventual decline of those fields seems to occur with a change in the role of Cadbury and new perceptions of the natural world indicated in depositional practice. Depositional behaviour seems to shift from

activities directly connected to herd management practice and subsistence, to more esoteric and personal concerns, with a greater employment of symbolic actions. This 'personalisation' may extend to the relationships of individual humans with horses and dogs in particular.

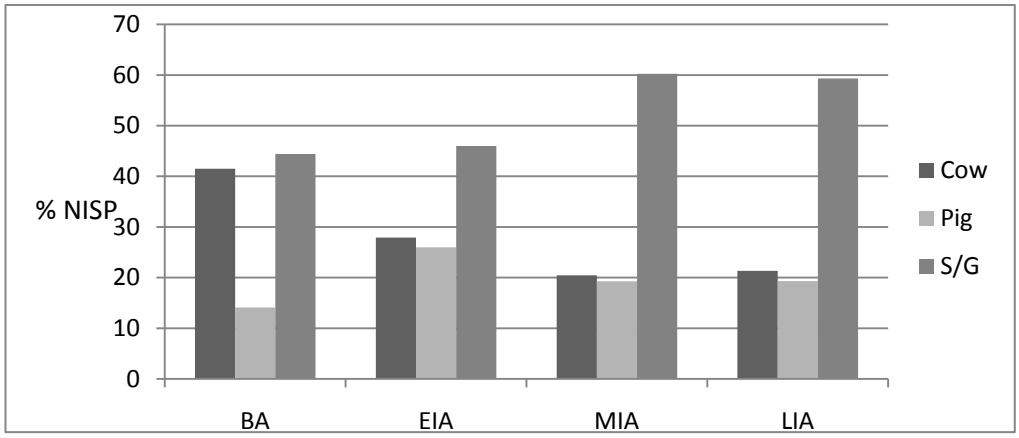

Figure 52: Cadbury Castle, percentage representation between the three main domestic species, main assemblages, Late Bronze Age to Late Iron Age (BA N =675 , EIA N=949 , MIA N=19735, LIA N= 11812).

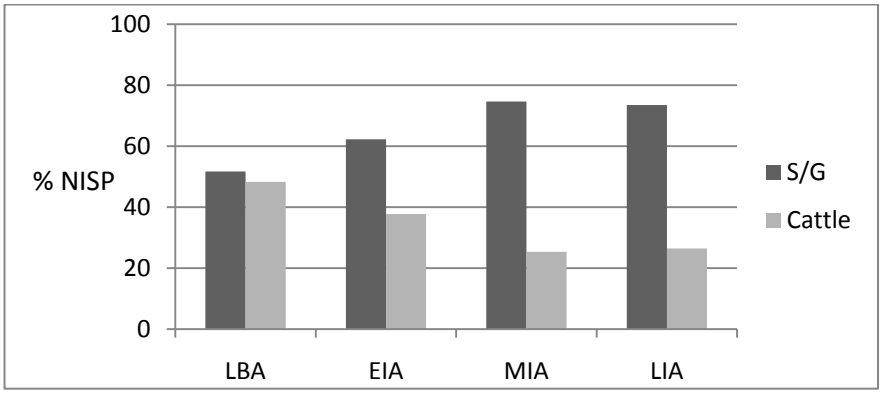

Figure 53: Cadbury Castle, proportion of sheep/goat to cattle (percentage of combined sheep/goat and cattle NISP) main assemblages, Late Bronze Age to Late Iron Age (LBA N =580 , EIA N =702 , MIA N =15928, LIA N=9528).

The story of the landscape is one of constant change. Shifts between enclosure and open land occurred on numerous occasions. In some cases one area was abandoned as another became enclosed, but some general changes can be seen. The open landscape of the earliest Bronze Age became enclosed on a very large and widespread scale across the entire SCEP area. It offered an extensive management system, which allowed wide ranging of livestock, finding their own fodder and water, but without the necessity of a constant presence of herders. The Middle Bronze Age brought a more nucleated, integrated approach that seems to have appeared in localised parts of the landscape, positioned to make best use of good soils for cultivation whilst bearing the concerns of animals in mind and providing for grazing on unenclosed land. From this point on there is in some places continuity to the end of the Iron Age, but the Later Bronze Age and Early Iron Age seems to indicate the abandonment of the more integrated systems. Not only do areas

with boundaries shift, but the systems are again on a larger scale, with little evidence of nucleation or small paddocks, and indication of moving livestock over large distances. Sheep begin to gain greater importance, and pigs were favoured for some consumption events. The flock management strategy that was adopted at this point continued until the end of the Iron Age, regardless of how the animals were kept. The large scale approach may seem at odds with the apparent settlement nucleation within Cadbury in the Early Iron Age, but an extensive approach may have been desirable. Sheep can be less labour intensive than cattle, especially if the latter are kept for milk production. Milking cows need to be kept close to the location of milking, and the milk needs to be consumed or processed close to the point of production. Sheep are more flexible in the way that they are managed for most of the year, and could be cared for by a limited number of people, although this would have resulted in the separation of the 'sedentary' population of Cadbury Castle and those following the flocks and herds.

At the point that sheep reached a true ascendency in the Middle Iron Age, a new and widespread series of field systems appeared in the landscape. Apparently nucleated, they were again sited on good soils and level ground, include small fields, paddocks, tracks and stock handling features, and indicate a more intensive and integrated approach to arable production and grazing management. This does not appear to be the result of competition for land, as several of these systems have a definable 'outside', and unenclosed land can be seen to have a role. It provided more extensive grazing so that more stock could be maintained and probably provided their most valuable 'product' when folded onto a small area of land utilised for arable production. The hillfort occupants seem to have consumed the products of this surrounding landscape, and the relationship between the two appears reflexive; as the hillfort declined as a focus, the enclosed landscape begins to fall into disrepair. At the end of the Iron Age, the husbandry aims and management methods used for herds and flocks was largely unchanged, but the story from the animal pathology and the abandoned fields indicates a change in practical approach. The intensive production had again been replaced by an extensive approach, although further away from the hill new fields came into being and survived into the Romano-British period. This demonstrates the way in which choice and strategy in obtaining the desired product which we see in mortality curves does not tell the whole story. Differing management approaches are possible to achieve the same result, but have radically different social implications. Social grouping, lineage, and ownership motivations evidently created local effects resulting in land abandonment and settlement shift. Having considered the changing nature of husbandry and organisation within one landscape, we now turn our attention to the wider picture.