The Prehistoric Funerary and Ritual Monument Survey of Glamorgan and Gwent: Overviews

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CONTENTS

| Prehisto | ric funerary and ritual monuments in Glamorgan Introduction | 2 |
|----------------------------|---|--|
| | General topography | 2 |
| | Survey of monument types | 2 4 5 6 8 |
| Ų. | The Neolithic period | 3 |
| | The Bronze Age | 0 |
| -71 -11 | Monuments within the landscape | |
| | Monument complexes | 24 |
| | Conclusions | 25 |
| | Acknowlegements | 26 |
| | Appendix 1: Definitions | 26 27 |
| | Appendix 2: Character areas | 30 |
| | Bibliography | 34 |
| | Sionography | 34 |
| | Figure 1: Character areas | 36 |
| | Figure 2: The Neolithic period | 37 |
| | Figure 3:The Bronze Age: barrows and cairns | 38 |
| | Figure 4: The Bronze Age: ring cairns and kerb cairns | 39 |
| I | Figure 5: Cemeteries cemetery pairs and cairnfields | 40 |
| 1 | Figure 6: The Bronze Age: standing stones and stone circles | 41 |
| | Plate 1: Hengiform monument on Cefn Bryn | 42 |
| 1 | Plate 2: Sker house: one of the barrows in a cemetery of four | 42 |
| 1 | Plate 3: A cairn with an internal kerb of coursed rubble on Mynydd y Garth | 43 |
| 1 | Plate 4: The kerb cairn (PRN 03429w) on Cefn Gwrhyd | 43 |
| | | |
| Duchiatou | is formation and situal management in Contract | |
| | ic funerary and ritual monuments in Gwent ntroduction | 44 |
| 1 | | 44 |
| | General topography Survey of monument types | 45 |
| | | 50 |
| | Gwent in the Neolithic period | 50 |
| | Gwent in the Neolithic and Bronze Age transition | 51 |
| т | Gwent in the Bronze Age | 54 |
| | Funerary and ritual landscapes | 57 |
| | Acknowlegements | |
| | 1' 1 D C '.' | 60 |
| | Appendix 1: Definitions | 61 |
| | Appendix 2: Character areas | 61 63 |
| | | 61 |
| E | Appendix 2: Character areas | 61 63 64 |
| E F | Appendix 2: Character areas Bibliography | 61 63 64 36 |
| E F F | Appendix 2: Character areas Bibliography Figure 1: Character areas Figure 2: The Neolithic period Figure 3: The Neolthic and Bronze Age | 61 63 64 36 37 |
| E F F | Appendix 2: Character areas Bibliography Figure 1: Character areas Figure 2: The Neolithic period | 61 63 64 36 37 38 |
| E F F F | Appendix 2: Character areas Bibliography Figure 1: Character areas Figure 2: The Neolithic period Figure 3: The Neolthic and Bronze Age Figure 4: The Bronze Age | 61 63 64 36 37 38 39 |
| F F F F | Appendix 2: Character areas Bibliography Figure 1: Character areas Figure 2: The Neolithic period Figure 3: The Neolithic and Bronze Age Figure 4: The Bronze Age Plate 1: View to the southwest of Gaerllwyd chambered tomb | 61 63 64 36 37 38 39 72 |
| F F F F F | Appendix 2: Character areas Bibliography Figure 1: Character areas Figure 2: The Neolithic period Figure 3: The Neolithic and Bronze Age Figure 4: The Bronze Age Plate 1: View to the southwest of Gaerllwyd chambered tomb Plate 2: View to the northeast of the Harold Stones | 61 63 64 36 37 38 39 72 72 |
| F F F F F F | Appendix 2: Character areas Bibliography Figure 1: Character areas Figure 2: The Neolithic period Figure 3: The Neolithic and Bronze Age Figure 4: The Bronze Age Plate 1: View to the southwest of Gaerllwyd chambered tomb | 61 63 64 36 37 38 39 72 |

PREHISTORIC FUNERARY AND RITUAL MONUMENTS IN GLAMORGAN

INTRODUCTION

In 2000, the Glamorgan-Gwent Archaeological Trust began work on a project to visit and record all known prehistoric funerary and ritual sites in the former counties of Glamorgan and Gwent. This was part of a Cadw-sponsored initiative to visit and record all such monuments in the whole of Wales. Although fieldwork for the pan-Wales project is still ongoing in the former counties of Dyfed, Clwyd and Powys, work has now been completed for the GGAT area as it is a smaller land-mass supporting fewer monuments. The purpose of this paper is to present the results of the project for Glamorgan.

The prehistoric funerary and ritual monuments of Glamorgan were last surveyed in the 1960s and the first half of the 1970s by the Royal Commission on Ancient and Historic Monuments in Wales, who published the results in the first part of their volume on pre-Norman sites in Glamorgan (RCAHMW 1976). This contained all sites known at the time, classified and discussed according to criteria which had been largely set in the 1960s; unfortunately the work was too far advanced at the time that Frances Lynch published her seminal classification of cairns and related Bronze Age monuments in Wales (Lynch 1972) for it to have been significantly influenced by her work. In the nearly thirty years which have passed since the publication of the Glamorgan Inventory, there has been considerable further developments in our understanding of these monuments, and the number has also continued to rise as further examples have been found. Although the Inventory listed nearly 400 barrows and cairns of various types believed to be of Bronze Age date and the present work just over 600, direct comparisons are misleading for two reasons. The area covered in our survey comprises the former counties of Mid, South and West Glamorgan, created in 1974, whereas RCAHMW's Glamorgan was the pre-1974 county which excluded the parishes of Penderyn and Vaynor, then in Brecknock which is the subject of a separate Inventory (RCAHMW 1997); these two parishes contain a large number of cairns. Our study also counted separately each cairn of probable funerary origin included within a cairnfield, whereas RCAHMW recorded them only as a components of cairnfields. Nevertheless, there is a significant increase in the number of known monuments, based in part on the initiatives carried out by RCAHMW since the 1990s to record monuments in the uplands. In contrast, the increase in the number of Neolithic or possibly Neolithic monuments is modest in terms of absolute numbers, with three new chambered tombs/long barrows added to the sixteen chambered tombs in the *Inventory*, and another four possible henges or hengiform monuments to add to the Inventory's one. This small number, however, is not reflected in terms of our understanding of the period, to which the new monuments, particularly the henges, make a significant contribution.

Methodology

The fieldwork was carried out over three financial years, from 2000 to 2003, though considerable disruption to the programme was caused by the outbreak of foot-and-mouth disease in 2001. The sites were divided by unitary authority, with Bridgend, Merthyr Tydfil and Rhondda Cynon Taff being targeted in the first year, Swansea and Neath Port Talbot in the second year, and the remainder of Glamorgan in the third year, together with Gwent, which forms the subject of a separate paper (Lewis forthcoming). The initial step was to carry out a search of the Sites and Monuments Record (SMR) to extract all Primary Record Numbers (PRNs) with a possible prehistoric funerary and ritual function. To these

were added a number of other sites gleaned from sources which had not yet been incorporated in the SMR. All SMR information was checked and corrected if necessary, and duplicates were identified and eliminated as far as was possible from existing information. This was particularly relevant to sites on the southern fringes of the Brecon Beacons, where in many cases the same site had been found in different sources with different grid references, and had therefore been entered twice or more on the SMR.

An attempt was made to visit each PRN, apart from known duplicates and sites for which there was uncontrovertibly evidence for destruction. In a few cases, permission for a site visit could not be obtained, though some of these sites could be viewed at a distance from public rights of way or neighbouring properties, allowing for limited recording to take place. However, for the most part landowners and tenants with monuments on their land were very helpful. Some of the sites in forestry could not be located, either because they had been destroyed or because dense planting prevented access. On the other hand, a number of sites in forestry were located that had not been seen since the OS survey of the 1950s, which took place before the areas concerned had been afforested.

The sites were located by GPS, usually a Garman model 12XL (correct to 10m), though a Magellan 315 (correct to 15m) was used for some sites, enabling the NGR for each monument to be corrected if necessary and allowing for future relocation in the field by subsequent workers. This was particularly important on open moorland with few good landmarks, where mistaken estimates of position had been the most frequent cause of confusion and duplication. Each site was recorded using a pro-forma, noting present description, measurements, position, aspect and viewshed, and present land use. Photographs were taken using black-and-white print and colour slide film; and in some cases also digital images where a suitable camera was available. A sketch plan and/or section or elevation was made where appropriate. Although the project remit did not include a deliberate search for new sites, a few were noted during the course of fieldwork on other sites, and these were recorded using the same methodology. The data obtained from the field visit wereas then transcribed into the database. The terminology used to describe the monuments complied with that developed by the Clwyd-Powys Archaeological Trust for use in the whole of the pan-Wales project, and can be found in Appendix 1. The condition of each monument was assessed according to the criteria established by RCAHMW for its uplands survey programme. Classifying the condition of cairns in particular contained an unavoidable element of subjectivity, since it was necessary to make a judgement on how high the cairn originally rose.

Following the conclusion of the fieldwork, the new and revised data were entered on the regional SMR, where they can be accessed by other workers. A report was also produced at the end of each year. The main part of this consisted of a gazetteer of sites, with their revised descriptions, but there was also a short appraisal of each class of monument represented. However, there was very little attempt to produced a detailed discussion, since the area covered each year cut across natural topographical boundaries and it was felt that discussion limited by artificial modern political boundaries ran the risk of lacking meaning. This paper, together with its companion on the monuments of Gwent (Lewis forthcoming), attempts to synthesise the results of the project and present them as a coherent whole.

GENERAL TOPOGRAPHY

Glamorgan can be divided into two main areas, an upland area consisting of the main part of the Coal Measures and the southern edge of the Brecon Beacons, and a lowland area comprising the rest of the county between the foot of the Coal Measures and the sea. There is some overlap between the two, in that the lower part of the valleys of the Rivers Neath and Tawe, together with the coastal plain north and northwest of Swansea and the eastern half of the Gower peninsula partake more of the nature of the lowland, with lower and more fragmented hills and the plains largely overlain by glacial drift. The other substantial area of lowland is the Vale of Glamorgan and its outlier to the west of the Ewenny River around Bridgend and Porthcawl; geologically this consists mainly of Lower Lias limestone, but with bands of Triassic and Rhaetic rocks occurring in places, mainly around the edges.

There have been significant changes in parts of the coastline since the Bronze Age, particularly around the Gower peninsula and eastwards to the mouth of the River Ogmore. The data for coastline change dependent upon sea level in the Bristol Channel are presented by Allen (2001, 17, fig 4B, indicating that at the beginning of the Neolithic (6000 bp), mean high water would have been at around 10m below datum, and the most significant differences would therefore have been in the bays of this area. The contours below the high-water mark also indicate that a cave used for burial in the Bronze Age which is now on the coast, was then close to the sea but not on a sea cliff with access limited by the tides. At Merthyr Mawr Warren at the mouth of the River Ogmore, the appearance of the coastline and the area immediately inland of it has been altered by besandment, which seems to have started in the Bronze Age (perhaps 2000 BC) and has continued up to the medieval period and beyond (Higgins 1933, 38-41, 61), obscuring the original topography and resulting in the disappearance from view of an important group of barrows and cairns. To the east of Merthyr Mawr, the coastal edge of the Vale is formed mainly by limestone cliffs, and here the main losses will have been through erosion of the cliff-edge; there is no evidence here for significant lower-lying deposits which have been overwhelmed by the sea.

For the purposes of the survey, Glamorgan was divided into seven character areas (Figure 1):

- 1 Gower
- 2 Coalfield 1: Lower Neath and Swansea Valleys and associated coastal plain
- 3 Coalfield 2: Uplands
- 4 Brecon Beacons
- 5 Vale of Glamorgan plus extension W of Ewenny River
- 6 Border Vale
- 7 Eastern Vale/Cardiff

Further details of these areas can be found in Appendix 2. The nature of the monument assemblages varies to a greater or lesser degree between these character areas, which are therefore used to inform discussion of the monuments themselves, and will therefore be dealt with more fully below. Whilst the use of these areas should present a much more meaningful overview of the monuments in their setting than could have been obtained by discussion the results of each year's fieldwork separately, it should still not be forgotten that Glamorgan itself is an artificial entity, and the Coalfield 1 area continues into Carmarthenshire, the Coalfield 2 area into Gwent, and the Brecon Beacons into Powys.

Present land use and vegetation history

At present, most of the lowlands are agricultural land, with some arable particularly in the Vale, but with improved pasture predominating elsewhere; a relatively small percentage of the lowland is occupied by unimproved moorland pasture and woodland and limited areas. In the uplands there are extensive areas of forestry, the remainder being given over largely to pasture, which takes the form of moorland pasture on the higher ground and improved pasture at lower elevations. Coal mining has taken place in many locations, though mainly in the uplands, and has been responsible for the complete restructuring of significant areas of landscape in some areas, through tipping and, more recently, opencasting. Differences in land use has affected the survival of monuments. Although some monuments in the uplands have been completely lost to mining and forestry, the remainder survive relatively well; but in the lowlands there is a problem for most of them of continual degradation caused by repeated ploughing. The spread of the main urban areas, particularly Bridgend, Cardiff and Swansea, has also had some impact on monuments which lie within their bounds, though destruction in advance of development has usually over the last 50 years been preceded by excavation (Lewis 1966; Savory 1952; Savory 1969).

There is only one site in the survey from which a dated pollen sample has been obtained. This is Crug-yr-Afan barrow (PRN 00722w; Crampton 1967), on the watershed between the Afan and Rhondda valleys in Character Area 3, where a sample indicated that the vegetation in the Neolithic period was heather (c70%) moorland, with smaller amounts of oak (c20%), hazel (c5%) and birch (c5%). In the Early Bronze Age, heather (pollen c40%) was widespread below moderately open oak (c40%) woodland. There is also an undated sample from the Nant Maden cairn (PRN 00742m) at the southern edge of the Brecon Beacons (Character Area 4) which suggests that the cairn had been established on heathland, and that forest regeneration had resulted in an oak maximum in this area during the Bronze Age (Crampton 1960). However, Crampton and Webley (1963, 336) have suggested that the podzols on which most of the round barrows were erected may have been derived from *sols brun acides* supporting woodland during the Early Bronze Age.

SURVEY OF MONUMENT TYPES

The monuments have been arranged broadly according to period, with chambered tombs, long barrows and henges in the Neolithic period, and round barrows with their variants ring ditches and the analogous cairn types in the Bronze Age, together with standing stones and stone circles. Although both round barrows and stone circles have their origins in the Neolithic, what little evidence there is available for our area suggests that there are probably no early examples of either here. One class of potentially significant Neolithic ritual monument, the interrupted ditch enclosure, was not considered in the survey. New evidence indicates that there may be a number of these in Glamorgan, of which the best known is that at Beech Court Farm, Ewenny (Yates forthcoming), but they are the subject of a separate survey which has only just begun.

¹ A samples was taken from one of the Great Carn ring cairns on Gower (PRN 01563w), during excavation, but proved inconclusive (Ward 1988, 161-3). Samples were also taken from a cairnfield at Cefn yr Esgyrn (PRNs 00017m, 00018m) on the northern rim of the Coalfield (Area 3), which was partially excavated before destruction open-cast mining in 1992, but site has been excluded from the present survey as the cairns which were examined proved to be clearance cairns of the Roman and Early Medieval periods (Lawler *et al* 1997).

THE NEOLITHIC PERIOD (Figure 2 and Plate 1)

To the Neolithic period can be attributed chambered tombs and long barrows, and a few henges and related monuments. There is also an inhumation (PRN 05056w) excavated from a cave on the Worm's Head in Gower in the early years of the 20th century, which is said to have been associated with Neolithic implements, though this could not be confirmed (RCAHMW 1976, 15).

Chambered tombs and long barrows

Chambered tombs

Seventeen examples of chambered tombs are known in Glamorgan, excluding placename sites and dubious examples such as that at Pen-yr-Alltwen near Pontardawe.² In accordance with decisions taken by the working group for the pan-Wales project, no attempt was made to define any subtypes within the classification field for the database, though as has frequently been remarked, Glamorgan lies at the intersection of two major traditions of Neolithic funerary architecture, with examples of both Portal Dolmens and Cotswold-Severn passage graves being present. There are also monuments which do not fall easily into either group. Portal dolmens are the largest group represented, with probably at least nine examples. Arthur's Stone (PRN 00068w), Cae'rarfau (PRN 00620m), Carn Llechart (PRN 00347w), Coedparcgarw (PRN 00374m), Gwal-y-Filiast (PRN 00003s), Nicholaston (PRN 00273w), the two Sweyn's Howes sites (PRN 00121w, 00122w), and probably the Tithegston tomb (00287m). Most appear to have been constructed above ground, but Arthur's Stone appears to be a natural boulder under which the chambers were formed by excavation, and Carn Llechart may have been formed at least partly in the same way. Severn-Cotswold passage graves are less common, with the best-understood examples being Parc le Breos (PRN 00251w), Penmaen Burrows (PRN 00250w) and the main tomb at Tinkinswood (PRN 00934s). The Cefn Drum tomb, this too would appear to be some kind of passage grave, but there is no evidence that it had the multiple chambers typical of the type. The Graig Fawr tomb (PRN 00924w) is represented by two burial chambers constructed of relatively small slabs of stone and standing only 3m apart. They were presumably contained within a single mound, but no trace of this could be located during the rapid survey.

Two sites, Nicholaston and Tithegston, still retain significant traces of the covering mound. At Parc le Breos and Tinkinswood, the base of the mound was reconstructed after excavation. At other sites, the remains of the mound are negligible or non-existent. It is possible that the capstone at least of Arthur's Stone was exposed; however, as viewed against the hills and headlands visible from the site it does not particularly support the theory that such monuments were meant to reflect the surrounding landscape, as its profile is at a different angle, though there is an element of subjectivity about such judgements.

² The Pen-yr-Alltwen site (PRN 02953w) is not the cist reported by Morgan (1923), which is now lost. It seems most likely to be a natural outcrop; it is however in an area associated with other prehistoric activity, probably ritual, represented by the structured cairn or kerb circle (PRN 00511w), and may have been a significant place in the natural landscape (Bradley 2000).

Long barrows

There are very few sites for which a long barrow classification appears appropriate, and this is mainly because of the lack of excavation to confirm whether there was any stone structure within the mound. The possible long mound at Killay (PRN00248w) identified by RCAHMW (1976, 40 no.43) was destroyed without any examination; the mound at Cae'reglwys (PRN 00408s) remains visible but cannot be further interpreted from the visible remains. The exact nature of the mound at Coed y Cwm (PRN 00369s), believed to have been a possible chambered tomb or long barrow because of the presence of large slabs of limestone at one time thought to come from a burial chamber, was not resolved by excavation, and it could be a natural feature (Daniel 1937).

Chambered tombs and long barrows are largely a lowland monument type, with six examples of chambered tombs in Gower (Area 1), five in the Eastern Vale (Area 7), two in the main Vale/Bridgend area (Area 5) and one in the Border Vale (Area (6); there are four in the Upland Coalfield (Area 3), but as this covers such a large proportion of the county, it is clear that the type is under-represented. The typical position for these is towards the foot of steeply rising ground; exceptions, such as Arthur's Stone on the summit of Cefn Bryn, Cefn Drum and Graig Fawr on ridges, or Cae'reglwys on the coast, are very much in the minority. Overall, thirteen monuments are on hillslopes, two on false crests, and one each on a summit, local summit and valley base. As regards aspect, although every compass direction has at least one site with that aspect, there is a definite bias towards the east and south (four examples each); of the other directions, only the southwest has two examples. Viewsheds also favour the east and south quarters. However, the numbers of monuments involved are so small that no firm conclusions can be drawn.

Henges

Only one classic henge has definitely been identified in Glamorgan, but there are a few other monuments which appear to have at least some of the defining features of henges, and have therefore been placed in the category of hengiform monument.³

The certain henge, at Newton near Rhossili (PRN 00123w) on Gower (Character Area 1) was recognised from an air photograph taken in 1964 which is published in RCAHMW 1976 as plate 6a; a second photograph taken by RCAHMW in 1992 shows it as much the same, though some details show less clearly and others appear for the first time. There are no remains surviving above ground, but the air photograph shows a ditch 5m wide and 53m overall in diameter, with two dark spots and a third less well defined internally on the eastern side, suggesting the presence of a ring of five or six large pits in a circle 7m within the lip of the ditch. A broad band of lighter colouration may result from the levelling of a bank within the inner circle, and there may have been an entrance about 5m wide on the west. It is located on a south-facing hillslope in lowland south Gower, in an area with no other known prehistoric funerary and ritual monuments,

³ Another circular feature on the flank of Cefn Cribwr in Mid Glamorgan was noted on an air photograph formerly in GGAT's collections but destroyed in the fire of 1983. It was provisionally interpreted as a henge, but this is on a very steep slope (estimated c25-30 degrees) which makes the interpretation doubtful, and the monument had not been plotted before the destruction of the photograph.

about 1.5km west of the south end of Rhossili Down but nearly twice that from the chambered tombs of Sweyne's Howes on the middle part of the down. The viewshed is to all sides except the north, though they are mostly to the middle distance only, with long views only to Cefn Bryn to the east and Rhossili Down to the northwest.

One of two similar possible hengiform monuments is also located on Gower, towards the western end of Cefin Bryn some 300m from Arthur's Stone. The other is at Graig y Gilfach in the Upland Coalfield (Character Area 3). Both consist of a low bank with an internal ditch, and it is for this reason that they have been classified here among the henges; in the Inventory they were both classified (with reservations) as ring cairns (RCAHMW 1976, 67 no. 139. The Gilfach Goch example (00500m), which is in a clearing in forestry, was clearly visible only on the west and north sides of its circuit; elsewhere it had been damaged and was obscured by the surrounding trees. The ditch measured 0.4m wide and 0.3m deep, but the bank is too indistinct to obtain a measurement, though RCAHMW measured its height as 0.6m in 1960, and described it as having ten straight sections from 4.9 to 10.7m long, and the enclosed area as having a diameter of 21.3 to 24.4m. It probably stands on a false crest with views to the west, but detail is obscured by trees. The Cefin Bryn example (PRN 00081w) is sited on a ridge crest with views covering 180 degrees to the north from east to west. It is essentially a circular monument defined by a ditch c 1.2m wide and c0.3m deep with an external bank c 1.5m wide and c0.2m; it is now badly overgrown by gorse, but it was planned by RCAHMW (1976, 76-7 no.210 fig 29) who noted two transverse ditches on the east side, which they interpreted as some sort of entrance feature, perhaps two upright stones whose removal registers as the ditches. There is also internal mound originally oval or crescentic, but now damaged at the north end.

A further monument has been suggested as a possible henge. This is a circular earth and stone bank 40m in diameter with no visible ditch in the Vale of Glamorgan (Character Area 5); the main reason for suggesting that it may have been a henge is its prominity to the portal dolmen (PRN 00003s), but the form itself is undiagnostic, and the monument has a variety of other potential interpretations, from Iron Age enclosure or Early Medieval ecclesiastical site to post-medieval plantation.

THE BRONZE AGE (Figures 3-6, Plates 2-4)

Whilst the numbers of recorded Neolithic monuments are relatively low, those of the Bronze Age run into hundreds, and there are few areas of the county where there are none. Round barrows and their variants, the different classes of cairn, are by far the commonest monument type in the area, with barrows predominating in the lowlands and cairns in the uplands. Standing stones are most common at the western side, in Gower. Stone circles are very rare, with the two definitely identified examples both in the western uplands; another possible example, also western, lies in Character Area 2 at the foot of the uplands.

Burials apparently not associated with structures

Although fourteen inhumations or groups of inhumations of definite or probable prehistoric date but unconnected with any monument have been recorded within Glamorgan, in most the circumstances of their discovery are such that little weight can usually be placed on the apparent lack of such a connection. At Merthyr Mawr, for instance, until the 1960s mobile sands regularly uncovered antiquities which were then destroyed by further wind action, and the two inhumations recorded from here were found in this way. One inhumation (PRN 00278m) lay adjacent to the cairn PRN 00226m and was thought by the National Museum of Wales to have belonged to the same group, although no cairn was actually recorded for the former. The other inhumation (PRN 00860m), which also has no record of an associated structure, was removed by the police on its discovery, and the site was never examined archaeologically. The inhumations which come from a known archaeological context are all burials in caves, three of them on Gower (Character Area 1) Culver Hole Llangennith (PRN 05080w), Cat Hole (PRN 05055w) and Tooth Cave (PRN 05054w) in Ilston Cwm, and a fourth example at the southern edge of the Uplands Coalfield (Character Area 3) in the Lesser Garth Cave (PRN 00593s). Three of the four caves here were utilised over an extended period of time, and the fourth (Tooth Cave) primarily in the Early Bronze Age; Bronze Age activity in all took the form of human skeletal material associated with pottery.

Evidence for cremations with no associated monuments is even poorer. One of the two recorded sites, Abercar (PRN 00800m) is an antiquarian report, and the site has now been submerged by a reservoir, making any further examination impossible; there is a tentative mention of a possible mound; it has therefore not been plotted on Figure 2. A cremation at Merthyr Mawr (PRN 00858m) was found in the 1950s; it was reported to, and followed up by, the National Museum of Wales, but the circumstances of the find made it impossible to determine whether there were any associated structures.

Round barrows (Figure 3 and Plate 2)

A total of 131 barrows were identified at known sites, including two known only from apparently reliable antiquarian accounts. It is not necessarily possible to separate barrows from cairns on the basis of the type of investigation employed in the project fieldwork, *ie* superficial inspection coupled with limited probing. Although mounds where a significant stone content is detectable below the present covering of vegetation have been classed as cairns, the presence of stone elements in the majority of the excavated barrows means that this is not necessarily a reliable criterion. Amongst examples which have been excavated (see below) Bishopston Burch (PRN 00240w) contained a cairn of large diameter, but due to the damage which this monument had suffered before it could be recorded, it is not possible to determine the relative proportions of stone and earth content in the monument. At Pennard Burch (PRN 00239w), although a cairn formed part of the structure of the mound, it was extremely small and the excavator preferred to describe it as a stone heap; the cairn at Sutton 268ft was described by its excavator as 'large', but it was still relatively modest in proportion to the size of the monument. Garn Goch (PRN 00712w) and Crug yr Afan (PRN 00722w) both consisted of an earthen barrow on which a cairn of significant size was erected, which may possibly represent successive periods of construction; they have therefore been classified as both barrows and cairns. (Crug yr Afan is incidentally the only barrow to have produced clear evidence for a surrounding ditch.)

Most barrows are to be found in the lowland part of the county. The majority are in the Vale (Character Area 5), where there are 67;⁴ ten in the Eastern Vale (Character Area 7) eight in the Border Vale (Character Area 6). In contrast, there are only nineteen barrows, or what appear from probing to be barrows, in the Coalfield (Character Area 3), and five of these are in the same group (Llyndwr Fawr: PRNs 00103-4m, 00106m, 00108-9m), where extensive peat growth may mask an underlying stone structure.⁵ The three barrows on Gower (Character Area 1) are all on relatively low ground, whereas the other numerous burial mounds in this area are all cairns situated on the hills. There is one example from each of the Lowland Coalfield (Character Area 2) and the Brecon Beacons.

Because of the number of barrows which had been destroyed or for which access could not be obtained, it was possible to record the siting for only 108 barrows. The prime locations chosen for siting barrows were hillslopes (41) and the coastal plain (38). Only very small numbers do not fall into any of these categories, there being seven barrows on summits (and a further two on local summits, six on valley base, five on high plateau, five on ridge crests, three on false crest and one by a stream. Because of the numbers, a further breakdown by Character Area was attempted, for areas containing more than five barrows. Most of the Area 3 (Coalfield) barrows are sited on either hillslope (9) or high plateau (6), the others being on false crest (1), ridge crest (1) or summit (1). Half of the Area 6 (Vale) barrows (32 examples) cannot be more precisely sited than as coastal plain, though the three out of four of the Sker House group are in the base of a little shallow valley at the edge of the coast, with the other on a false crest above. Twenty-three are hillslope sites, four summits, one each local summit, false crest, streamside and valley base. The Area 6 (Border vale) barrows are found in very limited range of locations, with three each on hillslopes, with two described as coastal plain and one each ridge crest. Five of the Area 7 (Eastern Vale) barrows are on hillslopes, with two described as coastal plain and one each ridge crest, summit and valley base. Forty-two barrows lay on level ground. Of the remainder there may have been a slight bias towards the north or south (ten each) and against the east and west (five and three respectively). No particular direction was favoured when it came to viewshed

Some barrows have been archaeologically excavated, mostly before their destruction by development. The most significant group were those excavated at the start of the Second World War in advance of airfield construction by Fox (1959) in the Vale Sutton 268ft PRN (00285s), two barrows at Sheeplays 293ft (PRNs 00287s-8s), and two at Six Wells (PRNs 00289s-90s) and Williams (1944) on Gower (Pennard Burch and Bishopston Burch: PRNs 00239-40w). Also examined were Mynydd Twmpathyddaer on Stormy Down (PRN 00156m; Grimes 1928) the Mount Pleasant barrow near Porthcawl (PRN 00214m: Savory 1952b), and one of a group at Welsh St Donats (PRN 00707s: Price and Ehrenburg 1977). Short notes have been published on excavations at Twmpath Diwlith (PRN 00754w: Fox and Fox 1934, 396; Wheeler 1923, 66), Marlborough Grange (PRN 00305s: Savory 1967), Colts Hill, Newton (PRN 00465w: Savory 1969) and St y Nyll (PRN 00078s: Savory 1958, 68). The results of the excavation have been to show that most barrows are complex structures, usually of more than one period. In the case of Colts Hill, Mount Pleasant and St y Nyll, the barrow appears to have been erected over a domestic structure.

⁴ Not counting the nine in the Merthyr Mawr/Porthcawl area (see below p00).

⁶ Northeast four, southeast nine, southwest seven, northwest eight.

⁵ At Llyndwr Fawr, probing suggested that in their present form, the monuments were covered by at least 0.5m of peat. Griffiths (1903, 119, 121) refers to other sites in the Rhondda which, in his day, appeared as substantial mounds of peat over stone and now appear effectively as stone monuments, probably as a result of changes in land use that may have led to partial drainage and consequent loss of peat.

Although their main components were variously clay, turf and earth, some of the excavated barrows for which there is adequate published detail included significant stone structural elements (cairns at Bishopston Burch, St Donats 1, St y Nyll and Sutton 268ft, the latter being U-shaped, stone rings at Pennard Burch, Sheeplays 279ft, revetment walls or kerbs at Marlborough Grange, Pwll Swil, St Donats 1 and Sutton 268ft, and stone casings to all or parts of the mounds at Colts Hill, at least three of the Merthyr Mawr barrows, St Donats 1). Rings of stakes were present at the two Sheeplays barrows and the two Six Wells barrows, forming concentric rings in the case of Sheeplays 279ft, where the excavator thought that they represented some kind of mortuary building. Turf, where present, was normally employed in the form of stacks. Ditches are not a standard feature of these barrows, though they do appear in some excavated examples. There was a ditch and berm at Crug yr Afan and St y Nyll, and a ditch provided with causeways at Sutton, but not all were so well constructed; Marlborough Grange and Mount Pleasant had what were described respectively as 'an intermittent flat bottomed ditch' and 'an irregular quarry ditch'.

No cists are recorded associated with the burials at Bishopston Burch, Marlborough Grange, Mount Pleasant, the two Sheeplays barrows, and the two Six Wells barrows, where the primary burials were made in central rock-cut pits; there was also a central burial pit at Colts Hill, although cists were inserted against the side of the boulder wall for other inhumations. The primary burial in the Sutton 268st barrow was made in a rock-cut pit; the excavator describes this as a cist, but there appears to have been very little by the way of built structure in its composition. Barrow 1 at St Donats had a central pit and evidence for cists, though the relationship between the two was not clear. A cist was used for the primary burial at Pennard Burch, Twmpath Diwlath, and Pwll Swil. Records made of the lost Merthyr Mawr barrows indicate that at least two of them (Pwll Swil, Riley's Tumulus) had multiple cists, four in the case of the former and two in the latter. These barrows had a particularly interesting composition (RCAHMW 1976, 82-5 nos.257-60; Ward 1919). Besandment of the Warren had already started in the Bronze Age, and this is reflected in the materials used to construct them; they were formed from piled sand with an external coating of stone, presumably designed to stabilise the structure. The largest was said to have been the mound known as Riley's Tumulus (PRN 00224m), though reports of its height have probably been exaggerated - the mound of sand which formed its core said to have been 16.5m in diameter and 6.4m high. What appears to have been the remains of a similar barrow ('Roberts's Cist' PRN 00226m) was excavated in 1948; it took the form of a stone cist associated with stones forming the segment of a circle 10.7m in diameter, possibly a kerb, and two slabs of stone with fragments of burnt and unburnt bone, possibly another cist (Savory 1953)

It is uncertain whether the rite of burial in a cist not associated with a mound of any kind was practiced within the area of Glamorgan. Two cremations are reported as being associated with cists and Bronze Age pottery, at Croes Wen (PRN 00688m) in the Upland Coalfield and Cwm Car (04453m) at the edge of the Brecon Beacons. Three cists with Bronze Age pottery and unburned skeletal remains come from Llancaiach Isaf (PRN 00654m), Tynewydd, Ogmore Vale (PRN 00060m), both in the Upland Coalfield, and from Tynewydd, St Fagans (PRN 00090s). However, none is sufficiently well recorded to be sure that they were not originally associated with mounds of some sort, and where reported cists were located during the course of the survey, they turned out to be geological formations.

⁷ An inhumation without reported grave goods in a cist from Hayes Road on the outskirts of Barry could as easily be Early Medieval, since it comes from the vicinity of both a Bronze Age barrow and the Early Christian Atlantic Trading Estate cemetery.

Ring ditches

The SMR for the former counties of Mid, South and West Glamorgan contain sixteen sites identified as ring ditches. All of these are known from air photographs, and may or may not be the ditches of ploughed-out round barrows; they include one group of eight (at the edge of the upland Coalfield Area 3), two groups of two (one in Vale Area 5 and the other in the Border vale Area 6), and the rest are single sites (all in the Vale). Geological conditions in the survey area are generally unsuitable for cropmarks, and it is possible that this monument type is under-represented, although given the fact that few barrows in the area are known to have had ditches, they may genuinely be uncommon. The only examples which have been tested by excavation were a group at Cefn yr Hendy in the Border Vale (not included in the total above), which turned out to be charcoal-burning platforms. Inspection of the ground, both during the course of the project and in earlier fieldwork, found no evidence of earthworks on any of the other ring ditch sites, and no stray finds came to light although some of the fields were under plough. The only exception is at Norton (00470m), where a flint was found in the vicinity during the field visit. However, it may well be associated with the large interrupted ditch enclosure that occupies the hilltop, rather than with any ploughed-out barrow.

Round barrows (cairns)

Cairns are by far the commonest monument type represented, but their distribution is weighted heavily towards high ground, the Upland Coalfield and the Brecon Beacons (Character Areas 3 and 4) in particular, though in the lower-lying zones of the Gower peninsula and the Lowland Coalfield (Character Areas 1 and 2), they occur fairly commonly on hills which dominated the surrounding area. The appearance of the cairns in the survey area is heavily influenced by the local geology, particularly in the north of the county, where there is a clear distinction between the cairns of the Brecon Beacons, where the blocks derived from Carbonifeous Limestone and Old Red Sandstone are generally used to form loose heaps which are generally inimicable to the establishment of vegetation, and the Pennant Sandstones of the Coalfield, where mounds are usually formed of larger blocks, and are less-well-marked and more frequently overgrown.

For the purposes of the survey, the cairns were divided into five groups: cairns with no evidence for structure; structured cairns (those with evidence for internal elements, normally kerbs and/or cists); platform cairns; ring cairns; and kerb cairns. With the exception of the kerb cairns, which are instantly recognisable by their small size and structural form (a ring of stones), there is bound to be some misallocation between groups, as their distinguishing characteristics are not necessarily visible in external examination, particularly when it comes to distinguishing between structured cairns and those where no evidence for structure is apparent superficially; for this reason they have been grouped together in the discussion which follows. Platform cairns are particularly difficult to identify, and can only really be identified with any confidence following excavation, but monuments which started out as ring cairns and were later infilled will not necessarily be identified as such during rapid survey, nor will structured cairns, particularly when covered with vegetation.

Three hundred and thirteen cairns were identified as being of probable funerary origin but having no evidence for structure apparent. A further 82 had some evidence for structure, and can confidently be classed as funerary and ritual monuments. The problem lies with the cairns that have no visible evidence for structure. Amongst them, the larger cairns (over 10m in diameter) have been identified as funerary with a fair degree of confidence. The main problem lies with smaller cairns, particularly in areas where field clearance may have been a factor. In general, well-marked and well-shaped cairns have been recorded as potentially funerary and slight or shapeless cairns have been rejected, but future excavation could show that these judgments, which may be over-influenced by taphonomic factors, are incorrect (see Owen-John 1986, 269).

The evidence for structures is not always clear, particularly in the case of kerbs, but for the purpose of the survey, the presence of boulders which may be the remains of kerbs has been accounted sufficient to class these sites as structured cairns. Kerbs definitely occur in 23 cairns and possible kerbs in another 31. Most take the form of rings of boulders, but Mynydd y Garth 4 (PRN 00485w) and Llanmadoc Hill 1 (PRN 00006w) have kerbs which include coursed rubblework in their construction, and at Mynydd y Gelli, one of the large cairns (PRN 00073m) excavated in 1903 is described as having twelve (probably originally fifteen) inward-leaning retaining stones, averaging 0.2m high and set on a wall of laid stones 1.2m or 1.5m thick (Griffiths 1906, 286-92). Cists may be slightly less common, although there are definite examples in 22 cairns, there are possible cists in only another 21. These normally take the form of a box lined with stone slabs, and another slab as the capstone. A few monuments contain more than one cist; a useful discussion of cairns with multiple cists is provided by Savory 1972, though this includes some monuments classed as barrows according to the definitions used during the present survey (see Appendix 1). A handful of the most complex cairns are recorded as possessing both kerbs and cists.

It is likely that many of the cairns which have no obvious evidence for structure would produce such evidence if they were excavated. Few cairns have been excavated, and fewer still have published reports which are sufficiently adequate to allow for comment. One of these is one of the few lowland examples, the Simondston cairn (PRN 00375m) on the outskirts of Bridgend in Character Area 5, was a circular stony mound revetted at intervals by kerbstones and containing a central cist for two urns with cremations; one of the stones of the cist was cupmarked. Four of the secondary cremation urns were in an area of the cairn which had been demarcated by two upright slabs; and other slabs had been carefully set, two of them over deep pits (Fox 1959, 78-89). Two cairns at the southern edge of the Brecon Beacons were excavated by Webley, but he published only one, Twyn Bryn Glas (PRN 00740m), which does have a visible external kerb. This was found to contain a boat-shaped enclosure of dry walling associated with the primary burial, and the cairn was rebuilt twice, initially to the same form, and later to a larger, circular form (Webley 1962). At the unpublished site at Nant Maden (PRN 00742m) the central burial was enclosed within what is described as a D-shaped structure, and there was a kerb of boulders (RCAHMW 1997, 94-6 RC111). The most recently excavated is the Great Carn on Cefn Bryn in Gower (PRN 00078w); this contained within its structure a ring of boulders which may or may not have preceded the construction of the cairn itself, and the primary burial had been deposited on what appeared to have been a plank, which in turn lay on a stone setting within a pit towards the centre of the monument. The cairn had

been built over another pit, a bedding trench, a posthole and a hearth, possibly domestic features, and a collection of Mesolithic flints (Ward 1987, 39-40).

The distribution of both sorts of cairn is overwhelmingly in the uplands, with 39 structured cairns and 184 cairns for which no structure in recorded in the Uplands Coalfield (Character Area 3) and fourteen structured and 84 apparently unstructured cairns in the Brecon Beacons (Area 4), accounting for slightly over 80% of the total. Gower (Area 1) has fourteen structured and 36 apparently unstructured cairns, almost all of which are on high ground. In contrast there were two structured and six other cairns in the Coastal Coalfield (Area 2), two structured cairns and ten others in the Vale/Bridgend area (Area 5), and one without evident structure in the Easter Vale (Area 7). All but two of the examples in the Vale/Bridgend/Eastern Vale area are coastal; and of these two, one now destroyed may not have been funerary. Nine are on Merthyr Mawr Warren, mostly in the coastal plain although one was somewhere on the ridge, the others being at Nash Point, Westward Corner to the east of Barry and Sully Island to the west. The only significant inland cairn is the Simondston cairn near Bridgend.

Most cairns of both types have provided evidence for siting. Figures overall show that hillslopes are the commonest location (seventeen structured cairns, 96 cairns without evidence for structure), followed by high plateau sites (nine structured, 66 other), ridge crest (ten structured, 38 other), false crest seventeen structured, 37 other), and summit (eight structured, 28 other). Other locations are represented by much smaller numbers: coastal plain (two structured, eleven other), streamside (six structured, nine other), local summit (six structured, eight other), col (two structured, three other). Overall, hillslopes represent about a third of both types taken together and high plateau a fifth; this is heavily influenced by the fact that most of the cairns are in the Uplands Coalfield and Brecon Beacons, where the proportions cairns in both locations are slightly higher; in Gower in contrast, where there is no high plateau, the proportion of sites on false crests is much higher, equal to the proportion on hillsides.

There was a distinct preference for a level site, with between a quarter and a third of all cairns so located (21 structured cairns, 96 other). Other cairns generally avoid steep slopes, but there is a general bias in favour of southern facing slopes, though this is apparent in cairns with no evidence for structure (43 on south-facing slopes, 26 southeast, 21 southwest) rather than structured cairns. This is probably significant, in view of the fact that the coalfield ridges, on which the greatest number of cairns are situated, generally run in a roughly north-south direction, giving more scope for sites facing generally east or west. Given our current patchy knowledge of the Bronze Age in Glamorgan, it is not really profitable to speculate at the moment as to what the significance of this orientation might be. There was however little to choose among the compass points covered by the viewsheds.

Platform cairns

Although a few of the monuments in the survey could potentially be platform cairns, it is very difficult without excavation to judge whether a cairn appearing as a low, flat and relatively level platform was actually intended to be like that, or whether its present appearance is the result of subsequent robbing, and the monument in question was intended as an ordinary structured or unstructured cairns. Five sites were identified as potential platform cairns, all in the Upland Coalfield area (Character Area 3) and mostly in the Merthyr Tyfil area; a further eight were identified as

possibly being platform cairns, although this interpretation was regarded as less likely than that they had been robbed. Two of these were also in the Upland Coalfield. and three were in the Brecon Beacons (Area 4), all in the same cairn cemetery, three on Gower (Area 1). None have been excavated, and there does not appear to be any consistency in their siting or viewshed.

Ring cairns (Figure 4)

Sixty-four examples of ring-cairns have been recorded in Glamorgan, plus one monument (the Pentre Farm cairn) whose nearest analogy appears to be the ring cairn and is accordingly included here. Unaltered ring cairns are relatively easy to identify on the ground because of their distinctive form with a largely stone-free interior, and sometimes as a ring-shaped bank with a lower interior. However, if the ring has later been filled, it may not be possible to distinguish a heavily overgrown ring-cairn from one of the other types. Some confusion may also be caused by solid cairns which have been heavily robbed, leaving an upstanding rim around a circle of lower ground, though this can usually be detected as the inner side of the rim tends to be ragged; the eighteen monuments of this type which were noted have been omitted from this section. Two very large ring-shaped monuments with relatively substantial upstanding banks, on Mynydd Penhydd and Tor Clawdd are omitted on the grounds that they seem defensive in appearance are therefore more likely to have been ringworks (RCAHMW 1976, 53, 55 no.60); they measured respectively 24m in diameter and up to 1m high, and 21.8m in diameter and c0.9m high. They are however smaller in diameter than the largest of the undoubted ring cairns the Graig Fawr double ring cairn (PRN 00338w), whose outer ring is c50m in diameter, the Morlais Hill ring cairn (00830m), which measures 32x30m, Pebyll (PRN 00721w) at 30.8m NE-SW x 29.4m, the Cwm Cadlan ring cain (PRN 00758m) at 26.5m. The normal size range is between 7.5m and 20m.

The distribution of ring cairns is, like other round cairns, largely on upland (the Upland Coalfield and Brecon Beacons, Character Areas 3 and 4) or, in the lower-lying zones of Gower (Character Area 1) and the Lowland Coalfield (Area 2), on hills which dominated the surrounding area. The main exception is the Pentre Farm cairn which lies on a low hillside overlooking the lower reaches of the River Loughor. This cairn, which is penannular in shape rather than being a normal ring cairn, has been excavated, as have the two rings cairns adjacent to the Great Carn on Cefn Bryn; these are the only examples where excavation has taken place. In one of the two Great Carn ring cairns (No.1), the site had been levelled before construction, but the other had been left sloping; the latter had one original entrance, later carefully blocked, and the former two entrances, of which one had been blocked. In both, the inner kerb to the ring was the more carefully constructed, and the monument had been filled in with stone in its final phase. No.1 contained cremated bone deposited in a pit; No.2 had a possible hearth, but no evidence for funerary activity. At Pentre Farm, the penannular stone emplacement, faced internally and externally with boulders and associated with three token deposits of burnt bone, had been constructed on top of a low earthen platform, and was later covered by a cap of stone.

In all three examples, the infilling of the ring poses important questions as to the recognition of this class of monument in rapid survey, particularly where the monument is wholly or partly covered with vegetation. It is possible that excavation of apparently structured or unstructured cairns would reveal that some of them are infilled ring cairns as at Pennard Burch (PRN 00239w); two of the doubtful sites may be examples of this. Little detail is visible in any of the unexcavated cairns, other than those whose banks are composed of large stones which have not favoured vegetation

growth. The clearest is at Nant-Troed-y-Rhiw 1 (PRN 00683w), where the oval ring is largely free of vegetation, and a cist can be seen backed up against it in the interior close to what may be the original entrance. The Cefn Cilsanws ring cairn (PRN 00787m) is crossed by two low narrow banks of stone of the same type as those used in the ring, forming an 'X'. At Pebyll, although the site is now heavily overgrown with vegetation, a cist in the ring can also still be seen along with traces of the kerbs noted by RCAHMW in 1965 as facing both sides of the ring. The Graig Fawr ring cairn consists of a relatively small oval inner ring set asymmetrically within a much larger circular one, and Penlle'rbebyll (PRN 00366w) is an oval bank set back-to back with a crescentic bank, both enclosed within a larger penannular bank.

The majority of the sites are in the Upland Coalfield (Character Area 3) which has 39. Next comes Gower (Area 1) with fourteen, all on the higher ground, and the Brecon Beacons with nine. This type of monument is very poorly represented in the lowlands; there are two examples in the Coastal Coalfield (Area 2), one on a ridge, and two in the Vale/Bridgend area (Area 5). Sixty ring cairns (including Pentre Farm) have evidence for siting. Hillslopes are the commonest situation with twenty examples, a third of the total number, followed by false crests with thirteen examples, nearly a quarter. High plateau and ridge crest sites account for nine and eight examples respectively, summits five (local summits one) and cols three. There does not appear to be any significant bias in siting between one character area and another. Leighton (1997, 74) notes that ring cairns in the southern Brecon Beacons are normally overlooked by nearby rising ground or 'are inconspicuously sited on level ground', but this does not however hold good for elsewhere in Glamorgan, as can be seen from the summit and ridge crest examples. There is again a general preference for flat sites (25 examples), but apart from that aspect is not very clearly defined; the main impression seems to be that the west is the least favoured quarter (two sites facing southwest and one each west and northwest). The south and northeast have the most sites, with seven each, and there are five sites facing north, four east and three southeast. There also is little evidence that any direction was particularly favoured for a viewshed, though a western view was slightly less popular, probably as a result of the fact that fewer sites were on ground that sloped to the west.

Kerb cairns (Figure 4 and Plate 4)

Kerb cairns are a rare monument type in Glamorgan, which appears to be at the very edge of their distribution range. They consist of a ring of stones no more than 5.5m in diameter, but mostly significantly smaller, defining the internal raised area; one appears to have evidence for an inner ring. Only three definite examples are known, with another possible badly damaged one; this lies on the same mountain as two of the definite sites, at the southern edge of the Brecon Beacons (Area 4), just north of Merthyr Tydfil. The other example lies in the Upland Coalfield (Area 3) north of Pontardawe, also relatively close to the edge of the county. All are on false crest or high plateau sites, and are oriented east, southeast or north-northeast-east.

Round barrow cemeteries (Figure 5 and Plate 2)

Three different types of round barrow cemetery were defined under the project terminology. As well as simple cemeteries, consisting of groups of barrows or cairns in close proximity, pairs of barrows or cairns were singled out as a separate monument type, as were cairnfields consisting of groups of small cairns of which some or all were considered

probably to be funerary. Groups of barrows or cairns within an apparently meaningful landscape but not in close proximity to each other were, in accordance with the parameters laid down by the pan-Wales survey, not classed as cemeteries. However, such groups often included more tightly spaced sub-groups which did fall within the project definition. The group of mounds at Pencoedtre Wood, previously believed to be a barrow cemetery (RCAHMW 1976, 101-2, nos 408-12) is now known to be a group of Romano-British huts (Bashford and Hughes 1998).

There were twenty cemeteries consisting of three of more barrows or cairns with a diameter greater than c5m in close proximity; nine occurred in the Upland Coalfield Area 3, five each in the Brecon Beacons and the Vale, and a single example on Gower. Relatively few of them were made up of three or more barrows or cairns of at least moderate size. There were six consisting of round barrows which appeared from the limited inspection possible during the course of the project to be constructed principally from earth; a further thirteen of these cemeteries were made up of cairns. Usually these groups consist of no more than five barrows or cairns, though it is possible that others may have been destroyed. There are only five larger groups, three of which are to be found in the Vale: Friars Point (fourteen barrows), Welsh St Donats (at least twelve, possibly more), Llanmadoc Hill, Gower (seven), Breach Farm (six) and (in the Coalfield area 3) Llyndwr Fawr (six on the summit); all of the three last each form a part of a dispersed cemetery group. Sitings were fairly evenly divided between coastal plain, hillslope, ridge crest. and summit. Few have a distinct aspect (south, southwest and northwest one example each, west two, level five), but the viewsheds are more or less evenly divided between the four quarters. The only examples to have been excavated are some of the Welsh St Donats barrows (see above).

Round barrow or cairn pairs

These pairs consist of two barrows or cairns in close proximity; they usually consist of two monuments of the same type; the examples in the Vale and Border Vale have both monuments as barrows, but elsewhere they are cairns (ordinary cairns or ring cairns). However, some pairs consist of a ring cairn and a round cairn, as at Cefn Bryn, Mynydd y Glog, Nant-Troed-y-Rhiw, Twyn y Glog, and some of the groups on Gelligaer Common. The pair of cairns at Bryn-chwith are situated so close to each other as to be touching; the same arrangement is found with group of three cairns at Graig Fawr (PRN 00336w), though since there are more than two of these they have been classed as a cemetery rather than a pair.

Most of the monuments making up these pairs have not been excavated. The exceptions are the pair of ring cairns near the Great Carn on Cefn Bryn on Gower, examined in a research excavation of the 1980s, Sheeplays pair in the Vale, excavated at the start of the Second World War in advance of the construction of an airfield, and one of the Naaboth's Vineyard pair in the Border Vale, where a salvage excavation was carried out during road-widening operations. The excavations confirmed that although there were differences in detail, the Sheeplays pair were similar in their internal

⁸ Good examples of these dispersed cemeteries occur on Cefn Bryn, Llanmadoc Hill and Rhossili Down in Gower (Character Area 1), on Cefn Gwyrhyd, Graig Fawr, Gelligaer Common, Merthyr Common, Mynydd Carn Llechart, Mynydd Garth/Mynydd Uchaf and Mynydd Margam in the Coalfield (Character Area 3); and Cefn Cilanws, Cefn Sychpant, Mynydd y Glog, Pant y Gadair, Penmoelallt and Vaynor Common in the Brecon B eacons (Character Area 4) Welsh St Donats in the Vale (Character Area 5).

construction, which incorporated circles of stakes and piles of turf, though Sheeplays 279ft also contained a ring of laid stones (Fox 1959, 129-48). The Great Carn ring cairn pair were also similar in general principle but with significant difference in detail (Ward 1988).

Thirty-eight pairs were noted in all, most of them again in upland areas. Just over half of the number (twenty examples) were to be found in the upland Coalfield (Character area 3); there were also seven in the Vale (Area 5), five in Gower (Area 1) all on hills, four in in the Brecon Beacons (Area 4), and one each in the lowland Coalfield (Area 2) and the Border Vale (Area 6). As regards location, there were six hillslope sites, five each of summits, ridge crests and high plateau sites, five false crest (plus two examples where one monument was on a false crest and the other on a hillslope, and one with one monument on the false crest and the other in a level high plateau situation), and one each col, local summit, and valley base. The Vale examples were all in fairly level coastal plain locations, but otherwise there was no strong correlation between area and siting, beyond the fact that most of the summit/local and ridge crest examples where in the upland Coalfield. Thirteen were on level sites, and where there was a definite aspect, southeast predominated slightly, with six examples, three for the east and four for the south; the other directions represented were north and northwest with two examples east and northeast with one. The viewsheds were more or less evenly divided between the four quarters.

Funerary cairnfields

Thirty-six examples of cairnfields containing probably funerary cairns were noted during the course of the survey; one of these (Rhos Gwawr) was recorded under two PRNs (00030-1m) as the cairns fell into two distinct groups. Cairnfields are a difficult group to assess from field survey only. The criterion used to determine whether a group of cairns was classed as a round barrow cemetery or a round barrow cemetery (cairnfield) was the size of the cairns which comprised it were generally under 5m in diameter, though occasionally slightly larger cairns are included. The other problem was in determining which among the cairns in the cairnfield size range were likely to have a funerary origin and which represented merely an unstructured accumulation of stones. In this case the criterion was whether the cairn appeared to form a compact heap which had been deliberately built, but it is difficult to say whether the present appearance of the cairns is actually an accurate reflection of their original form, since some of the cairns excavated at Penrhiw Cadoc turned out to have been far more carefully built than their superficial appearance suggested. Within each cairnfield, cairns felt most likely on the grounds of size and/or morphology to be funerary were given separate PRNs to enable them to be searched for in the SMR.

The cairnfield is predominantly a monument of the uplands; seventeen in the upland Coalfield (Character Area 3), thirteen in the Brecon Beacons (Area 4), but only three in Gower (Area 1), two in the lowland coalfield (Area 2) and a single example in the Vale area (Area 5), and even then the Area 1 and 2 examples are all on hills, the former all being on a single hill, Cefn Bryn, which has a generally upland character even though it rises to less than 200m OD. Within the uplands of the Coalfield, cairnfields occur above all in the central section, with lesser numbers towards the west; the

¹⁰ Cefn Bryn also had a further four cairnfields which it was though were probably not funerary.

⁹ Twenty-nine cairnfields were regarded as probably not funerary; at a further nine it was not clear whether they included funerary cairns.

only three possibly funerary examples on the eastern fringe were excluded because of doubts that they were for this purpose.

The upland bias may at least in part be the result of post-depositional factors, in that small heaps of stones in lowland areas might prove a tempting target for people constructing buildings and field walls. The only surviving cairnfield in a truly lowland location is Merthyr Mawr (PRN 00854m), where it had been preserved under wind-blown sand. This monument is known from the fact that cairns within it were uncovered from time to time by gales before the Warren stabilised in the second half of the 20th century. It would seem to contain the individually noted burials at PRNs 00236m, 00855m, 00856m, 01420m, and to have taken the form of individual crouched inhumations under small piles of stones. The best recorded cairn is described as measuring 6ft by 4ft (1.8x1.2m) and oriented northwest-southeast; it overlay the crouched inhumation of an adult with the head to southeast and no grave goods. This cairnfield may be associated with the Burrows Well settlement (PRN 00237m), which lies immediately to its east (Savory 1952; 1953). The earliest occupation recorded here during the course of a small trial excavation dated to the earlier Iron Age, but in view of the limited area examined, an earlier origin cannot be ruled out.

The upland cairnfields at Coly Uchaf, Mynydd y Gelli, Carn y Wiwer, and Nant Cwm Moel (PRNs 00504m, 00077m, 00577m, 03539m) are also all closely adjacent to settlements, although in each case the settlement is classed morphologically or from recorded finds as later than the conventional date for funerary cairnfields; continuity of occupation may perhaps be postulated, or possibly reassessment of dating evidence. There is some evidence for a relationship with other classes of monuments at some sites. One of the cairns at Cefn Cilsanws (PRN 01099m) was found to overlie the site of a Neolithic structure, but with no overt evidence of ritual activity (Webley 1958). In one of the smaller Cefn Bryn cairnfields (PRN 05051w), a group of the small cairns typical of such monuments is associated with a ring cairn. On Rhos Gwawr, Mynydd y Gelli and Penrhiw Angharad (PRN 00687w) large and definitely funerary cairns lie slightly outside the boundaries of the cairnfields proper, and some sort of relationship would seem likely. The same thing also occurs at Burrows Well where on the east side of the settlement, the opposite side from the recorded cairnfield, wee the remains of a probable sand barrow with a cist ('Roberts's cist' PRN 00226m; Savory 1953; see above). Another inhumation, that of an adult unaccompanied by grave goods or evidence for a cairn or cist, was found lying on its left side with the head to the south c100m to the east of the cairn. Excavation of the whole of such a complex of monuments is required in order to explore these relationships.

As far as location is concerned, 22 examples, or over half the total, were on hillslope sites, but generally not particularly steep hillsides. No other type of location was represented to anything like the same extent; five cairnfields were on high plateaux, two on ridge crests, two stream side locations (one of which could also be classed as a hillslope site), and one each in coastal plain, col, false crest, local summit and summit sitings. Where there was a definite aspect, south predominated, with ten examples, seven level, three for the southeast and two for the southwest; the other directions represented were north (five), northeast (three) and northwest (one). Twenty-three had a clear directional bias to the

¹² Siting details are unavailable for two sites, one of which has now been destroyed, and the other for which access permission could not be obtained

¹¹ It was noted as a possible cairn cemetery by RCAHMW, but considered insufficiently well established for inclusion in the Glamorgan Inventory.

viewshed, with the north and south quarters predominating (eight and seven examples respectively) and only four each to the east and west, but the numbers involved are too small to be statistically significant.

A small number of cairnfields have been subjected to proper archaeological excavation, with mixed results. Two cairnfields, Llwyncelyn and Twyn Bryn-hir (PRN 00005m, 00006m), were excavated in advance of road construction in the 1940s (Fox and Murray Thriepland 1942). Twyn Bryn-hir (site A) consisted of seventeen oval or circular mounds in an area 165m long from east to west by 69m wide; twelve were excavated. None of the excavated cairns yielded any certain signs of burial or grave goods, though two contained slabs which may have been derived from cists and one covered a hole0.6m square which had been dug into the subsoil and floored with a flat slab. Four were 'scoop graves', not now considered to be funerary. Llwyncelyn (site B) contained ten cairns, eight of which were circular and the other two oval; five were excavated. The excavated examples proved to be built of small stones, but all had been robbed; three of them had small central hollows, interpreted by the excavators as possibly being the remains of the actual graves. Both cairnfields were of superficially the same appearance, and excavation at both failed to find any clear evidence for burial.

In the case of Penrhiw Cradoc (PRN 00538m; Owen-John 1986), three cairns within a group of twelve which had been damaged during forestry operations were selected for excavation. Cairn B (=RCAHMW 1976, 114, no.489 ii), which survived relatively well, had been carefully constructed over three pits which contained burned material in their fills, including unidentifiable bone. It was 9.5x3.2m, orientated almost exactly north-south and surviving in places to a height of 0.6m or five courses of the well-defined drystone kerb which surrounded it, and which may have been set against the partially completed core. This cairn was almost certainly funerary in origin. Other pits were noted to the west of the cairn, but their relationship with it was unclear. Both of the two more badly damaged cairns, H (=RCAHMW 1976, 114, no.489 viii) and J (=RCAHMW 1976, 114, no.489 xi), may also originally have had kerbs, and have been rectangular in shape, though there was no evidence that either had been funerary. Both turned out on excavation to be 2.2m across, showing that surface dimensions may be misleading. Four radiocarbon dates from charcoal in pits under cairn B indicate a *terminus post quem* for its erection in the 15th century BC. Radiocarbon and paleoenvironmental investigations carried out as part of the excavation of the cairnfield at Cefn yr Esgyrn (PRN 00017-8m) showed that this was made up of non-funerary cairns associated with woodland clearance in the Roman or Early Medieval period (Lawler *et al* 1997).

Standing stones (Figure 6)

A total of 31 standing stones of definite or probable prehistoric date were noted in Glamorgan during the course of the survey though, as most of them have not been excavated, it can be difficult to be certain how many are ancient, and how

¹³ A number of groups of so-called 'scoop graves' were visited during the course of the survey, but have been excluded since the balance of evidence seems to be that they are not funerary. They consist of small mounds each associated which a quarry pit on one side, from which the mound material has clearly been derived. Fox and Murray Threipland's (1942) excavations, did not produce any real evidence for a funerary purpose. From the survey visits to the initial sites on the list it was concluded that they were not likely to be funerary, so they were subsequently omitted from visits. They may possibly have been intended as sheep-shelters, since the pits are of similar size to built sheep shelters, and the distribution of the two seem to be largely complementary.

many were set up later as boundary stones or other markers, cattle-rubbing stones, or simply as picturesque features, as for example the modern standing stone erected next to the Hutchwns round barrow in Porthcawl, or the one erected next to the carpark at Broughton Farm, Gower 'as a joke'. There is also a further complication in that monoliths of undressed stone were also set up as memorials in the Early Medieval period; inscriptions where they survive will serve as an identification, but without excavation it is impossible to tell whether there are uninscribed Early Medieval stones or stones where the inscription is lost (RCAHMW 1976, 121). A case in point are the Cefn Celfi stones (PRNs 00516w, 02668w). As they exist now, they consist of two substantial fragments respectively 0.75 and 0.6m high, of which the former seems certainly in its original position, though the latter is not securely founded and may have been moved; it is possible that it was originally a fragment broken off the other. They have been identified with three stones (one now disappeared) recorded in medieval literary sources as 'graves of heroes' (Jones 1936; 1967, 133-4), though this does not say whether they were prehistoric or Early Medieval in origin.

Possibly the most reliable indicator of ancient date is size.¹⁵ Stones of 2m or over in height have been accepted as prehistoric unless there is oral or documentary evidence to show that they were erected relatively recently; stones of this size are too large to be likely as boundary markers or cattle-rubbing stones unless erected very recently with earthmoving machinery.

There are thirteen of these larger stones; Bridgend (PRN 00390m), the two larger stones at Burry (PRNs 00085w and 00157w), Carreg Hir (PRN 00583w), Cefn Gwrhyd (PRN 00517w), Cefn Cross (PRN 00167m), Cotterell Park (PRN 00372s), Maen Bredwan (PRN 00581w), Mansel Jack (PRN 00087w), the larger of the two Oldwall stones (PRN 00088w), Ty'n Cellar (PRN 00789w), Ty'r Coed (PRN 00086w), and the relocated Maen Gwyr (PRN 00158w) which seems to be a genuinely ancient stone moved to a new site in the 19th century. More dubious is Y Carreg Wen in Cowbridge (PRN 00269s), which now stands 1.3m high, but with another 1.2m said to be buried below ground. Smaller (between 1.4m and 2.0m in height), but usually accepted as genuine are another five stones. These are the smallest Burry stone (PRN 00084w) and the smaller Oldwall stone (PRN 00089w) (heights respectively 1.5m and 1.6m) and Bon-y-maen (PRN 00396w, 1.4m high), Miskin Menhir (PRN 01071m), and the now lost Redland stone (PRN 00370s), which is described by RCAHMW (1976, 124 no.561) as being 1.8m in its maximum dimension, though it had fallen by this stage. The other smaller stones, Carreg Llwyd (PRN 02493s), Coedcae Pen-y-waun (PRN 04418w; 1.2m high), Cockett (PRN 00172w; 1.2m high) and Nant Herbert (PRN 00704w; 1.0m high) are more problematical. Carreg Llwyd is on a parish boundary, though there is no evidence to determine whether the stone or the boundary is the earlier. In the case of the other three, examination of the relevant tithe maps and 1st edn OS 25" maps reveals no reason why they might have been put up as boundary stones. Although the Cockett stone was in a landshare at the time of the tithe map, its placing in the field does not appear to have any relevance to the way in which the land was divided. Three stones have been lost, an alleged cup-marked stone (PRN 01022m).

¹⁴ There is also a huge recumbent boulder, Cerfyl Faen at Gwaun Cae Gurwen, which has been claimed as a standing stone (PRN 01590m), but is probably just a glacial erratic

¹⁵ Physical condition is not a reliable guide, since many of the stones are quartz conglomerates which are resistant to weathering, and the sandstone Mae Bredwen (PRN 00581w), where the faces of the bedding planes were noted as fairly fresh-looking by OS fieldworkers, is subject to spalling which will be continually renewing these faces.

A pair of stones (PRN 02434s) and a single stone (PRN 02433s) at Tinkinswood were recorded very close to the chambered tomb (PRN 02432s). The pair are definite standing stones 1.2m high; the single stone is at an NGR which fell at a point where outcrops of tabular stone could be seen protruding from the turf; these stones are included within the SAM which encompasses the chambered tomb and its associated features, but RCAHMW (1976) do not mention them either as a confirmed site or among their rejected examples. The proximity to the genuine prehistoric monument might suggest a possible contemporary origin, but there is nothing diagnostic in its form which would confirm that this is the case. In two cases, very small standing stones were noted in proximity to Bronze Age cairns. These were Mynydd y Capel on Cefn Merthyr (PRN 00567m), associated with a cairnfield (PRN 00514m) of which at least two cairns were noted as possibly funerary; and Mynydd y Gelli in the Rhondda (PRN 00075m), which is set in the ground in the middle of cairnfield (PRN 00077m) associated with a group of monuments comprising two structured cairns (PRN 00073m, 00074m) and huts (PRN 00076m). At the time of the fieldwork these were largely discounted as prehistoric monuments, following RCAHMW (1976, 124), as the size of the Mynydd y Capel example, which is only 0.85m high, appeared to assimilate it more closely with the track markers and boundary markers seen elsewhere, and all that was visible of the Mynydd y Gelli stone was 0.4m of a tilted slab protruding above the turf, with no clear evidence of being anything other than natural. However, they have been reconsidered in the light of examples from West Wales, where miniature standing stones associated with cairns have been accepted following excavation as forming a genuine part of the monument complex (Marshall and Murphy 1991, 37-8, 58, 76), and it is possible that the same thing may be happening on these sites too.

In most cases, the standing stones of Glamorgan seem to be lone monuments. Maen Bredwan (00581w), on Mynydd y Drumau overlooking Neath in the Coastal Coalfield, ¹⁶ may possibly be associated with a low and rather shapeless cairn, but it was not possible to determine whether the cairn was a genuine prehistoric monument or the result of field clearance. A number of supposed 'stone rows' have been recorded close to other chambered tombs, Arthur's Stone on Cefn Bryn and Carn Llechart. The former consists of small boulders marking the modern track, the latter of small natural outcrops of rock. There are also two pairs of diminutive standing stones on Cefn Car in the southern edge of the Brecon Beacons, but examination of these stones showed the marks of a metal tool, suggesting a later date. The only apparently genuine stone row is at Burry, where an estate map of 1784 shows that PRN 00084w originally formed part of a northwest-southeast row approximately 25m long, consisting of three standing stones of which only this one is still extant (Morris 1960). The other stones on Gower, although tending to cluster at specific locations, are not sufficiently close together to indicate that they were definitely associated. RCAHMW (1967, 121-2) has drawn attention to the fact that the highest densities of standing stones occur on Gower, particularly in its western side where there are eight stones, and that numbers may originally have been much higher, if all the fourteen 'stone' placenames collected by them were originally associated with monuments of this type.

Ten stones, most of them large, are included in Character Area 1. A further six (five, if the Cefn Celfi stones are counted as single example) come from Area 2, the Lowland Coalfield, three from the Upland Coalfield (Area 3), seven from the Vale/Porthcawl area (Area 5), one from the Border Vale (Area 6) and two (the dubious Tinkinswood pair) from the Eastern Vale (Area 7). From this, it can be seen that the distribution is overwhelmingly lowland, and is also

Also known as Carreg Bica, but another stone is recorded under this name at a completely different location near Maesteg, so the name Maen Bredwan has been preferred to avoid ambiguity.

strongly weighted in favour of the western side of the county (four of the seven from the Vale/Porthcawl area come from west of the Ewenny River). All of those parts of Gower where standing stones are recorded can loosely be described as coastal plain, as can much of the Vale/Porthcawl area, and the location of all but one of the Lower Coalfield sites, though only five are on a level plain where the topography cannot be more precisely specified. Five stones are on level streamside/valley base and floodplain sites, most probably originally with views all round, though in some cases these have now been obscured by trees or buildings. A single stone (Maen Bredwan) was on a level site on a high plateau, again with views all round. Fifteen stones out of the total were located on hillslopes, eight with a southern aspect, two southwest, two west, two northwest and two north; twelve were on level ground. No stones were noted on east-facing hillsides, though five hillside stones had views which included at least one part of the eastern sky, usually the southeast.

Excavation has taken place at four of these sites, mainly in advance of development or road widening, though the site of one of Burry stones (00085w) was excavated following its fall in 1948. This excavation was inconclusive as regards the nature of its original erection, since modern jam-jar and bottle glass fragments well down in the cobble packing showed that it had been reset in recent times (Savory 1949). Excavation at the Cottrell Park stone revealed that it had been erected in a pit with one side vertical and the other forming a sloping ramp down which the stone would have been slid. This side had been packed with stones, but not firmly enough to prevent the stone from leaning out of position; on the other side there was a superficial deposit of similar stones. No datable material of any kind was discovered. The best results came from the Bridgend stone, which was moved in 1964 in advance of building works (Lewis 1966). The stone stood in an oval hole dug 0.8m into the subsoil. Although the fill of this stone-hole too showed signs recent disturbance, it contained some large packing stones. Underneath the stone was a cremation deposit of burnt bone (from an adult) and ash with a carbonised hazel twig. The other recorded find was a flake of grey flint. The Miskin Menhir was also excavated in advance of being relocated, as a result of road building, but in this case excavation was incomplete (Vyner 1977). However, the results of this excavation seem broadly comparable with those of the Bridgend stone. It was found that the stone stood within an oval or boat-shaped area of compacted stones 1.55x1.45m which covered a roughly semicircular shallow pit to the N of the stone. The socket for the stone contained a massive slab of Pennant sandstone 1.50m wide and up to 0.30m thick, leaning against the rear of the socket; its shape and character suggested that it had broken from the upper part of the standing stone. A whetstone and a flint with secondary working came from the stone area and a second whetstone from the fill of the socket, but there was no closely datable material.

All these stones were of local origin, and were minimally worked. There is little evidence that any of them were deliberately marked. A stone or stones supposedly with cupmarks were reported in the Rhymney Valley in 1949 (PRN 01020m, 01022m), but the only record is in a letter written by Lady Fox, and no trace of either has ever been found since. There are possible deliberately made cupmarks on the Bridgend standing stone, though the associated grooves appear to have been caused by weathering. Otherwise the only confirmed cupmarks in Glamorgan, apart from those on the probable capstone of a chambered tomb (Maen Cattwg, see above) were found on one of the stones of the cist during excavations on Simondston cairn (00375m).

Little can be said about the function of these stones. RCAHMW (1976, 9, 121) suggest a possible association with trackways, but were unable to produce much evidence to bear on the problem, and were also forced to exclude the

Gower stones from this hypothesis. It is however true that the distribution of standing stones and cairns is mutually exclusive in Gower, and there is not much overlap in the rest of the area. As can be seen from the notes on siting above, where only five stones were noted as having a streamside/river floodplain location, the Glamorgan stones, unlike those of Breconshire, do not appear to have any particular association with water (RCAHMW 1997).

Stone circles (Figure 6)

There are only two stone circles in Glamorgan, Carn Caca (00561w) overlooking the Neath Valley and Carn Llechart (00355w) northwest of Pontardawe, both in the uplands of the Coalfield (Character Area 3). Both of them are kerb circles, and there is an antiquarian account which may refer to another, now destroyed, at Pen-yr-Alltwen on the lower ground southeast of Pontardawe (Area 2). Although both were visited and planned by RCAHMW in 1962 (1976, 56-7 no.66 and fig 21, 64-5 no.111 and fig 24), both were at that time classed among the cairns. Glamorgan must be regarded as the very southeastern edge of the distribution for kerb circles, though there is another in Gwent, on Gray Hill. As far as can be ascertained, stone circles formed by spaced free-standing stones never occurred in the area, and antiquarian references to them are almost certainly mistaken, usually because a group of natural boulders has been misinterpreted¹⁷.

Both extant kerb circles are very similar in siting, size and layout, consisting of a rough circle of sandstone slabs set on edge leaning slightly outwards, and very close together, sometimes touching. Both are on false crests and not easily visible from below, Carn Caca being level and Carn Llechart sloping to the SW; both look out over the nearest valley though in the case of Carn Caca this is to the north and west, whilst Carn Llechart faces south. At Carn Caca the kerb ring is backed on its outer side by a slight bank which is now difficult to see, though RCAHMW measured it as being 1.5m wide. Carn Llechart has a central cist formed by slabs of similar size to those used in the ring; Carn Caca has an upright slab of similar dimensions set slightly in from the circle at the northeast side, which may also represent a cist. The tallest stone at Carn Caca is 0.5m high and the longest 1.2m long, but those at Carn Llechart are larger (tallest 1.1m, longest 2.3m), but the diameters of the overall monuments are very similar, being 12.4m and 13.6m respectively. Carn Caca is less well preserved, as most of the stones of the northwestern half have been robbed and others have fallen; Carn Llechart has lost four since it was planned by RCAHMW.

MONUMENTS WITHIN THE LANDSCAPE

It remains to discuss some aspects of the monuments within the wider landscape. The Neolithic monuments do not particularly lend themselves to discussion because of their relatively low numbers, but densities of Bronze Age sites are sufficiently high for patterns to emerge. It became very noticeable during the course of the survey that certain points in the landscape seem to have been particularly attractive as sites of monuments, whilst other points with apparently

¹⁷ For example Morgan 1897, 142-3, which is a collection of natural boulders. The Early Christian site of Yr Hen Eglwys at Llangewydd has also been claimed as a stone circle on the strength of the curvilinear enclosure bank and two upright stones used as gateposts (Llewellyn 1895); and to make confusion worse, a mistranscription of Llangweydd as Llangennydd has lead to a completely spurious report of a stone circle in Gower (Allcroft 1923, 269, quoting minutes of evidence presented to RCAHMW 1912 no.1898).

similar characteristics contained few or none. A case in point is Gower. This area contains four well-marked eminences, the ridges of Cefn Bryn and Rhossili Down, and the more compact Hardings Down and Llanmadoc Hill. Three are characterised by extensive groups of cairns, and the fourth and smallest, Hardings Down, has a lesser number. In contrast, the lower-lying land between supports only the standing stones, and three barrows. Although generally considered as a lowland area, since none of the elevations reach as much as 200m, in the distribution of its monuments, this area may perhaps be considered as a microcosm of the wider scene. However, this is not the only point of interest. The next elevation to the east, the Cefn Coed/Townhill ridge has only a single dubious placename site, and Kilvey Hill only a very few cairns in spite of being about the same size as Hardings Down. This would seem to see to be a real distinction and not due to accidents of survival, since Townhill was enclosed only in 1762 and some antiquarian account would be expected if there had been any significant numbers of monuments there. The other hills around the bay to Port Talbot are also largely without monuments. In contrast, some of the inland ridges have large numbers of monuments. RCAHMW (1976, 53) singles out especially the areas north of Pontardawe (Mynydd Carnllechart, Mynydd y Garth/Mynydd Ucaf, and Cefn Gwrhyd) and south of Merthyr Tydfil (Mynydd Aberdare/Mynydd Gethin, Merthyr Common, and Gelligaer Common), and also in the lowlands the western Vale area particularly around Monknash. Work over the last thirty years has tended to confirm these groupings, though Graig Fawr/Cefn Drum north of Pontardulais could perhaps now be added, as can Cefn Sychpant, Mynydd-y-glog, and Penmoelallt north of Merthyr Tydfil in what used to be Breconshire. In contrast, cairns in the Rhondda and elsewhere in the various Vale regions, although not rare, are much less densely grouped.

Note has been made above in discussions of the individual types of monument on the direction of their viewsheds. To this must be added some discussion of the intervisibility of groups of monuments. In the lowlands, long views are generally now impeded by the hedges of an agricultural landscape, and in the uplands, because of the present poor condition of some cairns, it is not always possible to be sure how well they would show up when viewed from the monuments of the adjacent ridge. However, the general impression gained in the uplands is that, provided the tree cover was not too heavy, there would probably have been significant intervisibility, usually with better views of monuments on adjacent ridges than those on the same ridge. In some cases, monuments still dominate the surrounding area. The Mynydd-y-glog group is particularly interesting in this respect (Leighton 1997, 75 fig 39). Although most of the monuments of the group are too far apart to meet the definition of 'barrow cemetery' as laid down by the project, this mountain has fifteen cairns (including three structured cairns and one ring cairn), more than half of which extend in a band across the northern side of the high plateau which forms its top where they are on the skyline when viewed from many of the cairns on Cefn Sychpant to the north. Also on the northern side of the mountain, and dominating much of the plateau, is a natural rock formation visible from most of the cairns in this area; although natural, it would appear to form an integral part of the ritual landscape (see Bradley 2000). The two ring cairns, on the other hand, each of which forms a pair with another cairn, are both situated on the lower flanks of the mountain on the foot of rising ground (Leighton 1997, 74). The whole of this mountain, which also contains extensive areas of peat, would repay examination.

COMPLEXES

Although some areas seem to have been particularly attractive to builders of monuments, there are very few sites which have evidence for the deliberate groupings of different types of monument together as a deliberate association. The

occasional association of standing stones with cairns has been noted above, as has the presence of large cairns on the outskirts of cairnfield. Otherwise few associations were noted. The hengiform monument on Cefn Bryn on Gower lies within a few hundred metres of the chambered tomb of Arthur's Stone, and there is another possible association of a chambered tomb (Gwal y Filiast) with a possible henge at Dyffryn in the Vale of Glamorgan. Also on Gower are the two closely adjacent chambered tombs of Sweyne's Howes on Rhossili Down.

CONCLUSIONS

Although the prehistoric funerary and ritual monuments of Glamorgan have been relatively well published, owing to the work of RCAHMW in the 1960s and 1970s, the results of the present survey show that there is considerable value in the periodic revue of even a relatively well studied dataset in the light of changes in archaeological theory and the perception of monuments; the emphases of the present paper are very different from those of the *Glamorgan Inventory* of more than a quarter of a century ago, when typology was less developed and questions of siting and viewshed were barely considered. With regard to the latter, no general conclusions can be drawn for the Neolithic, as the number of monuments in the county is too small for meaningful analysis. The much greater numbers of monuments in the Bronze Age does give scope for more manipulation, though the use of more sophisticated systems, such as GIS, than were available for the project would almost certainly reveal more, particularly in conjunction with a programme of palaeoenvironmental sampling to examine the contemporary vegetation cover and hence clarify such questions as intervisibility of monuments. The most striking feature to have come out of such analysis as could be undertaken was the preference of level sites for all classes of monument, and prevalence of a southern aspect on sloping sites for cairns as opposed to barrows and other monument types. However, as noted above, understanding of the significance of these biases awaits further work.

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APPENDIX 1: DEFINITIONS

MONUMENT TYPES

The following definitions of monument types were agreed by the working party of the pan-Wales Prehistoric Funerary and Ritual Sites Project, and are employed in this report:

Chambered tomb

Monument with evidence of a burial chamber composed of upright stones and considered to be a funerary monument of Neolithic date. The burial chamber may be covered by a capstone and may be enclosed within a round or long mound or cairn. The burial chamber will generally be significantly larger than a cist.

Cist

Isolated stone-lined pit assumed to have held a human burial of prehistoric or later date

Henge

Circular earthwork or cropmark monument normally comprising a ditch with an internal or external bank and one or more entrances, associated with ritual or funerary activity of later Neolithic date and normally specially associated with other funerary or ritual monuments of Neolithic or Bronze Age date. The ditch is normally proportionally much wider than that of a ring ditch. Because of the relatively low numbers the monument type definition covers both henges and hengiform monument types (types of site which do not really fall into the category of henge but are thought to be related types). Internal settings may include timber circles, pit circles, stone circles, stone settings, central mounds, cremation pits etc

Sub-types

Henge (hengiform monument): A variety of sites which do not readily fall into the category of henge, but are thought to be related monuments. Types of hengiform monument currently identified include smaller sites, possibly with segmental ditches.

Inhumation

A single inhumation of prehistoric or later date which does not appear to be associated with any burial structure such as a cairn, cist or round barrow.

Sub-types

Inhumation (cave burial)

Long barrow

Earthwork or cropmark indications of long, roughly rectangular or trapezoidal mound of earth and/or stone or markedly oval mound presumed to have been used for sepulchro-ritual activity of early to middle Neolithic date. In the case of cropmark sites the original mound may be indicated by lateral ditches or trenches for timber revetments.

Prehistoric monument complex

A grouping of two or more prehistoric funerary and ritual monuments which are perceived as having some association. An example might be a round barrow and standing stone in close proximity, or a group including a wider range of monuments.

Ring ditch

One or more concentric ditches with no visibly surviving internal mound identified by excavation or by cropmarks and assumed to be associated with funerary and/or ritual monuments of later Neolithic to middle Bronze Age date. More frequently smaller examples (<30m in diameter) are assumed to be the ploughed-out remains of a round barrow or internal ring-ditch.

Round barrow

Round mound of earth and/or stone with a flattened or rounded top presumed to be for burial and/or other ritual activity of Neolithic, Bronze Age or Roman date. The mound may be enclosed by a circular or intermittent outer ditch and may have a complex structure including stone kerbs, stone settings or burial cists. Two or more associated round barrows are also classed as a Barrow Cemetery. Ring ditches are a related type with no visibly surviving internal mound, the smaller examples of which are generally considered to be ploughed-out round barrows. Included in the definition are sites first identified as ring ditches but subsequently found to have an internal mound.

Sub-types

Round barrow (cairn):

a circular cairn assumed to be predominantly composed of stone

Round barrow (kerb cairn):

a small circular cairn (c5m diam) with an outer kerb of disproportionally large stones

(interior normally infilled)

Round barrow (platform cairn): a circular cairn with a levelled flat top

Round barrow (ring cairn):

a circular bank of stones surrounding a hollow central area, the inner and/or outer

edges of which may be retained by stone kerbs or spaced stones

Round barrow (structured cairn): a circular cairn assumed to be predominantly composed of stone, and with evidence

of deliberate construction such as a kerb or inner stone setting

Round barrow cemetery

A group of two or more round barrows or ring-ditches within reasonably close proximity to each other, possibly associated with other monument types.

Sub-types

Round barrow cemetery (pair):

Two round barrows in close proximity and assumed to be associated

Round barrow cemetery (cairnfield): A group of small cairns within close proximity, assumed to be associated

Standing stone

One, or less frequently two, adjacent upright or originally upright stones of unknown function, set in a stonehole; standing stones found in association with funerary and ritual monuments of Neolithic to middle Bronze Age date may more readily be assumed to have a ritual function.

Stone circle

Circular setting of free-standing and normally spaced stones assumed to represent a ritual monument of later Neolithic to middle Bronze Age date. The definition also covers square settings of four stones which are likewise stones assumed to represent a ritual monument of later Neolithic to Middle Bronze Age date. The definition also includes settings of pits shown by excavation to have once held standing stones, and also covers stone circles which may form part of a henge.

Sub-types

Stone circle (kerb circle) A circle of edge-set stones which are abutting to form a more or less continuous kerb.

Internal features may or may not be visible or present. Variations include the presence of

an external ring bank and/or a 'portal'.

Stone Row

One or more rightly parallel rows of three or more upright stones set at intervals presumed to have been used for ritual activity of Bronze Age date.

SITING

The following siting descriptions were agreed by the working party of the pan-Wales Prehistoric Funerary and Ritual Sites Project, and are employed in this report:

Summit

Significant hill or mountain summit, not local summit

Ridge crest

Not summit or false crest

Col

Col or saddle

Local summit

Hilltop or local high point

High plateau

Generally level or slightly sloping/undulating upland

Hillslope

Hill or valley slope on side of summit, ridge, plateau etc

False crest

Shoulder or break in slope

Valley base

not floodplain, river terrace or slope

Pass

Situated along or ?waymaking a route but not on a col

Flood plain

River terrace

Coastal plain

Most sites could be conveniently classified under one of these headings, though a few were on the interface between two.

APPENDIX 2: CHARACTER AREAS

1. Gower

The Gower peninsula consists for the most part of rolling lowland dissected in places by narrow step-sided valleys, and dominated by the few areas of higher ground Rhossili Down, Harding's Down, Llanmadoc Hill and Cefn Bryn. The underlying geology of its eastern half consists of the Coal Measures, but they are largely overlain by glacial drift. Most of the Gower monuments lie west of the Coalfield, on the Old Red Sandstone which outcrops on Rhossili Down, Harding's Down, Llanmadoc Hill and Cefn Bryn; Cefn Bryn also includes the Carboniferous Limestone that makes up most of the west end of the peninsula.

| Total number of reliably attested monuments | 100 |
|---|-----|
| Chambered tombs | 6 |
| Henges and hengiform monuments | 2 |
| Inhumations (all in caves) | 4 |
| Round barrows (no qualifications) | 4 |
| Round barrows (cairns) | 36 |
| Round barrows (ring cairns) | 14 |
| Round barrows (structured cairns) | 14 |
| Round barrow cemeteries (no qualification) | 1 |
| Round barrow cemeteries (pairs) | 5 |
| Round barrow cemetery (cairnfield) | 3 |
| Standing stones | 10 |
| Stone row | 1 |

2. Coalfield 1: Lower Neath and Swansea Valleys and associated coastal plain

This is the coastal belt of the coalfield, which includes the lowest section of the coalfield ridges (see Section 3), extending as far as a line which runs approximately Pontardulais - Clydach - Aberdulais and then along the Pelenna and Afan rivers to Port Talbot. The hills are relatively small and low compared with those of the Coalfield uplands, and the landscape is relatively open, with the coastal plain and the relatively wide plains in the lower reaches of the Rivers Tawe and Neath predominating. The bedrock consists of the Upper Pennant Measures, but these are overlain by extensive areas of glacial drift, mainly boulder clay, on the flatter ground.

| Total number of reliably attested monuments Prehistoric monument complex (possible) | 28 | |
|--|----|--|
| 1 4 | 1 | |
| Round barrow | 1 | |
| Round barrow (cairn) | 6 | |
| Round barrow (ring cairn) | 2 | |
| Round barrow (structured cairn) | 2 | |
| Round barrow cemetery (cairnfield) | 2 | |
| Round barrow cemetery (pair) | 2 | |
| Standing stones | 6 | of which two may be separate fragments of the same stone |

3. Coalfield 2: Uplands

The geology of the uplands consists exclusively of the Coal Measures, mainly the Pennant Measures, though there are more extensive areas of the Lower Coal Measures at the northern edge. The geology governs the topography of the area, which consists of a system of marked ridges and deep narrow valleys with a general north-south trend; those in the eastern half are oriented northwest-southeast, whilst the Neath and Swansea Valleys are northeast-southwest

| Total number of reliably attested monuments | 368 |
|---|-----|
| Chambered tomb | 4 |
| Henge (hengiform monument) | 1 |
| Inhumation (cave burial) | 1 |
| Prehistoric monument complex | 1 |
| Ring ditch all part of a single group | . 8 |
| Round barrow | 23 |
| Round barrow (cairn) | 184 |
| Round barrow (kerb cairn) | 1 |
| Round barrow (platform cairn) | 5 |
| Round barrow (ring cairn) | 39 |
| Round barrow (structured cairn) | 39 |
| Round barrow cemeteries (no qualification) | 9 |
| Round barrow cemetery (cairnfield) | 17 |
| Round barrow cemetery (pair) | 20 |
| Standing stones | 4 |
| Stone circles (kerb circles) | 2 |
| | |

4. Brecon Beacons

Glamorgan, as extended by the local government reorganisation of 1974, extends into the southern rim of the Brecon Beacons which has more diverse landscape of upland plateau and ridges running east-west as well as north-south. The area between the mountains of the Beacons and the foot of the northern edge of the coalfield is overlain by glacial drift, mainly boulder clay. The solid geology consists of bands of Millstone Grit and Carboniferous Limestone along the southern edge of the hills, giving way to Old Red Sandstone, though most of this last lies outside the boundaries of the county.

| Total number of reliably attested monuments | 134 |
|---|-----|
| Cist | 1 |
| Round barrow (cairn) | 85 |
| Round barrow (kerb cairn) | 2 |
| Round barrow (ring cairn) | 9 |
| Round barrow (structured cairn) | 14 |
| Round barrow cemeteries (no qualification) | 5 |
| Round barrow cemetery (cairnfield) | 13 |
| Round barrow cemetery (pair) | 4 |
| | |

5. Vale of Glamorgan/Bridgend

For the purposes of the survey this area is taken as extending from Kenfig Burrows and Cefn Cribwr at the west, to a line drawn roughly from St Nicholas down Dyffryn Golwch to the western side of Barry at the east, and on the north to the Border Vale as defined below (Section 6). To the east of the River Thaw most of the land effectively forms an undulating plateau of Lower Lias limestone dissected by a system of branching cwms with precipitous sides, which extend inland from the coast up to and beyond the northern limit of the Lias as far as the edge of the Ely valley. Around Llangan and Corntown, and also west of the Thaw and east of the Ewenny, the cwms are shorter, shallower and not so steep-sided or inclined to branch. To the east of Cowbridge the Lias gives way south of the A48 to glacial drift. There are areas of Carboniferous Limestone from Ogmore Down to Ewenny, from Crack Hill to Penllyn and northwards towards Pencoed, Llanblethian to St Hilary Down and extending towards Welsh St Donats, and Triassic marls and conglomerates appear with Rhaetic sandstone at the interface between these two geologies, giving rise to small areas of steep hills. To the west of the Ewenny River, the county is gently rolling and the deposits are more evenly divided between Carboniferous Limestone (mainly at the west side), Lower Lias (mainly towards the south) and Triassic (widespread); the monuments are mainly on the Carboniferous. Where the Ewenny flows into the Ogmore and out into the Bristol Channel, there has been significant dune formation which has affected the types of monuments built.

| Total number of reliably attested monuments | 143 |
|---|-----|
| Chambered tomb | 3 |
| Cremation | 1 |
| Inhumation | 5 |
| Long barrow | 1 |
| Ring ditch | 6 |
| Round barrow | 87 |
| Round barrow (cairn) | 10 |
| Round barrow (ring cairn) | 2 |
| Round barrow (structured cairn) | 2 |
| Round barrow cemeteries (no qualification) | 5 |
| Round barrow cemetery (cairnfield) | 1 |
| Round barrow cemetery (pair) | 6 |
| Standing stone | 8 |
| | |

6. Border Vale/Cardiff

This area extends from the River Thaw at the west to the eastern edge of the county. At the north it runs up to the foot of the Coalfield escarpment. At the eastern side of the area, its southern side is bounded by the steep escarpment on the south side of the Ely Valley; west of Hensol it is less clearly distinguished from the Vale proper; for the purposes of the survey a line has been taken through Ystradowen to Clawdd Coch. To the north of a line drawn approximately along the River Thaw and through Welsh St Donats, Bonvilston, and St Nicholas the geology consists largely of sand and gravel, mostly glacial in origin. There are outcrops of Carboniferous Limestone at Llansannor, Pantygwyn, east of Talygarn, east of Miskin and around Pentyrch, and of Triassic formations and the Lower Lias at either side of St Brides super Ely; smaller areas of Triassic formations also occur further west at Llanharry and Pendoylan. Much of the countryside is broken, but there are extensive flat areas in the Taff and Ely valleys

| Total number of reliably attested monuments | 14 |
|---|----|
| Chambered tomb | 1 |
| Cremation | 1 |
| Ring ditch | 2 |
| Round barrow | 8 |
| Round barrow cemetery (pair) | 1 |
| Standing stones | 1 |

7. Eastern Vale

The eastern Vale extends from a line drawn at the west roughly from Nicholaston down Dyffryn Golwch to the western side of Barry, and to the River Ely on the north and east. The geology consists predominantly of Triassic deposits with smaller areas of Carboniferous and Lower Lias limestones, with narrow bands of Rhaetic sandstone at the interface between the Trias and Lias. This area is characterised by steep-sided hills.

| Total number of reliably attested monuments | 24 |
|---|----|
| Chambered tomb | 4 |
| Cist | 2 |
| Henge (possible hengiform monument) | 1 |
| Long barrow | 1 |
| Prehistoric monument complex | 1 |
| Round barrow | 12 |
| Round barrow (cairn) | 1 |
| Standing stones | 2 |

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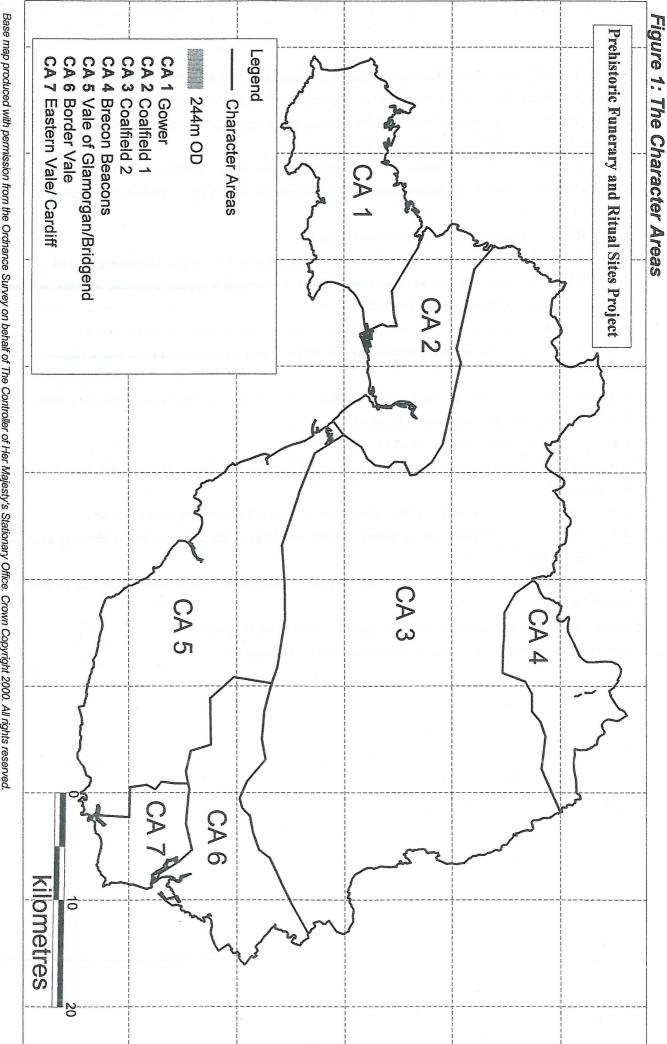
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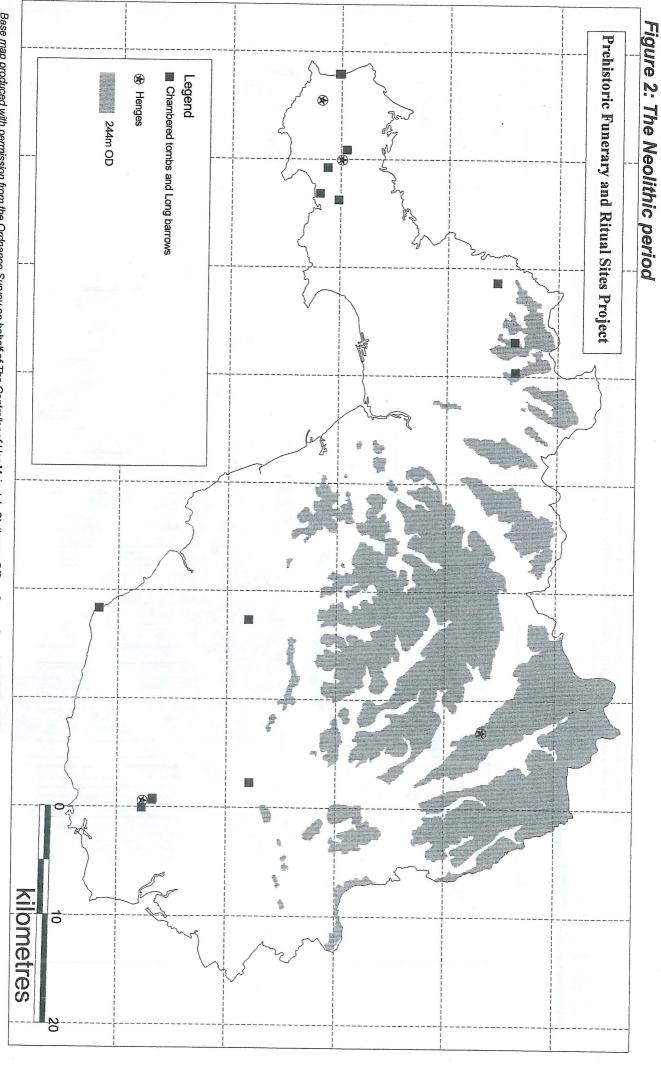
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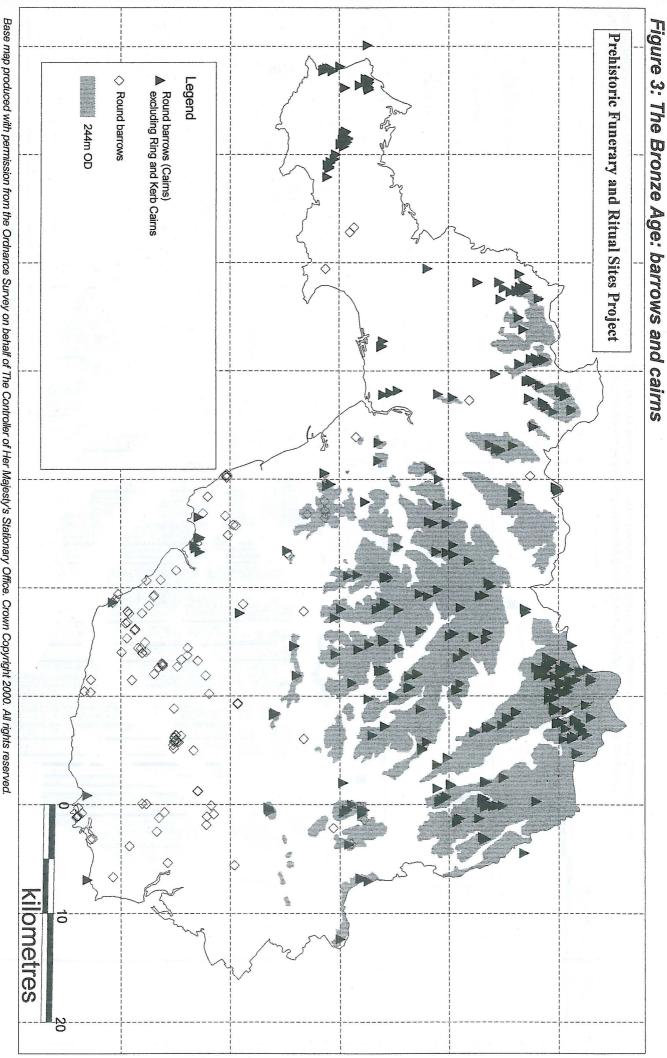
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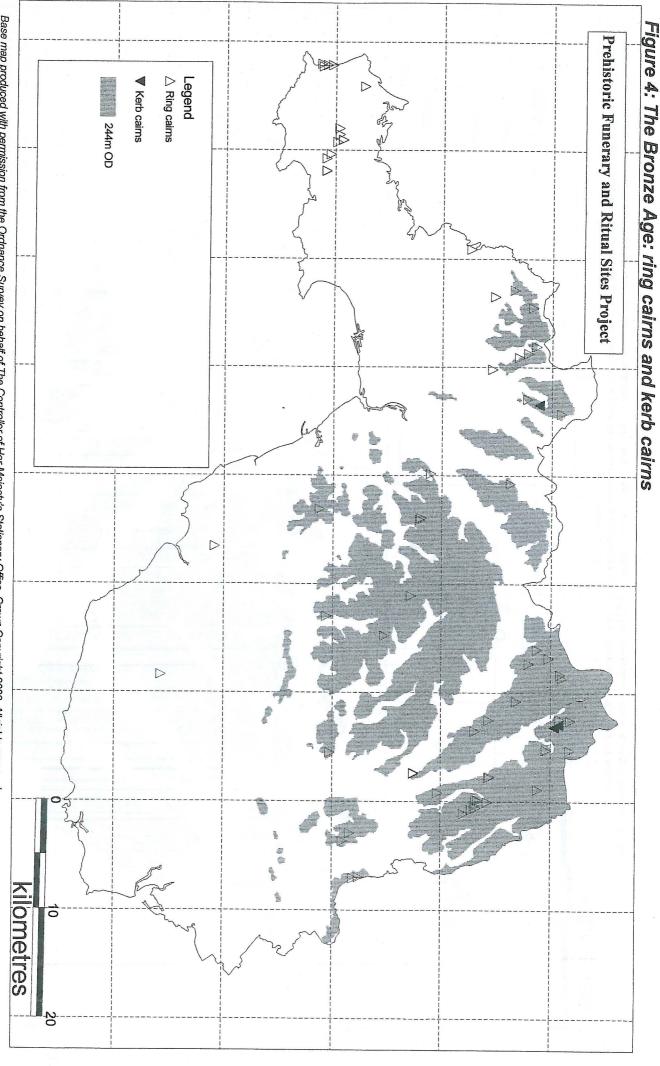


Figure 5: The Bronze Age: cemeteries, cemetery pairs and cairnfields

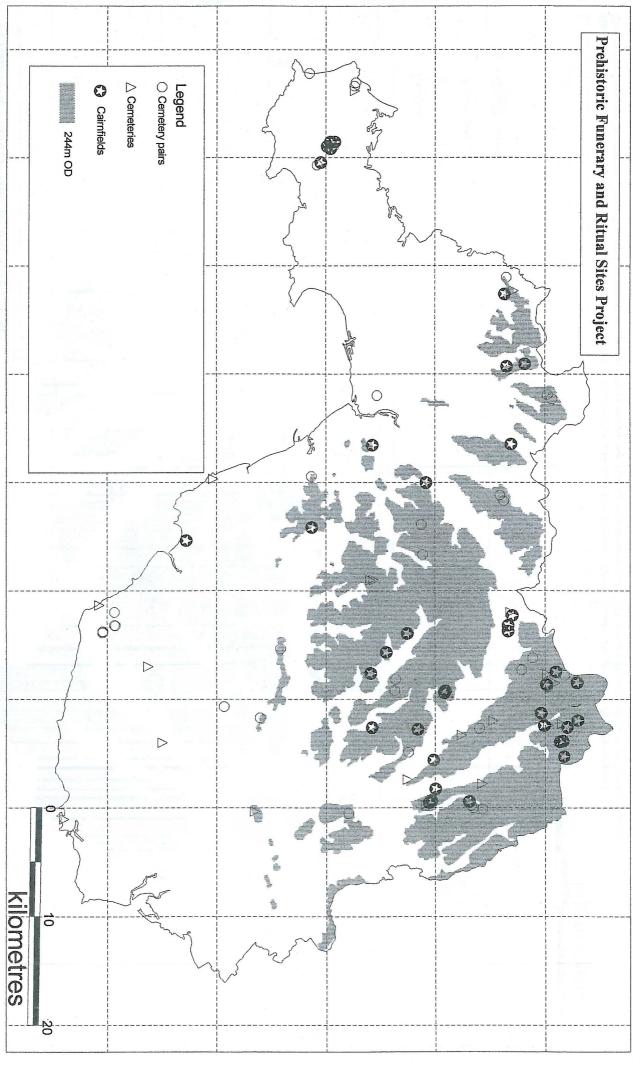


Figure 6: The Bronze Age: standing stones and stone circles

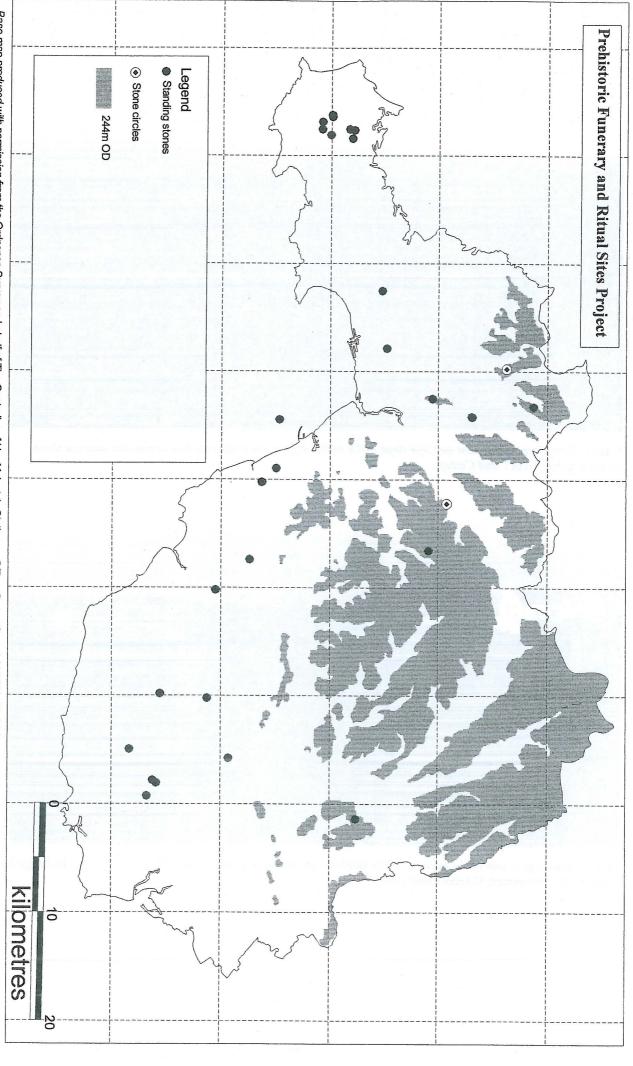




Plate 1: Hengiform monument on Cefn Bryn (PRN 00081w); the 1m scale pole lies across the internal ditch (Photograph \bigcirc GGAT and Cadw)

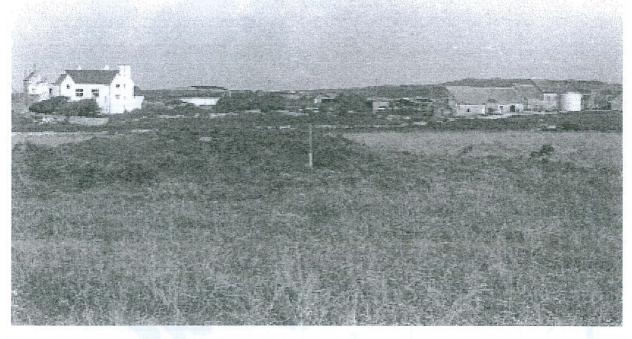


Plate 2: Sker house: one of the barrows (PRN 00358m) in a cemetery of four; the others lie close to the hedge line and to the right (Photograph \bigcirc GGAT and Cadw)



Plate 3: A cairn with an internal kerb of coursed rubble on Mynydd y Garth (PRN 00485w), showing the view looking southwards (Photograph © GGAT and Cadw)

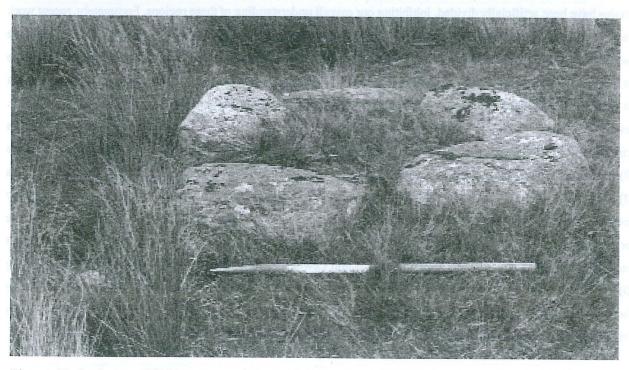


Plate 4: The kerb cairn (PRN 03429w) on Cefn Gwrhyd (Photograph @ GGAT and Cadw)

PREHISTORIC FUNERARY AND RITUAL MONUMENTS IN GWENT

INTRODUCTION

Between 2002 and 2003, the Glamorgan Gwent Archaeological Trust (GGAT) undertook a Cadw-sponsored Pan-Wales Prehistoric Funerary & Ritual monument survey. The project, which began with the Clwyd-Powys Archaeological Trust's pilot scheme in 1997-98, intended that all funerary and ritual sites of the Neolithic and Bronze Age in Wales should be visited and their state of preservation assessed. Fieldwork for the Pan-Wales project is still on going under three of the four Welsh archaeological trusts; work has now been completed in the former counties of Glamorgan and Gwent. The purpose of this paper is to present an overview for the monument survey of the former county of Gwent; a detailed account of individual monuments can be found in Pearson and Lewis (2003). The Glamorgan monument survey is dealt with in a separate paper (Evans forthcoming).

The old county of Gwent, established by the Local Government Act of 1974 and abolished in 1997, now consists of the new unitary authorities of Monmouthshire, Newport, Torfaen and Blaenau Gwent with parts of Caerphilly. It is within this geographical framework that the present survey was carried out. Unfortunately the political boundaries rarely take into consideration the topography of the prehistoric landscape; therefore important locales such as the Eastern Black Mountains have been artificially divided, inhibiting our overall understanding of these regions. Fortunately, recent work by Frank Olding (2000), in the Eastern Black Mountains, has begun, at least in part, to address this issue. It is notable that whilst there exists an intensive survey of prehistoric monuments in Glamorgan (RCAHMW 1976) and a more recent survey in Brecknockshire (RCAHMW 1997), few comparable studies have been published for Gwent. One such recent study is an informative guidebook for the prehistoric monuments of Monmouthshire by Children & Nash (1996). However the purpose of this publication is only a guidebook for the monument enthusiast which only provides information on a restricted number of sites. Although there are numerous studies of prehistoric Wales, such as Burgess (1980), Corcoran (1972), Grimes (1963), Lynch (1980), Savory (1972, 1980a and 1980b) and more recently Davies (1990) and Morgan (2001), these studies tend to be quite general. Tilley (1994), in his discussion of the Phenomenology of landscapes, has included a study of the Eastern black Mountains which is quite informative. However as far as the author is aware the Prehistoric Funerary & Ritual Monument Survey, undertaken by the Glamorgan Gwent Archaeological Trust, of the county of Gwent (Pearson and Lewis 2003) is the only up to date study of its kind. Olding (2000) concentrates his survey on a more closely developed geographical area. The current survey has provided a concise gazetteer of almost all known Neolithic and Bronze Age sites in Gwent, offering for the first time an in depth empirical database from which we may further investigate aspects of Gwent's prehistoric past.

Methodology

The fieldwork was carried out over three financial years, from 2000 to 2003, though considerable disruption to the programme was caused by the outbreak of foot-and-mouth disease in 2001. The sites were divided by unitary authority, with Bridgend, Merthyr Tydfil and Rhondda Cynon Taff being targeted in the first year, Swansea and Neath Port Talbot

in the second year, and the remainder of Glamorgan in the third year, together with Gwent, which forms the subject of this paper. The initial step was to carry out an SMR search to extract all PRNs with a possible prehistoric funerary and ritual function. To these were added a number of other sites gleaned from sources which had not yet been incorporated in the SMR. All SMR information was checked and corrected if necessary, and duplicates were identified and eliminated as far as was possible from existing information. This was particularly relevant to sites on the southern fringes of the Brecon Beacons, where in many cases the same site had been found in different sources with different grid references, and had therefore been entered twice or more on the SMR.

An attempt was made to visit each PRN, apart from known duplicates and sites for which there was uncontrovertibly evidence for destruction. In a few cases, permission for a site visit could not be obtained, though some of these sites could be viewed at a distance from public rights of way or neighbouring properties, allowing for some recording to take place. However, for the most part landowners and tenants were very helpful. Some of the sites in forestry could not be located, either because they had been destroyed or because dense planting prevented access. On the other hand, a number of sites in forestry were located that had not been seen since the OS survey of the 1950s, which took place before the areas concerned had been afforested.

The sites were located by GPS, enabling the NGR for each monument to be corrected if necessary, allowing for future relocation in the field by subsequent workers. This was particularly important on open moorland with few good landmarks; mistaken estimates of position had been the most frequent cause of confusion. Each site was recorded using a pro-forma, noting present description, measurements, position, aspect and prospect, and present land use. Photographs were taken using black-and-white print and colour slide film; and in some cases also digital images. A sketch was made where appropriate. The few new sites which were noted during the course of the field visit were recorded using the same methodology. The data obtained from the field visit was then transcribed into the database. The terminology used to describe the monuments complied with that developed by the Clwyd-Powys Archaeological Trust for use in the whole of the pan-Wales project. The condition of the monument was assessed according to the criteria established by RCAHMW for its uplands survey programme. Classifying the condition of cairns in particular contained an unavoidable element of subjectivity, since it was necessary to make a judgement on how high the cairn originally rose.

Following the conclusion of the fieldwork, the new and revised data were entered on the regional SMR, where they can be accessed by other workers. A paper report was also produced at the end of each year. The main part of this consisted of a gazetteer of sites, with their revised descriptions, but there was also a short appraisal of each class of monument represented. However, there was very little attempt to produced a detailed discussion, since the area covered each year cut across natural topographical boundaries and it was felt that discussion limited by artificial modern political boundaries ran the risk of lacking meaning. This paper, together with its companion on the monuments of Glamorgan (Evans forthcoming), attempts to synthesise the results of the project and present them as a coherent whole.

GENERAL TOPOGRAPHY

The present survey is fortunate in that Gwent has a wide diversity of geography within its borders. Gwent can be characterised into three distinct topographical entities: the upland environment of the eastern Coalfield and Black

Mountains, the undulating agriculturally rich lowlands of Monmouthshire and the low uniformity of the Gwent Levels. The Coalfield is characterised by a system of marked ridges and narrow, often deeply incised, valleys. The main orientation of the ridges is approximately north-south or northwest-southeast. Nearer to the southern interface with the coastal belt the ridges tend to become lower and the valleys wider, as for example around the lower reaches of the Rivers Rhymney and Ebbw. To the east of the scarp of the South Wales Coalfield, the landscape is predominantly open, undulating countryside, though still with significant hills. The northwest quarter of Monmouthshire, around Hatterall Hill and Llanthony Priory, comprises the eastern extremity of the Black Mountains; here the landscape consists of mountainous, steep slopes descending to wide valleys. The central and eastern parts of Monmouthshire are generally quite open and undulating, although steep hill slopes and valleys do characterise some areas such as Tintern and the Wye valley. The Gwent Levels are the most southerly aspect of the survey area and occupy the well-drained and improved farmland on the coastal margin from Cardiff to Chepstow running inland for several miles. The Caldicot Levels make up the greater part of the surveyed area with a portion of the Wentlooge Level to the southwest. Although the Levels are rich in archaeological finds, the standing funerary and ritual monuments are restricted to the slightly elevated fen-edge that rises toward the Old Red Sandstone and Carboniferous ridges at Wentwood and Shirenewton.

For the purpose of this survey the old county of Gwent was divided into six character areas. During the course of the project the character areas were manipulated and expanded as more information was gained about the monuments and their topographies (Figure 1).

- 1. Coalfield
- 2. Black Mountains: Abergavenny and Crucorney Fawr
- 3. Usk Valley: Gilwern to Newport
- 4. South Monmouthshire
- 5. North Monmouthshire
- 6. Wye Valley: Monmouth to Chepstow

As one would expect the results for monument distribution and individual form alter between each character area, this has opened up a comparative discourse assisting the synthesis in the following discussion. An expanded account of each character area can be found in Appendix 2.

Geology

The study area encompasses several geological zones (Neville George 1970). Upper Palaeozoic rocks occupy much of the survey area. The Coal Measures extend over the greater part of the uplands, mainly comprising sandstones but with more limited exposures of coarser grits and conglomerates. The Coal Measures immediately overlie (in sequence) Millstone Grit and Carboniferous Limestone. Both of these latter formations outcrop in a narrow band that surrounds the Coal Measures, extending in an anticlockwise arc from Llantrisant in Glamorgan, Risca and Pontypool back to Merthyr Tydfil in Glamorgan. The scarp of the South Wales Coalfield, from near Newport to Abergavenny (and continuing northwards), marks the eastern boundary of the Coal Measures. Old Red Sandstone is the dominant formation west of this boundary, and from Newport, where it outcrops in a band that becomes increasingly narrow and discontinuous as it extends westwards. The oldest formations in the area comprise an extensive exposure of Silurian

rocks to the west of Usk. Holocene sand and alluvial silts occupy much of the coastal lowland in the Newport and Cardiff districts, as well as reaching significant distances inland along the river valleys, most notably that of the Usk.

Soils

Soils vary widely across the study area, reflecting the different geology and topographies. The Monmouthshire lowlands are typified by well-drained silts and loamy soils, whilst those of the Gwent Levels are alluvial estuarine silts. The upland areas of Monmouthshire and the Coalfield tend towards thin, loamy, often permeable soils, commonly with thin peat horizons (Soil Survey of England & Wales 1983).

In their discussion of the distribution of prehistoric monuments in relation to soil types, Crampton & Webley (1963, 334-5) note that the Neolithic chambered tombs of Gower are sited near the boundary separating freely drained and poorly drained soils, and the majority of Bronze Age barrows (85% in Gower, 80% in upland Glamorgan) are located on podzols. This distribution is repeated at Gwernvale Neolithic chambered tomb within the Eastern Black Mountains, a little to the north of the survey area (Britnell & Savory 1984, 147). The significance for the siting of the monuments of Gwent will be discussed in more detail below.

Present vegetation and land use

At present, most of the study area is agricultural land, although the Coalfield landscape has been dramatically altered over the last several hundred years by the intense industrial activities resulting from the exploitation of coal and iron. In the lowland parts of Monmouthshire land use is a mixed economy of arable and animal husbandry. Northwestern Monmouthshire and the Coalfield are an upland farming environment, easily identified by the extensive areas of open and partially enclosed grazing. At lower elevations there is a large percentage of improved pasture within enclosed fields; unimproved heath and moorland (mainly unenclosed) tend to occupy the higher ground. There are extensive areas of coniferous forestry, planted as formally defined units, with a much-reduced area of deciduous woodland. Drained and improved pasture, with some arable, are characteristic of south Monmouthshire, most notably of the Gwent Levels. Telecommunications masts now dominate many of the major summits throughout the former county of Gwent.

NEOLITHIC AND BRONZE AGE SOCIETIES

Neolithic Gwent

The Neolithic period is usually seen to represent a new and dynamic era in human history, very different from the one that prevailed for the last half a million years. The domestication of plants and animals represents a vast social upheaval in the way people interacted and understood the world around them (Bradley 1998, 188-203). Peoples living around 4000BC in Gwent began to embrace novel ideas concerning the relationship between themselves and plants and animals, subsistence through hunting and gathering gradually gave way to a more sedentary way of life (although seasonal migration between upland and lowland zones continued unabated). New forms of material culture were embraced such as pottery and textile production, with the introduction of novel lithic technologies (Darvill 2000).

New ideologies were reflected in the way people treated the dead and living alike. Monumentality was adopted, involving the investment of vast human resources to erect great earthworks and megaliths; these include for example the chambered tombs (houses of the dead) of Gwern-y-Cleppa (00061g) and Gaerllwyd (01140g - Plate 1), the late Neolithic 'Harold's Stones' (00854g - standing stones, Plate 2) and the Garreg Las henge (1600g - ritual enclosure). These places were often in use for many generations and were seen as specially defined places to worship and act out specific activities; such activities included the ritualistic deposition of animal and human remains along with special forms of material culture such as worked bone, lithics and pottery (Whittle 1996).

Trade and communication flourished within the borders of Gwent and is represented by the numerous finds of polished flint axes. A few examples found in Beechwood (Newport) came from Scandinavia, one from the Scafell Pike axe factory in Cumbria was found on Newton Common (Monmouth) and two Greenstone axes from Penzance Cornwall were recovered from ground close to the M4 motorway, northwest of Newport (Children & Nash 1996 15-18, Darvill 1989 27). It has been suggested that polished flint axes are susceptible to damage through use (Children & Nash 1996); if this is the case their significance is somewhat more than utilitarian. One can imagine the value placed upon them because of their ascetically pleasing appearance and their exotic character bestowed by the great distances over which they travelled.

Settlement was restricted in the Neolithic to the elevated river valleys and lowlands of Gwent, whilst the higher ground of the Black Mountains and Eastern Coalfield (see Appendix 2) remained largely unsettled. However lithic scatters such as those found in the Grwyne Fawr valley do imply the presence of some Neolithic activity on these upland terraces. Flint axe finds have been restricted to the lower river valleys and may indicate the clearance of forest and brush for agricultural exploitation (Olding 2000, 17).

Bronze Age Gwent

The Bronze Age in Gwent heralded the coming of metal, large-scale forest decline (though whether a natural or human causation remains an open question) and the opening up of vast tracks of land to agriculture, mostly pastoral with some cereal production. The people living around 2000BC witnessed significant social and technological changes represented in the new forms of material culture and monumentality (Champion 1999). The morphology of ideologies created monuments and landscapes subtly different from their Neolithic predecessors. The round barrow in its many guises (including earthen forms such as Crick round barrow - 01057g, and stone varieties such as Carn Blorenge – 01774g, Plate 3) replaced the chambered tombs of Gwent as the most common funerary practice of the period. Beaker pots (a decorated form of pottery associated with an early Bronze Age 'culturally distinct' European people), copper alloy artefacts and new developments in lithic technology succeeded as the prevailing form of material culture interred within this new style of monument (Savory 1980b, 15).

Distinct social patterns begin to emerge with the adoption of specific material cultural forms deposited within the burial environment. Clear gender distinctions can be seen for the first time; barbed flint arrowheads, wristguards, flint axes and fire-making tools are associated with male burials whilst female burials contain jet and shale beads, antler picks and hoes, and various flint tools such as scrapers and awls (Parker Pearson 1999, 89). An example of this distinction can be found to the east of the survey area within a male burial at Llantrithyd in Glamorgan; the burial contained a stone wristguard with several barbed flint arrowheads (Savory 1980b, 20, 74-6 and 85). Artefactually rich single burials begin to replace the more sparsely adorned communal forms found in chambered tombs; the importance of beakers, a distinct cultural idiom, is also portrayed for the first time. Burial goods such as the barbed and tanged flint arrowheads and stone wrist guards highlight for the first time the significance of the bow in male society. Children & Nash (1996, 48) have suggested the emergence of a warrior elite; certainly the deposits found in burials begin to stress the importance of the individual for the first time and not the prevailing communal ideology of the Neolithic. The presence of Beaker pots associated with these burials has been linked to the trade in prestige items highlighting the increasing inequalities within Bronze Age society (Darvill 2000, 89). The quality of this Beaker pottery diminishes over time; early Beaker pots are finely made and decorated whilst later forms appear to be poor copies of the former, perhaps indicating the wholesale adoption of this material culture by a populous eager to demonstrate the inequalities reflected in society. The idea of feasting and gift exchange connected with Beaker material culture has also been suggested, Darvill (2000, 88) emphasising the significance of inter-personal relationships.

Forest decline and the pattern of dated early Bronze Age burials in the Black Mountains emphasises the gradual settlement of lower elevations (2500-2300BC) progressing to the higher latitudes (2050-1500BC) during this period (Olding 2000, 35 and 81). The building of barrows and the creation of field systems bounding the landscape, such as the Gray Hill complex in Monmouthshire, represent novel attitudes to personal ownership; this differed from the communal attitude associated with the human catchment area for each chambered tomb. Toward the end of the Bronze Age a decline in funerary monument construction can be observed, to be replaced by large defensive hillfort enclosures. Trade in stone axes diminishes to be replaced in copper alloy forms (although there are examples of flint axes imitating metal forms). The significance of the axe, whether stone or metal, as a commodity is not lost; there are numerous finds of copper alloy axe hoards deposited in 'personal hoards,' 'craftsmen's hoards' and 'merchant hoards' found within Gwent (Savory 1980 115-23). To bury something is to posses it for the future, indicating its economic value; later Bronze Age axes tend to contain high concentrations of lead rendering it useless for utilitarian purposes; perhaps the significance of the form and not the metal itself has some overriding value to Bronze Age society (Champion 1999, 106).

The Neolithic and Bronze Age environment

The character of the landscape of Southeast Wales during the Neolithic and Bronze Age periods is not clearly understood. In particular, the extent of deforestation, and the consequent balance between open ground and woodland (doubtless a situation in flux) remains to be established. The issue has significant implications for our appreciation of fundamental issues such as settlement patterns, and for matters that directly concern this study, notably the viewsheds and intervisibility of funerary and ritual monuments.

Much of the Late Neolithic and Early Bronze Age in Britain is characterised by extensive woodland clearance, including in upland environments, which offered thinner soils that were easier to cultivate than the heavier soils of the lowlands. Unfortunately, there are few pollen sequences from this period in South Wales, and none from the present study areas (see Evans *et al* 2002). However, a sample from Crug-yr-Afan barrow (PRN 00722w; Crampton 1967), 5 km to the west of the Rhondda valley, may give some indication, although the results can only be applied to the wider context with extreme caution. Here, the vegetation in the Neolithic period was heather moorland (c70%), with smaller amounts of oak (c20%), hazel (c5%) and birch (c5%). In the Early Bronze Age, heather (c40%) was widespread below moderately open oak (c40%) woodland. However, Crampton & Webley (1963, 336) have suggested that the podzols on which most of the round barrows were erected may have been derived from sols brun acides supporting woodland during the Early Bronze Age. Data from Cefn Gwernffrwd, Mid Wales, suggest a similar situation prevailed there, and that by the Late Bronze Age most of the woodland in that particular locality had disappeared (Chambers 1983).

THE SURVEY OF FUNERARY AND RITUAL MONUMENTS

It has been necessary to standardise the monument forms into typologies and periods (as already discussed above). Therefore chambered tombs, long barrows, henges and some standing stones are assigned to the Neolithic whilst the multifaceted round barrow, the remaining standing stones and the few stone circles are given over to the Bronze Age. True barrows, standing stones and circles have origins in the Neolithic; however these monuments in Gwent tend to belong to the periods described. Cremations, inhumations and the monument complex are generally undefined or multiperiod and are discussed as such below.

GWENT IN THE NEOLITHIC (Figure 2 and Plate 1)

Chambered tombs and long barrows

The chambered tomb is the most distinctive of the Neolithic monuments in Gwent. There are currently four known examples: Gwern y Cleppa (00061g), Gaerllwyd (01140g), Heston Brake (01147g) and Thornwell Farm (04432g), with an additional possible capstone at Cadwgan (08422g), discovered during the present survey. Of the four known examples most have some sort of published archaeological or historical reference (Burgess 1980, Corcoran 1972, Grimes 1963, Lynch 1980 and Savory 1972, 1980a and 1980b). All chambered tombs in Gwent loosely fall into the Cotswold' Severn type of monument, though no attempt was made to categorise these further into sub-types. The Cotswold Severn monument group can be described as a chambered tomb consisting of orthostats supporting a megalith capstone, the chamber is usually (but not always) covered by a long trapezoidal mound of earth or stone with a specially defined forecourt occupying the widest end. It is here that a reusable entrance to the interior of the monument is situated providing a renewable access point to the tomb.

Of the five sites discussed, Gwern y Cleppa (00061g) and Heston Brake (01147g) are located on a local summit, Cadwgan (08422g) on a hillslope, Thornwell Farm (04432g) on a false crest and the last, Gaerllwyd (01140g), on a terrace. They appear to favour elevated slopes or false crests but not summits. These sites are situated in positions that allow views along or across rivers and estuaries; they can be viewed by the immediate topography but not perhaps from a greater distance. The only exception is Gaerllwyd (01140g), which is situated at the base of a small rise on an elevated

but level terrace and has a restricted view to the north. Thornwell Farm (04432g) has an almost 360° viewshed (clear unobstructed view from the monument) with the exception of the NE quarter, whilst Gwern y Cleppa (00061g) only lacks views to the NW quarter. Both Heston Brake (01147g) and Gaerllwyd (01140g) have a full 360° viewshed, the possible capstone of Cadwgan (08422g) has a very limited view to the S and SW of Cwm Grwyne Fawr.

Overall it would appear that the chambered tombs tend to prefer elevated positions, but not summits. These monuments are located in areas where a view of river valleys and estuaries are important, they appear to have been situated in positions where access would have been easier, compared to upland sites such as Gwernvale and Penywrlod in Brecknockshire (Britnell & Savory 1984). Cadwgan (08422g), located within Character Area 2 (the Eastern Black Mountains) at the southern end of Cwm Grwyne Fawr, is the only exception. Heston Brake and Gwern y Cleppa, (Character Area 4) and Gaerllwyd (Character Area 5) with Thornwell Farm (Character Area 12) appear to represent a clearly defined 'Gwent' assemblage of chambered tombs and may tentatively suggest the distribution of distinct social groups and zones of communication.

Long barrow

The long barrow in Gwent is an unusually absent monument compared with the 300 or so found in the rest of Britain (Pollard 1997, 31). Long barrows are typically long rectangular or trapezoidal mounds of earth distinct from chambered tombs because they favour timber instead of megaliths for internal construction, if any (Darvill 2000). There is only one possible example found during the present survey; Boxtree Cottage (08425g). The monument is located on Hatterall Hill and is situated on a false crest with commanding views to the south of the Afon Monddu, Crucorney and Ysgyryd valleys. The definition is uncertain since the monument is highly disturbed and its middle portion of stones has been robbed away to ground level; indeed it may never have existed. There are 2 large stones within its northern perimeter which appear kerb-like. The mound stands quite low (0.4m) to the south, whilst to the north is much higher (1.2m). A little to the southwest is a round barrow cairn (08424g), this monument also taking advantage of this elevated position and lends some credence to the special nature of this particular site. Both are located within Character Area 2 and have a southerly aspect with no points open to the northern quarter. Emphasis then would appear to be placed on the view to the south; there is an excellent view to the south of the Afon Monddu. The southern viewshed of this monument includes, within a sweeping arc from the west: the Black Mountains, Crug Mawr and Y Fâl (Sugar Loaf), both the hills of Bryn Arw and Ysgyryd Fawr, and the lowlands around Llanfihangel Crucorney with character area 3 in the distance.

GWENT IN THE NEOLITHIC AND BRONZE AGE TRANSITION (Figure 3 and Plate 2)

Henges and hengiform monuments and the monument complex

Although no classic henge monuments were found within the survey area; a subdivision of this type, a hengiform monument was recorded. A henge monument can usually be described as a circular enclosure with an internal ditch and an external bank enclosing a formerly defined area. These enclosures usually have one or more entrances and are often associated with ritual and funerary monuments of Neolithic or Bronze Age date (Bahn 2002, 190 and Pollard &

Reynalds 2002, 27). A hengiform monument is thought to be an enclosure of a similar type as a henge, these monuments tend to have some of the attributes of a henge but not all (see Appendix 1). The identification of hengiform monuments tends to rely on their association with other proven funerary and ritual monuments. The only hengiform monument located within the survey area is a member of the Garreg Las Monument Complex (08452g) which is situated a little below the southern summit of Hatterall Hill in Character Area 2.

The monument is a circular, 1m high, turf covered stone earthwork enclosing a levelled interior sloping to the south; no interior or exterior ditch was visible at the time of the survey. The view from this location is enhanced by its increased elevation in comparison to the other prehistoric monuments located on Hatterall Hill, and has the same viewshed as Boxtree long barrow (08425g), all views but directly north are visible from the monument. The henge is situated on a high plateau in a central position which dominates both arms of Hatterall Hill to the south. The more westerly of these has a Neolithic 'cross dyke' (a linear embankment thought to represent communication within the landscape - 04513.0g); whilst to the east the hill contains the round barrow cemeteries of Hatterall Hill (08113g) and Garreg Las (08114g), with Three Wells Round Cairn (08115g) and both Boxtree long barrow (08425g) and round barrow cairn (08424g).

It is clear that this henge could have intersected the probable lines of communication between both peninsulas, therefore indicating its importance and that of the high plateau as a specially defined area. There is no doubt as to the importance of this area as a Neolithic-landscape. However questions must be asked of the authenticity of this particular monument, which is based primarily on its association with the Hatterall Hill barrow cemetery (08114g). The more southerly of the two barrows is a short distance to the southwest of the enclosure in a rough line toward the dyke; however its partner to the northeast is on the summit of Hatterall Hill which is some distance away and out of view from the enclosure; there is therefore some doubt as to whether they really form a pair. If we are to use Olding's (2002, 46) argument then the identification of Garrag Las as a hengiform monument depends on its association with the barrow cemetery rather than any clear archaeological or morphological evidence to the contrary. The hengiform enclosure and the cemetery pair are obviously apart of a monument complex; however the validity and their significance as individual monument categories must be questioned.

The only other example of a monument complex is found at Gray Hill (08453g), a large carboniferous outcrop in character area 4, which has commanding views to the south over the Severn estuary. The complex is extensive and was obviously an area of some significance as it includes a multitude of monument forms, the majority of which are situated on the southern slopes. Not apart of the ritual and funerary landscape, but obviously intrinsically linked, is Gray Hill's Bronze Age coaxial field systems. It is clear that the location of the cairns (00986g) and cemeteries on Gray Hill (01002g, 01003g and 01004g) have an intimate relationship with these boundaries and although they were not included in the survey they must not be ignored. Several standing stones, a stone row and a recumbent stone circle are located on the higher southern slopes (00988g, 08398g & 00987g), the first a part of a stone row and the latter a possible barrow. A further cairn, a short distance to the south of the stone circle, can now be added through the recent excavations of the University of Wales Collage Newport of what was previously thought to be a house platform. The excavation revealed a multi-phase cairn of Bronze Age date containing several barbed flint arrowheads and a rare faience bead. The monument has a southern viewshed over the mouth of the Severn with all but the northern quarter visible. It would

seem the emphasis is again placed on the importance of a southerly 'monument sitting' with views over a 'watercourse' (the estuary), a recurrent theme in the distribution of Gwent's monuments.

Stone circles, stone rows and standing stones

As we have already mentioned the, Gray Hill monument complex, Character Area 4, contains a recumbent stone circle (00987g), a standing stone (00988g) and stone row (08398g). The circle was originally surveyed by Rev W and M E Bagnall-Oakley in 1889 (Thom *et al* 1980, 398, Burl 1995, 174-5) and was thought to have been a central cist or tomb enclosed by a stone circle. A bank aligned northwest-southeast occupies the centre of the circle with three large stones; two of these are elongated and from the manner of their position appear to have once stood upright. These stones may indicate the ruined remains of the tomb described by the Bagnall-Oakleys. Nine recumbent stones in conglomerate form the circle with an extra standing stone a little to the southeast connecting the circle to the stone row that extends to the north (08398g). The row is made up of three evenly spaced stones (the most northerly being the standing stone - 00988g); the two outer stones are upright and the central stone recumbent, reflecting the nature of the associated circle. The proximity of the southerly stone to the circle would appear to be a significant and purposeful arrangement indicating the intimate relationship shared by both monuments.

The only other possible stone circle located within the present survey is situated on Garn Wen (01752g) in the Eastern Black Mountains, Character Area 2. All that remains of the circle described by Jones (1972, 18) is three stones in an arc that, if complete, would have had a diameter of 50m. It was decided that there was insufficient evidence that these really formed part of a circle in the present survey. Two dubious stone circles (00346g and 06519g Character Areas 5 and 1) identified by the SMR were also rejected after a field visit as erroneous.

Apart from the stone row of Gray Hill (08398g) the only other monument of this type found within the survey area is the 'Harold Stones' (00854g) at Trellech. Ordnance Survey field workers described three uprights belonging to the remnants of a stone circle or cromlech (Pearson & Lewis 2003, 107). As no evidence exists for this 'cromlech' it would seem more likely that these stones are a row similar to the one at Gray Hill. The stones are situated on a flat terrace slightly elevated above the stream to the north. The monument has a good 360° viewshed although visibility at extreme distance is inhibited by the undulating nature of this character area. Situated within Character Area 5 the stones proximity to the elevated ground of Beacon Hill, the western boundary of Character Area 6, to the east must be noted. The immediate area has a rich assemblage of other megalith monuments such as the standing stones found along side the B4293 (00693g) 1km to the north of Trellech indicating the preference here for monuments to be placed on reasonably flat terraces or low hills. The intervisibility here contrasts with that of other character areas located in elevated positions; emphasis seems to placed on the monument itself and not its general viewshed or topographical location.

The distribution of standing stones within Gwent appears to be weighted toward the Character Areas of 1, 2, 4 and 5 of which the former two are uplands containing the highest percentage (Figures 1 and 3), with an almost complete absence in monuments within the river valley Character Areas of 3 and 6; the latter with no standing stones at all. Of the 26 monuments surveyed there are fifteen reliably attested standing stones within the six character areas. There is however a

problem in ascertaining which standing stones are genuine ancient megaliths and not later historic markers such as parish boundary stones or even cattle-rubbing stones. It has generally been accepted that megaliths over 2m in height or those that are associated with known prehistoric monuments are genuine standing stones, although even these are subject to interpretation.

Character Area 1 has four megalith examples within its boundary: the recumbent Duke's Table (02070g), Carreg Gwyir (08432g), Carreg Maen-Taro (01950g) and a possible recumbent stone (08431g). Of the four only Dukes Table and Carreg Gwyir seem likely prehistoric monuments. Dukes table is situated in the centre of a valley base located on a slight knoll; it also appeared to have stood upright. Carreg Gwyir is located in a prominent position on a ridge crest with commanding views to the north; Cefn Coch inhibits the view to the south, Carreg Maen-Taro is a probable Post-Medieval boundary marker and 08431g was only noted due to its morphological likeness and proximity to Carreg Gwyir. Character Area 2 and 3 have one monument each: Garn Wen (03214g) and Llangybi (00358g) are both standing stones, the former on a south facing slope with views of Afon Grwyne Fawr and the latter on a floodplain west of the River Usk at Llangybi. Character Area 4 has seven monuments of this type, the most notable are: Bencroft Lane (00468g) situated on slightly elevated ground above the Caldicot Levels, Langstone (00250g), which has given its name to the parish and village near Newport and overlooks the M4 to the south of the village. Druidstone (00002g) is a large broad stone situated on a slight rise overlooking Old St Mellons and may have been apart of a larger monument, although no trace has been found. Character Area 5 has two monuments: Pen y Garn (00701g) is associated with a millstone quarry and is most probably a Post-Medieval boundary marker. The monument (00693g) is a standing stone surrounded by several smaller orthostats; it is located quite close to Trellech and may have some association with the Harold Stones (00854g). Character Area 6 has no reliably attested standing stones.

The siting of these monuments appears to be bias in favour of hillslopes (eight out of fifteen), with ridge crests, local summits and plateaus favoured by five sites. Lowland sitings, flood plains and valleys (two of fifteen) appear the least favoured of all locations for the siting of standing stones. This contrasts sharply with the siting distribution of other prehistoric monuments such as round barrows, which particularly appear to favour these locations (see below). The standing stones of Gwent do appear to have one recurrent theme common to all; these monuments are striking visible when approached at close quarters. Very few could be seen from a distance and even those that could, such as Gray Hill or Carreg Gwyir, the visual impact is confined to the immediate approach. Once at the monument the perception alters and significance is then placed on the viewshed from the monument itself.

GWENT IN THE BRONZE AGE (Figure 4 and Plate 3)

Cists, inhumations and cremations

No cists were recorded during the present survey. A dubiously recorded inhumation (00263g) was recorded in the 19th century in Alexandra docks (Character Area 4) of a human cranium deposited with Wild Boar, Red Deer, Sheep, Wolf, Horse and Whale (Pearson & Lewis 2003, p50) (Figure 4). The silt deposits in association with the burial were thought to date to the late Neolithic/early Bronze Age but no datable finds were recovered. A cremation of Bronze Age date

(03992g) was discovered on a level terrace within a field at Coed y Fon farm, Tredunnock (Character Area 3); a cinerary urn of cordoned type (c1400-1000BC) was found with burnt bones and a bone pin or needle during ploughing (Savory 1980, 133). The farmer also retains a flint axe-head recovered from the field recovered on a separate occasion.

Ring ditch

Only one example of this form of monument was identified by the survey, Mynadd y Bach, Newchurch site 2 (07738g), this was a cropmark and no earthworks were visible during the present survey.

Round barrows

The most numerous funerary monument is the round barrow with its many sub-divisions (see Appendix 1); 108 reliably attested monuments were recorded in Gwent. It is not always possible within the remit of a rapid survey to distinguish whether the monument is mainly of earth (round barrow according to the terminology adopted) or mainly of stone (round barrow cairn), as limited probing can only ascertain the obstructions a few centimetres below surface level. Likewise many barrows contain structures, such as the cup-marked kerb-circle of Crick round barrow (01057g – Savory 1940, 169-91). Features such as these only become apparent with excavation and, with so few monuments reliably excavated and recorded in Gwent identification of sub-types remains problematic. The remaining sub-types (see Appendix 1) by definition have distinguishing features that in most cases identify them in their current condition.

Character Area 4 contained the majority of the 25 round barrows surveyed with nine monuments, Character Area 1 contained six monuments with Character Area 5 having four monuments. The upland Character Area 2 only held two monuments with the river valley character areas 3 and 6 supporting three and one monuments respectively. Hillslopes (5 examples), plateaus (5 examples) and floodplains (5 examples) are the most favoured locations for the siting of round barrows. Although the term 'floodplain' was adopted for the purpose of the survey, the term alluvial terrace would better describe the locale where monuments such as Five Lanes (01031g and 01032g) are located. Local summits (3 examples), summits (3 examples) and ridge crests (3 examples) are favoured to a lesser extent as locations for monument siting, whilst false crests (1 example) are the least favoured location. These contrast sharply with the distribution for cairns (see below); with the lowland earthen round barrow and the upland round barrow cairn. However as noted above not all round barrows are simple earthen mounds. The St Brides round barrow (01015g), excavated both in the latter part of the 19th and 20th century, contained an elaborate wall with outer ditches beneath a large earthen mound (Pearson & Lewis 2003, 117). Several flints with a bronze dagger, sheath and a whetstone fragment were recovered with cremated bone (Savory 1980, 131). The attributes of sites such as the Llanfoist Mott (01781g) are too confused for definite period identification, whilst barrow pairs such as Five Lanes¹⁸ (01031g and 01032g) are almost certainly authentic prehistoric monuments.

¹⁸ Five Lanes is scheduled monument; however persistent ploughing has almost levelled the westerly of the pair (01032g), the siting of a water trough on the top of the eastern earthwork (01031g) has eroded the barrow so that the concrete pad supporting the trough is now elevated 0.3m above the mound. This kind of erosion is particularly frequent within intensively farmed lowland areas.

Round barrow (cairn)

The cairn is the most numerous of all the round barrow forms; 44 sites were recorded in total (Figure 4). The Eastern Coalfield, Character Area 1, has the greater majority of cairns (seventeen examples), with the Eastern Black Mountains a close second with fifteen examples. This distribution is reflected in the proportionately low numbers of lowland cairns; Character Areas 5 and 6 have three examples each, Character Area 4 has five examples with Character Area 3 exhibiting only one example. The siting for these monuments is biased in favour of hillslopes (nineteen examples), the ridge crest would also seem to be of some importance with seven examples. Due to the upland nature of cairn distribution high plateaus feature quite prominently (six examples) as do false crests, local summits and summits (each with four examples). There is a complete absence of cairns situated on alluvial terraces or floodplains. This bias may be explained by an abundance of stone for cairn building material in the upland areas, compared with the more easily cultivated and manipulated soils used in the construction of earthen barrows in the lowland areas. However simplistic interpretations such as these must always be questioned.

It has generally been accepted that cairns with a diameter of over 5m are almost certainly funerary monuments, smaller cairns are more problematic in their interpretation due to the existence of clearance and boundary cairns of Medieval and later date.

Fourteen structured cairns have been recorded within the survey area (see Appendix 1). This form of monument is restricted to an almost exclusive upland distribution. The highest concentration is within Character Area 2 (nine examples) with a smaller frequency in Character Area 1 (two examples), Gray Hill (three examples) is the only other location outside of the uplands to support this form of monument. The siting of structured cairns would appear to favour hillslopes (six examples); false crests also seem to be in some demand (four examples) whilst local summits (two examples), summits and ridge crests (one example each) appear the least favoured of all locations. The distribution of structured cairns is concentrated in the upland locations of the Eastern Black Mountains and Coalfield areas; as noted above Gray Hill is an important prehistoric landscape so it is of no surprise that some of the distribution extends to this area.

Structured cairns appear to have had somewhat more of an exploratory history than the round barrow cairn, although the excavation of cairns inevitably reveals hidden structures. Graig Ddu (01751g) for example is one such example excavated during the last century (Jones *et al* 1980). Graig Ddu produced barbed flint arrowheads, an incised pot rim and some bone fragments from a central stone slab-lined cist measuring 1.6m x 1m. A more recent excavation of a house platform on Gray Hill has exposed a structured cairn in place of the original interpreted domestic feature (UWCN 2003). The cairn is sub-circular in form and is defined to the northwest by four large (c0.65m in height x 1.3m in diameter) conglomerate kerbstones which are quite slim and lean outward by c30 degrees. The interior of the cairn appears to have a laid stone surface with a pit at its centre; hinting that the monument may well have originated as a platform cairn (see Appendix 1). The central pit contained a large quantity of burnt material and one find of a possible faience bead; pale blue with a ridged shape. The southeastern area of the cairn had the most evidence for multi-phase activity. Here several phases of construction could be seen; the cairn appears to have migrated away from the central pit area with successive phases of cobble construction. The cairn is situated at the terminal of one of the many coaxial field

boundaries dated to the Bronze Age. This newly discovered structured cairn is located within Character Area 4 and is situated on a hillslope again with commanding views of the Severn estuary; no view of the northern quarter is possible from this monument.

Miscellaneous round barrow types

Only one example of a kerb-cairn was located during the present survey (see Appendix 1). The monument (06968g) is located on a high plateau situated on the northern slope of Mynydd Bedwellte within Character Area 1. This type of monument is also rare to Glamorgan (Evans forthcoming) and they are probably at the edge of their range in southeast Wales. No platform cairns were located during the present survey; however three ring cairns were identified in Character Area 1 (see Appendix 2). Twyn y Bleiddiaid (01982g) is located on a hillslope whilst (07041g) is situated on a false crest and (07042g) on a high plateau. No other ring cairns were located within the survey area.

Round barrow cemeteries, cairnfields and cemetery pairs

No cairnfields were recorded during the present survey; however six round barrow cemeteries were surveyed (see Appendix 1). Character Area 2 contained two examples as does Character Area 4, whilst Character Area 1 and 6 have only one example each. Hillslope sitings again dominate with three examples, whilst high plateaus, ridge crests and local summits have one example each. Round barrow cemeteries tend to occupy elevated positions with some monuments overlooking river valleys, such as the River Wye (08409g) and Afon Honddu (08413g); all cemeteries surveyed had a commanding southern viewshed. The cemetery at Craig y Duffryn (08439g) differed slightly in siting; this monument occupies the most easterly elevated boundary of the Eastern Coalfield (character area 1) and although it does have commanding views of the River Usk (Character Area 3), it also has views to the east of Monmouthshire and south to the coast.

Another sub-division of the barrow cemetery is the round barrow cemetery pair (see Appendix 1). Seven pairs of round barrows were surveyed; Character Area 2 supports the highest quantity with four examples, while Character Area 4 has two examples and Character Area 1 is restricted to a single example. Monument siting appears broadly distributed with two ridge crest and high plateau examples and one example each for hillslope, false crest and alluvial terrace locations.

FUNERARY AND RITUAL LANDSCAPES

The idea of monumentality (Bradley 1998) seems to have figured greatly in the minds of the prehistoric peoples who built complex monuments to dispose of, and house their dead. The survey has identified the importance of certain topographical areas, selected by these peoples, as arenas for these funerary and ritual activities. Binary divisions of monument distribution between upland and lowland environments (unproductive agricultural land and productive arable locations) appear to be the most obvious interpretation of the survey results. Whilst the distribution of megaliths and their meanings remains focused more on the haptic nature (Cumming 2002) of individual sites and locations.

The six character areas were chosen because each exemplified certain topographical characteristics that distinguished them within a wider landscape (Figure 2); with the exception of the coastline and the quantity of vegetation types, these same regions would have not been too dissimilar in form in the prehistoric period from how they are in the present day. This study has placed a great deal of emphasis on the siting and viewsheds of monuments within these character areas. It is interesting to note that within these areas unexpected inconsistencies regarding monument distribution do occur; Cadwgan (08422g) is the only possible example of a chambered tomb found in an upland area, whilst a little further north there are the important chambered tombs of Gwernvale and Penywrlod situated in similar elevated positions (Britnell & Savory 1984). Gwent's chambered tombs tend to favour elevated positions in the river valleys and lowlands of Monmouthshire. However the quantity of monuments is too few to draw any reliable conclusions regarding the recognition of distinct social groups or a specific Gwent megalith tradition.

The monument complex is also problematic in its interpretation; the grouping of different monument forms together because of their geographical proximity is purely a modern construct. It is quite unclear whether the associated monuments were ever meant to be related. Was the monument complex an all encompassing monument, with a clear beginning and end in the mind of the prehistoric builder? It is not certain we can make those sorts of assumptions. What we can be certain of is that complexes such as Carreg Las (08452g) and Gray Hill (08453g) defined special areas reserved for specific ritual and funerary activities, which may well have continued over many centuries. Monument complexes appear to be biased in favour of upland locations; however one may assume that any such site located in a lowland area would have a smaller chance of survival due to the intense agricultural activity in these areas over the past six thousand years.

The use of stone in a monument is a commitment given to time and resources; it would have created a connection between the builder and the area in which it was built. It is significant that few megaliths are found in river valleys such as the Usk and Wye (Character Areas 3 and 6). The distribution of stone construction would appear to favour certain areas such as the uplands of the Eastern Coalfield and Black Mountains where views of river valleys and not the valley location themselves appear important (Figure 3). Gray Hill would appear to be the only 'upland' in a lowland character area and it is significant that standing stones such as (00988g) exhibit similar viewsheds and siting characteristics as those found in the uplands. The megaliths found in the lowlands of Monmouthshire are the most numerous; this distribution is significant because one assumes the survival of monuments in these Character Areas (4 and 5) has a reduced chance due to the greater settlement (and agricultural activities) by prehistoric peoples, compared with the less settled uplands. Viewsheds to and from standing stones, such as the Druidstone (0002g) and Langstone (00250g), are restricted to the immediate area around the monument, again stressing the importance of the monument's immediate locale.

The round barrow with its many sub-divisions is the most numerous type within the present survey. The distribution of this form of monument lends itself to certain recognisable groupings within specific areas (Figure 4). The distribution of earthen round barrows has a bias toward the lowland character areas, barrows such as Crick (01057g) seem to highlight the significance of broad valleys and alluvial terraces chosen for the siting of these forms of monument. In contrast, round barrow cairns occupy predominately upland locations. Interestingly the siting of monuments such as those at Garn Wen (01754g and 01755g) and the Blorenge Mountain (01774g, Plate 3) tend to favour high plateaus, ridge crests

and summits in direct contrast to the valley bottom siting chosen for earthen round barrows such as the St Brides round barrow (01015g). Not all barrows fall conveniently into this simplistic interpretation. There are exceptions in the general rule that barrows are a lowland type, since Three Wells (08115g) and (02299g) on Hatterall Ridge may well be earthen and not stone barrows.

Monumentality as history

Modern archaeological theory has established that Monumentality is as much a Neolithic development as the domestication of plants and animals (Bradley 1998, 188-203); people remembered and interacted with the past and expressed this by physically manipulating the world around them. Monuments are visible, they are durable, and their permanence would not have been lost on the psyche of the prehistoric person. Its monumentality (space) would have influenced and been influenced by the way in which people interpreted and re-interpreted these monuments from their conception to the present day (time); in effect these monuments both shaped and were shaped by the human consciousness through space and time. This effect differs dramatically from portable material culture, which has its own set of values. Portable material culture, such as polished stone axes and barbed flint arrowheads, can in most cases be made by the individual and hidden, deposited, broken or lost by that same individual. It carries with it a 'portable history' that is able to communicate to others in a very different way to monuments. Monuments need the co-operation and understanding of persons or groups to enable their construction (Harding 2000, 73-123). Monuments are static and therefore may constantly be reinterpreted with each generation; perhaps this is why monument complexes and some barrows are never a finished feature but one which is in a constant state of flux. For example the Crick round barrow had secondary burials dug into the top of the mound (Savory 1940).

Funerary and ritual monuments define a special place; their conception is and will inevitably be different from later use and interpretation because each generation will reinvent and reinterpret these monuments to fit their evolving social structures. The permanence of these monuments seems to indicate that they exist outside the realms of 'normal' experience, again giving them special significance. They exhibit a sense of communal effort, of social ordering reflecting the social structure expressed in monumentality. The concept of ancestors and notions of time may have motivated these societies to band together as a community with monumentality as their goal (Whittle 1996). Society may well have been fragmented, certainly in the Neolithic, and these events could have created social gatherings where bonds were re-established and ideas shared. This idea of social gathering could well have structured society with funerary and ritual monuments, such as henges and tombs, as the manifestation of this social act, an arena for the complex rituals and traditions that would have been needed by groups to re-establish kin and friendship bonds. Funerary and ritual monuments would certainly represent communal cohesion and an idea or tradition of permanence that would indicate an awareness of the past, present and the future. Finally funerary and ritual monuments have a mutability which causes us to interpret what we see, different people and cultures interpret in ways reliant on the social arena or traditions in which they were conditioned. That is why the interpretation and re-interpretation of monuments will continue as long as people seek answers within the past.

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APPENDIX 1: DEFINITIONS

MONUMENT TYPES

Chambered tomb

Definition

Monument with evidence of a burial chamber composed of upright stones and considered to be a funerary monument of Neolithic date. The burial chamber may be covered by a capstone and may be enclosed within a round or long mound or cairn. The burial chamber will generally be significantly larger than a cist.

Sub-types

No sub-types were noted in the survey area

Cist

Definition

Isolated stone-lined pit assumed to have held a human burial of prehistoric or later date

Sub-types

No sub-types were noted in the survey area.

Henge

Definition

Circular earthwork or cropmark monument normally comprising a ditch with an internal or external bank and one or more entrances, associated with ritual or funerary activity of later Neolithic date and normally specially associated with other funerary or ritual monuments of Neolithic or Bronze Age date. The ditch is normally proportionally much wider than that of a ring ditch. Because of the relatively low numbers the monument type definition covers both henges and hengiform monument types (types of site which do not really fall into the category of henge but is thought to be related types). Internal settings may include timber circles, pit circles, stone circles, stone settings, central mounds, cremation pits etc

Sub-types

Henge (hengiform monument): A variety of sites which do not readily fall into the category of henge, but are thought to be related monuments. Types of hengiform monument currently identified include smaller sites, possibly with segmental ditches.

Inhumation

A single inhumation of prehistoric or later date which does not appear to be associated with any burial structure such as a cairn, cist or round barrow.

Sub-types

Inhumation (cave burial)

Round barrow

Definition

Round mound of earth and/or stone with a flattened or rounded top presumed to be for burial and/or other ritual activity of Neolithic, Bronze Age or Roman date. The mound may be enclosed by a circular or intermittent outer ditch and may have a complex structure including stone kerbs, stone settings or burial cists. Two or more associated round barrows are also classed as a Barrow Cemetery. Ring ditches are a related type with no visibly surviving internal mound, the smaller examples of which are generally considered to be ploughed-out round barrows. Included in the definition are sites first identified as ring ditches but subsequently found to have an internal mound.

Sub-types

Round barrow (cairn):

a circular cairn assumed to be predominantly composed of stone

Round barrow (kerb cairn):

a small circular cairn (c5m diam) with an outer kerb of disproportionally large stones

(interior normally infilled)

Round barrow (platform cairn):

a circular cairn with a levelled flat top

Round barrow (ring cairn):

a circular bank of stones surrounding a hollow central area, the inner and/or outer

edges of which may be retained by stone kerbs or spaced stones

Round barrow (structured cairn): a circular cairn assumed to be predominantly composed of stone, and with evidence of deliberate construction such as a kerb or inner stone settingbank, both enclosed

within a larger penannular bank

Round barrow cemetery

Definition

A group of two or more round barrows or ring-ditches within reasonably close proximity to each other, possibly associated with other monument types.

Sub-types

Two round barrows in close proximity and assumed to be associated Round barrow cemetery (pair): Round barrow cemetery (cairnfield) A group of small cairns within close proximity, assumed to be associated

Standing stone

Definition

One, or less frequently two, adjacent upright or originally upright stones of unknown function, set in a stonehole; standing stones found in association with funerary and ritual monuments of Neolithic to middle Bronze Age date may more readily be assumed to have a ritual function.

Sub-types

None defined in the survey area

Stone circle

Circular setting of free-standing and normally spaced stones assumed to represent a ritual monument of later Neolithic to middle Bronze Age date. The definition also covers square settings of four stones which are likewise stones assumed to represent a ritual monument of later Neolithic to Middle Bronze Age date. The definition also includes settings of pits shown by excavation to have once held standing stones, and also covers stone circles which may form part of a henge.

Sub-types

Stone circle (kerb circle) A circle of edge-set stones which are abutting to form a more or less continuous kerb. Internal features may or may not be visible or present.

Stone row

One or more rightly parallel rows of three or more upright stones set at intervals presumed to have been used for ritual activity of Bronze Age date.

APPENDIX 2: CHARACTER AREAS

1. Coalfield

This character area covers the eastern coalfield, the Rhymney valley, Sirhowy valley, Ebbw Vale and Blaenau Valley. The eastern boundary is defined by following the Cwm Afon at Blaenavon south to the Rhymney valley at Lower Machen and the western boundary from Rhymney south along the valley to Bedwas.

| Total number of reliably attested monuments | 48 |
|---|----|
| Round barrow | 8 |
| Round barrow (cairn) | 21 |
| Round barrow (kerb cairn) | 3 |
| Round barrow (ring cairn) | 3 |
| Round barrow cemetery | 5 |
| Round barrow cemetery (pair) | 4 |
| Standing stones | 4 |

2. The Black Mountains - Abergavenny and Crucorney Fawr

This character area covers the upland and mountainous region found beginning with the Blorenge Mountain and Mynydd y Garn-fawr at Llanfoist (Abergavenny), northwest to the River Usk at Glangrwyney and north to the Vale of Ewyas which characterises the eastern limits of the Black Mountains.

| Total number of reliably attested monuments | 41 |
|---|----|
| Chambered tomb | 1 |
| Henge | 1 |
| Long barrow | 1 |
| Prehistoric monument complex | 1 |
| Round barrow | 3 |
| Round barrow (cairn) | 17 |
| Round barrow (kerb cairn) | 1 |
| Round barrow cemetery | 5 |
| Round barrow cemetery (pair) | 7 |
| Standing stones | 4 |

3. The Usk Valley - Gilwern to Newport

This character area can be identified as the valley of the River Usk from Glangrwyney on the Black Mountain's southern periphery south to Newport where the River Usk empties into the Severn Estuary.

| Total number of reliably attested monuments | 8 |
|---|---|
| Cist | 1 |
| Cremation | 1 |
| Inhumation | 1 |
| Round barrow | 3 |
| Round barrow (cairn) | 1 |
| Standing stones | 1 |

4. South Monmouthshire - East Newport and Gwent Iscoed

It comprises the lowlands of the Gwent Levels enclosed by the elevated land beginning at the Rhymney valley at Lower Machen, east to the River Usk at Newport where it follows the river north until Kemeys on Usk. From here the boundary continues northwest along the high ground of Kemeys Graig and Bertholau Graig before turning east along the Wentwood ridge and then the boundary follows the high ground southeast from here to Shirenewton and terminates at Chepstow (Character Area 6).

| Total number of reliably attested monuments | 37 |
|---|----|
| Chambered tomb | 2 |
| Prehistoric monument complex | 1 |
| Round barrow | 7 |
| Round barrow (cairn) | 8 |
| Round barrow (kerb cairn) | 1 |
| Round barrow cemetery | 6 |
| Round barrow cemetery (pair) | 2 |
| Standing stones | 8 |
| Stone circles | 1 |
| Stone row | 1 |

5. North Monmouthshire

This character area consists of gently undulating farmland and stretches from the South Monmouthshire boundary of Character Area 4, north to the border with Hereford and Worcester and is hemmed in by the valleys of the Usk and Wye to the west and east respectively.

| Total number of reliably attested monuments | 16 |
|---|----|
| Chambered tomb | 1 |
| Ring ditch | 1 |
| Round barrow | 6 |
| Round barrow (cairn) | 3 |
| Standing stones | 5 |

6. The Wye Valley - Monmouth to Chepstow

This character area comprises the Wye river valley from Monmouth south to Chepstow where the River Wye empties into the Severn Estuary.

| Total number of reliably attested monuments | 9 |
|---|---|
| Chambered tomb | 1 |
| Round barrow | 1 |
| Round barrow (cairn) | 3 |
| Round barrow cemetery | 4 |

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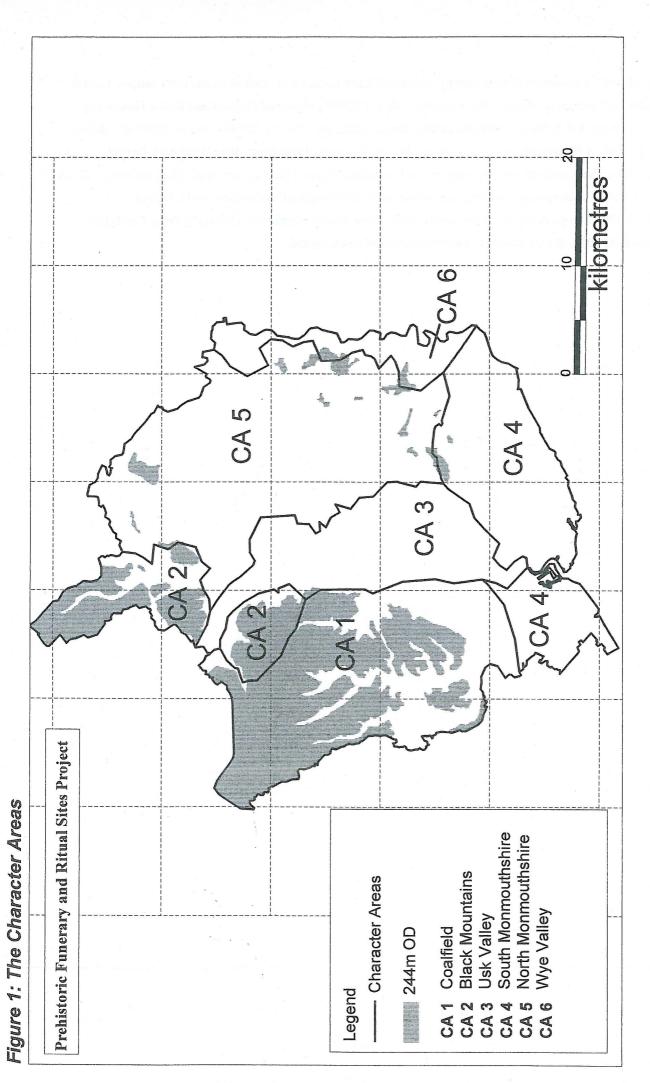
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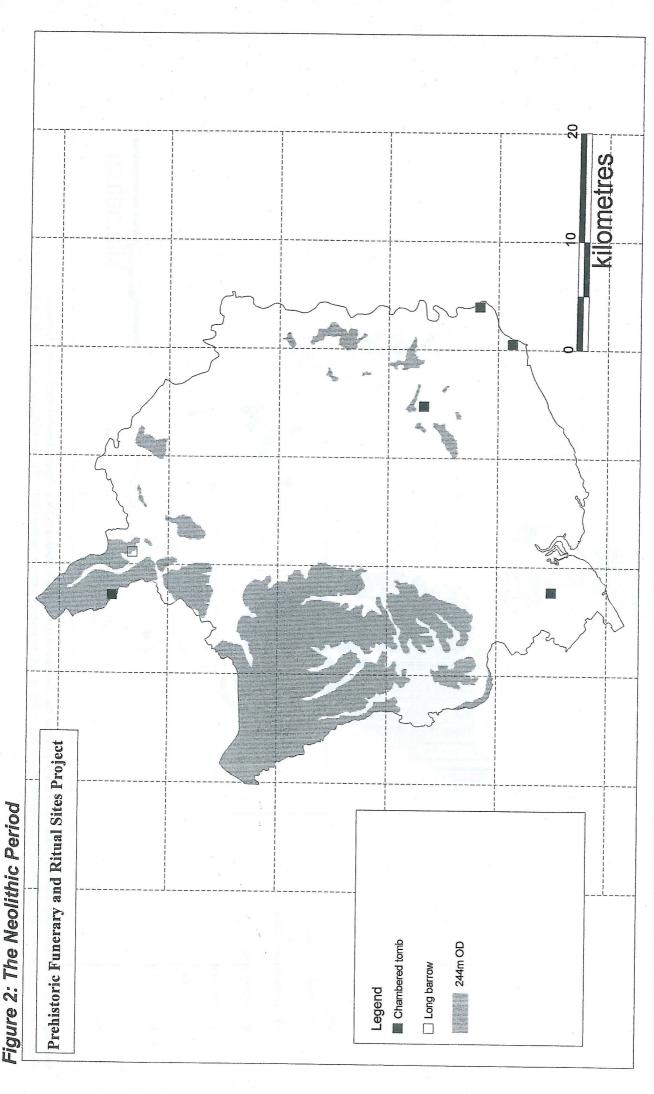
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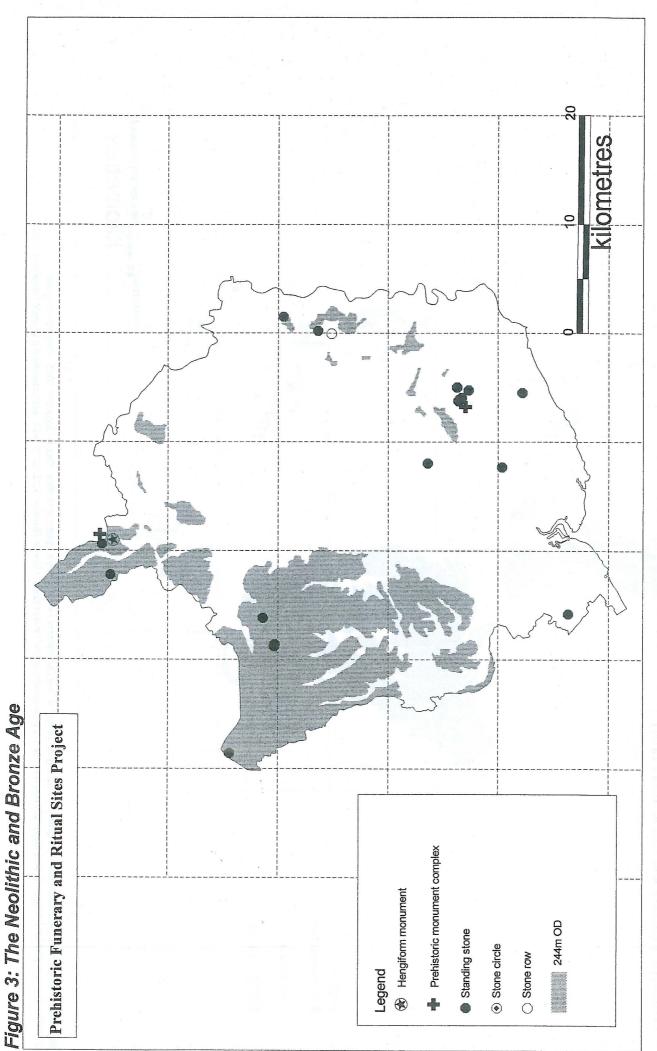
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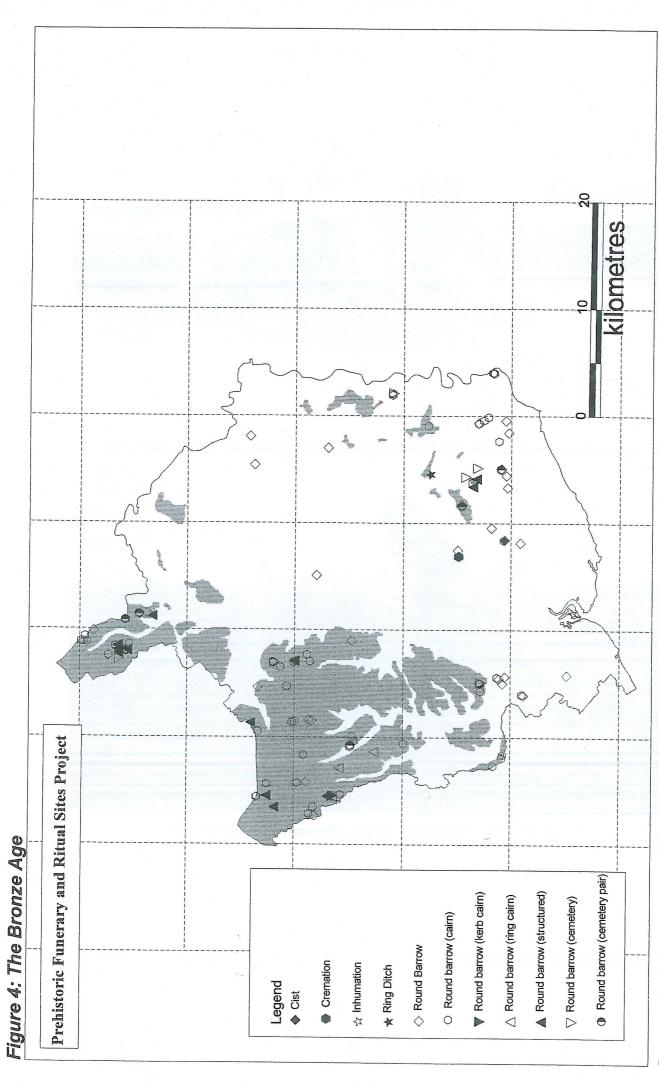
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Plate 1: View to the southwest of Gaerllwyd chambered tomb (01140g) (Photograph © GGAT and Cadw)





Plate 3: View to the southeast of Cairn Blorenge (01774g) showing the monument's commanding view of Character Area 3 (Photograph \bigcirc GGAT and Cadw)