Archaeological Field Survey Report

BELLE TOUT, EAST SUSSEX

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ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

[redacted]

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BELLE TOUT, EASTBOURNE AND EAST DEAN & FRISTON, EAST SUSSEX

NMR NUMBER TV 59 NE 56

INDUSTRY AND ENCLOSURE IN THE NEOLITHIC

APRIL 1996

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1. INTRODUCTION

In April 1996 the Royal Commission on the Historical Monuments of England surveyed the remains of an enclosure at Belle Tout, near Eastbourne, East Sussex (NMR Number TV 59 NE 56; SAM Number East Sussex 109). This survey was carried out as part of the Industry and Enclosure in the Neolithic Project, a national survey seeking to produce a corpus of Neolithic flint mines and enclosures in England. The project was the responsibility of staff of the Archaeological Field Office in Cambridge.

The enclosure is situated at NGR TV 560 956, 4km west of Eastbourne, East Sussex, on the upper slopes of Belle Tout hill (Figure 1). At the eastern end of the enclosure is situated the now disused Belle Tout Lighthouse (NMR Number TV 59 NE 94).

Belle Tout itself is one of a series of chalk headlands along the coast where the South Downs meet the English Channel. Three kilometres to the east lies Beachy Head, where the cliffs reach a height of over 150m. Belle Tout, whose summit reaches 80m above OD, overlooks Birling Gap, a natural declivity immediately west of the enclosure, and provides views of several kilometres in all directions. Although the sub-soil in the area is generally Upper Chalk, around the enclosures and down towards Birling Gap, the chalk is overlain by drift deposits of loam with patches of flint (Bradley 1970, 312).

Belle Tout is a Site of Special Scientific Interest (SSSI) and an Area of Outstanding Natural Beauty (AONB); the area was designated a Heritage Coast in 1973 (Russell 1996, 5). It is today owned and managed by two landowners; the western section by the National Trust and the eastern section by Eastbourne District Council.

The name *Belle Tout* is a 20th century version of *Beltout*, which first appears in 1724, and probably refers to a lookout point for an early coastal warning system pre-dating the 19th century lighthouse.

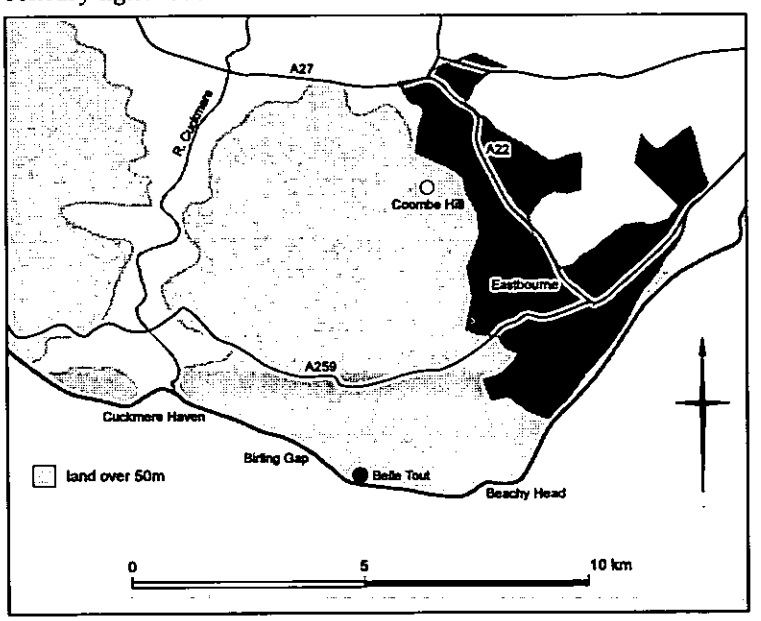

Figure 1: Location map

2. ARCHAEOLOGICAL HISTORY

The earliest known reference to Belle Tout is from Giddy (1814) who mentions the presence of the outer earthwork (Figure 2) following the excavation of a barrow above Birling Gap. More recently Lane Fox inspected the earthwork as part of an investigation into Sussex hillforts, but did not have time to excavate (1869, 32-3). He favoured an early date for the earthwork, based on the presence of an apparently substantial surface scatter of lithic material:

"I found the whole of the interior of the work, especially near the parapet, and part of the slope on the outside, strewed with flint flakes artificially fabricated: of these I collected as many as I could carry away as specimens..."

(Lane Fox 1869, 33)

This was confirmed in the course of the RCHME survey when a substantial quantity of waste flakes was observed at the western end of the enclosure where the soil had been disturbed by erosion; smaller scatters were noted throughout the interior.

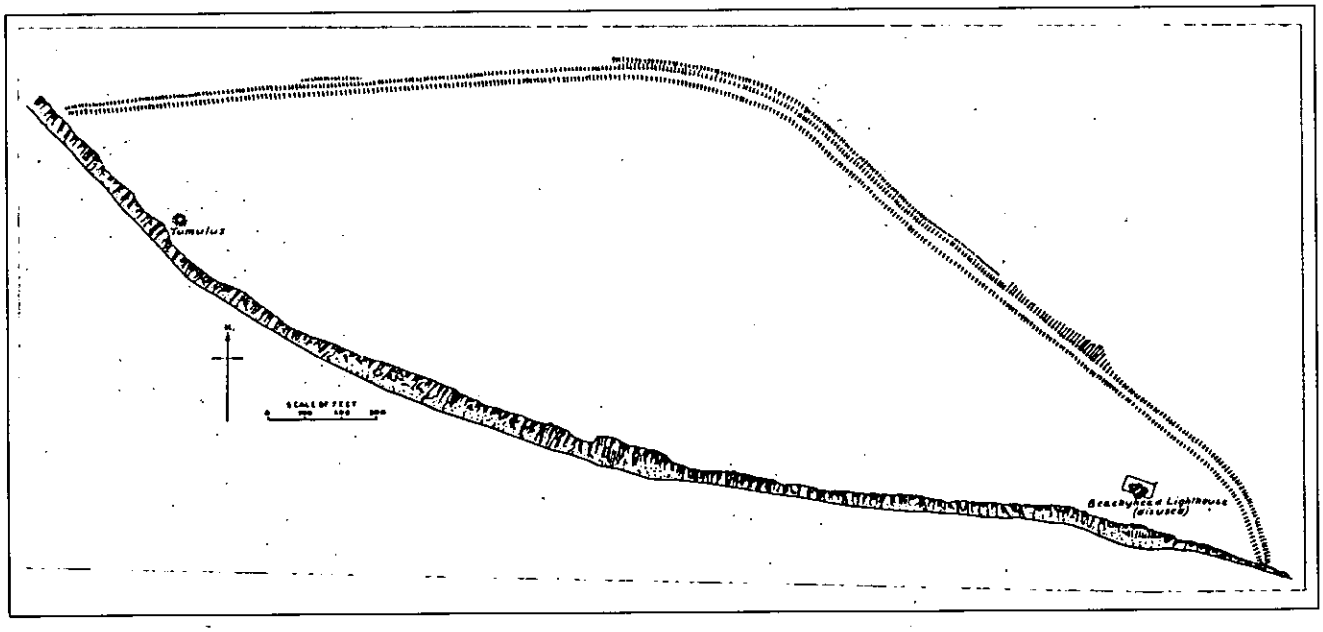

Figure 2: The outer earthwork in 1905 (Victoria County History 1905, 456)

The presence of the two inner earthworks, situated within and on the slopes of a dry valley close to the cliff edge (Figure 3), was first noted by Toms who carried out small scale excavation of them (Toms, 1912). Toms demonstrated the presence of two overlapping rectangular enclosures, the larger probably succeeding the smaller, although the latter survived as an earthwork and may have affected the use of and movement within its successor.

The smaller earthwork was sub-rectangular, measuring at least 60m by 35m, and comprising a bank and external ditch. The larger, sub-rectangular, enclosure had an entrance half-way along its eastern side, at the foot of the valley which the enclosure straddles. It measured at least 120m by 70m, and in contrast to the smaller enclosure comprised a bank with internal ditch. Dating material consisted of one sherd of possible Bronze Age pottery and one possible Beaker sherd (Toms 1912, 48).

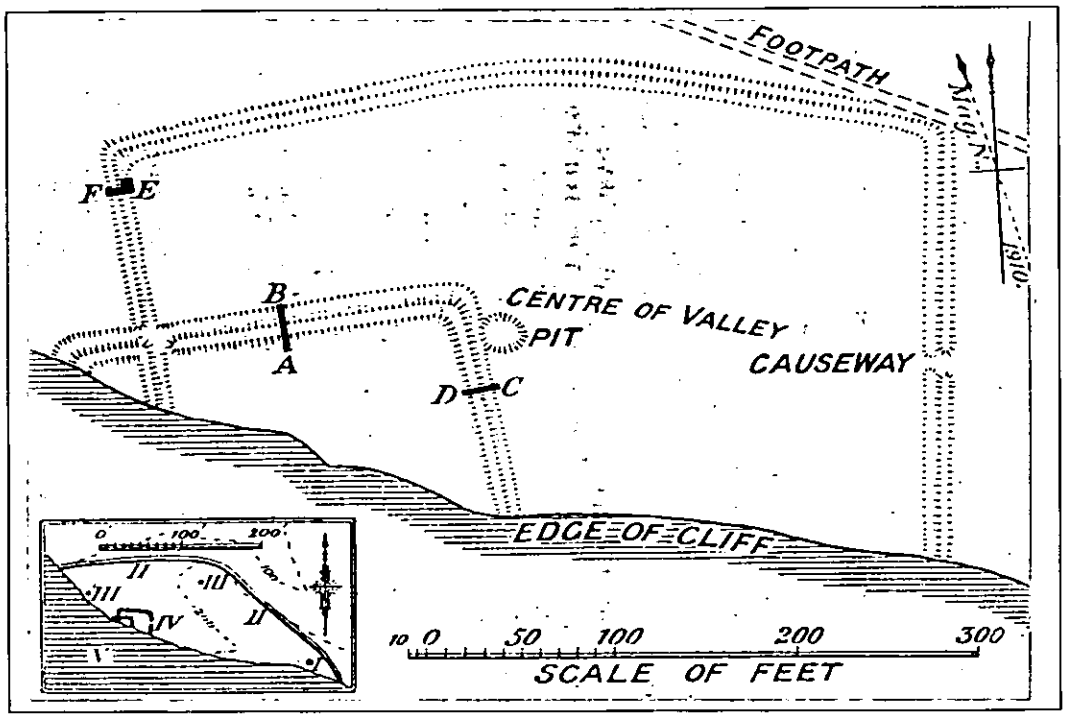

Figure 3: The inner earthworks in 1909 (Toms 1912, 45)

Toms concluded that the enclosures were almost contemporary with one another, with the larger slightly later than the smaller, and were probably of Beaker/Early Bronze Age date (Toms 1912, 53). However, given Bradley's later description of the site as a Beaker settlement and his subsequent revision of the ceramic evidence (see below), the fact that Toms was only able to identify one sherd as belonging to a Beaker is worth noting: the remainder he compared to coarser vessels such as Collared Urns and Food Vessels.

The first recorded excavation of the outer earthwork was carried out in 1968-9 by Bradley, when two small sections were cut through the rampart (Bradley 1971). Bradley observed one possible entrance gap in the earthwork, situated roughly midway along its surviving course, a little to the southwest of Horseshoe Plantation, but suggested that this was unlikely to have been an original entrance given the steepness of the scarp below the ditch and the fact that a resistivity survey failed to provide unambiguous evidence for a causeway here; he concluded that the original entrance may have been lost to coastal erosion (Bradley 1971, 8).

Bradley suggested that at its western end the bank was of two phases. The first phase is not described in detail; the second phase involved the cutting of a quarry scoop into the back of the phase I rampart resulting in extra material probably used to heighten the rampart. The

only artefact recovered during the excavation was a single abraded Beaker sherd from the tail of the primary rampart; this was considered to be residual. What appear to be surface finds of a hammerstone and a quantity of flint flakes were also collected, suggesting that *'...the dyke had disturbed one of several earlier complexes on the hill'* (Bradley 1971, 13). Although there were no dateable finds from secure contexts in either section, Bradley regarded the earthwork as representing an Iron Age promontory fort. It is implicit throughout the report that an Iron Age date was assumed prior to the excavation, and appears to have been confirmed by the discovery of what appeared to be Iron Age material close to the inner earthworks (see below).

During the 1968-9 season, Bradley also excavated part of the larger of the inner earthworks, almost all of the smaller enclosure having disappeared over the eroding cliff by the late 1960's (1970). His initial publication of the results was hampered by a number of assumptions about the nature of the site and by incorrect identification of some of the pottery; this led to a later summary reassessment where he appears to have concluded that the enclosures were of Beaker date, though this picture is far from clear given the re-dating of Beaker sherds to the Bronze Age and Iron Age sherds to the Neolithic (Bradley 1982, 70-1). In his revision, Bradley confirmed that a knapping site within the larger of the inner earthworks belongs to the Neolithic period (*ibid*, 71).

Given the confusion regarding the inner earthworks, a thorough re-evaluation of features and finds is required. Nonetheless, the evidence of both Toms' and Bradley's excavations place the larger enclosure within the period of currency of Food Vessels, and possibly with the Beakers, while the smaller enclosure is slightly earlier. The presence of Neolithic sherds indicates an earlier presence but the nature of that activity and its relationship to the earthworks is uncertain.

Bradley's later reassessment of his excavations (Bradley 1982) contained no revision of his work on the outer earthwork, despite the fact that there are clear problems with the 'Iron Age' pottery (apart from its distance from the earthwork: at least 300m). In 1971 it is clear that Bradley regarded the assemblage as problematic, comparing elements of it with material from known Late Bronze Age sites (Bradley 1971, 16); by 1982 it had become clear that a proportion of the postulated Iron Age pottery was in fact of Neolithic date (Bradley 1982, 64). Bradley concluded by comparing the enclosure at Belle Tout with other sites, notably Ranscombe Camp (Sussex) (actually a substantial cross-ridge dyke), Butser Hill (Hampshire) and Bindon Hill (Dorset), suggesting that all feature slight earthworks, apparently characterised by a low density of internal features, indicative of use as pastoral rather than defensive enclosures, and arguing for a development from cross-ridge dykes and Bronze Age stock enclosures (Bradley 1971, 17). However, bearing in mind the limited investigation if the interior of these sites by excavation or geophysical prospection, these observations can only be considered tentative.

Subsequent work at Belle Tout has been confined mostly to the outer earthwork, and has been limited in extent. In 1975 a watching brief associated with the cutting of a 3ft wide trench to bury telegraph wires a short distance east of one of Bradley's sections produced

no dateable material (Drewett 1975, 184). There was no evidence for a second phase in the bank, suggesting that this may have been an intermittent feature, a suggestion supported by clear variations in the height of the bank along its course. Drewett concurred with Bradley's interpretation of the site as a *'pre-Roman Iron Age stock enclosure'* (*ibid*, 186).

In 1978 a second watching brief occurred when a cable trench was cut from Hodcombe to Belle Tout Lighthouse (Drewett 1979). No dateable finds were recovered and there was no evidence for features within the enclosed area; the outer ditch was also absent, this being explained by the steepness of the hill at this point.

As part of a wider project investigating the archaeology of Bullock Down, excavation took place in 1979-80 at two small gaps in the earthwork, in 1979 close to the 1969 and 1975 excavations, and in 1980 centred on the possible entrance noted by Bradley (Bedwin 1982). The 1979 excavation showed the bank to be of simple chalk dump construction, partly flattened and enlarged to accommodate a golf tee. There were two ditch sections of differing width and depth, separated by a causeway of less than 50cm. Again no dateable material was recovered from below-surface layers.

The 1980 excavation focused on the gap in the outer earthwork close to Horseshoe Plantation, and showed the bank to be of simple chalk dump construction; both ditch terminals were well-defined. No Iron Age material was recovered, and Bedwin felt that this argued against an Iron Age date for the earthwork. The flints were thought to be probably later Neolithic or Early Bronze Age, though the small sample and the lack of information on the contexts in which they were found makes secure dating impossible.

As part of the Bullock Down Project, a molluscan analysis was carried out by Thomas on a sample recovered from the ditch profile in the western terminal of the 'entrance' in the outer earthwork (Bedwin 1982, 94). Among the mollusca recovered from the lower ditch fill were a number of *Helix Aspersa*, a species though to have been introduced into this country no earlier than the 1st century AD. Bedwin, finding the molluscan evidence irreconcilable with the artefactual evidence favoured the latter. The molluscs recovered from pre-earthwork buried soil indicate disturbed soil conditions, possibly caused by ploughing, despite the steepness of the slope at this point.

The most recent excavations at Belle Tout were carried out in 1995 by Russell who excavated both the outer earthwork and the larger of the inner earthworks (Russell 1996). A section across the outer earthwork between Bradley's 1969 trench and Drewett's 1975 one produced evidence for a two-phased rampart (*'constructionally if not chronologically'*, Russell thus implying two roughly contemporary phases) of simple unrevetted dump construction. Little material evidence was recovered, though the worked flint (seemingly the only diagnostic material) *'..would [not] be out of place within a middle-late Neolithic context'* (*ibid*, 34). Excavation of the inner earthwork confirmed Toms' and Bradley's findings, though, as with the earlier excavations, little dating material was recovered. Environmental data suggested that the outer earthwork pre-dated the inner earthworks.

Prior to the RCHME survey, the chronology and function of the various monuments at Belle Tout was far from clear. According to Russell, the molluscan evidence provided a rough

chronological framework in which the outer earthwork preceded the inner earthworks (Russell 1996, 34). However, the scarcity of material culture from all excavations, and the problems with the existing material means that such a proposal can be neither accepted nor rejected. The lack of investigation (both excavation and geophysical prospection) within the interior of all of the monuments has reinforced this dilemma, and has resulted in a total lack of understanding of the nature of the sites. In summary, the lack of clarity of the previous fieldwork, and its at times contradictory nature, has produced no clear assessment of the chronological sequence or function of the sites.

3. ARCHAEOLOGICAL DESCRIPTION AND INTERPRETATION

For letters and words in **bold** in the text, please refer to Figure 4.

There are four main monuments at Belle Tout: the **outer earthwork**, which prompted the RCHME survey due to the recent suggestion of its Neolithic date, the **inner earthworks**, which have been substantially destroyed by coastal erosion, the **barrow** and **Belle Tout Lighthouse**.

One of the main factors affecting the archaeology at Belle Tout is the erosion of the chalk cliff which is gradually destroying the features there. The average rate of erosion at the western end of the enclosure between 1874 and 1996 was 0.56m per year while at the eastern end it was 0.19m per year; the total distance which the cliff has eroded over that period was 68m at the western end and 23m at the eastern end. While the rate of erosion has been fairly constant at the eastern end, at the western end it increased dramatically after 1909, from 0.07m per year to 0.76m per year. The total area lost from within the outer earthwork since 1874 is 3.9 hectares.

The outer earthwork (TV 59 NE 56)

This 1130m long linear earthwork, situated on the crest of the hill for most of its length before dipping down towards Birling Gap, encloses an area of 20.1 hectares. The earthwork originally comprised a bank with external ditch and counterscarp bank. The main bank and ditch survive along most of its length, though in a very slight form, while the counterscarp bank is visible along roughly half of its length; in parts the earthwork survives only as a single scarp. Most of the excavation trenches are still visible, and are generally well healed.

The outer scarp of the bank stands between 0.4m and 2.3m high above the ditch bottom, but is generally no more than 0.2m high in the interior, and ranges between 5.0m and 7.0m wide; it increases in height towards the western end, and survives best just before it is cut by the chalk cliff. The ditch is on average 0.1m deep by 1.8m wide. The counterscarp bank measures between 0.1m and 0.8m high by 2.1m to 4.8m wide.

The earthwork is relatively free of vegetation, though low scrub and gorse obscure much of the western half; clearance has obviously taken place in recent years since Bradley was unable to trace its complete course in the late 1960s (Bradley 1971, 9). Interpretation was further hindered along this section by the presence of several amorphous features which may be the remains of tees and bunkers of a now disused golf course; excavation in 1979 revealed traces of a golf tee (Bedwin 1982, 91) and there are a number of features visible on aerial photographs which indicate the presence of a golf course here (NMR APs: 106G/UK/725/3035-6; MAL/74047/263-4).

Apparently underlying a section of the outer earthwork towards it western end are traces of a **lynchet** or similar linear feature. Measuring 124.0m long by 0.4m high, this slight scarp runs obliquely up the hill and across the outer earthwork. Traces of lynchets survive elsewhere both on Belle Tout (outside the survey area) and on the neighbouring hills, attesting to early agricultural activity in the area.

The earthwork is essentially continuous, with the only apparent original interruption, excavated in 1980, situated roughly half-way along its length (Bedwin 1982, 93). However, towards the western end the top of the bank is uneven and slightly segmented in form, possibly the result of later damage. Towards the eastern end, 8m to 12m below the earthwork are a series of shallow scoops cut into the hill and running roughly parallel with the earthwork; they measured between 10m and 24m by 4m to 6m wide. There is no obvious relationship between the scoops and the outer earthwork.

A long linear scar through the eastern end of the earthwork is visible on aerial photographs taken in 1946 (NMR APs: 106G/UK/725/3035-6), and several more were located nearby. This is one of a number of World War II target railways, on which targets were pulled along by means of cables (Roger Thomas, *pers comm*). No sign of this scar is visible today, though the section of earthwork which it crossed is very low and shows signs of disturbance. Belle Tout Lighthouse was used as a naval gunnery target during World War II, though it is not known if these two activities were related.

The inner earthworks (TV 59 NE 54)

Only the larger of the two inner earthworks survives, the smaller enclosure and the chalk cut shaft (see below) having now eroded over the edge of the cliff (see Figure 2 for their form in 1909).

The larger enclosure survives as an L-shaped earthwork, 120.0m by 60.0m, comprising in the main a bank and inner ditch with a counterscarp bank surviving in places. The bank is on average 4.5m wide by 0.4m high, while the ditch is no more than 1.8m wide and 0.2m deep. Much of the enclosure has eroded away (see Figure 2 for its survival in 1909), but it was originally polygonal in shape, comprising at least four sides, with perhaps the cliff edge as the fifth side (though see below for a discussion on rate of erosion). On the eastern side of the enclosure, at the bottom of the dry valley across which it lies, there seemed to be evidence for an interruption in the bank, though this was not surveyable. This is the entrance causeway first noted by Toms (Toms 1912, 45) and excavated by Bradley (Bradley 1970, 329).

The barrow (TV 59 NE 55)

A circular mound 11.8m in diameter and 0.7m high survives in a clearing in the gorse and scrub towards the centre of the outer earthwork. A slight hollow in the centre of the mound probably marks an unrecorded excavation of the barrow.

Belle Tout Lighthouse (TV 59 NE 94)

The lighthouse was not surveyed during this project, except for use as control. The lighthouse is circular, constructed of granite with a 360° light at the top. Attached to the north is a low brick extension with a walled garden beyond. A linear scarp, 62.0m long and 1.1m high marks the edge of an earlier garden associated with the lighthouse.

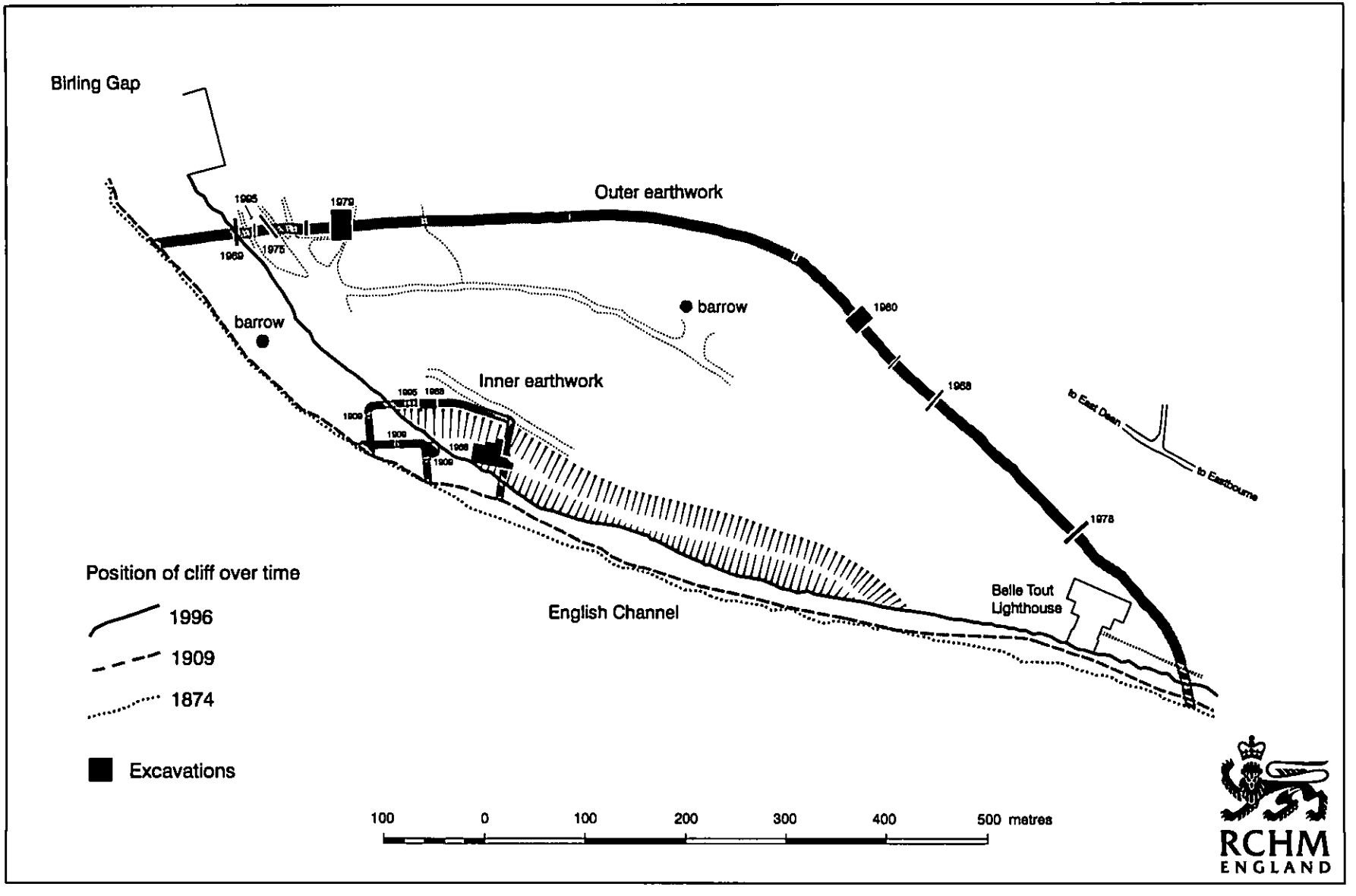

Figure 5: Extent of cliff erosion and location of excavation trenches

4. DISCUSSION

One of the questions often discussed regarding the outer earthwork at Belle Tout is whether or not it was always a coastal site, as this would obviously affect its original form and probably its interpretation. Previous estimates of coastal erosion along the cliffs at Belle Tout range from 0.4m per year (Russell 1996, 7) to 2.0m per year (Bewley 1994, 67). Figure 5 shows the outline of the cliff in 1874, 1909 and 1996 (Ordnance Survey 1874; Toms 1912). Judging by the rate of erosion between 1874 and 1996, the amount of land lost at Belle Tout since 3000BC could be as little as 350m, assuming a rate of 0.07m per year, the average yearly loss between 1874 and 1909.

The situation is far from clear, and without a detailed coastal study of the Belle Tout area, unlikely to be resolved. All that can be said with certainty is that a proportion, likely to be fairly large, of the archaeology at Belle Tout has disappeared.

The inner and outer earthworks

The implications of a substantial loss of land at Belle Tout are numerous. It is possible that the outer earthwork originally completed a full circuit, in which case it would probably have been the largest prehistoric enclosure in England, though there is no way of knowing its original shape and therefore size. An hypothetical complete circle based on the remaining section of the outer earthwork produces an area of some 198 hectares, compared with the 20.1 hectares enclosed today, although obviously possible variations along its circuit cannot be taken into account. However, it is equally possible that the enclosure was always a cliff-edge site, in which case the earthwork may have originally turned less obliquely towards the cliff: there is a suggestion of this at the eastern end, but any return at the western end was lost to erosion before 1874 (Ordnance Survey 1874).

Despite several excavations of the outer earthwork since the late 1960's, no unequivocal conclusions have been reached regarding its date or its function. The evidence of the various sections cut through the bank and ditch leave the earthwork effectively undated, though probably prehistoric. Bradley's original Iron Age dating cannot be upheld in the light of the complete absence of material of Iron Age date from the earthwork, although the molluscan evidence should be borne in mind. Russell found Neolithic but no Iron Age material during his 1995 excavation, but given the density of surface flint within the enclosure, and in particular in the vicinity of his trench, a definite Neolithic date cannot be confirmed since these finds might be residual, and could have been incorporated during the construction of the bank. Russell's environmental data, however, indicates that the outer earthwork was constructed prior to the inner earthworks, whose Late Neolithic to Early Bronze Age date range appears to be well established, though care should be taken when indirectly assigning a date to a monument on the basis of the date of other monuments, especially when the date of the latter is not definite.

In terms of its size, the outer earthwork at Belle Tout is totally unlike Neolithic causewayed enclosures in Sussex. It encloses an area of 20.1 hectares (and presumably originally

considerably more), compared with just 2.1ha at Halnaker Hill (SU 90 NW 2), 2.3ha at Court Hill (SU 81 SE 5) and 0.5ha at Combe Hill (TQ 50 SE 12). The bank exhibits no clear signs of segmentation (the possible traces at the western end are probably the result of later damage, perhaps associated with the golf course), and although the ditch is interrupted, there were no definite causeways across it, rather the ditch had disappeared in places due to the steepness of the slope. It has been argued that the lack of clear segmentation in the outer enclosure at Belle Tout is comparable with the Neolithic enclosures at Halnaker Hill and Court Hill (Russell 1996, 16-7); however, recent RCHME surveys of these sites has demonstrated the existence of causeways in both enclosures.

The slightness of the ditch supports a Neolithic date for the outer earthwork, though this could be due at least in part to later damage. The profile of the ditch varies from U-shaped (Drewett 1975, 186; Bedwin 1982, 92) to flat-bottomed (Bradley 1971, 12; Russell 1996, Fig 12), and the reasons for this are not apparent. None of the excavations revealed a V-shaped ditch, typically dated to the Iron Age, though Bradley would argue that the stock enclosure site type, of which he considers Belle Tout an example, is as yet not fully understood, and their ditches may not confirm to the Iron Age pattern. The simple unrevetted dump rampart also supports a Neolithic date, though the location of the earthwork on the crest of the hill is a typically Bronze Age or Iron Age characteristic, which is not shared by any of the known Neolithic enclosures in Sussex (Alastair Oswald, *pers comm*). The lack of Iron Age material from excavation would appear to discount an Iron Age date for the monument, although if it functioned as a stock enclosure, as Bradley suggests, the expected density of material evidence would be much lower.

The function of the enclosure, whether ritual, domestic or pastoral, is also unclear. Given the paucity of material and structural evidence recovered from the interior of the enclosure (Drewett 1979, 41), it would be easy to conclude that Bradley's stock enclosure interpretation is sound. However, such an assertion, based only on investigation of a narrow pipe trench would be dangerous. Defence can reasonably be ruled out given the slightness of the earthwork (even allowing for later damage, the rampart was probably never very high), and the sheer size of the enclosure surely makes intensive occupation an unlikely interpretation, though small scale or zoned settlement within the enclosure cannot be ruled out. Excavation might resolve this problem, though it is difficult to see where this might be targeted.

A search of the historical maps pertaining to the Belle Tout area revealed that the area appears not to have been enclosed, and there was no evidence for arable agriculture. If this was the case, and if there had ever been structures within the interior of the outer earthwork (or, indeed, the inner earthworks), it is unlikely that no trace of them would survive. None of the aerial photographs held by the NMR Air Photographs Library exhibit evidence for features within the interior of either of the earthworks. This might be considered to be unusual on a chalk site, but given the fact that the site has never been under crop when aerial photographs have been taken, and the fact that the area has rarely been photographed during the summer months, this is not surprising.

One thing is clear: the outer earthwork is unusual. The available dating evidence suggests a Neolithic date, though the problems with possible residuality of surface flint, the paucity of clearly dateable material from secure contexts and the problems with Bradley's initial dating make that interpretation difficult to prove conclusively. The enclosure would have enclosed the dry valley within which the inner earthworks are situated. The reason for the inclusion of this valley within the perimeter of the outer earthwork is not clear; it may have had a symbolic purpose, or it may have been incidental. The perceived lack of structures within the interior might suggest that there were unusual or non-functional issues underpinning the location and construction of the site, though this picture might change with detailed investigation of the interior.

The molluscan evidence, and the possible lynchet beneath the outer earthwork bank highlight the possibility of earlier ploughing, something which also seems to be evident from the excavations of the inner earthworks, where their rectangular form and breaks in slope beneath the banks strongly suggest the presence of pre-enclosure ploughed fields.

The date of the inner earthwork is less controversial. All three excavators broadly agree on a Late Neolithic-Early Bronze Age date, and Toms demonstrated that the two enclosures were roughly contemporaneous, though the smaller was the earlier of the two. The form of the larger enclosure, straddling a dry valley, and having an internal ditch is unusual. The function of the inner earthworks is also unclear. Both Toms and Bradley seem to have concluded that the enclosures were occupied for at least part of their history. The relationship between the inner and outer earthworks has not been established, and will only become clearer with a systematic programme of fieldwork incorporating both of the enclosures and their interiors.

Shaft

TV 59 NE 299: Both Toms and Bradley recorded the presence of a shallow circular depression close to the northeastern corner of the smaller of the inner earthworks (Toms 1912, 45; Bradley 1970, 313). Neither of them excavated the feature, and they were therefore unaware of its nature which only became apparent as it eroded into the sea.

A cliff fall in 1971 showed it to be a vertical chalk-cut shaft, at least 43.0m in depth and around 1.7m in diameter, tapering slightly towards the bottom (Bradley 1974, 156). There seems to have been no trace of any filling except in the top 2.0m, and no finds on the wave cut platform, suggesting that it may have been hollow for the most part. A series of 'footholds' were evident in the face of the shaft, arranged in pairs at vertical intervals of roughly 0.55m, and these were thought to be consistent with the use of a metal implement.

Chalk spoil around the mouth of the shaft was seen to overlie the adjacent smaller enclosure earthwork, with a mature topsoil having developed between bank and spoil deposition, indicating a much later date for the shaft than the enclosure, though the absence of finds was problematic.

In July 1975, a further examination was made, where the shaft was exposed in section just above the wave cut platform; at this point it was 1.0m in diameter (Stevens 1979). Stevens

suggested that the gault clay a few metres deeper was the likely target assuming that the feature was a well.

Bedwin noted that by the summer of 1980, little remained of the shaft (Bedwin 1982, 96). He collected some soil samples from the surviving section (whilst dangling from a helicopter), but the analysis of the samples does not appear to have been completed in time for their inclusion in the Bullock Down publication. However, one sample, taken from *c*20m down, contained a single sherd of Middle Bronze Age pottery.

The shaft has been shown to post-date the smaller of the inner earthworks, but its relationship to the larger inner earthwork and to the outer earthwork is not known. If it was contemporary with either of the earthworks, it could be very significant in relation to the function of the site(s). Similar shafts, generally of Iron Age date, but occasionally earlier have been recorded, often with upright stakes in the bottom, complete and broken pottery vessels and bones indicative of cuts of meat (*cf* Viereckschanzen) (Peter Topping, *pers comm*). The ritual significance of these shafts is unclear, but they are often associated with square or rectilinear enclosures. The lack of information regarding the base of the shaft at Belle Tout is unfortunate, since it may well fall into this category.

Other features

Belle Tout Lighthouse

The granite lighthouse, which was originally called the Beachy Head Lighthouse, was built in 1831 by Stevenson. Problems with heavy mist which obscured the light led to its being de-commissioned earlier this century when the one at Beachy Head (higher, and therefore not affected by the lower-lying coastal mist) was constructed. The Belle Tout Lighthouse was partially damaged during World War II when it was used as a naval gunnery target; it became a private residence after the war when the brick extension was built.

Barrows

At least three round barrows were thought to lie within the outer earthwork, only one of which survives today (TV 59 NE 55); several more lie on the lower ground below Belle Tout, though these were not investigated as part of the RCHME survey.

TV 59 NE 55: At TV 5594 9581 a round barrow, which showed evidence of small scale excavation was surveyed in 1996. This may have been one of the barrows mentioned, though not excavated, by Giddy (1814).

TV 59 NE 53: At TV 5552 9575 was the site of a round barrow which had apparently almost completely disappeared over the cliff by 1930. The barrow was subject to limited excavation in 1813, and the excavator refers to several tumuli at the western end of Belle Tout (Giddy 1814). The barrow was apparently larger than the others, which, given that it was no more than 36ft (10.9m) in diameter, suggests that the others were somewhat smaller. This barrow had completely disappeared by 1996.

TV 59 NE 90: At TV 5770 9582 the Ordnance Survey recorded the presence of a barrow on the basis of oral information from Bradley in 1970. Subsequent OS field investigation failed to find anything at that location or in the immediate vicinity. The RCHME survey failed to find any evidence of a barrow at this location.

6. SURVEY AND RESEARCH METHODS

The archaeological survey of Belle Tout was carried out by Moraig Brown and Alastair Oswald of the RCHME. Control for the survey was supplied using a Wild TC1610 Electronic Theodolite with integral EDM. Data was captured on a Wild GRM 10 Rec Module and plotted via computer using Trimmap software on a Calcomp 3024 plotter. Archaeological detail was surveyed at 1:1000 scale with tapes using conventional graphical methods. The report was researched and written by Moraig Brown, with assistance from Martyn Barber and Alastair Oswald, and edited by Peter Topping.

The site archive (NMR Number TV 59 NE 56) and a copy of this report have been deposited in the archive of the RCHME at the National Monuments Record Centre, Kemble Drive, Swindon SN2 2GZ, to where further enquiries should be directed.

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7. BIBLIOGRAPHY

Bedwin 1982 Excavations at Belle Tout, Eastbourne 1979-80 in P Drewett (ed) *The Archaeology of Bullock Down, Eastbourne, East Sussex: The Development of a Landscape* Sussex Archaeological Society Monograph **1**, 90-5 (Lewes)

Bewley R 1994 *Prehistoric Settlements* (English Heritage & Batsford)

Bradley R 1970 The excavation of a Beaker Settlement at Belle Tout, East Sussex, England *Proceedings of the Prehistoric Society* **36**, 312-79

Bradley R 1971a An Iron Age Promontory Fort at Belle Tout *Sussex Archaeological Collections* **109**, 9-19

Bradley R 1971b Stock raising and the origins of the Hillfort on the South Downs *Antiquaries Journal* **51**, 8-29

Bradley R 1974 A chalk-cut shaft at Belle Tout *Sussex Archaeological Collections* 112, 156

Bradley R 1982 Belle Tout - Revision and Reassessment in P Drewett (ed) *The Archaeology of Bullock Down, Eastbourne, East Sussex: The Development of a Landscape* Sussex Archaeological Society Monograph **1**, 62-71 (Lewes)

Budgen R 1724 *Actual Survey of the County of Sussex*

Coates R 1979 Belle Tout *Sussex Archaeological Collections* **117**, 264

Drewett P 1975 A Section through the Iron Age Promontory Fort at Belle Tout *Sussex Archaeological Collections* **113**, 184-6 .

Drewett P (ed) 1982 *The Archaeology of Bullock Down, Eastbourne, East Sussex: The Development of a Landscape* Sussex Archaeological Society Monograph **1** (Lewes)

Drewett P, Rudling D & Gardiner M 1988 *A Regional History of England: The South-East to AD1000* (Longman, London)

Giddy D 1814 (note dated June 24 1813 on barrow excavation at Berling Gap, near Eastbourn) *Archaeologia* **17**, 338-9

Jessup FW 1966 *Kent History Illustrated* (Kent County Council, Maidstone)

Lane Fox AH 1869 An Examination into the Character and probable Origin of the Hill Forts of Sussex *Archaeologia* **42**, 27-52

Ordnance Survey 1874 1st Edition 25" Sussex Sheets LXXXII.3 & LXXXII.4

Ordnance Survey 1961 1:2500 Plans TV 5595, 5695 & 5795

Ordnance Survey nd 1:10560 Plan TV 59 NE

Mercer RJ 1990 *Causewayed Enclosures* (Shire Archaeology)

Russell M 1996 *Belle Tout, East Sussex* Unpublished Archaeological Investigation Interim Report (Bournemouth University)

Stevens L 1979 A chalk-cut shaft at Belle Tout, Eastdean *Sussex Archaeological Collections* **117**, 260

Toms HS 1912 Excavations at the Beltout Valley Entrenchments *Sussex Archaeological Collections* **15**, 240-2

Victoria County History 1905 *A History of Sussex*, **1**

Unpublished sources

NMR APs

106G/UK/725/3035-6 10-SEP-1946

MAL/74047/263-4 21-JUL-1974