THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

Carno Windfarm, Trannon Moor, Powys

AN INTERIM REPORT ON THE ARCHAEOLOGICAL EXCAVATIONS OF MAY 2000

CPAT Report No 365

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Report for National Wind Power and Powys County Council

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1 INTRODUCTION

1.1 The Carno Windfarm occupies an area of 7.5km^2 on Trannon Moor to the south of Carno, Powys, in what was southern Montgomeryshire. The windfarm opened in 1996, and among the arrangements between the then Montgomeryshire District Council and the developers, National Wind Power, at the time that planning consent was granted, was one that led the latter to make an annual grant for environmental work within the area of the windfarm.

1.2 The potential impact of the windfarm upon the archaeology has been the subject of several investigations by the Clwyd-Powys Archaeological Trust, who conducted the initial historic landscape assessment of the windfarm site (Owen 1993) and subsequently undertook both an excavation and a watching brief before and during construction work (Silvester 1995; Hankinson 1996). Further stages of investigation were undertaken on behalf of Powys County Council under the grant scheme agreed with National Wind Power, in the form of a historically-oriented landscape study in 1997 (Hankinson *et al* 1998), and a detailed measured survey of the more significant archaeological sites, undertaken during 1999 (Jones and Owen 1999).

1.3 The present programme of work was developed early in 2000 and agreed with Powys County Council, who administered the funding. It allowed for the evaluation of specific sites within the confines of the windfarm to determine their nature, dating and state of preservation. The excavations were undertaken during May 2000 by staff from CPAT with the assistance of three archaeologists from the Sectie Archeologie Gemeente Zwolle, Netherlands.

2 TOPOGRAPHICAL AND ARCHAEOLOGICAL BACKGROUND

2.1 The area of the windfarm is dominated by the Twr Gwyn ridge which descends from Bryn Amlwg in the north (SN 922 973) to Bryn yr Oerfa in the south (SN 915 945), and acts as a watershed between the upper reaches of Afon Cledan to the east and Afon Trannon to the west. Another ridge from Bryn yr Oerfa across Esgair Draenllwyn to Bryn yr Aran (SN 935 955) forms a watershed between Afon Cledan on the north-west and Afon Gerniog on the south-east. Except for Afon Trannon which runs south-westwards, the aforementioned streams together with Afon Cwm-calch represent the dominant drainage pattern flowing south-eastwards into the Carno valley.

2.2 The windfarm occupies moorland, divided into large tracts of land by wire fences, much of which has been improved at some point in the past. South of the windfarm is a continuous forestry plantation extending over several square kilometres.

2.3 In spite of the absence of habitations, Trannon is an archaeologically significant area. Several prehistoric burial cairns and a stone alignment have been known since the mid-19th century, and other cairns were identified during the preliminary survey (Owen 1993, 3). In addition, the discovery of two worked flints during the excavations in 1995 (Silvester 1995) confirmed a level of domestic activity on the moors during the prehistoric period which might be anticipated but has been recognised only rarely during specific field studies, as with the work on Carreg-y-big a few miles to the north of Carno (Silvester and Davies 1992). A circular enclosure was thought to be of later prehistoric date and, traversing the area, was a metalled road which has the appearance of a Roman road, for which a case was made after excavation in 1995 (Silvester 1995). However more recent work cast some doubt on this early attribution (Thomas in Hankinson *et al* 1998, section 4.3). From more recent times there are the signs of such traditional upland activities as summer pasturing (in the form of a summer dwelling or *hafod*) and the remains of peat cutting, the latter particularly extensive as an aerial photo mapping programme for the moor demonstrated in the previous report (Hankinson *et al*. 1988, fig. 2).

3 THE EXCAVATIONS

3.1.1 The excavations were undertaken over a two-week period in early May 2000, examining five sites which had been previously identified during earlier phases of fieldwork, together with one possible new site which came to our attention only during the fieldwork programme in 1999. The aim in every case was not to conduct a full excavation of any particular site but to answer specific questions about the monument by removing the surrounding deposits - such as turf, peat and loose rubble - and meticulously recording the stonework revealed, and, except in one or two instances not to remove any material that might be considered to be part of the original structure.

3.1.2 All the excavations were undertaken by hand, with a full written, drawn and photographic record being maintained. PRN numbers refer to record numbers in the regional Sites and Monuments Record. Numbers in brackets in the following report refer to individual contexts, that is the layers and deposits that go to make up the monuments, and the soils beneath and around them. These numbers will appear on the publication plans that accompany the final report on the work. The site archive (see Appendix 1) will be deposited with the Sites and Monuments Record, CPAT, Welshpool, and the few finds have temporarily been retained for further study pending discussions with the landowners as to their final deposition.

3.1.3 In addition to the excavations an evaluation of the palaeoenvironmental potential of the windfarm area was commissioned from Professor M Walker of the Department of Geography, University of Wales, Lampeter. His report is included in this report as Annex 1.

3.2 PRN 1396 Twr Gwyn Bach Cairn — SN9188995176 Bronze Age

3.2.1 The disturbed remains of this feature had previously been interpreted as those of a possible building (Owen 1993), situated immediately to the south-east of the possible Roman road (PRN 7755). However, a report from the mid-19th century recorded the site as one of a group of cairns that had already been dug into at a time beyond the memory of the eldest inhabitant of the area (Hamer 1868, 266-7). The landowner, Mr Thomas, also believed it to be a cairn, an attribution reinforced by the fact that the large and much more obvious cairn on the ridge 800m to the north is known as Twr Gwyn Mawr (PRN 910).

3.2.2 A single trench was excavated across the site, measuring 9m in length and up to 2m wide. The removal of the turf and peaty topsoil (1) revealed a mass of mostly large stones (3) forming a mound or bank with a pronounced depression in the centre which was relatively stone-free. At the south-western end of the trench a noticeably stone-free area was interpreted as a former excavation trench which appeared to have cut into the monument from the west, removing the stone that made up the bank. The only find consisted of a small fragment of burnt flint (Find no. 1) from the topsoil.

Discussion

3.2.3 The results from this excavation confirmed that the site is almost certainly that of a Bronze Age burial cairn which has been extensively disturbed either in antiquity or by antiquarian investigations. There is presently insufficient evidence to determine the original nature of the cairn. The central depression gives the impression of a ring cairn, that is a circular bank of stone with an open area at the centre, yet it is perhaps more likely that it may have been an ordinary burial cairn consisting of a simple mound of stones. The present appearance is undoubtedly due to previous excavation, with mounds of stone around the periphery of the monument resulting from the removal of much of the cairn interior.

3.3 PRN 4308 Trannon Ring cairn Ring cairn — SN9197595718 Bronze Age

3.3.1 Previously interpreted as an enclosure of uncertain date, the excavation was designed to investigate the alternative theory that this might be a ring cairn. The monument measures *c.*17.5m in diameter, and is defined by a low earth and stone ring bank 3-4m wide and up to 0.3m high. There was a gap, possibly an entrance on the south side, and another possible entrance opposite it on the north, hence the view that it might be an enclosure. Two excavation trenches were sited to investigate firstly a

setting of edge-set stones, which resembled a cist within the interior of the bank, and secondly the possible southern entrance.

3.3.2 The turf was stripped over an area of 3.0 x 2.0m surrounding the stone setting, together with up to 0.12m of peaty topsoil (300), revealing four edge-set stones defining what was clearly a cist (302), set unexpectedly within a low cairn (301) composed of small stones (plates 1 and 2). An extension of the trench to the west, to incorporate a section across the ring bank, revealed that the edge of the cairn lay 0.80m inside the bank, giving dimensions for the cairn of roughly 3.6m east-west by 4.8m north-south. The only find consisted of a fragment of iron horseshoe (find no. 3) recovered from a layer of very dark grey-brown peaty silt (310), which overlay the outer edge of the cairn and the inner edge of the ring bank. The cist appeared to have been disturbed in antiquity, with three stones sloping and obviously displaced. Originally it measured approximately 0.56m north-south by 0.32m east-west, internally, and was 0.38m deep. The upper fill of the cist (304) consisted of a brown, firm, silty loam, and produced a small fragment of burnt flint (find no. 2). The lower fill (314) consisted of dark grey-brown silt, containing a significant quantity of small fragments of calcined bone and flecks of charcoal, samples of which were retained for possible future analysis and radiocarbon dating (find no. 5). In the base of the cist, a shallow roughly circular depression (313) 0.15m across and only 9cm deep was also filled by layer 314. It is possible that the depression may once have held a burial urn, which could have been robbed with at least part of the contents redeposited within layer 314. Unfortunately no fragments of pottery were recognised.

3.3.3 The section through the ring bank (plate 3) revealed it to be composed of small stones, generally 20cm across, within a matrix of peaty loam, but with larger stones forming the outer edge. The original width of the bank at this point was *c.*3.2m, though it survived to a height of only 0.25m. Beneath the bank, an intermittent layer of grey-brown gritty silt (311) containing flecks of charcoal (find no. 6), may be the remains of the original Bronze Age land surface, buried beneath the bank.

3.3.4 The investigation of the possible southern entrance comprised the removal of the turf over an area of up to 4.8 x 3.0m (plate 4). The peaty topsoil (300) was generally shallow, barely covering the stone make-up of the ring bank (308), and filling the interstices between the stones. Two large stones were visible through the turf prior to excavation, situated on the west side of the possible entrance. It was evident from the excavation though, that the large stones did not form the west side of an entrance as the bank material extended beyond them, giving only a narrow break in the bank (*c.* 0.5m wide) through which the natural subsoil was visible. Although not fully excavated, there appeared to be no evidence to suggest that the break in the bank was a deliberately created entrance, and the gap may therefore have been formed at least in part by animal erosion. At this point there was no indication of an inner or outer kerb to the bank, which survived to a maximum of 3.2m wide and only 0.2m high.

Discussion

3.3.5 The results from the excavations have provided significant new evidence which allows a much better interpretation and understanding of the monument. Rather than being a possible enclosure, it is now clear that the site is part of the general complex of Bronze Age funerary and ritual monuments forming a distinct group at the eastern edge of the Twr Gwyn ridge. The site consists of a ring cairn up to 17.5m in external diameter, with a bank up to 3.2m wide. The interior has a small cairn measuring *c.*3.6 x 4.9m, set eccentrically on the west side, with a central cist within. A visual re-examination of the internal topography of the ring cairn suggests that there may be another possible eccentric cairn on the east side, measuring perhaps 4.5m in diameter.

3.4 PRN 4309 Careg Lwyd Stone Alignment SN9194695718
Stone row **Bronze Age**

3.4.1 Situated on a moderate slope, the stone row (plate 5) is orientated north-south and appears to terminate at its southern end in a large recumbent stone some 3m long by 1m square. This monolith lies in a hollow which, although enhanced by animal erosion, may have resulted from deliberate excavations to reveal the extent of the stone. It is uncertain as to whether or not the stone ever stood upright, or whether it is in its original location. The row itself can be traced for 21m to the north of this stone, comprising 6 or 7 stones between 0.8 and 1.5m in length, together with numerous small stones, some of which may be natural. It had previously been suggested that the row might have originally been double, in that the configuration of the visible stones suggested two rows and it was this assertion that prompted the evaluation.

3.4.2 A single trench measuring 4m north-south x 3.3m east-west was excavated at the southern end of the row, to incorporate three of the recumbent stones. The removal of 0.15m of topsoil (400) revealed the disturbed surface of the natural subsoil (401), consisting of very dark grey-brown clay silt. The holes in which two of the stones had been set (403 and 406) were evident at this level, as were several areas of disturbance surrounding the recumbent stones which might well have been the result of animal disturbance. A thorough cleaning of the area down to the undisturbed natural subsoil revealed the original settings for the three stones. The largest, southern stone (405) had fallen to the west and measured 1.5m in length by 0.9m wide and up to 0.32m thick, and had originally been set within a pit (406) containing possible packing stones. The middle stone (408), which had also fallen to the west, measured 1.6m long, 0.7m wide and up to 0.37m thick, originally set within a pit (406), which also contained probable packing stones. The northern stone (411) had fallen to the east and measured 0.98m long by 0.36m wide and at least 0.25m thick, originally set within a pit (409), but with no indication of packing stones. Several shallow depressions along the eastern side of the excavation (412, 414, 416) may have resulted from the removal of small naturally occurring stones set within the subsoil.

Discussion

3.4.3 It is clear from the excavation that the stone row was a single alignment, and that a number of the stones have fallen in opposing directions (ie to the east or west), which had given the impression that it might have been a double row. No finds or other dating evidence were forthcoming from the excavations.

3.5 PRN 4310 Trannon Moor Cairn — SN9203296089
Ring cairn — Bronze Age

3.5.1 Prior to excavation the cairn appeared as a sub-circular ring roughly 3.5m in diameter with a number of individual stones projecting through the turf cover. The site appeared to be best preserved on the eastern side, implying that there might have been some disturbance on the west.

3.5.2 The initial investigation consisted of a single trench (4.6 x 1.2m) aligned roughly east-west, located across the centre of the cairn. This was later extended to encompass the whole site, which was stripped of turf and topsoil (500) over an area of up to 4.8 x 4.6m, to reveal the true form of the cairn, but without any intrusive excavation.

3.5.3 The removal of the topsoil revealed a small ring cairn composed of stones on average 0.4m across. The cairn consisted of a ring of stones which may originally have been *c.* 1.0m wide and up to 3.5m in diameter. The irregular appearance of the cairn, particularly prior to excavation, was due to the some disturbance of stones on the eastern side, which had been spread outwards, with one large stone from the west side having been displaced inwards. Cleaning of the interior revealed the natural subsoil (502) with some degree of animal disturbance, but no suggestion of a central burial pit. No finds were recovered from the excavation.

Discussion

3.5.4 The excavation has confirmed that the site is a small ring cairn forming part of the wider funerary and ritual complex on the moor.

3.6 PRN 7741 Bryn yr Aran Cairn — SN9328895804
Cairn — Bronze Age

3.6.1 The earthwork remains, which consist of a low curving bank with a raised stony platform to the east, have been previously identified as either a possible ring cairn or a platform of uncertain date. A single trench (9.4 x 1.2m) was excavated across the site in an attempt to determine its true nature and dating.

3.6.2 The removal of the topsoil (600) revealed two distinct features. At the western end of the trench the curving bank, visible as an upstanding earthwork, was seen to be composed almost entirely of small stones forming a bank which at this point measured *c.* 2.0m across and up to 0.25m high. To the east the raise platform visible on the surface consisted of a dense layer of stones (604) forming a low cairn

perhaps 5.0 to 5.3m across and up to 0.35m high. Although no deliberate structure was visible within the surface of the cairn an area of more edge-set stones was noticed along its western edge, but the significance of these possibly structural stones, if any, could not be determined. The gap between the curving bank and the cairn was up to 1.6m across, within which a layer of flat angular stone (606) was visible against the inner edge of the bank, and this was overlain to the east by a layer of yellow-brown clay-silt (602) which butted against the western edge of the cairn. No finds or other dating evidence were recovered.

Discussion

3.6.3 Although the excavation has provided significant new evidence the precise nature of the site remains uncertain. It seems probable that the site comprises at least two phases of activity, consisting of a curving bank, which may be part of a ring cairn, together with a roughly circular cairn. Although from the form of the monument it is tempting to suggest that the ring cairn may be the earlier phase, subsequently partly overlain by the ordinary cairn, this remains to be demonstrated and further excavation would be required to provide the evidence. What is certain, however, is that this is a prehistoric funerary monument and not an indeterminate platform.

3.7 PRN 80131 Careg Lwyd Ring Cairn ? SN9191895710
Ring cairn ? Bronze Age

3.7.1 The slight earthworks lying on a rise to the west of the stone row (PRN 4309) had been noted in 1999 as a potential archaeological site, but had escaped attention during the earlier surveys because of their fugitive appearance. A single trench was excavated across the site to determine whether or not the features were of archaeological significance.

3.7.1 The removal of the topsoil (200) revealed a possible low bank of small stones (201) up to 1.8m across and only 0.15m high, at the eastern end of the trench. A group of large boulders (205) in the central area gave the initial appearance of being structural, possibly forming a cist, but on further investigation these were shown to be set firmly within the subsoil and therefore likely to be entirely of natural origin. An extension of the trench to the north was intended to investigate further the possible bank, which could be traced at ground level as a curving terrace. Excavation revealed a substantial bank composed of small stones within a matrix of peaty loam. The bank was at least 3m wide and up to 0.3m high externally. The western end of the original trench contained no evidence for the continuation of the bank as might have been expected from a projection of its curve.

Discussion

3.7.2 The results from the excavation have demonstrated that the slight earthworks are the remains of an archaeological site. The nature of the curving bank, and the proximity of the site to the prehistoric funerary and ritual complex on the Twr Gwyn ridge, suggest that these are the remains of another ring cairn which may have utilised a natural rock outcrop as a focus. An earthwork survey suggests that the cairn may be up to 7.3m in diameter.

4 CONCLUSIONS

4.1 The limited excavated programme on Trannon Moor was established with a particular set of objectives. Of five that were identified in the lead up to the work four were achieved, namely the re-interpretation of the enclosure (PRN 4308) as a ring cairn, the confirmation of the existence of another ring cairn (PRN 80131) to the west of the stone row, the recognition that the 'building' known as Twr Gwyn Bach (PRN 1396) was indeed another cairn, and fourthly that the depth of peat deposits on Trannon Moor offers enormous potential for decoding the appearance and vegetation of the local landscape over the last seven thousand years. The clarification of the nature of two other cairns (PRN 4310 and 7741), together with that of the stone alignment (PRN 4309) has further added to the information now available.

4.2 The excavations have demonstrated that it is not always possible to determine the nature and condition of a site from its surface appearance. As with the excavations that were conducted at Carneddau 4km north-east of Carno (Gibson 1993), the interpretation of three of the sites

investigated at Trannon have necessitated the revision of accepted views on the nature of the surface evidence in the light of excavated evidence.

4.3 The excavations have strongly reinforced the importance of the Twr Gwyn ridge as a focus of prehistoric ritual and funerary activity. With the identification of the enclosure as a ring cairn and the demonstration that there is another previously unrecognised cairn at the end of the ridge, we can now witness a significant concentration of sites in a small area of little more than 150m diameter. Add to these the number of outlying cairns, and it is quite evident that this is one of the more important prehistoric complexes in central Powys. It is also evident that their location is important in relation to the valley of Afon Cledan below and this element of siting is an aspect that will necessitate further consideration in the final assessment.

4.4 Disturbance to the monuments on the ridge was deliberately eschewed. They form a coherent and visible group and in respecting their integrity we have ensured that in the future others can look at them and speculate on their purpose.

5 ACKNOWLEDGEMENTS

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APPENDIX 1

TRANNON MOOR (CARNO WINDFARM), POWYS
REPORT ON THE PALAEOENVIRONMENTAL POTENTIAL OF THE LANDSCAPE IN THE AREA OF THE CARNO WINDFARM

by M.J.C. Walker

AIMS AND OBJECTIVES

The terms of reference were to undertake 'a preliminary reconnaissance of the environmental deposits on the moor, with a view to formulating recommendations for frameworking further analyses'. The principal source of palaeoenvironmental information will be found in peat sequences, which preserve a pollen and plant macrofossil record. These data can be used to reconstruct former vegetation patterns, and vegetation changes shown in the records will reflect both natural and anthropogenic processes. The abundant archaeological remains (ring cairns, stone row cist etc.) on the uplands of Trannon Moor indicate a human presence in the area, probably during Bronze Age times. The vegetational record revealed by the palaeoecological evidence will provide an environmental context for these human activities.

METHODS

The aim of the reconnaissance was to locate deep peat sequences which could, in due course, be sampled in detail for pollen and plant macrofossil evidence. Initially, attention was focused on the highest parts of the moor in the vicinity of the previously excavated stone row and ring cairn, but the western area of the Windfarm Site was also investigated, particularly in the area to the south-west where the remains of a Roman Road had tentatively been identified. Likely sites were explored by depth probing to check peat depth, and basal cores were extracted using a Russian peat sampler to check the stratigraphy of the lower parts of some of the deeper profiles.

RESULTS

Ten potential areas were investigated, and these are shown (by number) on Fig. 2. The sites are divided into three categories: A. Sites of considerable environmental potential; B. Sites of possible environmental potential; C. Sites of limited environmental potential. The details of the investigated sites are as follows.

Category A sites

1. This is an extensive area of *Sphagnum-Juncus* blanket mire immediately to the north of turbines A20 and A22. There is evidence of former peat cutting, but there are also large expanses of apparently uncut blanket peat. The peat depth is in excess of 3m and, in places is as deep as 3.5m. A test core showed predominantly *Eriophorum* peat with woody fragments at the base. The site is only 300 m north of the Twr Gwyn cairn, and is within 500m of the other monuments on the crest-line and eastern side of the high ground to the south.

2. Immediately to the north of the road that runs east-west near the southern boundary of the Wind Farm, and immediately to the north of turbines B8 and B6, is a large area of *Calluna vulgaris--Eriophorum* blanket mire. Test bores showed that almost 4m of peat is present, and a basal core revealed silty-clays, overlain by amorphous organic mud (mor) which was, in turn, overlain by *Eriophorum* peat. These peats contained woody fragments. The site is slightly less than 1 km from the main group of monuments on the high ground to the east, but is immediately adjacent to what has been tentatively identified as the remains of a Roman road immediately to the south.

3. On the crest of the ridge immediately to the west of turbine A21 is a an area of *Calluna vulgaris-Eriophorum* blanket mire. Test bores showed this to have a maximum depth of 2m, with *Eriophorum* peat present throughout the profile. This area has been heavily cut-over, but this has left exposed faces in the peat from which monolith samples could easily be obtained. Moreover, this area of peat is immediately adjacent to the main group of archaeological monuments.

Category B sites

4. In the north-western area of the Windfarm, and immediately to the south of the access road (turbines B25 and B26) is a spread of *Sphagnum-Juncus* mire. This has been very heavily cut-over and the maximum peat depth is of the order of 2.5m. The peat is relatively dry and surface excavation (perhaps down to 1 m or so) might be possible here. However, the site is some distance (over 1 km) from the main group of archaeological monuments.

5. In the far north-west of the Windfarm are large areas of *Calluna vulgaris-Eriophorum* blanket mire. Again, while these may offer environmental potential, they are away from the main group of archaeological sites.

6. At the head of the valley that trends westwards from the main access road immediately top the west of turbine A11 and to the south of A19, is marshy area in which peat has accumulated. Again, there is evidence of peat cutting, but in parts there are (apparently) undisturbed areas where up to 1.8m of peat are preserved. Although the peat sequence is less thick than at other sites, this site is very close to (within 200m of) the rings cairns and associated monuments immediately to the east.

Category C sites

7. This is an area of impeded drainage in the valley that drains to the east to the north of turbine A23. Almost 1.5m of silty peat has accumulated here, but a stream drains the site and the valley floor has been extensively cut-over. There *may* be potential here, and the site does lie within 200 m of the recently excavated ring cairn to the south of turbine A23, but extensive field-survey would be necessary to establish whether the site does indeed contain a sequence of palaeoenviromental value.

8. The broad valley floor immediately to the west of turbine B3 looked to be promising but, in the event, less than 1m of peat was found to be present here. Again, further fieldwork further to the west may reveal a deeper peat sequence, but the site does seem to have limited palaeoenvironmental potential.

9. The north-south trending valley to the north of Trannon farm again looked to have potential, but here also less than 1m of very silty peat and clay was found.

10. A preliminary assessment was carried out on the deposits in the valley that trends north-eastwards towards the proposed site of the Visitor Study Centre. Although peats are present along the valley floor, these appear to be mostly shallow (less than 1m), and probably have relatively limited palaeoenvironmental potential.

EVALUATION

The three Category A sites described above all possess considerable palaeoenvironmental potential. In the uplands of South Wales, blanket peat initiation has been dated to Bronze Age times (Chambers 1981), whereas in mid-Wales, a Neolithic date has been suggested (Moore 1973). However, more recent studies of high-altitude blanket peats in the mid-Wales uplands point to a much earlier date for peat initiation, perhaps around 8000-9000 calendar years ago (Buckley 2000). The latter work also shows that peat accumulation only ceased around 1000 years ago. The presence of woody material in the lower parts of two of the Trannon peat profiles is especially interesting, as it shows the local presence of woodland on these high moors which have long been devoid of trees. Woodland clearance in the Welsh uplands has generally been ascribed to the Bronze Age (e.g. Moore 1968; Moore and Chater 1969; Chambers 1982; Chambers and Price 1988; Smith and Cloutman 1988) and this tends to be confirmed by a radiocarbon date of 3130 ± 70 BP on woodland decline in a pollen diagram from the nearby Carneddau area (Walker 1993). Hence, if a woodland episode is preserved in the lower parts of the Trannon peat profiles, this must predate the major woodland clearance episode. Clearly, the age of these basal peats cannot be established on present evidence, but there would seem to be good grounds for believing that they extend back into Neolithic and, perhaps, even into Mesolithic times.

The conclusion must be, therefore, that there is a strong possibility that the Trannon peats contain a record of environmental change for a substantial part of the prehistoric period. As such, pollen (augmented, perhaps, by plant macrofossil data) would provide an excellent palaeoenvironmental

context for the archaeological evidence from the area. The fact that the peats can be readily dated by radiocarbon would also provide the requisite timeframe.

RECOMMENDATIONS

It is recommended that detailed palaeoenvironmental work, involving pollen analysis, and possibly plant macrofossil analysis, supported by a full programme of radiocarbon dating, is undertaken on the upland peats on Trannon Moor. Attention should be focused primarily on the three category A sites described above, although further investigative work might usefully be undertaken on site 6, in view of its proximity to the archaeological monuments. The previous study of the Carneddau area (Walker, 1993) demonstrated the value of investigating a network of sites, and it is recommended that a similar strategy be followed for Trannon Moor.

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APPENDIX 2

SITE ARCHIVE

65 Context record forms
6 material record forms
4 A1 site drawings, nos 1-4
9 A4 site drawings nos 10-18

6 black and white negative films, contacts and prints, nos 951-956
2 colour slide films, nos CS00/30-31
Photographic catalogue

Digital survey - Penmap/CAD/DXF formats

Finds

1	Flint flake
2	Flint flake, context 304
3	Iron horseshoe, context 310
4	Iron object, context 400
5	Calcined bone/soil sample, context 314
6	Charcoal sample, context 311

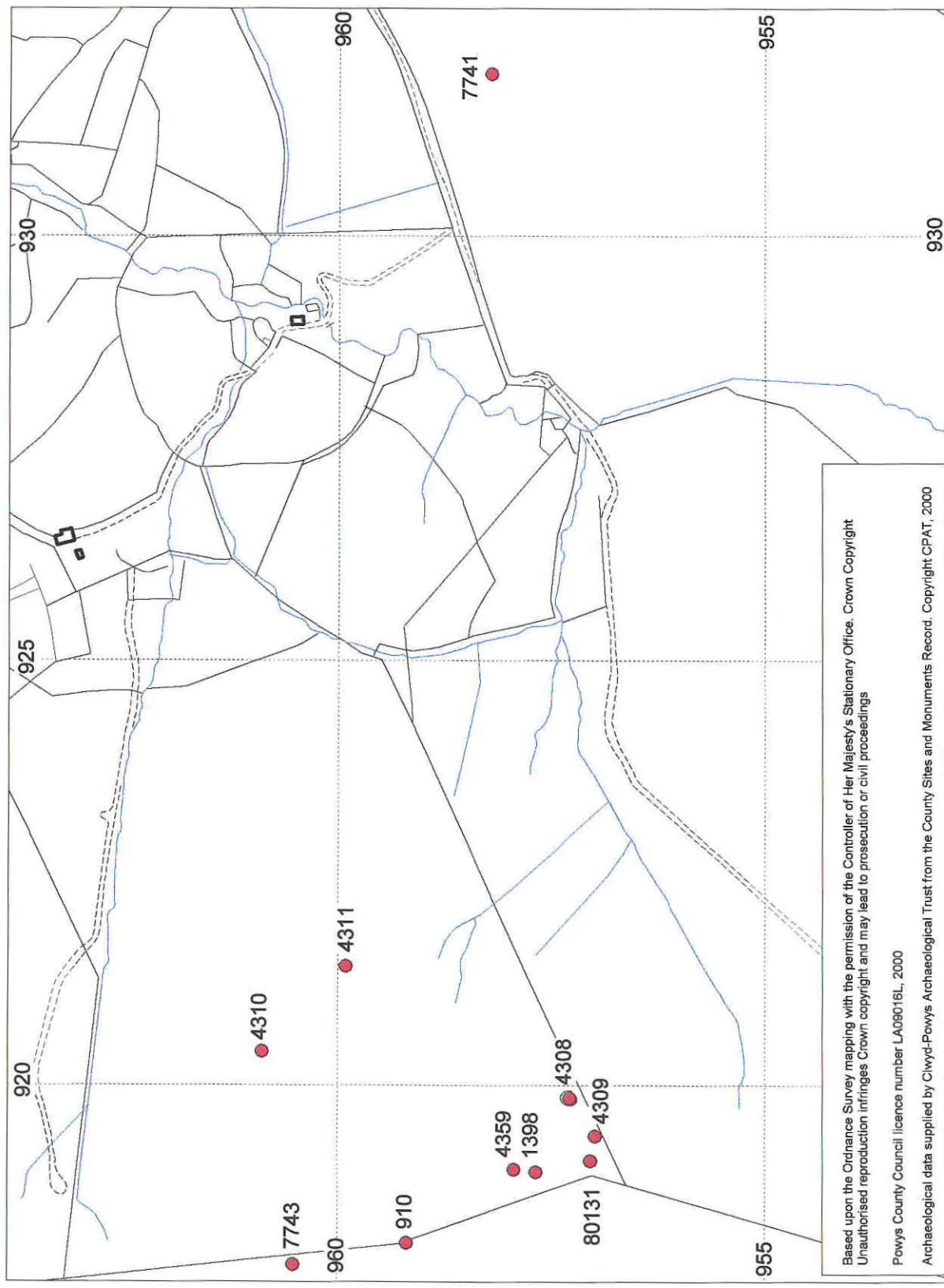

Fig. 1 Prehistoric Funerary and Ritual Monuments on Trannon Moor

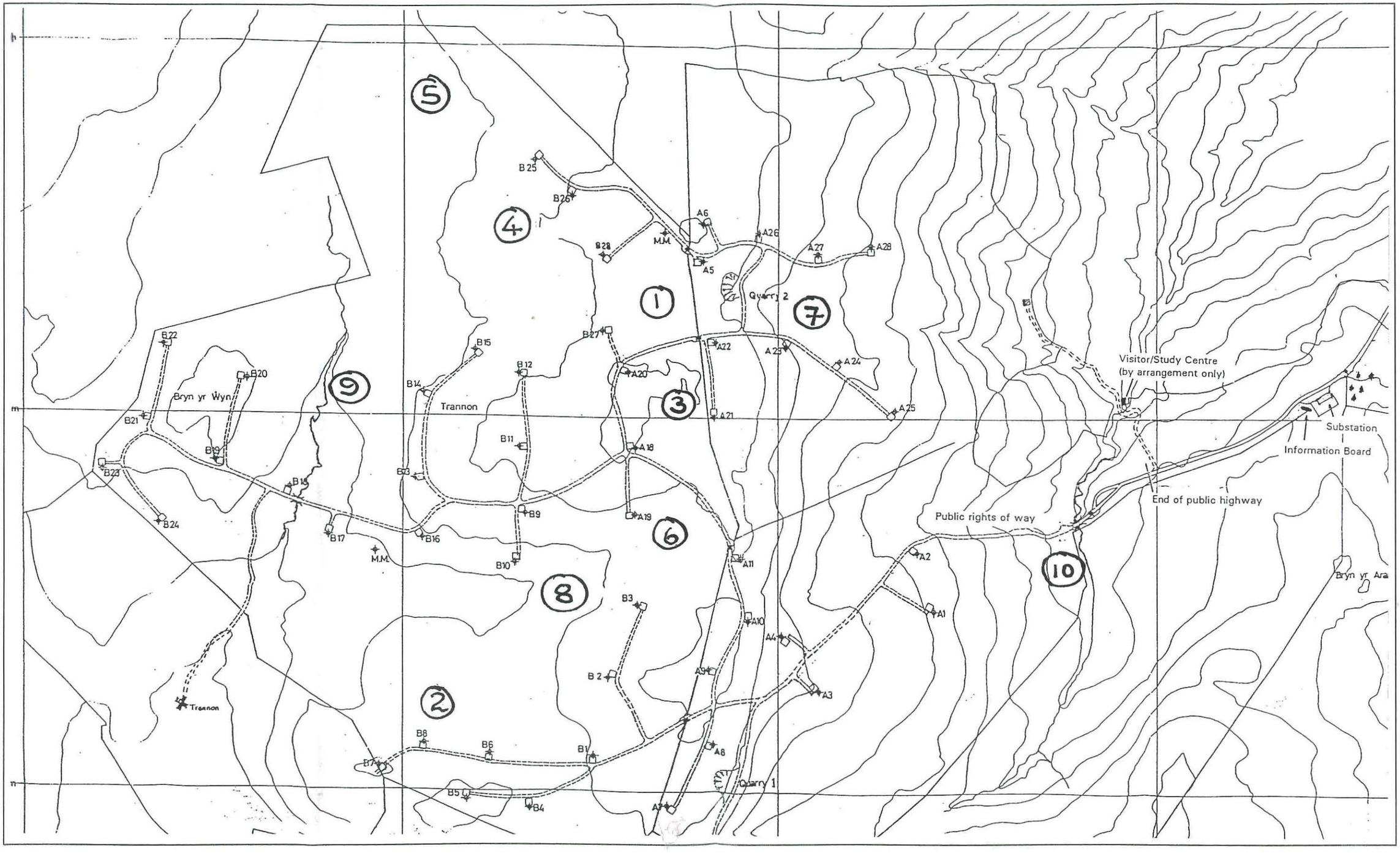

Fig. 2 Location of palaeoenvironmental samples

Plate 1 Trannon Ring Cairn PRN 4308 from E showing cairn 301 and cist 302. Photo CPAT 952.17

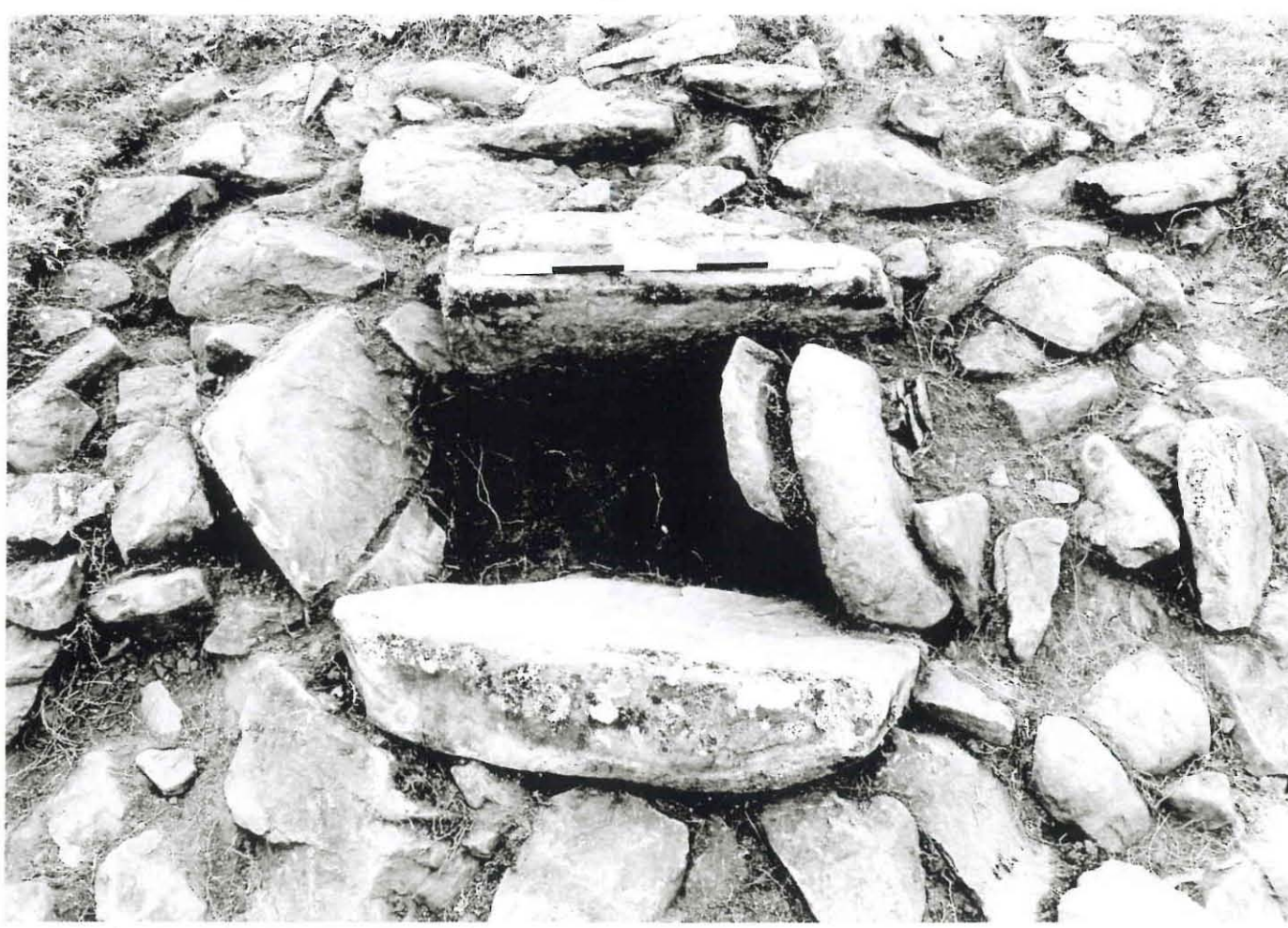

Plate 2 Trannon Ring Cairn PRN 4308 from E showing cist 302. Photo CPAT 952.8

Plate 3 Trannon Ring Cairn PRN 4308 from N showing ring bank 303. Photo CPAT 952.19

Plate 4 Trannon Ring Cairn PRN 4308 from W showing ring bank 308. Photo CPAT 953.2

Plate 5 Careg Lwyd Stone Row PRN 4309 from N. Photo CPAT 955.22

Plate 6 Trannon Moor Cairn PRN 4310 from S. Photo CPAT 954.19

Plate 7 Bryn yr Aran Cairn PRN 7741 from W showing bank 601 and cairn 604 beyond. Photo CPAT 955.34

Plate 8 Careg Lwyd Ring Cairn ? PRN 80131 from N showing bank 201. Photo CPAT 952.8