II

GROUPS OF SMALL CAIRNS AND THE EXCAVATION OF A CAIRNFIELD ON MILLSTONE HILL, NORTHUMBERLAND

George Jobey

INTRODUCTION

GROUPS OF small cairns are far from being spectacular field-monuments; their importance for the archaeological record lies rather in the persistency with which they occur over many parts of the northern uplands. The number of cairns in any one group may range from a mere handful to some hundreds, often scattered at random over extensive areas. From field-survey alone it has not always been possible to distinguish unequivocally between those that may be burial-monuments and those which may have arisen as a result of land-clearance for agricultural purposes. Moreover, even where the latter has seemed to be assured, the problem of assigning contexts to a basic and long-lived agricultural practice has often remained unresolved (e.g. Graham, 1957; Feachem, 1973; *RCAM*, 1978).

In Northumberland cairnfields have been surveyed in detail or delineated more generally on O.S. six inch maps since the mid-1960s, when attention was first drawn to their possible extent in the county (Jobey, 1968). The programme was initiated in the belief that many were probably the results of clearance for prehistoric cultivation, and, as such, might lead to the recognition of domestic sites in periods where the evidence had been scarce or entirely lacking. An additional incentive was also provided by the fact that many of the areas where cairnfields were known or suspected to exist were those which were most vulnerable to the inexorable spread of modern afforestation.

For the purposes of the present report, and until more comprehensive treatment can be accorded to them, local cairnfields can be divided into the following categories. The first consists of comparatively small groups where individual cairns, are well formed and sometimes kerbed; these have all the hallmarks of funerary monuments and occasionally have been proved to be so in excavation, as at High Knowes, Alnham (Jobey, 1966). The second comprises groups of small cairns, sometimes though by no means always with clearly defined cultivation plots, which are associated with unenclosed round houses whose sites are marked by ring-grooves, ring-banks or platforms (forthcoming). For the present, sites at the Ox-Eye Stone and on Hepburn Moor will serve as illustrations (figs. 1 and 2); although neither of these sites is an outstanding example they both have the merit of lying only a short distance from the cairnfield on Millstone Hill, which is the subject of this report (fig. 3). In many instances these settlements are also accompanied by paddocks or fields demarcated by linear clearance-banks, which need not always

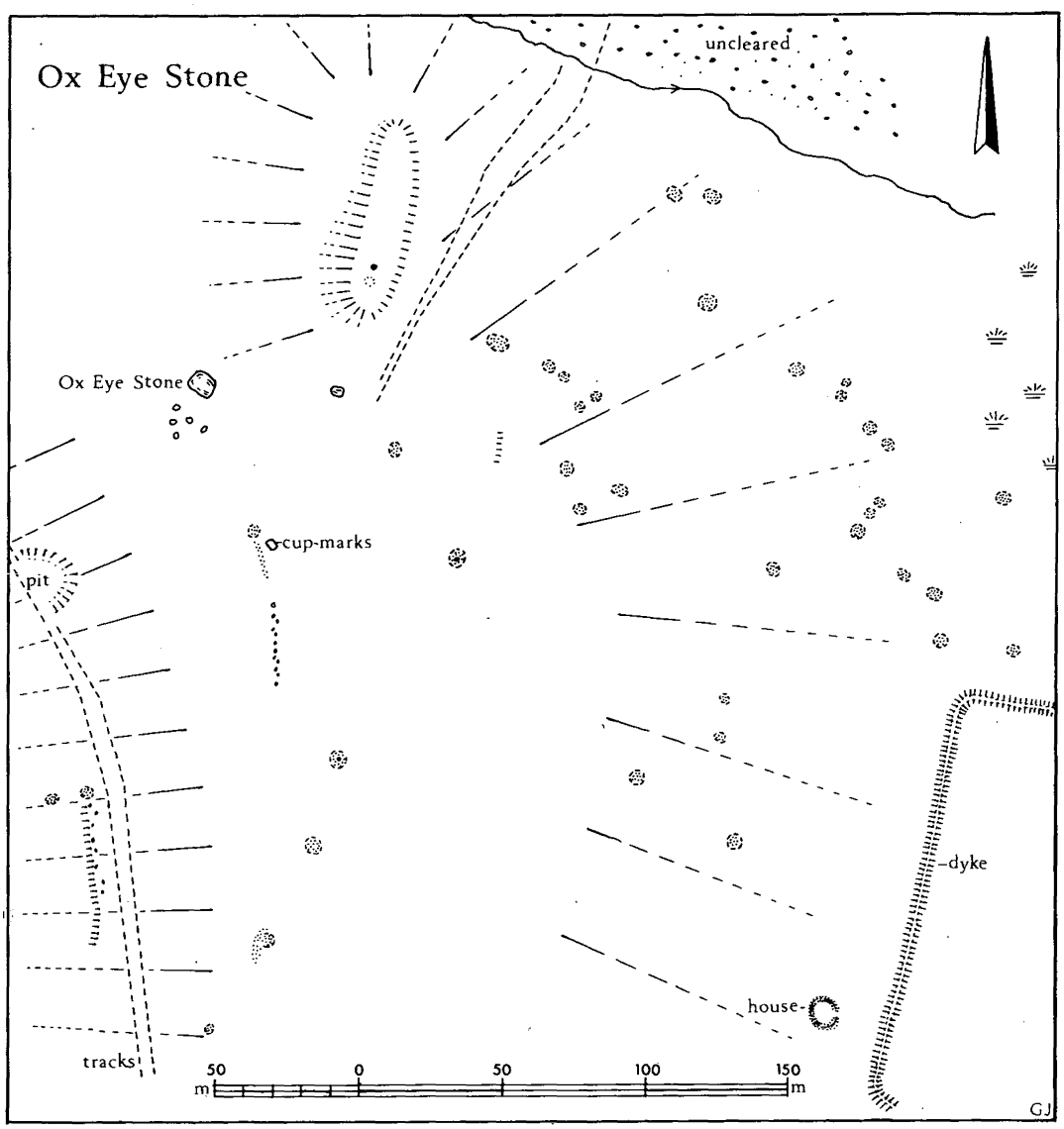


Fig. 1.

represent the same clearance-phase as the cairns themselves. On present evidence (1979) it would not be unreasonable to envisage a general context as early as the second millennium B.C. for some of these unenclosed settlements, though it is not suggested that this need apply to all (Jobey, 1978). In addition, however, there is a third category of cairnfield, often extensive in nature, which may have the surface appearance of field-clearance but lacks any overt indication of associated dwellings.

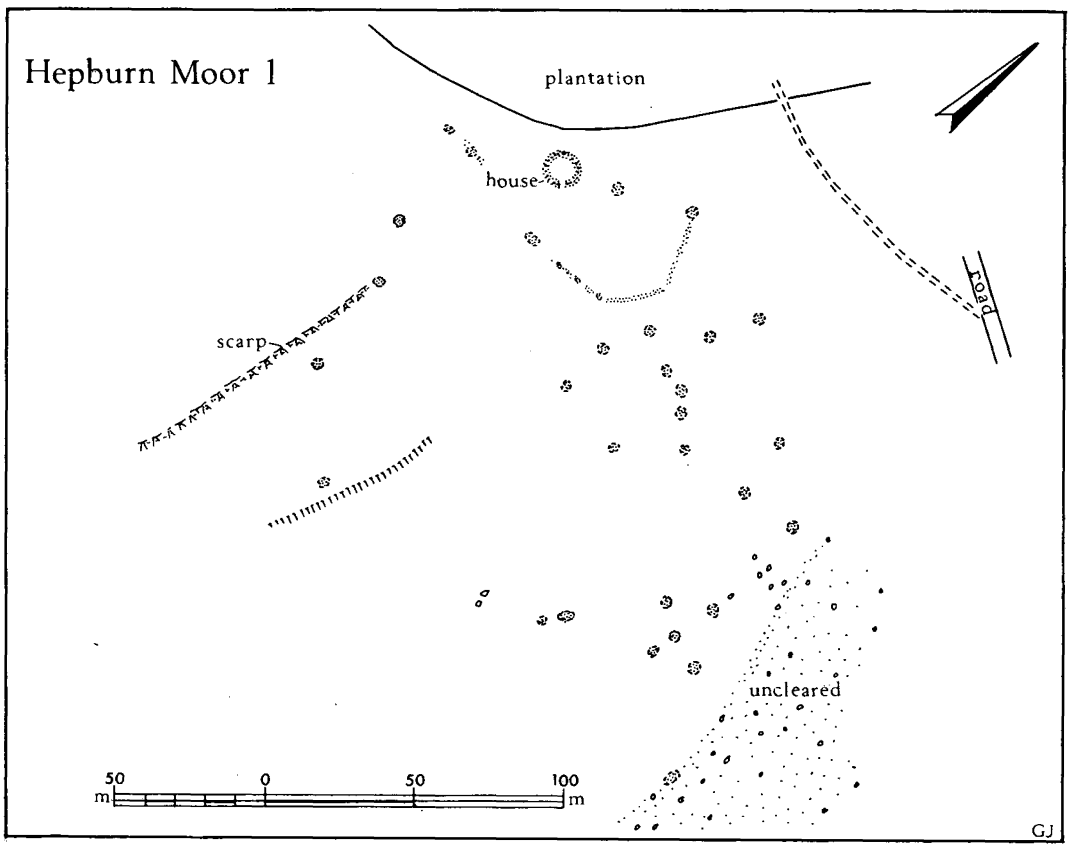


Fig. 2.

Very occasionally a larger enclosure may fall within the same area, as on the Common Burn near Wooler, Northumberland, but at present this is far from being a persistent feature and could represent no more than a fortuitous juxtaposition of monuments of different periods. Far more frequent are those examples where large cairnfields, ostensibly the results of clearance, also contain one or more undoubted burial monuments; some of those already recorded in the area of North and South Sandyford, Northumberland, furnish appropriate examples (Jobey, 1968).

In the winter of 1976 it came to notice that the Forestry Commission had purchased an extensive area of moorland to the west of the Sandyfords, preparatory to planting (fig. 3). Although the numerous cairnfields in this area had been surveyed in 1964 they were still largely unscheduled, not least because of the difficulties posed by the extensive areas involved. At the time the situation could only be resolved by preserving some of them from impending development and forfeiting others. Gratitude must be expressed to our member, Mr. Oswin Craster, then Inspector of Ancient Monuments, for ensuring the preservation of some examples, and to the

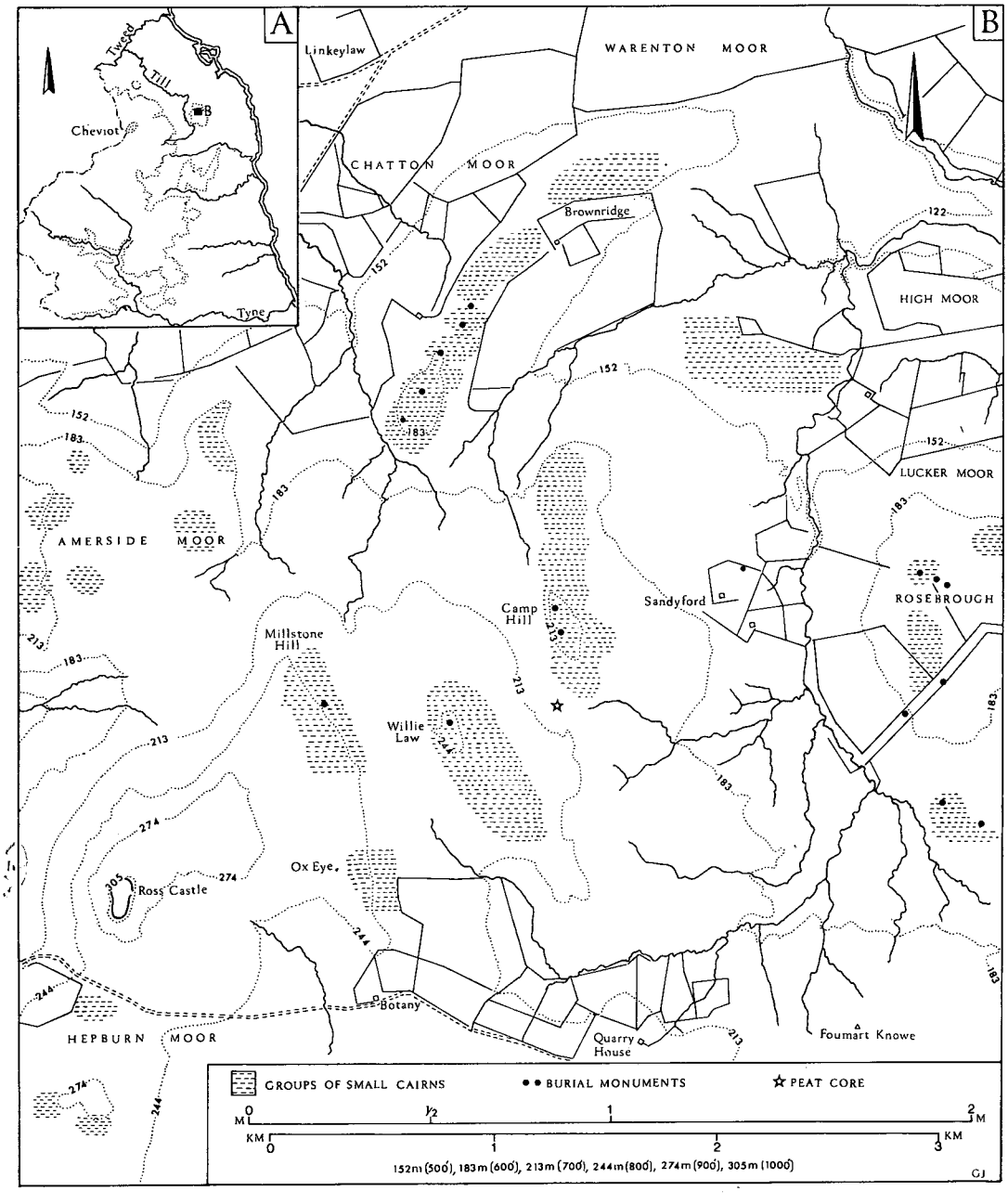

A
Tweed
Till
Cheviot
B
Tyne
B
Linkeylaw
WARENTON MOOR
CHATTON MOOR
Brownridge
122
HIGH MOOR
152
183
LUCKER MOOR
AMERSIDE MOOR
Sandyford
ROSEBROUGH
Camp Hill
Millstone Hill
213
Willie Law
274
Ox Eye
Ross Castle
305
244
Botany
HEPBURN MOOR
Quarry House
Fourmart Knowe
GROUPS OF SMALL CAIRNS
BURIAL MONUMENTS
PEAT CORE
0
½
1
2
M
KM
0
1
2
3
KM
152m (500'), 183m (600'), 213m (700'), 244m (800'), 274m (900'), 305m (1000')
GJ

Fig. 3.

Department of the Environment for financial assistance towards limited investigation of the cairnfield on Millstone Hill prior to afforestation. The excavation was carried out over a period of ten days during a spell of what can only be described with reserve as inclement weather. Valuable assistance was rendered by Ms. S. Banks, B. Charlton, C. Mackichan, L. Morgan, C. Waite and Messrs. I. Jobey, T. Newman and P. Paxton. Specialist reports have been kindly provided by Dr. J. Weyman and Mr. G. Davies. In more recent years the survey itself has benefited greatly from the efforts of Mr. T. Gates, Field Officer for the county.

The Area (fig. 3)

This tract of country lies immediately to the east of the main scarp of the Fell Sandstone Series which overlooks the Till Valley to the west. It consists of a series of ridges and elevated moorlands intersected by the drainage basins of small burns. Many of the groups of cairns, such as those on Amerside Law, Camp Hill and Hepburn Moor lie on the thin acid soils of the Fell Sandstones, which, if not recently afforested, now support little more than heather-moorland. On the other hand, those on Brownridge, Rosebrough and to the west of Luckermoorhouse are all situated on the Lower Limestone Group where generally rough pasture and bracken prevail. Almost without exception, more recent farms and their various intakes occupy areas of the Lower Carboniferous Group and a more substantial covering of drift-material. This later agricultural activity could well have reduced the extent of some of the surviving cairnfields or even erased others, since there is ample evidence of former rig-and-furrow cultivation on the north and south slopes of Brownridge, on parts of Rosebrough, and to the north of Botany.

The numbers of cairns in the various groups range from a mere dozen or so in those on Amerside Moor to a total of one hundred and fifty and almost two hundred on Camp Hill and Brownridge respectively. In four instances, namely that to the east of the Ox-Eye Stone and three on Hepburn Moor, the groups of cairns are accompanied by one or more probable house-sites, and there seems little doubt but that these are settlements with associated clearance. As for the remainder, however, no associated houses have been noted and in some cases the presence of genuine burial-monuments amongst the smaller cairns is evident. By way of example, on Brownridge there are probably five burial-monuments including a ring-cairn or enclosed cremation-cemetery, on Rosebrough lies a group of prominent burial-cairns known locally as the Generals' Graves (Greenwell, CXCIII–CXCVII), whilst on Camp Hill there is a large cairn which contained Beaker and Enlarged Food Vessel burials (Jobey, 1968). It is also worthy of note that in adjacent areas which have been subject to more recent agricultural activity there have been found a short-cist burial at North Sandyford, a Food Vessel burial at Linkeylaw and a crop of "stone cists, 'urns' and human remains" on Warenton Moor.

Additional evidence for early activity in the same area, whether this presence was of a transitory or permanent nature, is not lacking. Cup-marked boulders are to be seen on Camp Hill and hard by the Ox-Eye Stone, whilst loose finds of artefacts

ranging in general context from the Mesolithic to the Bronze Age have been recovered from Hepburn Moor, Rosebrough Moor, and Chatton Moor. As many of the small finds are in private possession, and have not been recorded hitherto, the opportunity has been taken to list some of them in an Appendix.

Settlement of the later first millennium B.C. is represented by the hillfort on Ross Castle, one of a number that make use of the defensive potential offered by the scarps of the Fell Sandstones. By way of contrast, however, and despite the insertion of a cremation of the Roman period into the earlier burial-cairn on Camp Hill, there are at present no structural remains of Romano-British settlements in the immediate area (Jobey, 1968).

The Site (fig. 4; NU 088 261)

The cairnfield on Millstone Hill, which is now entirely over-planted, lay on the flat to gently sloping eastern flank of the hill at an altitude of *c.* 244 m (800 ft). It consisted of some eighty-five, small, heather-covered cairns, round to elliptical in

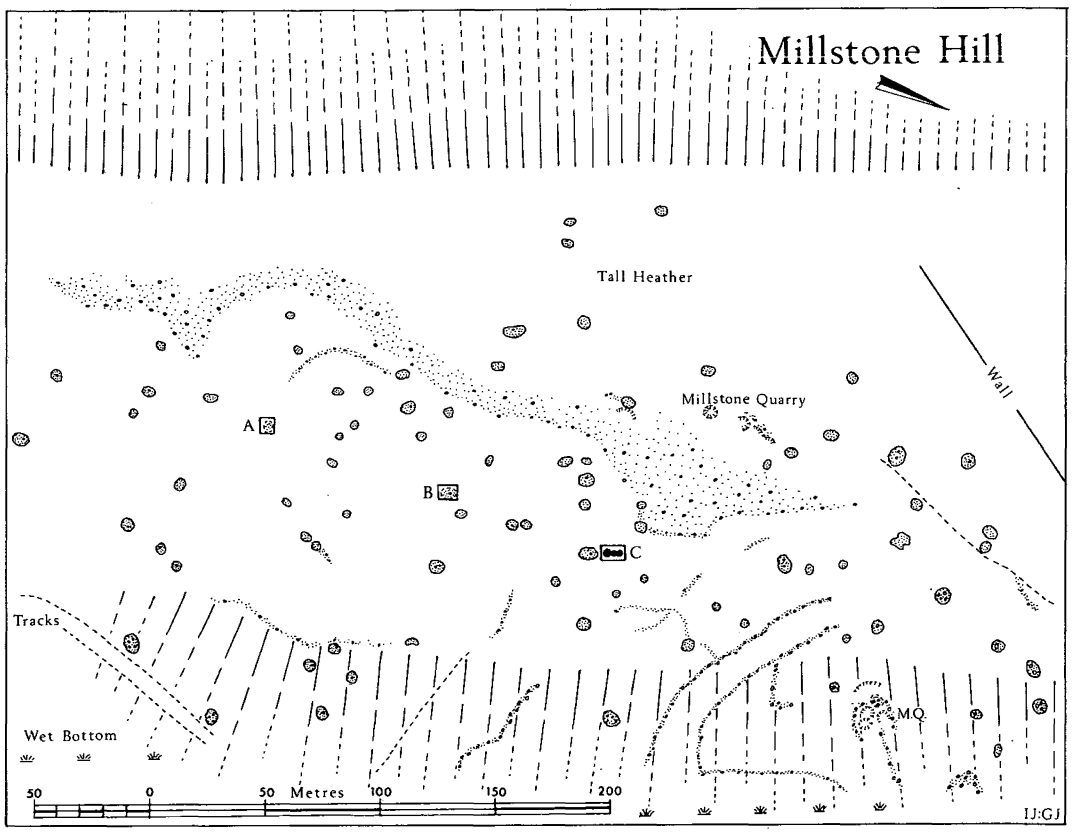


Fig. 4.

form, which seldom measured more than 5 m across and 0·7 m in height and were scattered over an area of *c.* 1·2 ha. As the long heather had been burnt off sometime previously, it was evident that no more than three conjoining cairns had the appearance of being well formed burial-cairns with protruding kerbstones (fig. 4, C); otherwise, the impression was that of an area deliberately cleared by casting the land-stones into piles or on to a small rocky scarp which ran from north to south through part of the cairnfield. Short linear rickles of stone were also discernible at various points, but these did not encompass clearly defined plots such as have been noted on occasions elsewhere (e.g. Feachem, 1973). Two slightly more substantial banks, seemingly demarcating a broad pathway leading from the damp bottom in the east, had the appearance of being intrusive features but were not demonstrably so. Although no house-sites were visible the remains of structures less substantial than stone-founded houses would not have revealed themselves in the prevailing cover, whilst the contours over much of the area were such that the construction of artificial stances for timber-built houses would not have been necessary. The remaining features consisted of a number of shallow surface-quarries for the extraction of large mill-stones and some slightly hollowed trackways. Both are characteristic surface-remains of the Fell Sandstones, the former utilizing the tabular and tractable nature of the rock, which in earlier times and for similar reasons was an ideal medium for cup-and-ring markings, and the latter a legacy from pack-horse traffic across the open moor-land, much of it being directed in this instance towards the coal-winnings which formerly existed by the Coalhouse Burn to the north.

The cairnfield itself was bounded on the north and west by an old wall and a dyke, possibly the southern boundary of Chatton in the seventeenth century (*NCH*, XIV, 204), on the east by an ill-drained but shallow moss, and on the south by an un-cleared stretch of boulder-strewn, Fell Sandstone moorland.

The Excavation

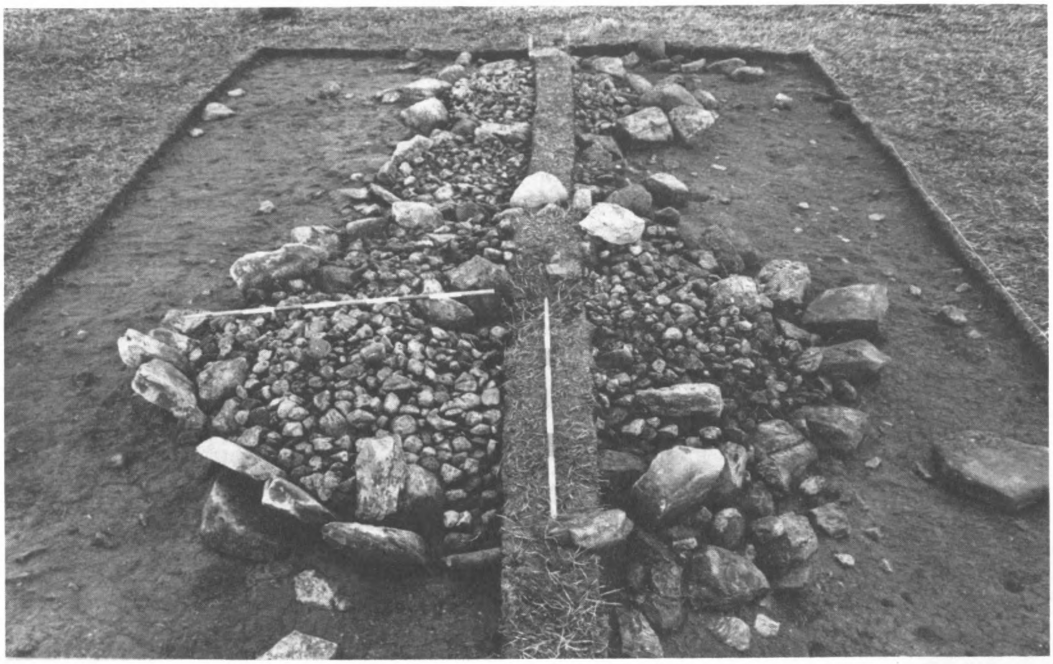
Limitations on the available time and resources allowed no more than the investigation of three comparatively small areas; these included two putative clearance-cairns and the three contiguous burial-cairns (fig. 4, A, B, and C).

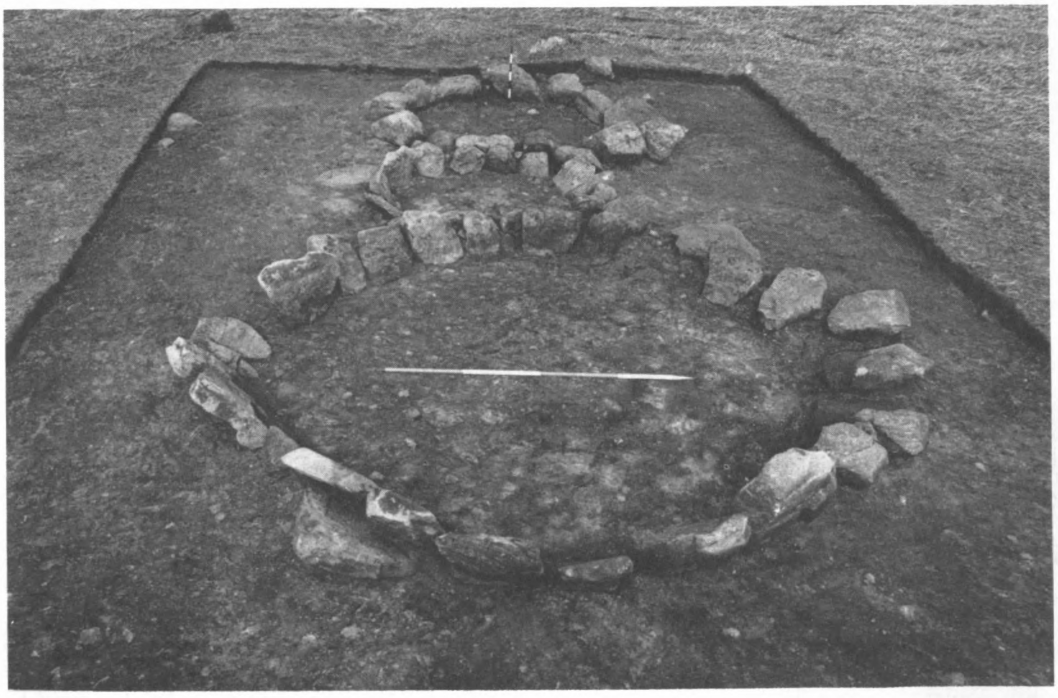
1. Kerbed Cairns, Area C (fig. 5, pls. V and VI)

The tops of some of the kerbstones protruded above the thin cover of the peaty soil and heather, at once distinguishing these cairns from the remainder. By the same token, however, this distinction had also attracted previous investigators and from the outset it was apparent that the largest cairn, C1, had been robbed in the centre. The initial clearance disclosed that all three cairns had been of similar drum-like appearance, whereby the almost level surface of the stone infilling had never risen higher than just below the tops of the kerbstones.

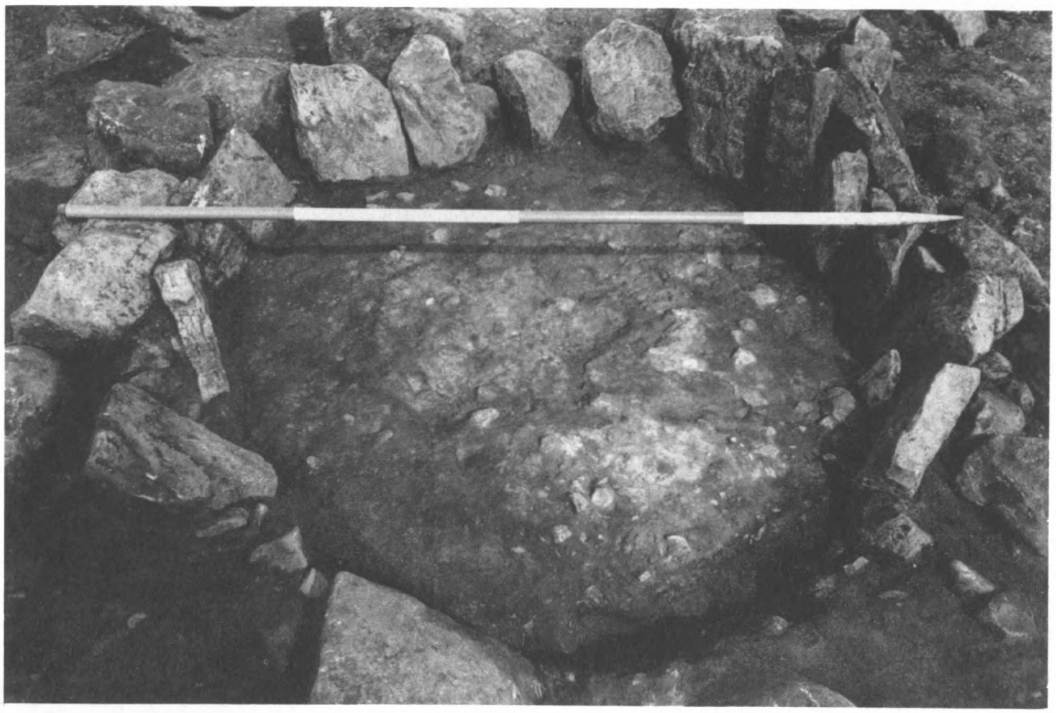
Cairn C1

This cairn had been retained by twenty-six or possibly twenty-seven slab-like

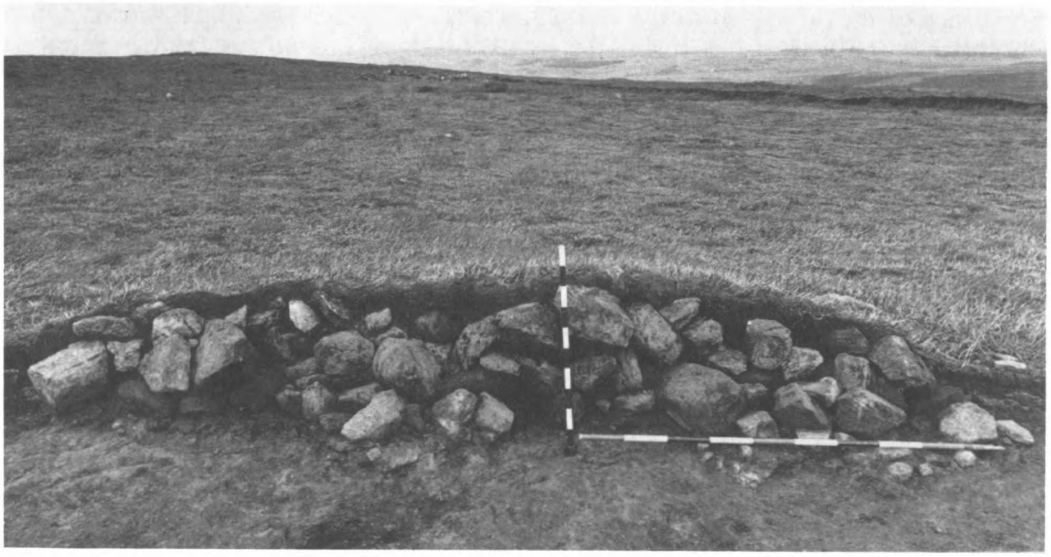




Millstone Hill, kerbed cairns C1, 2, 3.



a. Millstone Hill, kerbed cairn C2.



b. Millstone Hill, clearance cairn A.

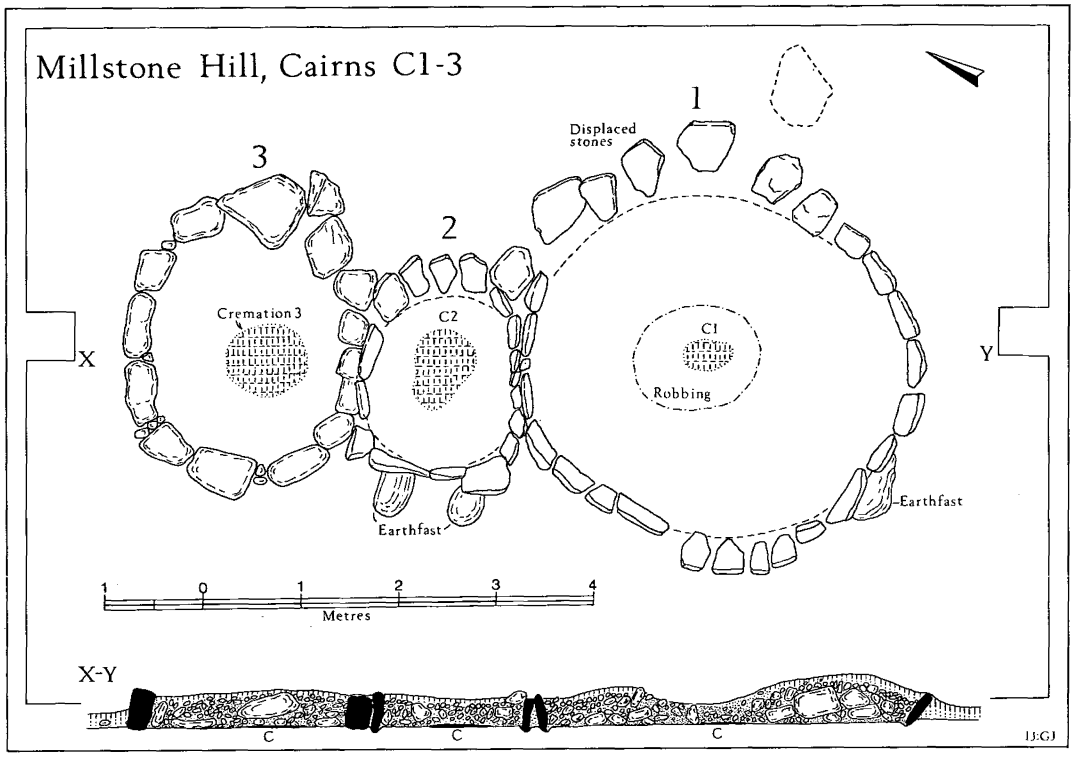


Fig. 5.

kerbstones of local rock from 0·1 to 0·2 m thick. Although the stones varied somewhat in size, the largest measuring 0·6 by 0·6 m, there was no systematic gradation around the circumference of the cairn nor any semblance of a false portal or deliberately placed outliers. Many stones were leaning outwards, presumably as a result of pressure from the cairn-material, and a number had been entirely displaced in the north-eastern quadrant. A shallow bedding-trench barely penetrated the subsoil and only a few chocking stones had been used to give additional stability to the kerbstones. As originally constructed the circular kerb would have had a diameter of *c.* 3·5 m and would have stood to a height of 0·4 to 0·5 m above ground level. The infilling of the cairn consisted of a basal layer of small boulders, capped by a mass of smaller, fist-sized stones which must have been especially selected for the purpose (pl. V).

In addition to the later displacement of some of the kerbstones, a robber-pit measuring a metre or more in diameter had been sunk into the centre of the cairn, penetrating down to the original ground-surface. Some of the smaller stones from the top of the cairn had been cast on to the northern lip of the pit, whilst some of the larger basal stones had been thrown to the outside of the kerb in the south-eastern quadrant. Small undecorated fragments from a coarse hand-built vessel were scattered through-

out the robbed area and small patches of cremated bone and powdery charcoal, the latter extensively penetrated by rootlets, were found in the leached earth and hard-pan in the centre of the cairn. Although the fabric of the vessel would not be inconsistent with that of a cinerary urn, few sherds are conjoining and much of the vessel is missing, so that a reliable reconstruction is impossible (*v.* small finds). As small fragments of bone and flecks of charcoal still adhered to the inside faces of some of the sherds perhaps this deposit can be regarded as a single cremation, probably that of an adult (information, J. Weyman). In view of possible contamination from robbing and rootlets the small sample of charcoal was not submitted for radiocarbon assay.

Cairn C2

This was the smallest of the three cairns and its kerbstones, seventeen in number, were similar in form and stature to those of C1. They had been set into a narrow but continuous bedding-trench, slightly over 0·1 m in depth below the level of the subsoil. On the north and south, where the kerbstones were contiguous with those of C1 and C3, they retained a more or less upright position, but elsewhere were inclined outwards, again presumably as a result of inadequate support. The slightly elliptical form of the cairn was already apparent after the initial clearance and was later confirmed by the diameters of the bedding-trench which were 1·5 m north to south and 1·75 m east to west. In this instance there had been no disturbance of the cairn-material which was similar in nature to that of C1, including the capping of small stones.

Cremated remains, unaccompanied by grave-goods, covered an egg-shaped area of the underlying leached soil and iron-pan in the centre of the cairn. From the section (fig. 5) this cremation can be seen to have formed a slight tump, as if the material had been scraped up from the remains of a pyre and placed in the centre of the kerbed area. Unfortunately, the skeletal material was so comminuted that the identification of the cremation as that of a child or young adult can be no more than a suggestion (information, J. Weyman). The sample of charcoal submitted to the laboratory for radiocarbon assay was too small for normal processing and for some years now has awaited the installation of a "small-sample counter".

Cairn C3

The kerb was more substantial but less sophisticated than those of cairns C1 and C2, being formed from thirteen large and irregularly shaped boulders of Fell Sandstone which rested directly on the old land-surface. Whereas no bedding-trench would have been necessary for their support, some attempt had been made to close the gaps between the boulders with smaller stones which were rammed into place. The enclosed, roughly circular area had a maximum diameter of 2·5 m, and the infilling of cairn-material was similar to that of C1 and C2. In this instance, however, whether by an accident or design, a very large weather-worn boulder had been placed over but not directly upon the cremated deposit. The latter consisted of a thin patch of comminuted bone and charcoal, about 1 m in diameter, which was mainly bound up in hard-

pan. Beyond this, occasional flecks of charcoal extended as far as the inside of the kerbstones, but not in such quantity as to suggest that the cremation had been carried out *in situ*. There were no small finds and the cremated bone was so fragmented as to defy identification (information, J. Weyman). Regrettably, the result of the radiocarbon assay of the charcoal sample recovered from the cremation has been delayed for the same reason as that from C2.

Sequence of construction

Although it might be argued that cairn C2 was secondary to C1, in that the kerbstones of the latter could have lost their upright stance before the erection of the former, or that the elliptical shape of C2 was due to its later insertion in the space between C1 and C3, there was in fact no unequivocal evidence for a structural sequence. However, in view of the close juxtaposition of the cairns and the similar methods of infilling, it seems reasonable to infer that no great interval of time had elapsed between the construction of one and another. By the same token, there could also have been some close family or social relationship between the cremated persons, though this too must remain conjectural.

Cairn A (fig. 6)

Both before and after the initial clearance of the peaty soil and heather roots this cairn lacked any structural form. It consisted of a roughly circular but jumbled mass of large and small stones, some partly weathered others not, the whole measuring 4·5 to 5 m in overall diameters and 0·9 m in height near the centre. The basal layer of stones was found to be lying on or slightly embedded in the now leached, original land-surface. With the exception of some animal burrows the latter was undisturbed and still retained the odd earthfast stone. There was no evidence in excavation

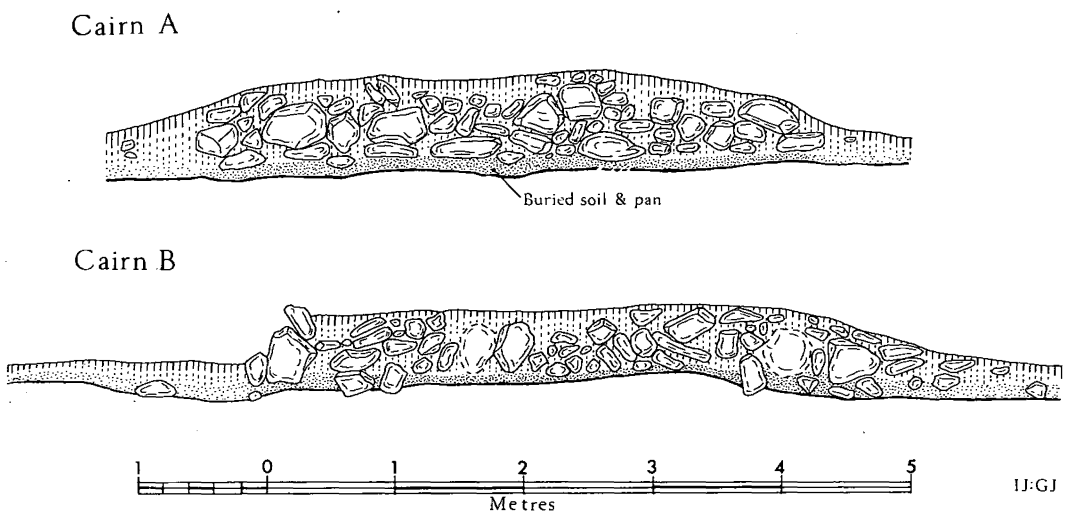


Fig. 6.

or from chemical analysis that the mound had ever covered an interment. Patches of charcoal were present on the old land-surface, immediately beneath the piled stone, but in view of possible contamination by animal activity in this area the material was not submitted for radiocarbon assay. Although a number of samples were taken for pollen analysis no results have been obtained after a considerable, if unavoidable, delay.

Cairn B (fig. 6)

This cairn proved to be elliptical in shape, measuring *c.* 5 m north to south by 4·25 m east to west, and was 0·9 m in maximum height above the buried land-surface. In all other respects the jumbled pile of stone was similar to that of cairn A and, when eventually removed, produced no evidence for an interment. Thin patches of charcoal, some identifiable as oak, were again present over the whole of the old land-surface which in this instance was free from animal burrows. This material, taken from immediately beneath the stones, yielded a radiocarbon date of 1690 ± 90 b.c. (Har 1942; 3640 ± 90 b.p.).

Although there was no indisputable evidence for cultivation, such as ard or spade-marks, either beneath the cairns or on the subsoil over an area of two or three metres beyond their perimeters, the evidence such as it is would suggest that cairns A and B were the result of land-clearance for some form of rural economy. Likewise, the carbonized material from immediately beneath both cairns may be seen as the residue from previous burning-off. Whilst the single radiocarbon date indicates no more than a general *terminus post quem* for the formation of cairn B, there was no reason to suspect that any great interval of time had elapsed between these two activities.

The Peat Core, Camp Hill Moss (NU 100 263)

Camp Hill Moss lies about 1·5 km to the east of the cairnfield on Millstone Hill (fig. 3) but is within an area where cairnfields abound. A 1·87 m monolith of peat from the moss was examined by Mr. Grant Davies as part of a wider programme of pollen analysis in Northumberland, and the cost of the radiocarbon determinations was met from the funds available to the present writer. As detailed results of the pollen analysis have already been published elsewhere (Davies and Turner, 1979), it will be sufficient at this juncture to give only an extract from the relevant conclusions of the authors.

"The moss appears to have started forming sometime after the elm decline and well before 1560 ± 70 b.c. (HAR 1945; 3510 ± 70 b.p.). There is no evidence for human interference with the vegetation below 121 cm, i.e. before *c.* 1560 b.c., although charcoal in the peat at 170 to 174 cm indicates either a natural fire or one caused by a passing group of hunters. The change from an *Alnus* dominated assemblage to one dominated by *Betula* at about 140 cm presumably reflects the natural succession of the moss as the surface peat was raised above the reach of the mineral rich drainage water. . . ."

"From 1560 ± 70 b.c. to 1160 ± 80 b.c. (HAR 1946; 3110 ± 80 b.p.) increased

frequencies for Graminae, *Plantago lanceolata* and *Rumex acetosa/acetosella* type, indicate continuous use of the land in the area, probably the same sort of temporary clearances as have been described from the other sites (i.e. in Northumberland).

"From 1160±80 b.c. to 720±70 b.c. (HAR 1947; 2670±70 b.p.) the area was under less pressure, and it is only after *c.* 720 b.c. that a phase of renewed clearing activity began. Cereal pollen has been recorded as has the pollen of such associated weeds as *Centaurea cyanus*, indicating that crops were being grown. This small-scale activity continued until the level of 52·5 to 54·0 cm, i.e. that at which a radiocarbon date of a.d. 1310±80 (HAR 1948; 640±80 b.p.) is thought to be too recent, when the first intensive land use began...."

The authors considered that the date for this later intensive land use was too recent, partly on the grounds that this was the time of the late medieval recession, well documented elsewhere (Davies and Turner, 1979, p. 801). A possible date about the beginning of the Roman occupation was thought to be more likely, since this would give a more acceptable rate of peat accumulation for the relevant levels and would also correspond with the late Iron Age to Early Roman dates for such a phenomenon noted in pollen-diagrams from elsewhere in the north (*ibid.*, p. 802).

As it happens the problem of this possibly anomalous date is not of immediate concern in the present context, and for the present it may be sufficient to note the general correspondence between the date of 1690±90 b.c. from the material beneath clearance-cairn B on Millstone Hill and that of 1560±70 b.c. from Camp Hill Moss for the beginning of a period of suggested temporary clearance.

Small Finds

1. The only small finds from the excavations consisted of thirty-six sherds from a coarse, hand-built vessel, scattered throughout the robbed area in cairn C1. Whilst the two largest wall-sherds measure 50 mm across and are 14–15 mm thick, the majority of the fragments are less than 2 cm across and many have lost one or other of their surfaces. Most fragments are bi-coloured in section, the thick outer portion being buff with a pink tinge and the inner dark grey to black; large grits abound throughout. The major part of the vessel is missing, few sherds conjoin, and only one abraded rim-sherd is present. Although the latter appears to have a very oblique internal bevel (fig. 7), the angle and diameter of the rim remains uncertain. There is no indication of a collar or cordon amongst the surviving material. One small wall-sherd bears a possible finger-nail impression but this is very doubtfully a decorative feature and the remainder of the sherds which retain an outer surface are plain. The base has had a diameter of *c.* 120 mm and the maximum diameter of the vessel has been at least 200 mm.

2. It is perhaps appropriate to record at this stage the *subsequent* discovery of a "triangular shaped stone with cup-marks" in a recent plough-furrow a few metres away from cairns C1–3. The stone is in private possession and I am grateful to Mr. S. Beckensall for information in advance of publication (*Institutum Canarium*, forthcoming).

Discussion

In the area immediately peripheral to Millstone Hill loose finds provide ample evidence for at least a transitory human presence from Mesolithic times to the

Fig. 7.

earlier Bronze Age and supplement the not inconsiderable burial-record of the area in the late Neolithic and earlier Bronze Age (*v.* Appendix). A problem of primary interest, however, must be at what stage this elevated area of what is now moorland was subject to more permanent forms of settlement and development. In recent years substantial evidence for neolithic activity in the Till basin to the west has been enhanced, for example, by excavation on the alluvial gravels in the area of Thirlings (Miket, 1976). This site lies some 15 km to the north-west of Millstone Hill and, in addition to structural evidence, has produced Grimston and Fengate style pottery, together with radiocarbon dates of 3280±150 b.c. and 2130±130 b.c. (corrected median dates would be of the order of 4070 and 2724 B.C.; Clark, 1975). In the past, however, the high ridges on the east side of the Till valley have not as a whole produced strong evidence for *permanent* neolithic settlement, although some lithic material has been recovered and there have been more notable but limited loose finds of pottery, as from Old Bewick to the south and Kyloe to the north. Nor would the single and isolated radiocarbon date of 2890 ±90 b.c. (3760–3580 B.C.) from an enigmatic pit on Camp Hill (Jobey, 1968), or the additional loose finds of more recent years, confirm a more permanent development of the area at this time.

For the present, the context of the open settlements with attendant clearance at Ox-Eye and on Hepburn Moor to the south of Millstone Hill are unknown, and no more than morphological analogy would allow one to infer a possible context as early as the second millennium B.C. Nevertheless, the evidence from the cairnfield on Millstone Hill, although not altogether unequivocal and not necessarily applicable to the other groups of small cairns in the area, may indicate more intensive development of these uplands by the late third or early second millennium B.C. If the single date of 1690±90 b.c. (2202–1975 B.C.) from material immediately beneath one of the clearance-cairns is taken to be the general context for this activity, then it would roughly correspond with the date of 1560±70 b.c. (2035–1796 B.C.) for the early clearance-phase in the pollen analysis from Camp Hill Moss, as well as with similar radiocarbon or suggested dates for "small-scale" clearance elsewhere in the county (Davies and Turner, 1979). It might be argued that the many genuine burial-monuments in the area of Camp Hill Moss would themselves involve some minor clearance during the same general period, but this would not deny the possibility of near contemporary or even complementary agricultural activities. As it happens, the

radiocarbon date from Millstone Hill is not significantly different from that of 1670±50 b.c. (2174–1945 B.C.) from one of the nearby Beaker burials beneath the large cairn on Camp Hill (Jobey, 1968).

In the absence of conclusive evidence it may also be a matter for conjecture as to whether the clearance on Millstone Hill was aimed at the creation of grassland or for arable purposes. Although there were possible ard or plough-marks near one of the small cairns previously excavated on Camp Hill, the context of these could not be determined in 1967. In supporting an arable purpose, therefore, one can do no more than refer to the sort of commonsense arguments such as were used to substantiate the case for Bronze Age cereal growing on the marginal lands of north-east Yorkshire (Fleming, 1971). Whilst this may run counter to the suggestion that the Bronze Age clearances detected on the available pollen diagrams for Northumberland were mainly a result of pastoral activities (Davies and Turner, 1979), based presumably on absence or scarcity of cereal pollen grains, it should be noted that the analysis for Broad Moss, lying in the Cheviots to the west of the Till, yielded pollen of *Hordeum* and agricultural weeds from the estimated Bronze Age levels. This particular moss is adjacent to unenclosed round houses on Tathey Crags (Jobey, 1972a) and is not far removed from unenclosed houses and cairns on Long Crag and a similar settlement with cairns and linear banks near Langlee Crags (unpublished). Some or all of these sites have a potentially early context, as do those at Ox-Eye and on Hepburn Moor. The altitude of Millstone Hill would be no deterrent to cultivation, even less so before a time of climatic deterioration, and the presently impoverished nature of the soil is not a factor that need be taken into consideration.

Although structural evidence for habitation is lacking on Millstone Hill the excavations were limited and the discovery of timber-built structures would have been fortuitous. Moreover, if some form of shifting agriculture is envisaged the dwellings need not have been within or immediately adjacent to the cairnfield; for this reason it would be all the more helpful to know the context of the sites at the Ox-Eye or on Hepburn Moor, the former in particular lies within a few minutes walking distance.

A prolonged if unavoidable delay in the receipt of radiocarbon assays adds to the difficulty of deciding upon the chronological priority between the clearance-cairns and the three contiguous cremation-cairns. Small kerb-cairns similar to those on Millstone Hill have been seen as a distinctive type of burial-monument, even though their dates and affinities as a whole remain uncertain and perhaps varied (Ritchie and Maclaren, 1972). Published or unpublished examples in the north have been noted in the Pennines, Yorkshire, Northumberland and in many parts of Scotland. The kerbstones have been taken as a dominant feature of the type because of their size in relation to the smallness of the cairns, to which perhaps may be added the rather flat and low infilling of cairn-material. In some instances these cairns also appear in pairs or in small groups. The three burial-cairns on Millstone Hill would seem to fit conveniently into this category, though the slab-like kerbstones of C1 and C2 are not particularly large.

In Scotland such comparatively small cairns have received most recent attention during the preparation of the Inventories for Argyll, where the closest and at present

the most instructive parallel may be found in the group of two contiguous and one outlying cairn at Claggan (Ritchie and Thornber, 1975). Radiocarbon dates of 975 ± 50 b.c. and 1058 ± 40 b.c. (*c.* 1450–1175 B.C.) were obtained from the cremations in one of the two contiguous cairns and the small detached cairn respectively. The old ground surface below the other cairn yielded dates in the mid-first millennium B.C., but in this case the cairn-material had been considerably disturbed and no burial was found. Although the triple arrangement of the burial-cairns on Millstone Hill is unusual it is not unknown elsewhere, and, for what a general structural parallel may be worth, occurs on Beeley Moor, Derbyshire (Radley, 1969). Here three much larger attached and aligned cairns with kerbs seemed to have been primarily associated with cremations in Cordoned Urns.

All told, it is quite conceivable that the three cremation-cairns on Millstone Hill were erected on land which had been previously cultivated and abandoned. Whilst no overt signs of cultivation were found on the subsoil beneath these cairns, it is perhaps significant that no clearance-stones had been added to the monuments, such as could have happened had they been in existence before the clearance occurred. Although this sequence of events proposed for Millstone Hill does not necessarily explain the context, or indeed, the precise nature of all other cairnfields in the vicinity, it may go some way towards illustrating the potential of the area for a more permanent form of settlement by the late third or early second millennium B.C. By the same token it may also redress the imbalance of the local record of monuments which hitherto has been mainly one of ritual and death for this period.

APPENDIX

G. Jobey and J. Weyman

Until recent years the majority of the loose finds from the area covered in the main by fig. 3 have been amongst the privately held Rogerson collection. Mr. Rogerson was at one time a shepherd at Blawearie, being present at Canon Greenwell's excavation of the nearby Barrow CC. He later moved to Quarry House, 3 km to the north-east, and two of his sons farmed at Quarry House and Barramoor respectively. The family collection was fully recorded in 1941 (Newbigin, 1941) and there had been only minor additions by 1971 when the items were last inspected (Jobey, 1972b).

A second, more recently formed private collection must now be taken into account. From time to time material from the collection of Mr. Fritz Berthele has been brought to the Museum of Antiquities by Mr. S. Beckensall, where it has been drawn for the records by Miss M. Hurrell before being returned. We are greatly indebted to all of them for this opportunity to refer to the finds and to Dr. D. Smith, Keeper of the Museum, for his permission to reproduce some of the illustrations. The following note is based almost entirely on the drawings and is not intended as a complete inventory of the collection, being limited geographically to the area under consideration. At present it has not been possible to assign more than a general

provenance to most of the finds, which are assumed to have come mainly from newly afforested areas.

1. Foumart Knowe, Rosebrough Moor

Foumart Knowe itself lies 1 km to the east of Quarry House and *c.* 2 km to the south of the large burial-cairns on Rosebrough. The items consist of 4 waste flakes (2 of them blades, 1 possibly utilized); 1 denticulated blade, 1 flint knife which is a blade of triangular form, and 1 oval side scraper/knife.

The map reference given for these finds is NT 115 256 which is to the north of Foumart Knowe. However, an additional, unpublished collection in the Museum of Antiquities (Acc. 1973.7) also comes from Foumart Knowe at NT 115 246, and it could be that both are from the same area. This museum accession is largely neolithic in character and includes 2 good scrapers, 1 oval flint knife, and 1 blade worked down both margins, all having flat flaking. In addition there are two fragments from different polished stone axeheads, one with a cutting edge and the other with a butt-end. There are, however, some mesolithic features also present in the group as a whole in that there is a preponderance of blade forms, some typical margin retouch, and a tiny blade with oblique trimming. The axeheads supplement that already recorded from Brownridge (Burgess, 1968), the three from the neighbourhood of Hepburn Moor, and the two from Blawearie a little further to the south (Rogerson collection).

2. Hepburn Moor and Quarry House

Items of flint include:—

(i) 6 leaf arrowheads, all damaged to some degree (e.g. fig. 8, 1–4). 2 of these are not classifiable but 2 are of Green's type 4A, 1 of 3A and 1 of 3B.
(ii) 7 barbed and tanged arrowheads (e.g. fig. 8, 5–8), 5 of which are Sutton b type and 2 of Kilmarnock or Sutton c type.
(iii) 2 tanged arrowheads, 1 of Sutton b type and the other a or b. There is also 1 piece which is probably a failed tanged arrowhead which has been made into a small scraper-like tool.
(iv) 3 pointed flakes which may be projectile heads or borers.
(v) 8 microliths of maximum length of 37 mm and worked down all or part of one margin on narrow blades (e.g. 8, 9–13).
(vi) 21 small blades which are untrimmed or with minor margin retouch.
(vii) 6 tiny button-scrapers up to 15 mm diameter (e.g. 8, 14–15).
(viii) 10 small scrapers which are also probably mesolithic.
(ix) 6 scrapers which are characteristically neolithic and 10 flakes which are probably also neolithic.
(x) 4 worked blades in the "fabricator" class, and several unworked flakes which tend to be blade-like.

Items of shale or jet consist of:—

(i) A fragment from a shale "ring" of uncertain form (fig. 8, 16).
(ii) A perforated shale disc (fig. 8, 18).
(iii) A "bugle" bead of jet or shale which is of flattened elliptical form, elongated, and with a semblance of collars at the ends (fig. 8, 17). This bead is noted as having come from Quarry House, Hepburn Moor.

The collection of flint has a very strong late mesolithic element amongst it and

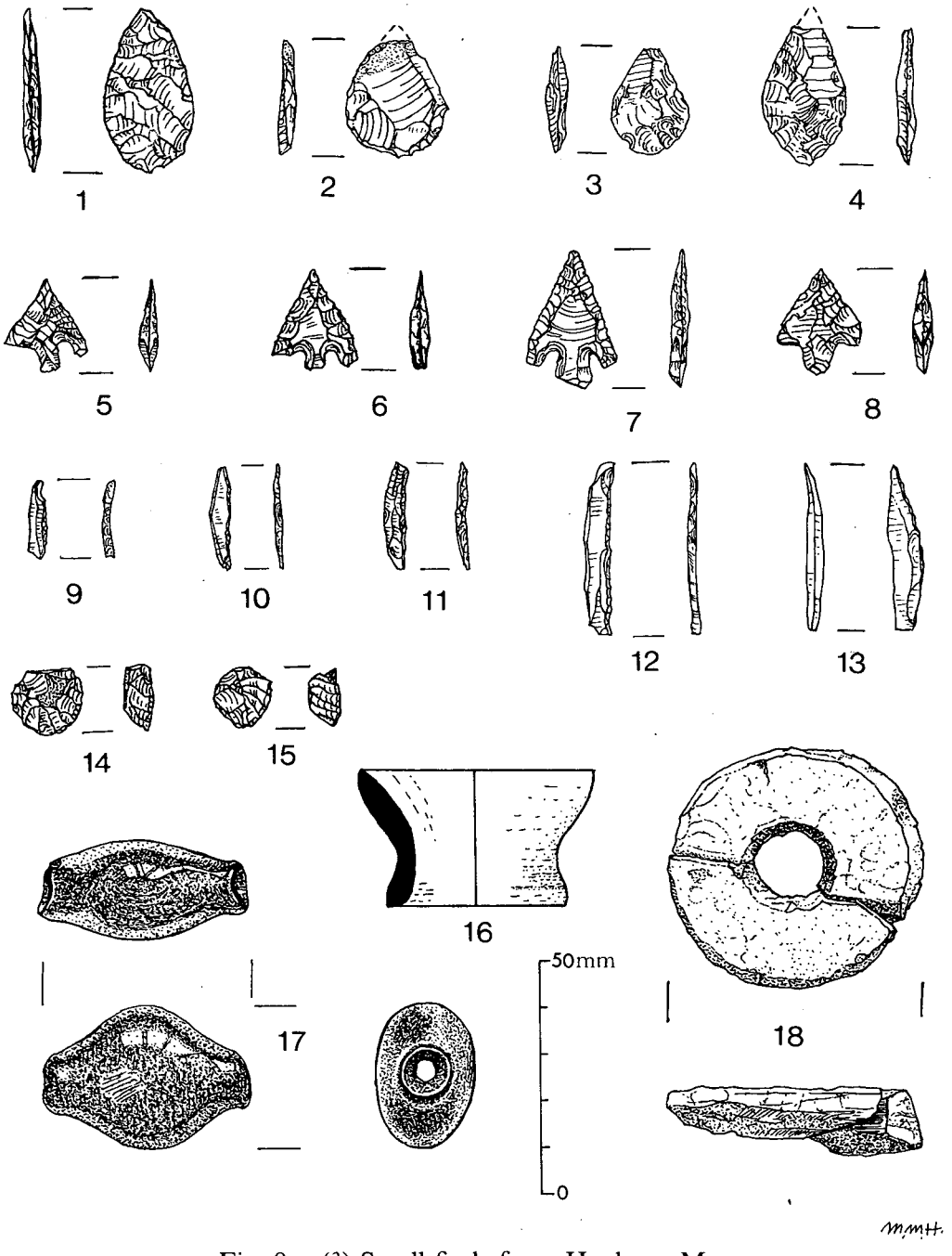


Fig. 8. (⅔) Small finds from Hepburn Moor.

adds a firm contribution to a period only hinted at in the Rogerson collection from Hepburn Moor. The tiny button-scrapers are identical with some found on the mesolithic coastal sites (Buckley, 1922). As a whole this mesolithic material forms a welcome addition to other finds of this nature from the Fell Sandstone and adjacent moorlands, such as from Bowden Doors and Goats' Crag to the north or Wellhope and Debdon Moors to the south, all lying some 10 to 15 km from the North Sea littoral with its better known sites (e.g. Weyman, 1977). The later neolithic and Beaker material in the collection also augments that from Hepburn Moor already in the Rogerson collection.

Although the shale ring is of uncertain form, ostensibly not part of a cup and only doubtfully of "napkin-ring" type (Jobey, 1966), the bead is a fine specimen and the only complete one of this form from the county at the moment. The probable neolithic context of similar beads has been discussed recently elsewhere (Kenworthy, 1977). Excluding the shale or jet finds from burials in the area, namely from Camp Hill and Barrow CC at Blawearie, these loose finds recall the two somewhat enigmatic finds from Hepburn Moor in the Rogerson collection, the first being a fragment of a "cup or armlet" and the second a "miniature cup", once suggested as having a form in parallel with the so-called "vase-supports" (Newbigin, 1941).

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