Biggar Archaeology group

Bringing the past to the present

Brownsbank Farm Fieldwork and Excavation 1997 – 2001. 3rd Interim Report.

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With contributions from Dr Jennifer Miller (North Light Heritage) and John Whitworth (BAG) 2013.

Since 1997 the ploughed fields of Brownsbank Farm have been walked as part of The Pre-History North of Biggar Project operated by the Biggar Archaeology Group (BAG). In the spring of 2000 a series of locations with surface scatters of Early Neolithic pottery was found in one field (No 4). Several locations were excavated (2000 – 2001) to test for surviving in situ archaeology, and at one, a significant assemblage of pottery was retrieved, which was in association with Arran pitchstone, Langdale Pike Group VI axe flakes, a lithic assemblage and pits containing further pottery and charcoal enriched fills. Radiocarbon dates were obtained from two contexts.

Introduction

This report is primarily the same as the first two interims (Ward 2000 & 2001) regarding the fieldwork, but with the additional inclusion of charcoal analyses, C^{14} dates, illustrations and with reference to subsequent relevant discoveries. None of the finds have been professionally analysed and therefore comment regarding them by this writer must be considered as 'non specialist'.

The Pre-History North of Biggar Project (PHNBP) has been running since 1995 as an arable fieldwalking project, to test a hypothesis that most evidence of early pre-history in Clydesdale and to the north of the town of Biggar, appears to have a Neolithic bias, while that to the south of Biggar is mostly Bronze Age. The value of the Project and the hypothesis is steadily being validated, most especially by the retrieval of objects and by the excavations by BAG at Biggar Common West and East, Weston Farm, Melbourne Farm, Carwood Farm, all to the north of Biggar. The work reported here is further evidence that the hypothesis is proving true, however, Neolithic assemblages have now been retrieved by BAG south of Biggar at Nether Hangingshaw Farm and at Daer Valley (all ref's below).

This report deals specifically with the excavation evidence at Brownsbank Farm, and also that from fieldwalking over most of the farm land, in as far as it can do without recourse to specialist analyses. Eventually more detailed results by professional analyses of the finds may be married with the findings of the various campaigns hereinafter described, and drawn together for the purpose of a final report.

This report, and previous interim reports by the writer on the PHNBP should serve as a dire warning that a considerable amount of evidence of early pre-history is being lost annually by ploughing, at least in south central Scotland. It highlights the need for major programmes of arable fieldwalking to be undertaken nationally, and as a matter of some urgency. It also indicates the value of the Biggar based voluntary archaeologists who are willing to meet the challenge of saving our eroding and irreplaceable heritage.

The excavation site was discovered on Saturday 29th April and excavation was completed by the evening of May 1st as a matter of some urgency. The field was rotovated on the 3rd May.

Brownsbank Farm Location. **Fig's 1, 2, 3 & 7**

OS 1:50,000 Landranger Map Upper Clyde Valley, OS 1:10,000 Map Sheet NT 04 SE

Brownsbank Farm lies on the east side of the A702 Edinburgh to Biggar road, at Candyburn, some 3 miles north of the town of Biggar, the elevation is between 250m and 350m OD for the arable land and it lies of the southern flank of Broomy Law (hill). This hill and the surrounding ones, especially Black Mount to the NW form a valley containing important archaeological sites dating from the periods of the Late Upper Palaeolithic, Mesolithic, Early and Late Neolithic, Bronze Age, Iron Age and Roman. **The extraordinary area is unique in Britain as a consequence of the LUP site at Howburn Farm** (Ballin, Saville, Tipping, Verrill & Ward 2009-2010, see all ref's below).

The main excavation site (Trench 1) (Fig's 2 - 6) is located at NT 07654280 and at 270m OD. The site lies on a small natural terrace in the triangular shaped field which is on the lower SW flank of Broomy Law. It is 50m S of the A702 road. The site has a north westerly facing aspect across the valley towards Elsrickle village and has views to the W and NE. The rest of the trenches are in the same field (Fig 6).

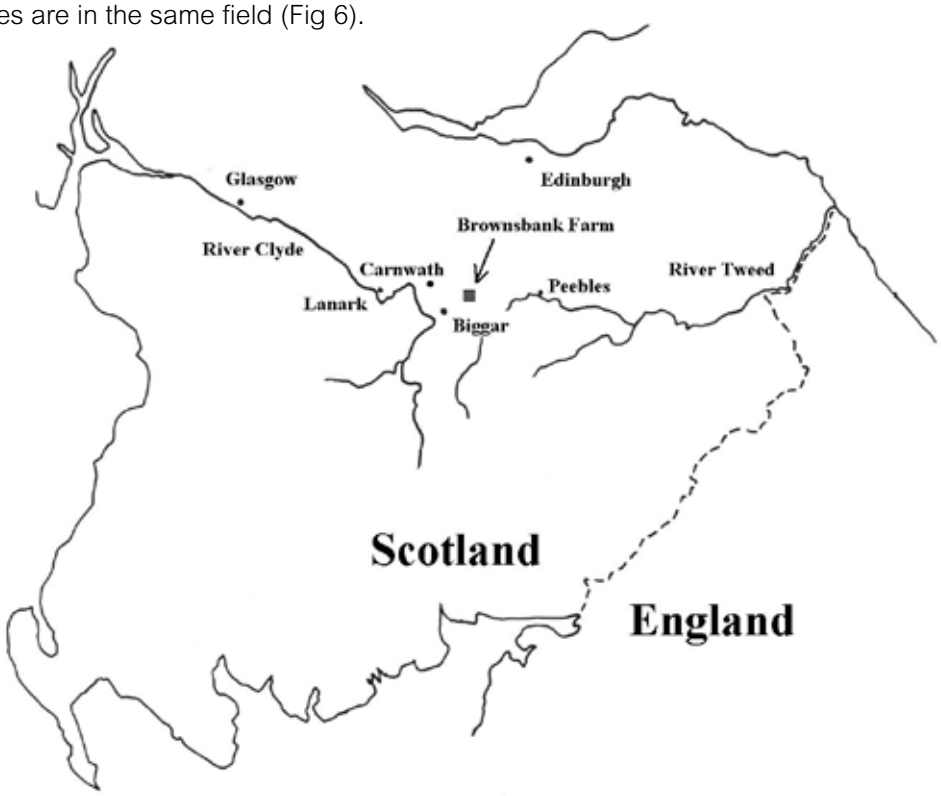

Fig 1

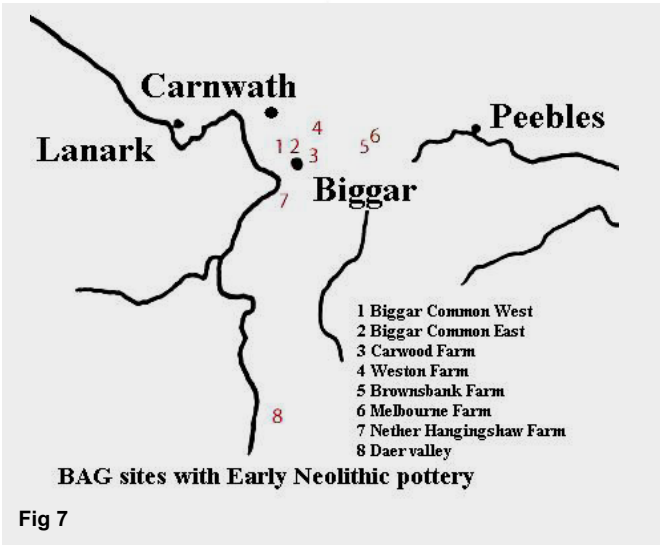

Fig 7

The field is given as late as 1957 on the OS 1:10,560 map NT 04 SE as 'Young Cock Wood'. The farmer, Mr Tweedie states that the field has only been developed from unimproved pasture since the late 1980's. The field has been subjected to mechanised ploughing on four occasions since the time of the plantation which was felled prior to 1957. Whether the area was cultivated before the plantation is unknown, however, if it were, only shallow ploughing by draft animals would have occurred.

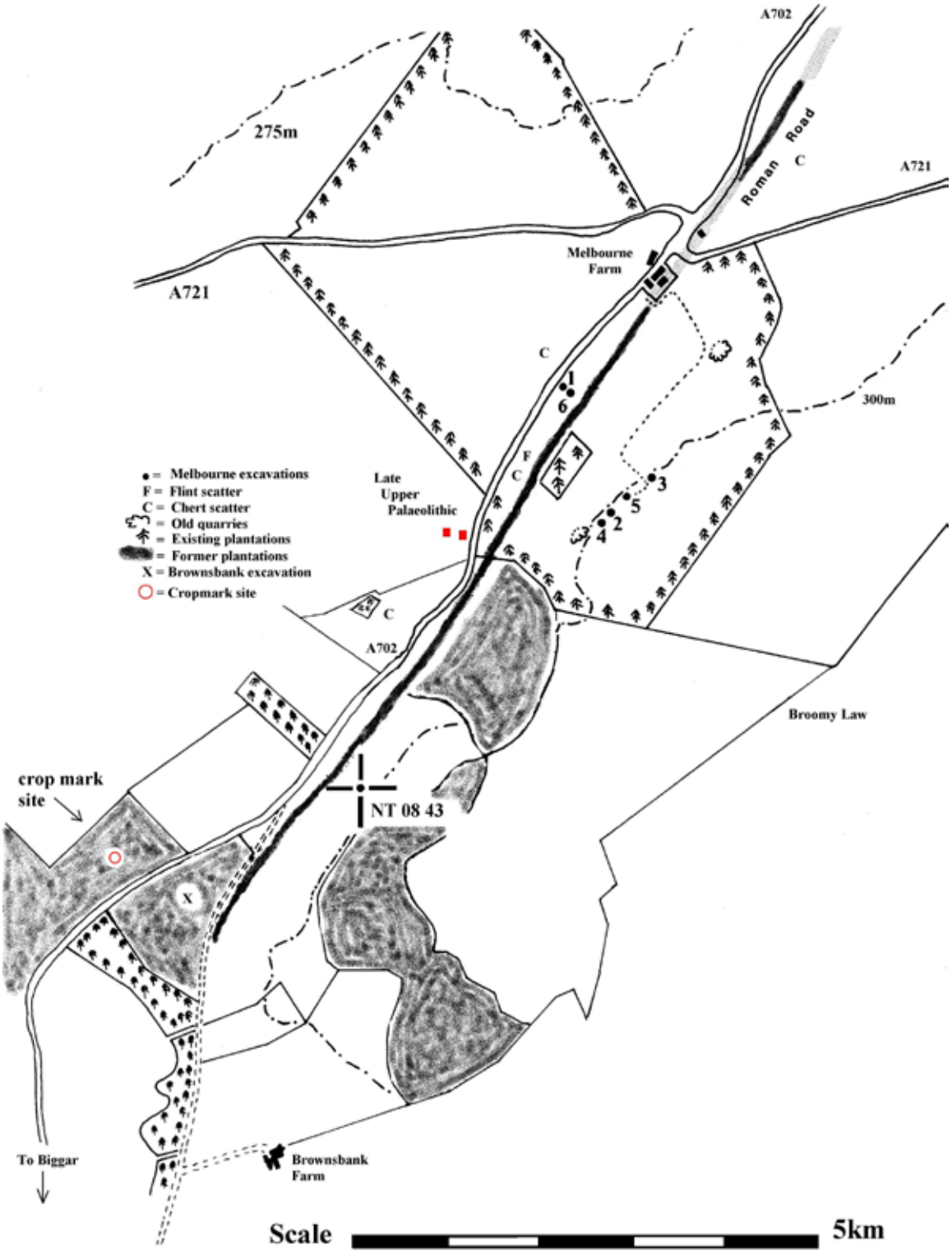

Fig 2

The 1st Ed OS (1850's) map shows no plantation in the area, the 2nd Ed map (1890's) shows the field and the one on the other side of the A702 road, and where the now crop mark site (RCAHMS, 275 of which more below) (Fig's 2 & 3) lies, as being over planted, the trees are shown on the 3rd Ed (1957) as Cock Wood and Young Cock Wood. The crop mark site is known to have been an upstanding monument around 1950, although only just traceable, both it and the archaeological deposits given in this report therefore survived until these woodlands were finally pulled out.

The salutary lesson being that old woodlands have a good chance of protecting archaeological sites, but when modern arable cultivation takes over the land, such sites and monuments will soon be eradicated. The same phenomenon has been observed by BAG in their excavations at Biggar Common East (Carwood Hill) and Carwood Farm (Ward 2013 x 2).

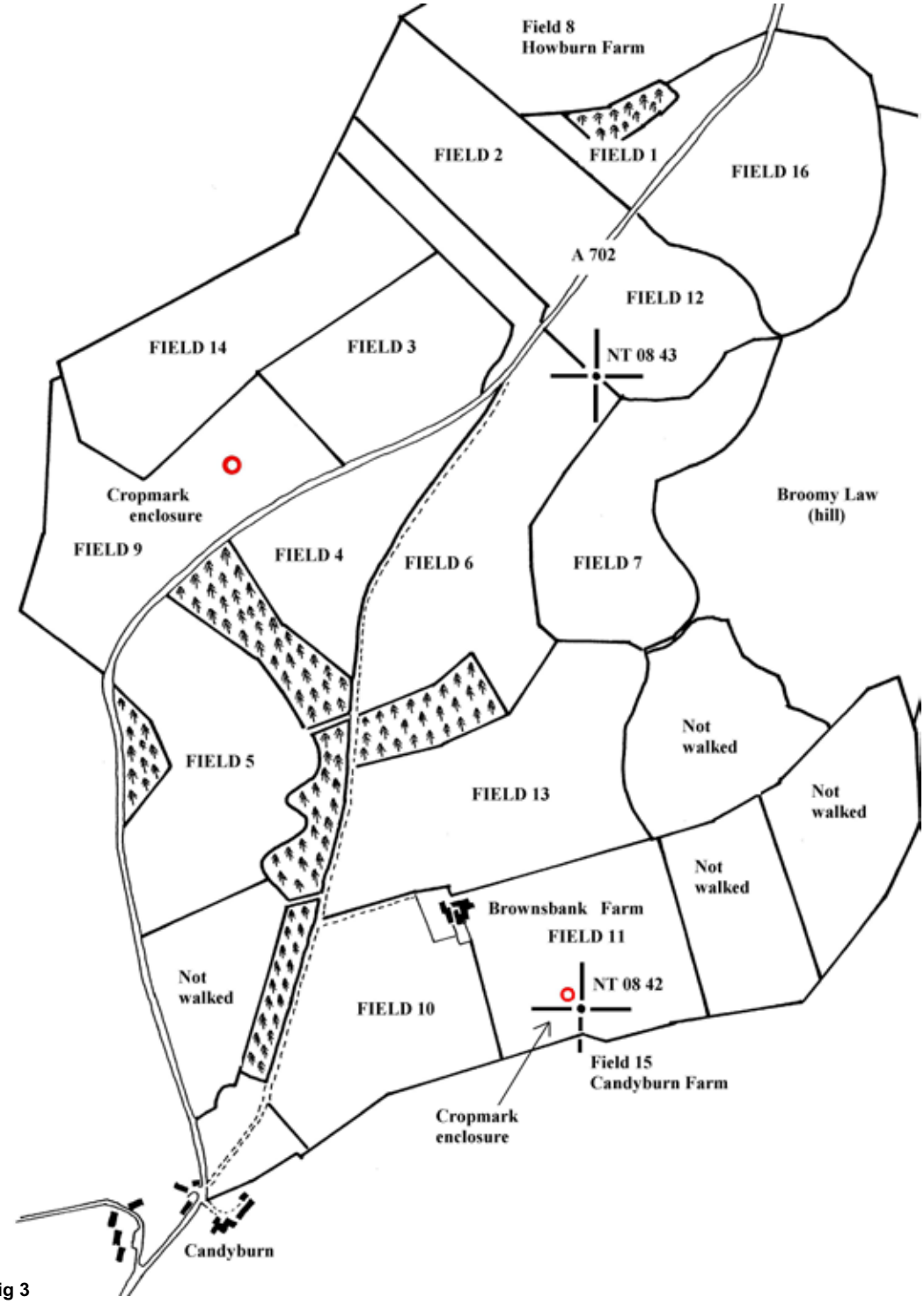

Fig 3

Geology

The land is described as being capable of producing a narrow range of crops, with soil limitations (Macaulay, 1986). The underlying solid geology is andesite, an igneous rock of Lower Old Red Sandstone age. This must come near to the surface in certain places judging by the broken weathered rock of that type and which is strewn across the fields. The thin top soil is now relatively stone free and it gives way to an orange coloured sub strata which varies from sandy to gritty with some till. The sandy material is fluvio-glacial drift derived from the Southern Uplands. Broken rock from the andesite is abundant.

A range of rock types are found naturally on the field, the principal one being the andesite in a weathered and decomposed state, some of this is seen as soft red haematitic stone. Belonging to the andesite sequence are agates which are commonly found as broken and intact pebbles, with small examples still embedded within the andesite.

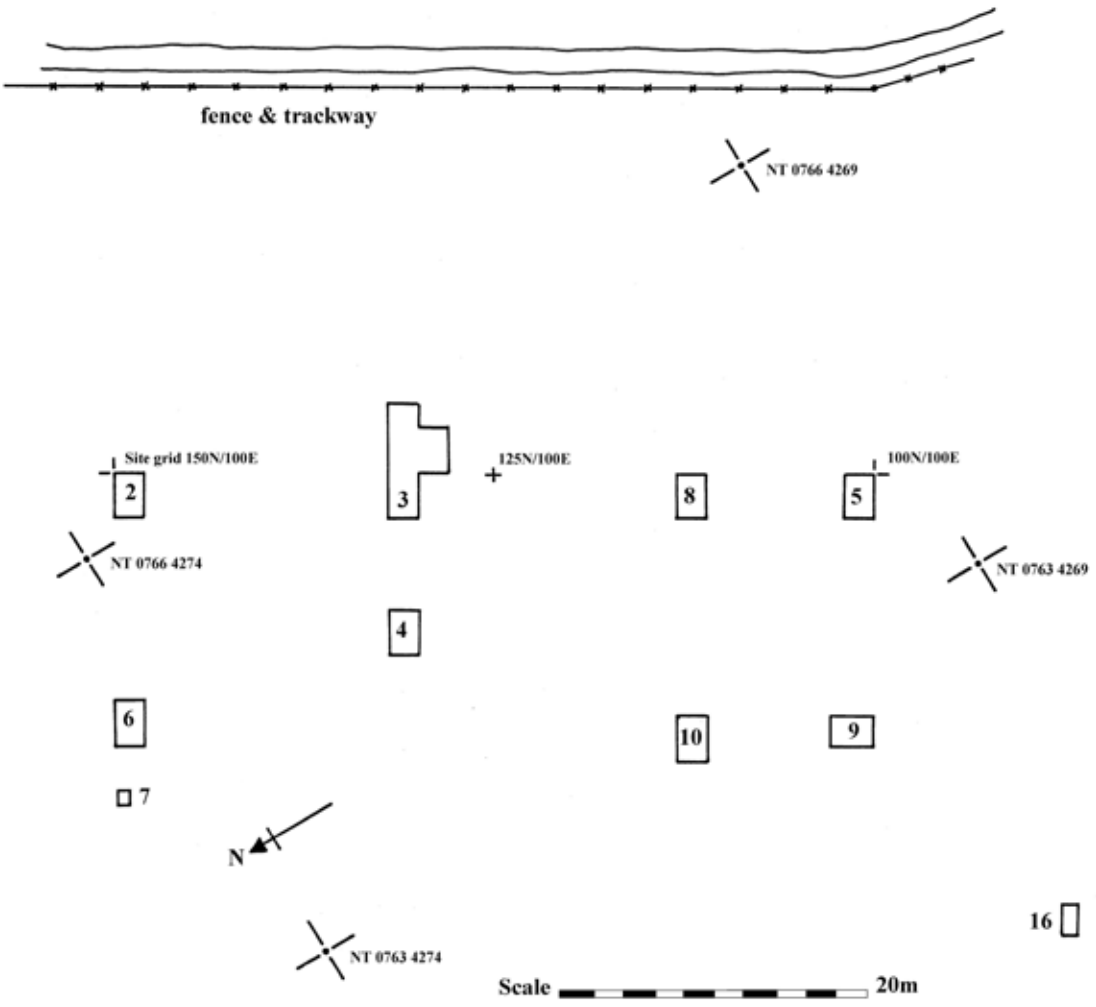

Fig 6

The fluvio glacial deposited rock types are; greywacke and radiolarian chert, both found as rocks up to cobble size and both derived from the Southern Uplands only 1.5 miles to the east. Quartsite pebbles and cobbles are also common, these rounded stones are originally derived from north of the Highland Boundary Fault, but have been weathered out of conglomerates to the south west of Biggar and transported to this location glacially. They are the hardest rocks in the area and were the favoured hammer/grinding stones throughout prehistory in this district.

The stone types brought by people to the area are flint, pitchstone and tuff. Small pieces of cannal coal may be of modern origin, but this remains uncertain, it is certainly not naturally deposited.

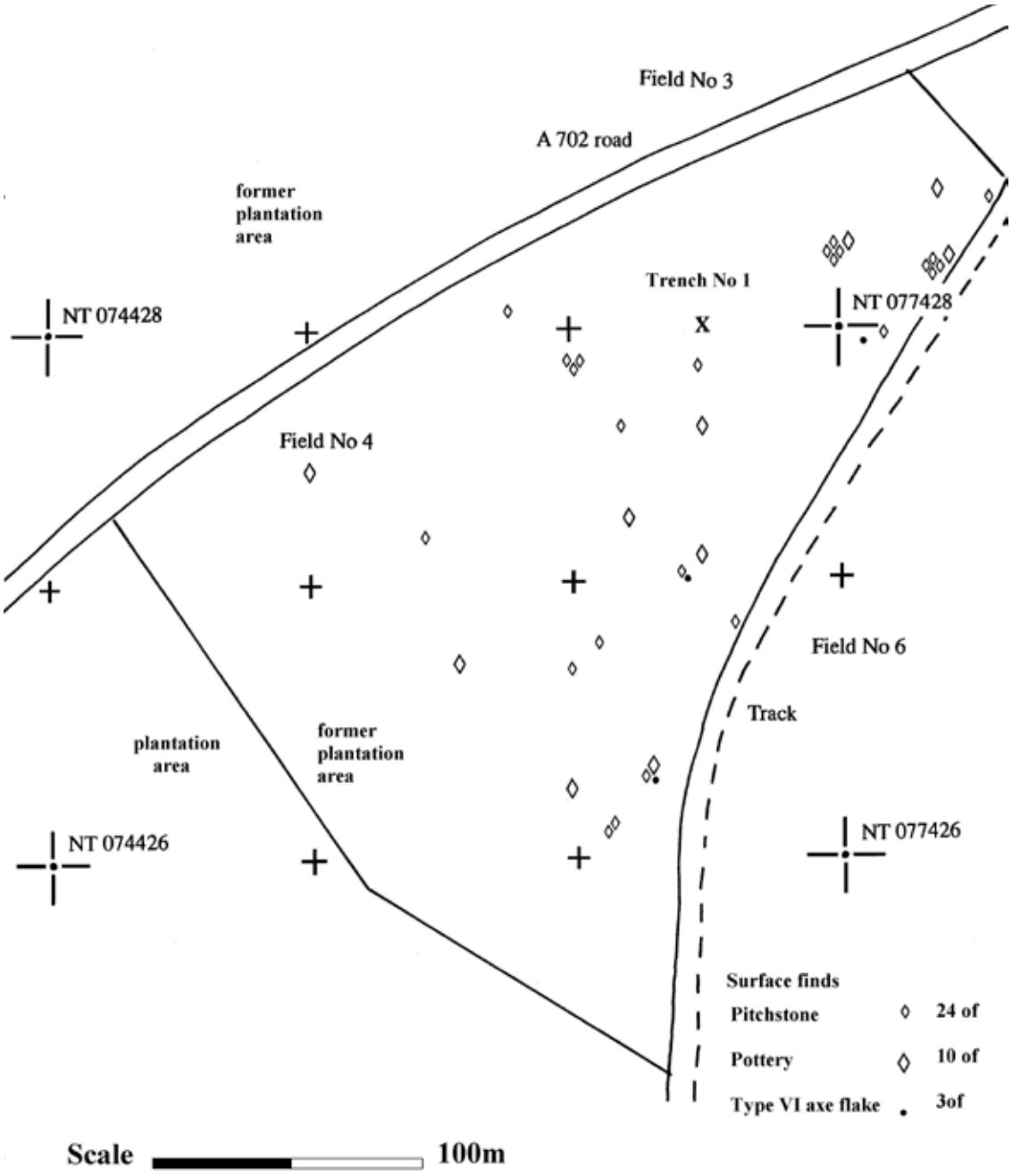

Fig 4

Methodology

Fieldwalking

Fields around the farm (Fig 3) have been walked when the opportunity presented itself, most fields have been inspected on more than one occasion, a singular fact is that often more finds are made on second and subsequent ploughings than the first one, this is because the ploughs tend to dig deeper with each successive cultivation, bringing the last vestiges of sites to the surface, repeat walkovers are therefore imperative to gain a true evaluation of the archaeological deposits and finds in a field.

The excavation field (No 4) was walked over in 1999 and a few flint and chert tools, pitchstone and a hammer stone were found - and two sherds of pottery. The Project strategy aims, where possible, to walk every field at least twice. During both 1999 and 2000 the entire field was thoroughly inspected with close proximity walkers, set two metres apart.

On the second occasion a similar range of lithic was retrieved but with the addition of several locations where the distinctive Early Neolithic pottery was also found. It was noticed that much sub stratum had been brought to the surface over most of the field in 2000, indicating that slightly deeper ploughing had taken place. The locations of the fieldwalking finds were spot located (Fig 4) using hand held GPS.

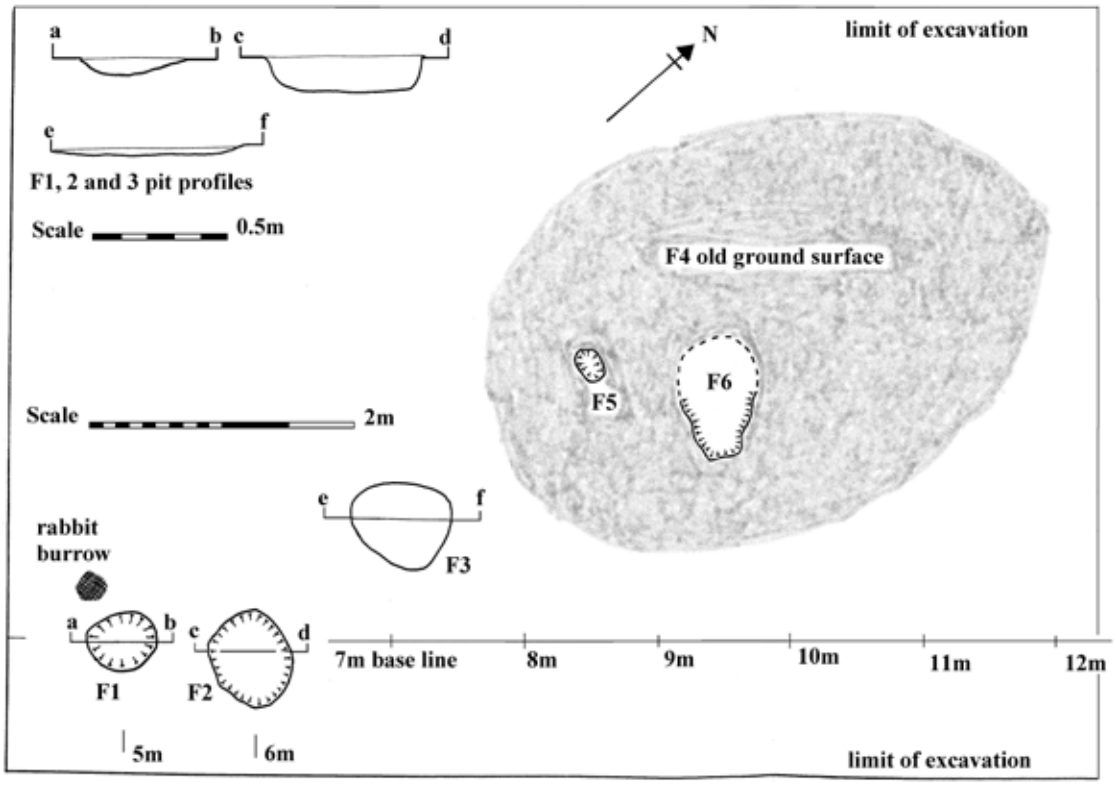

Fig 5

The Excavations **Fig's 4 – 6** **Plates 1 – 5a** **see Appendix I for finds list**

Two locations produced multiple sherds and pitchstone; one was the excavation Trench No 1 and the other is only about 25m to the SE and about 5m higher up (see fieldwalking finds MB 00 / 55 and 56). Upon closer examination of the area at what was to become Trench No 1, it was discovered that numerous sherds lay within the uppermost level of the new plough soil. A preliminary search, by hand only, (Pl 1) increased the six or so surface ceramic finds to about a hundred, with several rim sherds included. Pitchstone and larger stone tools were found and charcoal including a hazel nut shell was noted. Based upon this it was reckoned that an important Early Neolithic site, probably a settlement, had been disturbed. The decision was taken to carry out a limited excavation to establish the nature of damaged and possibly preserved contexts. This was organised in considerable haste since the field was under cultivation.

A baseline was established over the main concentration of artefacts which were initially found in the ploughsoil and the trench was opened along each side of the baseline. A total area of nearly 50 square metres was eventually excavated and which formed a rectangular shaped trench.

Plate 1

Plate 2

Plate 3

The ploughsoil was systematically hand trowelled and all spoil sieved through 1cm mesh riddles (Pl's 2 & 3). None of the objects from the disturbed ploughsoil were spot recorded, being referenced in the catalogue only to the ploughsoil context over the entire trench and slightly beyond in some cases.

The inverted turf from the previous years' ploughing was then removed by forks and inspected for finds, it was noted that there was a significant drop in the ratio of finds in the surface top soil / sub soil to the previous years top soil, although a few sherds were retrieved indicating that pottery was disturbed in 1999. The trench was then hand trowelled to clean the surface and detailed excavation commenced.

From this point all objects found were spot recorded to an accuracy of 10cm on plan, no finds were levelled, although from Feature No 4, a spread of old ground surface, three separate lifts of finds were made, allowing for three arbitrary levels to be recorded, these are designated F4/1 , 2 and 3, No 1 being the uppermost.

Plate 4

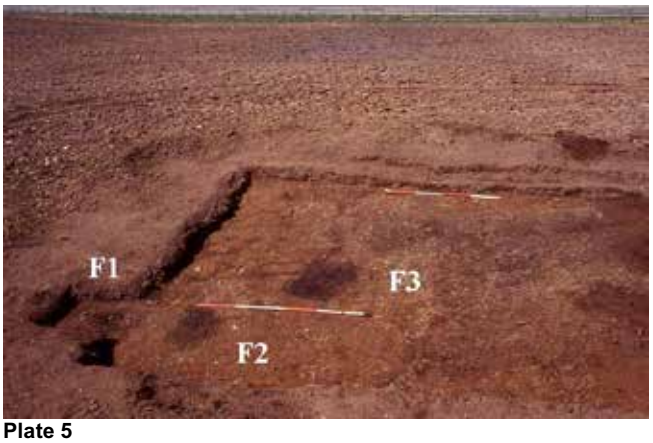

Plate 5

Plate 5a

Finds processing

Lithics have been washed and sherds have been dried at room temperature and then some of them lightly cleaned with a soft hair brush, some sherds are noted to have incrustation adhering to them and these have not been cleaned at all. A few sherds were washed out of the soil samples during flotation.

Sample processing

The five pits from the site were bulk sampled after being sectioned, F4, the old ground surface was not sampled. The contents of each sample was then hand processed by the writer using flotation to separate charcoal and modern organics from the soil. Flots were collected in 1mm and 0.3mm sieves and dried at room temperature. The 1mm flots were then inspected and larger charcoal hand picked for identification and to secure dateable samples, hazel nut shell and cereal grains were retrieved at this stage. Modern organics such as rootlets were removed as far as was possible. The samples were then submitted for specialist analyses with the outcome of at least two single entity AMS C^{14} dates (see below).

Excavation results. Fig 5 (See finds list for details of finds in relation to contexts)

When the trench was first cleaned it became obvious that several patches of charcoal enriched soil were visible (Pl 4). These were later shown to be the features No's 1, 2, 3, and 6; F6 was visible as a more dense concentration of charcoal on F4 surface, although it was not possible to show a clean cut through F4.

Features 1, 2 and 3 (Pl 5) were trowelled down by a depth of up to 50mm to reveal the edges of pits, each of which was sectioned in half. These pits were unrelated stratigraphically.

F1 became apparent as a grey coloured soil with charcoal flecks evident and with several sherds lying in the upper fill. The pit measured 0.5m by 0.4m by 0.1m deep. It had gradual sides and a bowl shaped base. Found within the pit were a broken quartzite hammer stone, two freshly broken fragments of another quartzite pebble but with no obvious signs of wear, two tiny fragments of cremated bone and sixteen pieces of pottery from fragments to sherds, two of which are rims from different pots. The fill contained a small amount of charcoal, but enough for species identification and hazel nut shell was noted. A radiocarbon date on Corylus was:

1 Sigma cal BC 3784 – 3664, cal BP 5733 – 5613
2 Sigma cal BC 3911 – 3649, cal BP 5860 – 5598

Full details in Appendix IV

F2 became apparent as a grey coloured soil with charcoal flecks evident and with several sherds lying in the upper fill. The pit measured 0.75m by 0.6m by up to 0.3m deep. It had steep to shallow sides and a level base. Found within the pit were a flake and a tiny spall of pitchstone, four flakes of chert, a flake of brown coloured siltstone, about twenty five tiny to small fragments of cremated bone, some of which may be identifiable, and eighty six pieces of pottery which includes; six rims of which there are at least four pots represented, two sherds with carbonised encrustation adhering to them and two sherds measuring up to 60mm and 70mm in size. The fill contained enough charcoal to have species identification and dating samples selected, included are hazel nut shell and a number of cereal grains. A radiocarbon date on Corylus was:

1 Sigma cal BC 3692 – 3639, cal BP 5641 – 5588
2 Sigma cal BC 3709 – 3538, cal BP 5658 – 5487

Full details in Appendix IV

F3 became apparent as a charcoal enriched black patch with round wood fragments visible. The pit edge on the SE side was very distinct and clean cut against the natural red/orange coloured sandy sub-stratum The sub circular feature, as defined, measured 0.65m by 0.65m and only about 50mm deep. The ground below the charcoal deposit had been subject to moderate heat causing oxidisation of some soil and stones, this showed as a reddened discolouration from the natural orange hues.

No finds were made within this context and expert analyses of the charcoal fragments confirmed the site interpretation as the feature being a relatively modern one, since heather stalk, in fresh condition, appeared to be the principal charcoal type. It was probably the result of a fire pit after the plantation was cleared since it is known that heather covered the area before the first modern cultivation took place, see App III for charcoal.

F4 was shown to be a surviving area of old ground surface (ogs) which was slightly enriched with tiny and microscopic charcoal giving the soil a distinctive grey colour which contrasted with the light brown top soil. F4 formed an area of about 4.5m by 3m, the ogs tailed into the slope on the S side and deepened on the N to a depth of around 0.1m, the ground around it had been truncated by the plough to the natural which varied from a red/orange coloured sandy sub-stratum on about three quarters of the feature on the W side and giving way on the E to more rocky sub-stratum. F4 was not sampled. The charcoal which apparently emanated through F4 from F6 below was not retained.

A quantity of finds from F4 were plotted and were retrieved in three arbitrary layers, they are as follows: a broken greywacke pebble which appears to have been slightly heated, and showing possible slight percussion marks at one end, a greywacke pebble (Pl 8) showing four facets of wear indicating its use as a rubbing stone, three pitchstone flakes including two of a grey coloured variety, two chert flakes, a flake from a Group VI axe with some polish surviving and a possible bulb of percussion indicating the broken axe may have been knapped after its use as an axe had ceased, 165 pieces of pottery of which 16 are rims, 5 are carinations and at least six sherds have carbonised encrustation adhering to them. Tiny flecks of cremated bone amounting to about eight fragments were found.

F5 was a small oval shaped pit measuring 0.25m by 0.15m by 0.15m deep and which had been cut into the till. The fill was a greyish coloured soil probably indicating microscopic charcoal, the fill was of the same colour and texture to the soil of F4 which apparently overlay the pit, although F4 and F5 may have been one and the same context, F5 was not sampled. The pit contained four pieces of pottery and a tiny fragment of burnt bone.

F6 was a pit which appeared to have been obliterated in pre-history to some extent on its NW side, the more distinct SE side measured 0.45m from side to side and at least 0.3m length survived. The surviving edges had steep sides and a fairly level base while the remainder of what may have been the pit was rather hummocky and amorphous. Like F5, F6 apparently underlay F4, although unlike F5, F6 contained more visible charcoal which appeared to surface through the F4 layer, however no distinct boundary between the upper layer of the pit and F4 was discernible, only against the sub-stratum was the edge of F6 clear. The fill in the surviving part of the pit was sampled and produced a small quantity of charcoal which allowed for species identification; hazel nut shell was already noted.

The feature produced sixteen pieces of pottery including three rim sherds from different pots, a large and a tiny flake of pitchstone and four tiny fragments of cremated bone.

Modern disturbance

One distinct and recent vertical rabbit burrow (Fig 5) lay near to F1, and on the W corner of the trench, an area devoid of pre-historic features apart from occasional very thin lenses of old ground surface, there were the remnants of rabbit burrows. These were not recorded on plan but are visible on Plate 5. The most recent ploughing which ran on an NE/SW alignment left no lines in the sub-stratum to show the individual furrows, rather it had cut the ground very evenly and down to the natural. The ploughsoil depth was up to about 0.3m but varied slightly over the area, no doubt accounting for the surviving F4.

The probable modern fire pit, F3 has been described above.

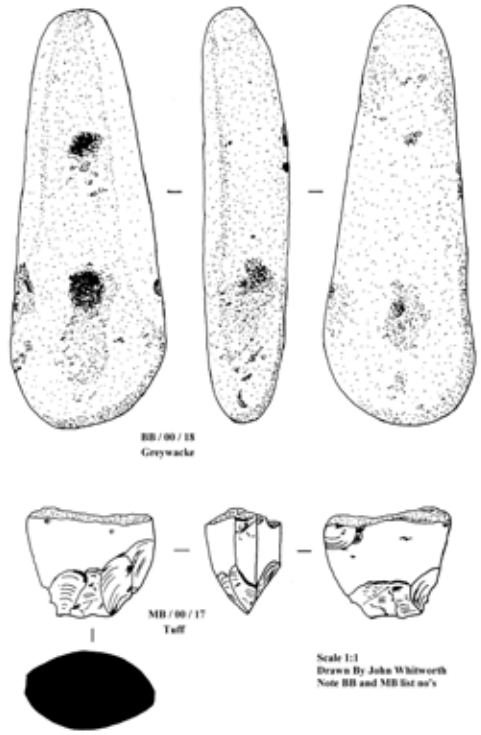

Fig 10

Summary and interpretation of features. Fig 5

The features formed an approximate N/S alignment but other than that there is no pattern to be implied because of the variety of the sizes of the four Neolithic pits which are certain. It would appear that a larger area of old ground surface and probably a layer from the top of F4 was skimmed off by the plough, displacing the main concentration of ploughsoil finds.

F4 was a similar context to those found at both Biggar Common West and East, Carwood Farm and Nether Hangingshaw Farm projects, where charcoal enriched soils produced many lithic artefacts and significant quantities of Early Neolithic pottery. These contexts are interpreted by the writer as habitation floor surfaces and the same interpretation is applied at Brownsbank Farm.

Plate 6

F1 and F5 may be post holes while F2 and F6 are less likely to have functioned as such. Therefore it is not credible to imply that the pits indicate structural remains such as a house, the absence of pits in the western corner of the trench tends to support that. The largest intact pit, F2, may have had a storage or preparation function, perhaps for food, given the nut shell and cereal found within it. The presence of burnt bone, pottery and other artefacts in the pits is a repetition of similar pits found at the nearby sites of Biggar Common and Melbourne. It is suggested here that the pits on all these sites, whether post holes or for some other purpose, were bound to become filled with objects since apparently there was so much material strewn around the area. The deposition of most of the fill material is therefore likely to have been co-incidental rather than a more deliberate, and often described 'ritualistic' act.

The function of the pits may have differed according to their size, the smaller ones being post holes and the larger examples perhaps being used for storage. What ever they are, it would appear that they represent domestic activity and if they are not located within a habitation site, then they are most likely to have been near to one.

Summary and interpretation of the finds.

Excavation

Unfortunately, a high proportion of the finds were disturbed, including the two large hand tools; the greywacke multi purpose tool (Pl 6 & Fig 10) and the quartzite hammer/grinder (Pl 7). It would appear that more in situ material was disturbed in 2000 than in 1999, certainly this is true for pitchstone, flint and pottery, although the opposite is the case for chert. This indicates the value of follow up fieldwalking for at least two seasons if possible.

A significant percentage of finds was retrieved from in situ contexts including the pits, two of which contained pitchstone along with sherds, this is further evidence that the two types of material are contemporaneous in use and deposition. This was the first time in Clydesdale where the pitchstone was found within pits containing pottery, although it has been found on each of the aforementioned sites since, in situ, and with scatters of potsherds. Since this excavation, pitchstone has been found in pits with EN pottery at Carwood Farm, Nether Hangingshaw Farm and at Daer valley.

The excavation assemblage from Brownsbank is very similar to those from Biggar Common West and East, Weston Farm, the adjacent Melbourne Farm, Carwood Farm, Nether Hangingshaw Farm and Daer valley (Fig 7) (all BAG sites) where on each location there has been a clear association of Early Neolithic pottery with pitchstone and Group VI axes.

Plate 7

Plate 12

Pottery Plates 9, 10, 10a & 11 Fig 8

A total of 1055 sherds were recovered, this number includes fragments. Of the pottery a total of 563 sherds had been displaced, this includes: 59 rim sherds, 5 carination sherds, 2 sherds with encrustation, 135 sherds larger than 25mm and about 350 sherds and fragments smaller than 25mm.

The pottery is fairly typical of the types of Early Neolithic ceramic found elsewhere and is very similar to the assemblages previously, and since, found in the Clydesdale area. The best description of these Early Neolithic carinated and uncarinated plain bowls is to be found in Alison Sheridan's re-evaluation of EN pottery in Johnston (1997, ibid). The sherds from the various BAG sites given here would lie comfortably with each other, on any particular site; such is the basic similarity in them. Plate 12 shows replica pots made from the Biggar Common West sample, it would appear that most Early Neolithic pottery from the various BAG sites is of similar styles.

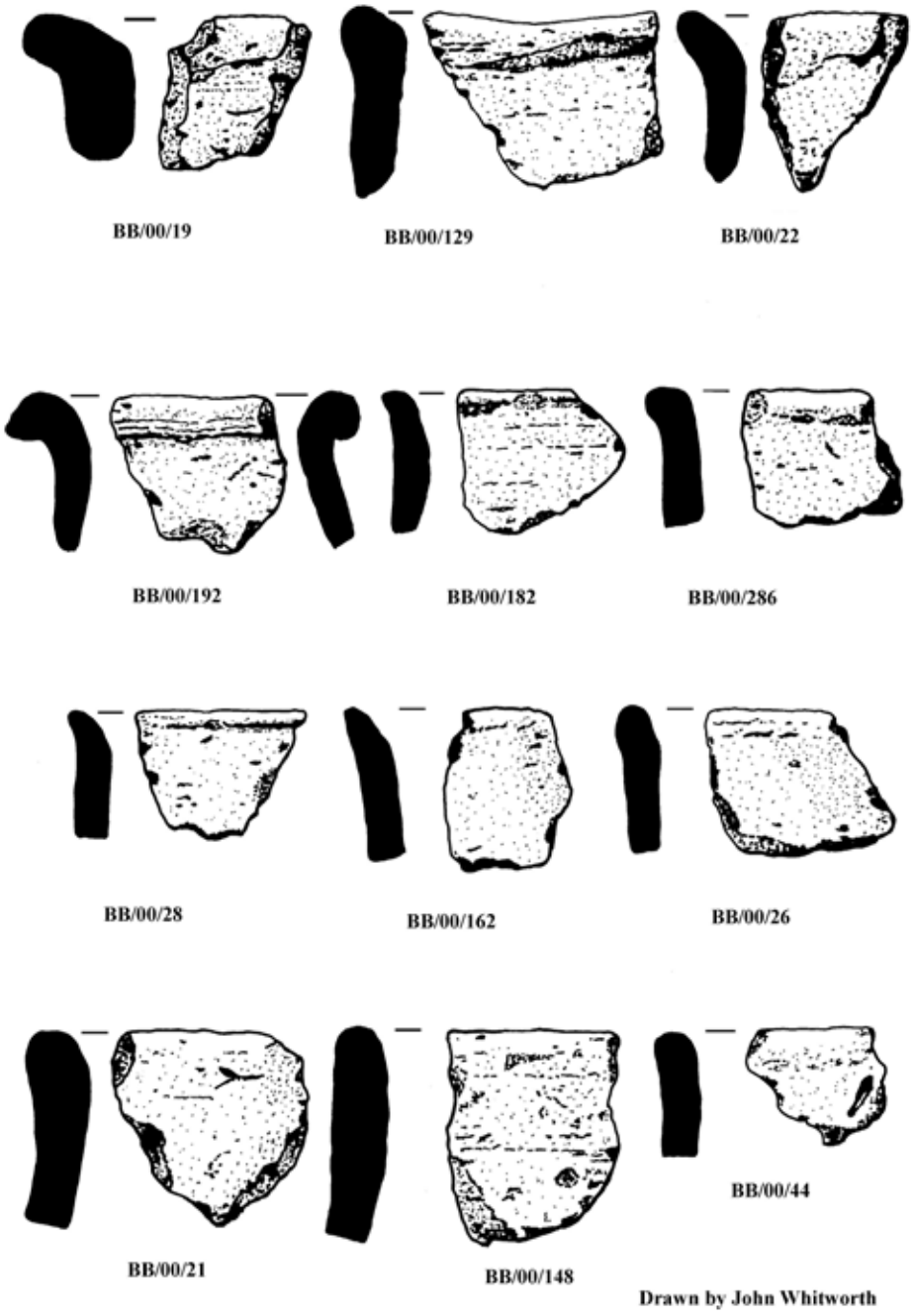

Fig 8

The surfaces of the sherds are often highly burnished with the colour ranging from buff, orange/reddish brown to black. Sherd wall thickness varies from 5mm to 10mm (Fig 8) indicating high quality manufacture with only a few stony inclusions being present in the fabric. There is a wide range of rim types from round topped straight sided to the more common everted rims (Pl's 9 – 10a). The pot diameters at the rims range from 60mm to 180mm and the shoulders from carinated bowls are present. Several sherds show that some pots were carinated (Pl 11), although it appears that the whole range of types found on other BAG sites are present. Of particular interest are the sherds with a black carbonised incrustation adhering to the surfaces, it is hoped that some day these will provide evidence of use and also give more accurate C^{14} dates for the actual pots.

Plate 10

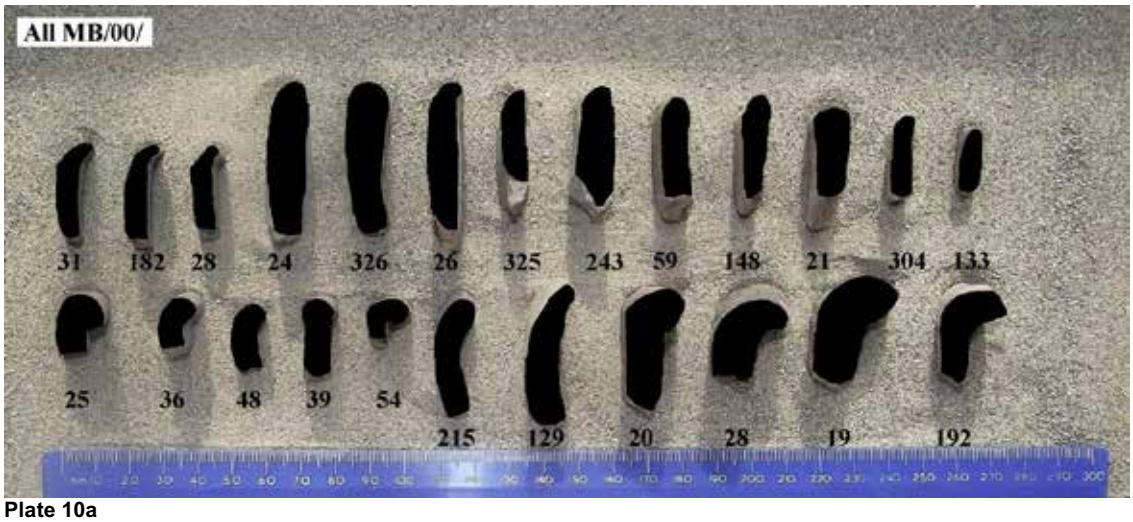

Plate 10a

Although most of the sherds have been lightly cleaned, a few from the features were washed during the processing of the soil samples. There has been no attempt to re-construct any of the assemblage. Fresh breaks are evident on some sherds indicating the stress they underwent during ploughing and a reasonable quantity of sherds was retrieved from in situ contexts.

These are mostly unabraded at their broken faces, indicating how well they survive while undisturbed. Apart from the small fragments there may be a possibility of matching some sherds to fit together.

Clearly it is beyond the skills of BAG to analyse both the pottery and lithic, therefore descriptions given here must be considered 'non specialist'.

Plate 11

Plate 9

Lithic. **Plates 6 – 8 & 13 - 15**

The lithic assemblage is interesting for a number of reasons.

The high proportion of pitchstone to all other types indicates the importance of this exotic stone. There are also, unusually, three types of pitchstone represented, the common black shiny variety dominates with a few pieces of the grey coloured type being present*, however a third type with a dark coarse grain and which has not been seen before in Clydesdale is also present. Most of the pitchstone is flake, spalls or chips and which was the largest collection of pitchstone from a single site in Clydesdale {but superseded at nearby Melbourne Farm soon afterwards} and taken along with the pitchstone found in the other parts of the same field, forms an extremely large assemblage for an area outwith Arran.

*{It is now known from more recent work at Daer valley that the grey pitchstone is the result of an oxidisation process and is merely the normal black type with a veneer on the surface only}.

Rather surprisingly the chert component of the assemblage is rather low and is made up mostly of debitage, although the leaf arrow head, cores and scraper are typical of other local sites (Pl's 13 – 15).

Flint also comes as an apparently little used material on this site, being only six pieces but including the tip of a probable leaf arrow-head and also a scraper (Pl 14).

The fragments of Group VI axe (Langdale Pike), for example see Fig 10 (MB/00/17) and found by fieldwalking, verify evidence from other Clydesdale sites and indicate the use of such axes in association with the Early Neolithic pottery and pitchstone. Interestingly, and found on the other local sites also, are axe flakes which have been re-cycled into smaller tool types, for example the knife here (MB.00/6) (but found by fieldwalking), the arrowhead from nearby Melbourne Farm (MB/95/46), and a leaf arrow-head at Biggar Common East (BC/A2/187). Finlayson suspects the secondary use of the tuff as thin flakes would be more symbolic than practical given the hardness of the tuff (Finlayson in Ward 2013).

Quartzite hammer and grinding stones are commonly found in this area, being the hardest, convenient, hand fitting stone types to be found locally. Plates 17 & 18 (MB/97/2 and MB/99/17) show two examples found nearby by fieldwalking.

Plate 8

Plate 13

Greywacke tools are less common, perhaps surprisingly, given that handy shapes and sizes of stone are easily obtained along the river courses of the Southern Uplands. However, judging by the polished flake of greywacke (MB99/36) (an axe?) it appears that on this site, that local stone was acceptable for use. Unfortunately the two large tools, (BB.00/13 and BB.00/18) (Pl's 6 & 7) were found in the disturbed ploughsoil and therefore some doubt may be cast on their original association, although it most likely that they do form part of the repertoire of finds from the Early Neolithic site of Trench 1. While the use of greywacke for a small grinding tool or quern rubber is unusual, the tool type itself is not.

The hammer stone (BB.00/18) (Fig 10) on the other hand is the first of its type to be found in the area. It is a conveniently naturally shaped long pebble, chosen to allow a better grip, a handle in fact, to make percussion more comfortable for the user. The tool has percussion marks on all sides, and facets on the long edges and broad end indicating its use as a rubber. Eight hammer stones of varying types and showing degrees of use were recovered indicating their use on the site. This is a higher ratio of such tools than has previously been found on local sites.

Plate 14

Plate 15

Bone

The sixty-three tiny fragments of cremated bone were found over the site and especially within the pits. This also has a parallel with the other local sites alluded to. It may be possible to glean some information from one or two pieces of bone but it is unlikely that analyses will be able to differentiate between human and other animal types. The bone may be the product of cooked food or simple accidental burning of bone scraps. It is considered here that the site represents an aspect of settlement, although other activities cannot be totally ruled out.

Finds Context

It will be apparent that a large percentage of finds were disturbed into the plough soil, however, given the close proximity of all and forming a discrete scatter, it may be taken for granted that all of the objects were displaced from an associated context of features and the in situ finds. The displacement of finds and materials from a single furrow ploughing event is less than 0.5m, it is possible further cultivation such as harrowing may move them very slightly again. However, it has been observed by BAG on several occasions that such finds do not migrate far from their source of origin, unless they have been subject to repeated cultivation within a field and over extended periods of time.

Samples see App III

The soil samples provided charcoal from each context and this has been identified and some was submitted for C^{14} dating (App's II & IV). Only some of the pits were sampled. The inclusion of hazel nut shell in several contexts has parallels elsewhere in the Early Neolithic sites in Clydesdale and at Biggar Common cereal was also found. The hazel indicates that this seasonal food was a popular and probably important food resource while the cereal is further evidence of the first farmers, the dated contexts containing cereal compliment the work at Biggar Common where grains of Hordeum were dated to cal BC 3496-3147 and cal BC 3508-3350. See App III for full details and discussion of the charcoal.

Excavations 2001 Plate 5a Fig 6

In 2001 a further series of trenches were opened in the same field over previously identified spots of pottery finds and in some cases, in places on a purely speculative basis, being level areas where the possibility of prehistoric activity seems credible (Ward 2001). However, this time the work was carried out prior to ploughing since the locations were known from the previous years work.

Methodology

A baseline was established 25m west of and running parallel with the fence which separates Field No 4 and Field No 6 (Fig's 3, 4 & 6).

Trenches at irregular intervals were set off the baseline at positions which were chosen because of the topography of the ground, fairly level areas being selected. Other trench locations were chosen to test if the topography, especially level areas would indicate productive targets.

The same methodology of excavation as for Trench No 1 was adopted, however sieving was not always possible due to the damper conditions prevailing; regardless, it was reckoned that any drop off in finds numbers must have been insignificant due to the smaller trenches.

The trenches were allocated numbers running on from the single Trench No 1 which was opened the previous year.

Results

Trenches No's 2 – 10 and No 16 form a grouping (Fig 6) on a natural terrace which has an undulating surface. Trench No 7 lies at the highest point before the ground drops down slope and to the north.

Trench No 2
The trench measured 3m by 2m and the plough soil depth was 0.25m. No features were found and all the finds came from the plough soil.

Trench No 3 NT 0766 4272
The trench measured 7m by 4m in total irregular shape giving an area of 20 square metres. The plough soil was 0.25m deep. No features were found and all of the finds were located as a discrete patch near the middle, nothing was found around the edges of the excavation.

Trench No 4
The trench measured 3m by 2m and the depth of plough soil was 0.25m. Two amorphous areas of old ground surface survived below the plough soil, each of these was a depression of slightly charcoal enriched compacted soil which was lighter in colour to the darker organic plough soil. No finds were made in the features which were not sampled. All objects found were in the plough soil.

T4/F1 = c0.25m diameter by 0.05m deep, location on grid = 131.6N/93E
T4/F2 = c0.3m by 0.2m and 0.1m deep, location on grid = 131.2N/92.3E

Trench No 5
The trench measured 3m by 2m and the plough soil depth was 0.25m. No features were found and all finds came from the plough soil.

Trench No 6
The trench measured 3m by 2m and the plough soil depth was 0.25m, it lay directly over bedrock, the only find was in the plough soil.

Trench No 7
The trench measured 1m square and was to test an anomaly found by dowsing. The plough soil was 0.25m deep and lay directly over bed rock, no features or finds were made and the anomaly is believed to have been the result of geology.

Trench No 8
The trench measured 3m by 2m and the plough soil depth was 0.25m, no features were found and all objects came from the plough soil.

Trench No 9
The trench measured 3m by 2m and the plough soil depth was 0.25m, no features were found and all objects came from the plough soil.

Trench No 10
The trench measured 3m by 2m and the plough soil depth was 0.25m, no features or finds were located.

Trench No 11 NT 0765 4280

The trench measured 3m by 2m and was aligned to 0^0 magnetic. It lay just a few metres SW of trench No 1, the exact position of which was no longer evident. The plough soil was 0.25m deep and no features were located, the finds all came from the plough soil

Trenches No 12 – 14 NT 0762 4276 = T 12

Each trench measured 2m by 1m and were aligned to 0^0 magnetic, each was separated by a distance of 5m, no finds or features were located.

Trench No 15 NT 0753 4266

The trench measured 3m by 2m and was aligned to 0^0 magnetic, the plough soil was up to 0.3m deep but no finds or features were located..

Trench No 16

The trench measured 2m by 1m, the ploughsoil was 0.25m deep and the finds came from the top soil.

Results

By reference to the addition to the finds list it will be seen that Trench No 3 was the most productive in terms of objects retrieved. A significant quantity of Early Neolithic pottery including at least nine rim sherds from different vessels was found in association with twenty two flakes of pitchstone. This is further evidence to an ever increasing list of sites from BAG projects where the two types of object were used contemporaneously by the first farmers.

The leaf arrow sits comfortably with the pottery and pitchstone but the transverse arrow is a later Neolithic artefact and several of these have now been found in the general area by field walking. The transverse arrow head is apparently made from a translucent agate which makes it particularly interesting since manufactured items from this lithic are extremely rare. Agate can be found naturally in nearby fields and it occasionally has the appearance of being struck, but whether by farm machinery or by knapping remains unclear to the non specialist.

Five of the trenches produced pitchstone flakes, which, now given the known distribution of pitchstone over this field, may be hardly surprising. There is now in excess of one hundred pieces of pitchstone gathered from this field.

The flint knife from Trench No 3 and the other quality tools may not be ascribed accurately to a specific period on typological criteria, therefore it is difficult to say with confidence whether they were used in association with pitchstone and pottery. There is a known residual scatter of later pre historic lithic over the general area.

Judging by the discrete density of objects from trench No 3 and also the pottery and lithic scatters from other Early and Late Neolithic sites excavated by BAG in the district such as Biggar Common West and East and nearby Melbourne, and also in Trench No 1 here, it is now very clear that the activities involving tools and vessels on these sites was restricted to very small areas, with only a few items being displaced further afield.

Conclusion for all excavation

It is clear that several locations in this field show that Early Neolithic activities involving pottery has taken place, and it is likely that this represents domestic or settlement enterprise, although no decent evidence was found to indicate a habitation or any constructional detail of one.

The variety and number of pot rims and from different vessels and the range of radiocarbon dates may be indicative of fairly long periods of activity, again suggesting habitation.

The policy adopted by the group of small scale exploratory excavations 'chasing' finds and features, and expanding the trenches on that basis, and stopping when finds apparently run out, may not be the best approach, however, it does appear to work and provide results. Nevertheless it is accepted that much archaeological deposits and finds may lie anywhere on such a field, perhaps not having been disturbed, and therefore more frequent test pits would be a better method.

However, given the meagre resources of such a group as BAG and with the other constraints they have to work under as a voluntary organisation, this project has demonstrated what can be achieved by targeting areas based on accruing knowledge and persevering with a strategy.

Surface finds made by field walking have a limited value in terms of indicating where actual sites may lie, unless concentrations of objects are found. Experience by the writer has shown that even a few items on top of the ground can betray the presence of hundreds or even thousands more below the surface. Generally, lithic material is found on the surface of fields as a sparse spread and although the overall density of objects will lead the finder to draw conclusions, often referred to as a 'background scatter', such judgement may be seriously flawed without recourse to excavation.

When prehistoric pottery is found, it is almost certain that the plough has disturbed it for the first time in millennia, and that previously it was lying in a stable environment, since the poorly fired pottery does not survive the attrition of mechanised cultivation, or even weathering effects, when exposed to one or both of them. In every case where the writer has been involved surface finds of prehistoric pottery have led to many more being found in the plough soil and in 'in situ' contexts below it. It is a singular fact that even in shallow upland soils, prehistoric pottery can survive very well in the compacted but thin matrix within which it has lain for thousands of years, even withstanding severe frosts which must penetrate the ground most winters. When such pottery becomes disturbed, it comes under immediate and severe threat of erosion and destruction.

Early Neolithic pottery can be difficult to recognise in a ploughed field since it is usually made in 'earthy' colours of brown to black and small sherds can look deceptively like stones.

The ongoing projects by BAG are attempting to understand the processes of artefact movement and survivability in arable fields, and the value of that knowledge in assessing the archaeological significance of an area. Experience has now shown the importance of systematic repeat visits to fields, where prevailing conditions will change constantly, especially weather conditions. Observation of the soils is also important, for example where fresh sub soils are seen on new ploughed ground, one may be sure that the plough has penetrated deeper than before, and therefore may have disturbed archaeological deposits and/or finds for the first time.

The site in context

While Early and Late Neolithic sites with pottery assemblages have now been found in significant numbers by BAG to the north of Biggar, numbers of upstanding and cropmark monuments of the period are few. The henge crop mark just north of Biggar at Hillend (RCAHMS, NT 03 NW/63) and the impressive upstanding Class II henge at Weston Farm (RCAHMS 1978, No 170), taken along with the chambered cairn of Burngrange (RCAHMS 1978, No 1) and possibly some of the other long cairns in the same general area, are testament to the presence of the first farmers. Further west at Blackshouse Burn (RCAHMS 1978, No 171 and Lelong & Pollard 1998) near the village of Pettinain is the massive enclosure which encloses some 6.5ha and was dated to the Neolithic. A cursus monument is recorded at Lindsaylands beside the River Clyde near Biggar by RCAHMS (NT 03 NW/125 Canmore No 169737). A further possible cursus monument was discovered at Melbourne in 2013 (RCAHMS pers comm) north of and only a few fields removed from the site under discussion.

However, almost adjacent the site under discussion lays a monument which was still visible in the 1950's (RCAHMS 1978, No 275) but which was subsequently reduced to being seen as a crop mark only (Figs 2 & 3). It was recorded by RCAHMS as having a bank with an external ditch. The site was excavated by the University of Glasgow (Brophy 2006) soon after the excavation described here and the outline of the shallow ditch was seen (Pl 18). The proximity of the two locations may be seen in Plate 19 where the car is sitting on the location of Trench No 1 and the cropmark excavation is over the road. Results of the excavation are still awaited but this may have an association in time with the finds from Field No 4. The finds by BAG fieldwalking from the cropmark field (No 9) are given below.

The main project; The Pre History North of Biggar Project has been a tremendous success and will continue indefinitely, as long as there are volunteers to pursue it. The original working hypothesis is holding well, but ultimately, it will only be when the finds assemblages from both fieldwalking and excavations have been studied professionally, that the full implications of the project will be realised.

In the interim, this report should be read in conjunction with those from Biggar Common West and East, Carwood Farm, Melbourne Farm, Weston Farm, Nether Hangingshaw Farm and Daer valley, all of which have now provided a massive wealth of Early Neolithic pottery and lithic assemblages with dateable contexts.

Fieldwalking results **Appendix II for complete finds list**

Brownsbank Farm is part of the main project, the Pre-History North of Biggar Project. The results of the Brownsbank fields only are given here the sake of completeness for this report, and it should be borne in mind that it is anticipated that further fields on the farm are to be inspected as they become available. So far, fifteen fields have been inspected (Fig 3). Most have produced lithic items but only in Field No 4 has there been pottery. Each of the fields has been thoroughly walked, some on more than one occasion and each has been inspected to a high degree of efficiency.

Note: *Field No 8 on Fig 3 is excluded as it was mistakenly assumed to be Brownsbank Farm when it actually was Howburn Farm, the huge concentration of finds form this field are dealt with in Howburn Farm reports and which include the important LUP site in Field No 8.*

Field No 1
This field has been walked on three occasions and each time in the same locality a scatter of mainly chert was located adjacent and SE of the small plantation. The value of persistence once again paid off with a series of chert cores and several chert and flint scrapers of varying size being found. Expert analysis of these objects will be able to differentiate if more than one period is concerned, but it seems likely that the tools are indicative of Neolithic activity.

The two pitchstone flakes are typical of the background scatter of pitchstone which is manifest over much of the Project area.

Field No 2
This field was subject to a mechanised cultivation process for potatoes in 1997 and which caused most of the stone content in the field to be sorted in the machinery and then buried below the soil. Consequently very little was found other than a quartzite hammer stone. It is this type of process which will negate arable fieldwalking in the future for meaningful archaeological purposes.

Field No 3
This field produced a background scatter of lithic of different types and which included pitchstone flakes and a quartzite hammer stone.

Field No 4
This field was walked in 1999 and in 2000 with different results despite close proximity walking in each case. In 1999 the finds were not spot recorded because they did not appear to be forming a pattern. However, the work in 2000 produced a larger assemblage of most types of material and with pottery locations; it was therefore decided to accurately record all finds.

The finds plot for Field No 4 is given in Fig 4 (year 2000 finds only) and shows that the pitchstone has a slight bias in a line along the eastern side of the field, which is the higher side. Pitchstone has now been found in a more or less continuous line along the fields from Brownsbank to the north of Melbourne crossroads, a distance of over 4 km. So far the pitchstone has been found along the areas on each side of the A 702 with the concentrations at Brownsbank and at Melbourne Area 1.

Find types and totals

	Walking 2000	walking 1999	total	+ excavation	grand totals
Pitchstone	40	12	52	65	118
Flint	13	6	19	8	27
Chert	18	66	84	73	157
Type VI axe flakes	3	---	3	13	16
Ceramic	28	2	30	1055	1085
Chert microlith	1	1	2	---	2
Large tools	1	1	2	8	10

The 1999 lithics included chert cores, scrapers and a leaf arrow-head. Flint items include scrapers, a saw and knives. A fine quartzite double ended hammer stone (MB.99/17) with percussion marks on its edges as well as ground ends was also found circa 50 m N of the excavation site.

It is clear that the field contains more than one activity zone, judging by the pottery locations with pitchstone.

It is likely that the ploughing in 2000 was slightly deeper for some reason, and dislodged previously undisturbed material. The field, when ploughed in 2000 had numerous areas where the sandy sub stratum had been cut and inverted over the ploughsoil. Whether there would be a repeat deepening of the plough on future occasions is uncertain, but it remains a possibility and worthy of attention.

Field No 5
This field was walked over once and produced a variety of flint and chert tools, also six pitchstone flakes and a flake from a Type VI axe. The finds were nearly all made on the NE corner of the field on the upper terraced area there. The amount of quality artefacts indicates a zone of activity in this field.

Field No 6
This field has been walked over on four occasions but it was most effectively done in 1997 when a number of chert and flint tools were found. A prominent stony knoll at NT 087426 appears to have been a focal point judging by the tools found there. The broad terrace which runs parallel with the A 702 road and at the N end of the field has also been an area of some activity, as several tools were located along with three pitchstone flakes.

Field No 7
This high hillside field was inspected on two occasions in 2000, firstly when it was furrow ploughed and secondly when it was seeded and rolled. Nothing was found on the second walk-over, however, on the first walk, it was rather surprising to find so many items at such an altitude. All the objects were found along the main break of slope which drops steeply down to Field No 6.

Field No 8
Not included as it belongs to Howburn Farm (see above). The field was originally mistakenly listed under Brownsbank Farm. The field is the location of the Late Upper Palaeolithic site and also has a large assemblage of finds covering all prehistoric periods.

Field No 9
A sparse collection of material was gathered from Field No 9 and significantly very little was found around the area of the crop mark site (above), nor indeed from the upper part of the field and somewhat surprisingly from across the road from Field No 4 which was prolific with finds. One pitchstone fake was found.

Field No 10
Lying on the SW side of the farm and on a slope down to the valley floor there, this field produced only a very small scatter of chert listed as ‘a general scatter’.

Field No 11
The field was walked on two occasions; 2002 and 2004. The field included a quantity of chert with several cores and core fragments. The objects from 2004 including an unusual number of quartzite hammer stones and it is likely that expert analyses will show at least a Mesolithic activity involving chert.

Field No 12
Only a few objects were found on this steeply sloping field including a possible flint transverse arrow.

Field No 13
The large field above the farm produced a quantity of finds on the side nearer the farm and it is likely that Fields No's 11 and 13 may have finds common to sites at their boundaries with each other and near to the farm. A quantity of cannal coal pieces were recovered which appear to show some concentration, however, this material is still problematic in understanding whether it is of prehistoric origin, or more modern rubbish being scattered on the fields. BAG record its occurrence in fields in case it is prehistoric but only very occasional pieces can be shown to be worked. A fragment of bracelet of possible cannal coal (MB/04/163) was found in the field, but hardly gives credence to the unworked material being of prehistoric origin.

Field No 14
The field lies at the base of the valley and produced a sparse collection of objects but it included a flint B & T arrow.

Field No 15
This field is not on Brownsbank Farm; it is part of Candyburn Farm but is included here for completeness as it is unlikely to be discussed elsewhere.

Field No 16
Field 16 was walked by the writer when furrow ploughed in 2011, however the conditions were dry and dusty and no finds were made. The field lies on a steep slope and that may account for the absence of objects, however, several locations showed charcoal deposits but this was easily seen as the product of burning within a conifer plantation which is known to have existed on that area in modern times.

Discussion and conclusion

The evidence from Field No 4 points to Early Neolithic settlement and probably at more than one location on the field. Taken with the finds from the surrounding fields and those further to the north at Melbourne crossroads and the farms beyond, a picture is now emerging of moderately intensive Neolithic activity on the eastern slopes along the dry valley between Brownsbank and Dolphinton.

The Project hypothesis that most of the archaeology north of the town of Biggar is Neolithic and that to the south is Bronze Age is now re-enforced by the results so far achieved. Since the Project began in 1995, three significant Neolithic locations where settlement appears to be the focal activity have been located; these are Weston, Melbourne and Brownsbank. Although background Mesolithic activity has been found at Melbourne and Brownsbank and major Mesolithic sites have been discovered at Weston, very few positive Bronze Age artefacts have been found in the Project so far, although there are a few barb and tanged arrow-heads which may simply be co-incidental. Much will depend on expert study of the lithic finds before this tentative conclusion can be firmed up.

This work again highlights the richness of the surviving early pre-historic archaeology of Clydesdale and, that it is being ravaged annually by agricultural and forestry ploughing. The fact that such sites are being discovered almost on an annual basis by the local voluntary archaeologists from Biggar Museum must presumably indicate that other sites are being lost to our knowledge by the same processes. It is neither possible nor fair to expect a voluntary group with hardly any resources to combat this problem, given its extent, although local voluntary groups are perhaps best placed to identify the problem when it occurs.

It must, at some point become obvious to the authorities charged with the preservation of Scottish archaeology, that there is a need for a more strategic approach and commitment to the regional and National dilemma of sites being severely damaged and lost through ploughing and indeed from other man made and natural agencies.

This report challenges such authorities to act now to formulate strategies and provide resources to deal with the extensive loss of buried heritage, especially in rural areas.

Further work

Specialists will be required to study and report on the finds assemblage from both the excavation and the fieldwalking collection before a qualified statement can be made.

Examination of the cremated bone by an expert may provide further information.

The sherds with encrustation could be submitted for specialist analysis and if possible pollen and other environmental evidence will be gathered from the residues which may also be C^{14} dated.

Acknowledgement

The writer is indebted in the first instance to Messrs Thomas and George Tweedie, farmers of Brownsbank Farm for permission to fieldwalk and more especially to excavate at such short notice, and also for the interest they showed in the proceedings and their assistance in the work, especially backfilling.

The excavation work was undertaken as a rescue operation and had to be done before the next phase of cultivation began, rotovation of the field, and which was imminent. Some members of the local archaeological team were involved in the walking exercise and others responded at short notice to help with the excavation. The full team are recorded here with the grateful appreciation of the writer for their extremely hard work over three hot spring days:

Margaret Brown, Jack Boughy, Fionna Christison, Denise Dudds, Brenda and Peter Dreghorn, Joyce Durham, Maureen Erasmusson, Chris, Ken and Gemma Fawell, Richard Gillanders, Bob Knox, Joy McBain, Iain MacLeod, Caroline, Kenny, Kelly and Lee McDonald, Jim Ness, Alan and Terry Paton, John Vipond, Janet Ward, Alison White, Renof Wiggins.

Post excavation work: the writer processed the soil samples, produced site illustrations and managed the entire operation. Work of sorting, cleaning and cataloguing the finds assemblage was done by Denise Dudds, Joy MacBain, Alison White, Anne Whitworth and the writer. John Whitworth illustrated selected finds.

This second report and site illustrations are by the writer and he alone is responsible for any errors, omissions and opinions' expressed herein.

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Brophy K 2006. Discovery & Excavation in Scotland 2006, 158.

Notes

Throughout this report reference has been made to the Biggar Common, Melbourne and Weston sites, the available information on these projects are in the following four reports:

1) Johnston, D A 1997 'Biggar Common, 1987 - 93: an early prehistoric funerary and domestic landscape in Clydesdale, South Lanarkshire, Proceedings of the Society of Antiquaries of Scotland 127 (1997) 185 - 254

2) Ward, T 1993. Excavations and other fieldwork on the Biggar Common East Interim Report, 1993 Biggar Museum Trust

3) Ward, T 1996. Pre-History North of Biggar Project, Melbourne 2nd Interim Report, 1996 Biggar Museum Trust

4) Ward, T 1998. Pre-History North of Biggar Project, Weston Fieldwalking and Excavations, Interim Report, 1998 Biggar Museum Trust

Notes

Biggar Common East and Melbourne reports have been revised to:

Ward T 2013 et al: Barrowman C, Finlayson B, Miller J. The discovery and excavation of an Early Neolithic pottery assemblage at Biggar Common East (Carwood Hill) www.biggararchaeology.org.uk.

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APPENDIX I

Pre History North of Biggar Project

List of finds from Brownsbank Farm excavations. June 2000.

Site Location. OS 1:10,000 map NT 04 SE NT 07654280

Site code is BB for Brownsbank excavation to differentiate from fieldwalking finds from the Project which are classified MB for Melbourne area.

Where sizes of Rim sherds are given the sizes are in millimetres. First size = minimum rim diameter, second size = sherds thickness at lowest point. Li = lithic. Ce = ceramic

Follows finds gathered from ploughsoil context

BB. 00 / 1	Li	Chert	leaf arrowhead	**Fig 9**			
	2		Li	Flint	tip of arrowhead		
	3		Li	Pitchstone	50 of	cores and flakes, black & grey	
	4		Li	Chert	scraper		
	5		Li	Flint	scraper		
	6		Li	Tuff	12 of	Type VI axe flakes	
	7		Li	Chert	knife		
	8		Li	Chert	5 of	cores	
	9		Li	Chert	143 of	flakes and chunks	
	10		Li	Chert	2 of	worked?	
	11		Li	Flint	2 of	flakes	
	12		Li	Agate			
	13		Li	Quartsite	double ended pounder		**Plate 7**
	14		Li	"	broken pounder		
	15		LI	"	pebble smoother?		
	16		Li	"	flake		
	17		Li	"	Tuff axe chunk	**Fig 10**	
	18		Li	Greywacke	indented hammer stone		**Plate 6 & Fig 10**
	19		Ce	Rim	100 dia	14 thick	**Plate 9 & 10a & Fig 8**
	20		Ce	Rim	120	12	**Plate 10a**
	21		Ce	Rim	160	9	**Plate 10 & Fig 8**
	22		Ce	Rim	180	6	**Fig 8**
	23		Ce	Rim	120	7	
	24		Ce	Rim	180	6	**Plate 10**
	25		Ce	Rim	180	8	**Plate 10a**
	26		Ce	Rim	120	6	**Plate 10 & Fig 8**
	27		Ce	Rim	180	8	
	28		Ce	Rim	180	6	**Plate 9 & 10a & Fig 8**
	29		Ce	Rim	140	6	
	30		Ce	Rim	160	7	
	31		Ce	Rim	100	6	**Plate 10a**
	32		Ce	Rim	120		
	33		Ce	Rim	120	8	
	34		Ce	Rim	180	6	
	35		Ce	Rim	180	10	
	36		Ce	Rim	180	8	**Plate 10a**
	37		Ce	Rim	140	10	
	38		Ce	Rim	120	8	
	39		Ce	Rim	180	8	**Plate 10a**
	40		Ce	Rim	160	8	
	41		Ce	Rim	140	7	
	42		Ce	Rim	180	11	
	43		Ce	Rim	140	7	
	44		Ce	Rim	180	7 groove = decoration?	**Fig 8**
	45		Ce	Rim	fragment		
	46		Ce	Rim	140	9	
	47		Ce	Rim	fragment		
	48		Ce	Rim	140	7	**Plate 10a**
	49		Ce	Rim	180	9	
	50		Ce	Rim	100	7	
	51		Ce	Rim	100	7	
	52		Ce	Rim	140	7	
	53		Ce	Rim	fragment		
	54		Ce	Rim	160	6	**Plate 10a**
	55		Ce	Rim	180	9	

56	Ce	Rim	140	9	
57	Ce	Rim	120	7	
58	Ce	Rim	140	7	
59	Ce	Rim	140	6	**Plate 10a**
60	Ce	Rim	180	7	
61	Ce	Rim	fragment		
62	Ce	Rim	100	10	
63	Ce	Rim	fragment		
64	Ce	Rim	100	7	
65	Ce	Rim	fragment		
66	Ce	Rim	160	6	
67	Ce	Rim	100	5	
68	Ce	Rim	fragment		
69	Ce	Rim	fragment		
70	Ce	Rim	140	8	
71	Ce	Rim	120	10	
72	Ce	Rim	fragment		
73	Ce	Rim	fragment		
74	Ce	Rim	fragment		
75	Ce	Carination	**Plate 11**		
76	Ce	Carination	**Plate 11**		
77	Ce	Carination			
78	Ce	Carination			
79	Ce	485 of (* on bags denotes uncleaned sherds)			
80	Ce	Rim	fragment		
81	Ce	Rim	fragment		
82	Ce	Rim	fragment		
83	Ce	Carination			
84	Ce	Encrustation			
85	Ce	Encrustation			
86	Ce	Carination			
87	NO FIND				
88	NO FIND				
89	NO FIND				
90	NO FIND				

Follows in situ finds recorded from base line to 10cm accuracy

base	offset E / W				
91	Li	Pitchstone	4.5	0.4W	
92	Ce	4.7	0.9W		
93	Li	Chert	5.0	4.5W	
94	Ce	5.0	4.8W		
95	Ce	5.2	0.8W		
96	Ce	5.3	3.5W		
97	Li	Chert	5.3	3.5W	
98a	Ce	Rim fragment	5.4	2.6W	
98b	Ce	Rim fragment	5.4	2.6W	
99	Li	Chert	5.5	2.8W	
100	Ce	5.6	1.8W		
101	Li	Chert	2 of	5.6	1.8W
102	Ce	5.6	4.0W		
103	Ce	5.7	2.9W		
104	Li	Chert	5.9	1.6W	
105	Ce	6.0	0.5W		
106	Ce	6.0	1.0W		
107	Ce	6.0	1.2W		
108	Li	Chert	6.2	0.6W	
109	Ce	6.2	4.3W		
110	Li	Chert	6.2	4.3W	
111	Ce	6.3	2.0W		
112	Li	Pitchstone coarse grain		6.4	2.1W
113	Ce	6.5	0.5W		
114	Ce	3 of	7.3	2.4W	
115	Ce	7.4	1.0W		
116	Ce	2 of	7.5	2.8W	
117	Ce	7.6	2.1W		
118	Ce	Rim 100	8	7.6	2.4W
119	Ce	2 of	7.6	2.4W	
120	Ce	7.6	2.6W		
121	Ce	2 of	7.6	2.7W	
122	Ce	Rim 140 8	7.7	2.4W	
123	Ce	4 of	7.7	2.4W	
124	Ce	7.7	2.6W		
125	Ce	7.8	2.8W		
126	Ce	Rim 180 7	7.8	3.2W	
127	Ce	5 of	7.8	3.2W	

128	Li	Chert	7.8	3.8W	
129	Ce	Rim 100 10	7.9	2.1W	**Plate 9 &10a & Fig 8**
130	Ce	Rim 100 6	7.9	2.1W	
131	Ce	3 of	7.9	2.1W	
132	Li	Chert	7.9	2.1W	
133	Ce	Rim 80	8.0	2.6W	**Plate 10 &10a**
134	Ce	8.0	2.6W		
135	Ce	Rim 140 8	8.0	2.8W	
136	Ce	Rim 140 8	8.0	2.8W	
137	Ce	7 of	8.0	2.8W	
138	Ce	8.1	3.1W		
139	Ce	Rim 100 5	8.2	2.7W	
140	Ce	5 of	8.2	2.7W	
141	Ce	Carination	8.2	3.1W	**Plate 11**
142	Ce	4 of	8.2	3.1W	
143	Ce	8.3	2.1W		
144	Ce	8.3	2.4W		
145	Burnt bone	8.3	2.4W		
146	Ce	Rim 140 10	8.3	2.5W	
147	Ce	2 of	8.3	2.5W	
148	Ce	Rim 140 8	8.4	2.5W	**Plate 9 &10a & Fig 8**
149	Li	Quartsite hammerstone		8.4	2.6W
150	Ce	2 of	8.4	2.6W	
151	Li	Chert	8.4	3.1W	
152	Li	Pitchstone	8.5	1.2W	
153	Ce	5 of	8.5	2.3W	
154	Li	Chert	8.5	2.3W	
155	Ce	Carination	8.7	2.3W	
156	Ce	Rim 160 7	8.7	2.3W	
157	Ce	2 of	8.7	2.3W	
158	Burnt bone	8.7	2.3W		
159	Ce	Rim 120 6	8.7	2.9W	
160	Ce	Rim 140 9	8.7	2.9W	
161	Ce	2 of	8.7	2.9W	
162	Ce	Rim 100 6	8.7	3.0W	**Fig 8**
163	Burnt bone	8.7	3.0W		
164	Ce	Rim 100 8	8.8	2.7W	
165	Ce	8.9	2.5W		
166	Ce	Encrustation	9.0	3.1W	
167	Ce	9.0	3.1W		
168	Ce	9.2	2.7W		
169	Ce	3 of	9.6	2.8W	
170	Ce	2 of	9.8	3.3W	
171	Ce	10.4	3.0W		
172	Ce	Encrustation	11.3	2.8W	
173	Ce	2 of	11.6	2.6W	
174	11.7	2.9W			
175	Li	Flint burnt	5.1	0.0	
176	Ce	5.8	0.0		
177	Ce	5.8	0.3W		
Follows finds from Feature 1					
178	Li	Quartsite hammerstone		F1	
179	Li	Quartsite chunks 2 of	F1		
180	Burnt bone	2of	F1		
181	Ce	Rim 160 7	F1		
182	Ce	Rim 100 6	F1	**Plate 10a & Fig 8**	
183	Ce	13 of	F1		
Follows finds from Feature 2					
184	NO FIND				
185	Burnt bone	25 of	F2		
186	Li	Chert 4of	F2		
187	Li	Chert/siltstone?	F2		
188	Li	Pitchstone	2 of	F2	
189	Ce	Encrustation	F2		
190	Ce	Encrustation	F2		
191	Ce	Rim 60 6	F2		
192	Ce	Rim 120 7	F2	**Plate 9 & 10a & Fig 8**	
193	Ce	Rim 100 5	F2		
194	Ce	Rim 100 9	F2		
195	Ce	Rim 140 8	F2		
196	Ce	Rim fragment	F2		
197	Ce	Encrustation	F2		
198	Ce	170 of	F2		
No finds from Feature 3					

Follows finds from Feature 4 / 1	F4 / 1					
199	Ce	7.6	1.3W			
200	Ce	8.0	2.7W			
201	Ce	8.0	3.2W			
202	Ce	8.0	3.5W			
203	Burnt bone	8.0	3.5W			
204	Burnt bone	9.1	1.9W			
205	Li	Pitchstone (grey)	9.1	1.9W		
206	Ce	2of	9.1	1.9W		
207	Ce	Rim 140	6	9.1	2.5W	**Plate 10**
208	Ce	Encrustation	9.1	2.5W		
209	Ce	Encrustation	9.1	2.5W		
210	Ce	Encrustation	9.1	2.5W		
211	Ce	Encrustation	9.1	2.5W		
212	Burnt bone	9.1	2.5W			
213	Ce	9.3	2.8W			
214	Ce	Carination	9.4	2.5W	**Plate 11**	
215	Ce	Rim 100 9	9.4	2.5W	**Plate 10 &10a**	
216	Ce	9 of	9.4	2.5W		
217	Ce	Rim 160 8	9.5	2.2W		
218	Ce	Rim 160 6	9.6	2.4W		
219	Ce	Rim 160 9	9.6	2.2W		
220	Li	Type VI axe flake	9.6	2.2W		
221	Ce	Rim 180 8	9.6	2.4W		
222	Ce	2 of	9.6	2.4W		
223	Ce	4 of	9.6	2.4W		
224	Li	Chert	9.6	2.4W		
225	Ce	8 of	9.7	1.3W		
226	Ce	3 of	9.8	1.3W		
227	Ce	2 of conjoin?	9.7	1.8W		
228	Ce	2 of	9.7	1.8W		
229	Ce	5 of	10.0	1.7W		
230	Ce	8 of	10.0	2.1W		
231	Burnt bone	10.0	2.1W			
232	Ce	7 of	10.0	2.4W		
233	Ce	Rim fragment	10.0	2.4W		
234	Ce	Encrustation	10.0	2.4W		
235	Li	Flint	10.0	2.4W		
236	Ce	2 of	10.1	2.5W		
237	Ce	2 of	10.2	1.3W		
238	Ce	Rim 140	7	10.2	1.3W	
239	Ce	3 of	10.2	2.5W		
240	Ce	2 of	10.4	2.7W		
241	Ce	Rim 100 7	10.4	2.7W		
242	Ce	4 of	10.4	2.7W		
243	Ce	Rim 100 6	10.4	2.9W	**Plate 10a**	
244	Ce	Carination	10.4	2.9W	**Plate 11**	
245	Li	Chert	10.4	2.9W		
246	Ce	3 of	10.5	2.6W		
247	Li	Pitchstone 3 of conjoin (grey)	10.5		2.6W	
248	Ce	Rim 100 7	10.5	2.8W		
249	Ce	10.6	2.3W			
250	Li	Pitchstone	10.6	2.3W		
251	Ce	3 of	10.7	2.7W		
252	Li	Chert	11.5	2.3W		
253	Ce	2 of	11.7	2.8W		
Follows finds from Feature 4 / 2	F4 / 2					
254	Ce	8.2	3.2W			
255	Ce	Rim	8.2	3.2W		
256	Ce	8 of	8.3	2.9W		
257	Burnt bone	8.3	2.9W			
258	Ce	5 of	8.4	2.1W		
259	Ce	3 of	8.5	2.9W		
260	Ce	Rim 140 5	8.5	2.9W		
261	Ce	9.0	1.4W			
262	Ce	4 of	9.2	2.7W		
263	Ce	2 of	9.1	2.4W		
264	Ce	Encrustation	9.1	2.4W		
265	Ce	Encrustation	9.1	2.4W		
266	Ce	Encrustation	9.1	2.4W		
267	Ce	Encrustation	9.1	2.4W		
268	Ce	2 of	9.2	3.0W		
269	Ce	3 of	9.4	2.7W		

270	Ce	Rim 100 8	9.4	3.0W	
271	Ce	9.5	1.9W		
272	Ce	10.0	1.7W		
273	Burnt bone	10.0	1.7W		
274	Ce	10.7	2.9W		
275	Ce	10.9	0.7W		
276	Ce	2 of	10.9	2.6W	
277	Ce	2 of	11.3	1.7W	
278	Ce	4 of	11.3	3.2W	
279	Ce	2 of	11.6	3.2W	
280	Ce	Encrustation	11.6	3.2W	
281	Ce	11.9	1.8W		
282	Ce	2 of	12.7	2.4W	
Follows finds from Feature 4 / 3	F4 / 3				
283	Ce	8.0	2.6W		
284	Ce	Encrustation	8.0	2.6W	
285	Ce	2 of	8.1	2.1W	
286	Ce	Rim 80 8	8.1	2.1W	**Fig 8**
287	Ce	Carination + Encrustation		8.1	2.1W
288	Ce	Encrustation	8.8	3.0W	
289	Ce	Encrustation	8.9	3.0W	
290	Ce	2 of	9.7	2.4W	
291	Ce	Rim 140 7	9.7	2.4W	
292	Ce	Carination	9.7	2.4W	
293	Burnt bone	9.7	2.4W		
294	Ce	4 of	11.3	2.6W	
295	Burnt bone	9.5	2.5W		
296	Li	Greywacke (tool?)	9.5	2.5W	
297	Li	Greywacke grinder	9.7	2.4W	**Plate 8**
Follows finds from Feature 5	F 5				
298	Burnt bone	F 5			
299	Ce	2 of	F 5		
300	Ce	Encrustation	F 5		
301	Ce	Encrustation	F 5		
Follows finds from Feature 6	F 6				
302	Burnt bone	F 6			
303	Ce	13 of	F 6		
304	Ce	Rim 160 9	F 6	**Plate 10 &10a**	
305	Ce	Rim 80 7	F 6		
306	Ce	Rim 80 7	F 6		
307	Li	Pitchstone (spall)	F 6		
308	Li	Pitchstone flake	F 6		
Follows finds picked up after the site was rotovated					
309	Ce	12 of			
310	Li	Pitchstone			
311	Li	Chert	4 of		
312	Ce	Rim			

Finds totals		
Ce1055 includes; Rims 104, Carinations 13, Encrustation 21		
Pitchstone	63	+ core and scraper
Flint	6	+ arrowhead tip and scraper
Chert	73	+ leaf arrowhead and scraper and 5 cores
Agate	4	
Type VI axe flakes	13	
Large tools	8	

Follows finds from excavations 2000 / 2001. Trench No 2			
313	Li	Agate u/work 3 of	
314	Li	Chert u/work 1 of	
315	Ce		1 of
Follows finds from excavations 2000 / 2001. Trench No 3			
316	Li	Sandstone	hammerstone
317	Li	Agate	Transverse arrow-head
318	Li	Flint	Leaf arrow-head
319	Li	Flint	Knife (all round retouch)
320	Li	Flint	flakes 7 of
321	Li	Pitchstone 22 of (1 of notched)	
322	Li	Agate	6 of
323	Li	Chert	66 of
324	Ce	Rim	
325	Ce	Rim	**Plate 10a**
326	Ce	Rim	**Plate 10a**
327	Ce	Rim	

328	Ce	Rim		
329	Ce	Rim		
330	Ce	Rim		
331	Ce	Rim		
332	Ce	Rim		
333	Ce	134 of		

Finds Totals

Ce	143 of includes 9 Rims
Flint	10of includes a leaf arrow, knife
Pitchstone	22 of, 1 notched
Agate	6 of includes a transverse arrow-head,
Chert	66 of
Sandstone	1of hammerstone

Follows finds from excavations 2000 / 2001. Trench No.4

334	Ce	1 of	
335 Li	Chert		1 of

Follows finds from excavations 2000 / 2001. Trench No. 5

336	Li	Pitchstone		1 of
337	Li	Flint	flake	1 of
338	Li	Flint	scraper	1 of
339	Li	Chert	5 of	
340	Li	Agate	1 of	

Follows finds from excavations 2000 / 2001. Trench No. 6

341	Li	Tuff Type	6 axe flake / broken leaf arrow

Follows finds from excavations 2000 / 2001. Trench No. 7

No finds.

Follows finds from excavations 2000 / 2001. Trench No. 8

342	Li	Flint	Broken knife 1 of	
343	Li	Flint	Knife 1 of	
344	Li	Agate		1 of
345	Li	Chert 12 of		

Follows finds from excavations 2000 / 2001. Trench No. 9

346	Li	Pitchstone	1 of
347	Li	Quartzite?	Broken Knife
348A	Li	Chert	2 of
348B	Li	Chert	Microlith 1 of

Follows finds from excavations 2000 / 2001. Trench No. 10

No finds

Follows finds from excavations 2000 / 2001. Trench No. 11

349	Li	Pitchstone 2 of	
350	Li	Chert 12 of	

Follows finds from excavations 2000 / 2001. Trench No. 12 - 15

No finds

Follows finds from excavations 2000 / 2001. Trench No. 16

351	Li	Pitchstone	1 of
352	Li	Chert	5 of
Burnt bone	63 fragments		

APPENDIX II

Pre-History North of Biggar Project

Brownsbank Farm fieldwalking finds only Li = lithic Ce = ceramic

MB.97/1	Li	Quartsite H/St	NT 07704315 Brownsbank Field No 3	
MB.97/2	Li	Quartsite H/St	NT 07874345 " " No 2	**Plate 6**
MB.97/3	Li	Flint knife	NT 08004334 " " No 1	
MB.97/4	Li	Flint arrow?	NT 07834306 " " No 3	
MB.97/5	Li	Flint	Field centred	NT 075431 " " No 3
MB.97/6	Li	Axe flake		ditto
MB.97/7	Li	Chert Microlith?	ditto	
MB.97/8	Li	Chert 3 of	ditto	
MB.97/9	Li	Agate 4 of	ditto	
MB.97/10	Li	Agate 2 of	ditto	
MB.97/11	Li	Flint 3 of	ditto	
MB.97/12	Li	Chert 44 of	ditto	
MB.97/13	Li	Chert 27 of	Field centred NT 079427 Brownsbank Field No 6	
MB.97/14	Li	Chert scraper	ditto	
MB.97/15	Li	Chert scraper	ditto	
MB.97/16	Li	Flint scraper	ditto	
MB.97/17	Li	Flint 4 of	ditto	
MB.97/18	Li	Pitchstone	ditto	
MB.97/19	Li	Axe flake	ditto	
MB.97/20	Li	Cannal coal	Same field as above but centred around outcropping	
MB.97/21	Li	Chert core	ditto rock @ NT 087426	
MB.97/22	Li	Quartsite	ditto	
MB.97/23	Li	Flint	ditto	
MB.97/24	Li	Flint scraper	ditto	
MB.97/25	Li	Flint scraper	ditto	
MB.97/26	Li	Flint slug knife	ditto	
MB.97/27	Li	Cannal, worked	ditto	
Follows Brownsbank Field No 1 @ NT 081434 (note c 25of @ 081434)				
MB.97/28	Li	Chert 66 of	ditto	
MB.97/29	Li	Chert tool?	ditto	
MB.97/30	Li	Flint scraper	ditto	
MB.97/31	Li	Pitchstone	ditto	
MB.97/32	Li	Agate 2 of	ditto	
MB.97/33	Li	Slate? modern pencil?	ditto	
MB.97/34	Li	Cannal 6 of	ditto	
MB.97/35	Li	Flint 3 of	ditto	
MB.97/36	Li	Chert 59 of	Brownsbank Field No 3 centred @ NT 076431	
MB.97/37	Li	Flint	ditto	
MB.97/38	Li	Cannal	ditto	
MB.97/39	Li	Agate 6 of	ditto	
MB.97/47	LiQuartsite hammer stone NT 07704348 Brownsbank Field No 2			
Follows Brownsbank Farm 1998				
MB.98/1	Li	Chert 12 of	NT 078426	sw. half of Field No 6
MB.98/2	Li	Axe flake	''	''
MB.98/3	Li	Agate re-touched	''	''
MB.98/4	Li	Flint 2 of burnt	''	''
MB.98/5	Li	Flint flake tool?	'"'	
MB.98/6	Li	Flint flake	'"'	
MB.98/7	Li	Chert micro burin	NT 079433 centred Field No 3	
MB.98/8	Li	Flint 2 of	''	''
MB.98/9	Li	Chert core	''	''
MB.98/10	Li	Pitchstone 2 of	''	''
MB.98/11	Li	Agate	''	''
MB.98/12	Li	Chert core	''	''
MB.98/13	Li	Chert flakes 52 of	''	''
MB.98/14	Li	Chert chunks 37 of	''	''
MB.98/15	Li	Cannal coal 16 of	''	''
MB.98/16	Li	Flint flake	NT 08104340 scatter at wood Field No 1	

MB.98/17	Li	Cannal coal 6 of	''	''
MB.98/18	Li	Chert cores 5 of	''	''
MB.98/19	Li	Chert flakes 37 of	''	''
MB.98/20	Li	Chert chunks 23 of	''	''

Brownsbank 1999

Follows finds from field formerly known as "Young Cock Wood"(see OS 1957), finds represent background scatter only and are not individually plotted. No concentrations.

Brownsbank Field No 4

MB.99/1	Li	Chert	56 of	NT 075427
MB.99/2	Li	Agate	2 of	" prob' natural
MB.99/3	LiMisc' freaks includes plastic, slag, 2 of stone			
MB.99/4	Li	Chert cores	3 of	"
MB.99/5	Li	Chert scrapers 3 of	"	
MB.99/6	Li	Chert leaf arrow	"	
MB.99/7	Li	Chert microlith "		
MB.99/8	Li	Chert / Flint knife	"	black stone
MB.99/9	Li	Chert leaf? arrow	"	poss' just a flake
MB.99/10	Li	Flint	"	
MB.99/11	Li	Flint saw	"	
MB.99/12	Li	Flint knife	"	double edge retouch
MB.99/13	Li	Flint blades 2 of	"	
MB.99/14	no find	"		
MB.99/15	Li	Flint scraper	"	
MB.99/16	Li	Pitchstone 12 of	"	flakes, blades? chips
MB.99/17	Li	Quartsite hammer stone "	**Plate 17**	
MB.99/18	CeGreywacke facetted hammer stone			

Brownsbank Field No 5

MB.99/19	Li	Chert 102 of	NT 074424 95% from north half of field and mostly from upper terrace
MB.99/20	Li	Chert cores 4 of	"
MB.99/21	Li	Chert knives 2 of	"
MB.99/22	Li	Chert scrapers 4 of	"
MB.99/23	Li	Chert scraper/graver	"
MB.99/24	Li	Siltstone	"
MB.99/25	Li	Agate	"
MB.99/26	Li	Flint 2of	"
MB.99/27	Li	Cannal coal 16 of	"
MB 99/28	Li	Flint scraper	"
MB.99/29	Li	Flint scraper	"
MB.99/30	Li	Flint knife	"
MB.99/31	Li	Flint leaf arrow	"
MB.99/32	Li	Flint blades 2 of	" yellow flint c 50m apart
MB.99/33	Li	Flint blades	"
MB.99/34	Li	Pitchstone 6 of	"
MB.99/35	Li	Type VI axe flake	"
MB.99/36	Li	Greywacke axe flake	"

Brownsbank Field No 6

MB.99/37	Li	Chert 14 of	NT 081431 part walked only	
MB.99/38	Li	Chert	"	edge damage
MB.99/39	Li	Cannal coal	"	

Brownsbank Field No 1

MB.99/40	Li	Chert cores 3 of	NT 08104335 edge of plantation only	
MB.99/41	Li	Chert 22 of " circa 50m stretch		
MB.99/42	Li	Chert edge damage	"	
MB.99/43	Li	Agate	"	
MB.99/44	Li	Chert scraper?	"	edge damage/re-touch
MB.99/45	Li	Chert leaf arrow?	"	Plate 13

Brownsbank 2000

Follows finds from field formerly known as "Young Cock Wood"(see OS 1957), finds represent background scatter only and are not all individually plotted. See also the finds from the excavation in April 2000 from the same field, **these are catalogued as 'BB' = Brownsbank**.

Brownsbank Field No 4

MB.00/1	Li	Chert core	c NT 07574281
MB.00/2	Li	Pitchstone	"
3	Li	Pitchstone	NT 07544272

4	Li	Chert	"	
5	Li	Pitchstone	NT 07654270	
6	Li	Tuff Type VI flake = scraper	"	
7	Li	Flint broken leaf arrowhead	NT 07504275	
8	Li	Flint flake	"	
9	Ce	"		
10	Li	Flint flake	"	
11	Li	Pitchstone	NT 07764285	
12	Li	Pitchstone core	NT 07664268	
13	Li	Pitchstone	NT 07744283	
14	Li	Pitchstone 2 of	NT 07724280	
15	Li	Flint	c NT 075426	
16	Li	Chert core	c NT 075426	
17	Li	Tuff Type VI axe section	NT 07714280	
18	Li	Pitchstone core	NT 07604265	
19	Li	Pitchstone core/scraper	NT 07754283	
20	Li	Pitchstone flakes 2 of	"	
21	Ce	2 of	"	
22	Ce	2 of	NT 07654275	
23	Li	Pitchstone flake	NT 07654278	
24	Li	Flint flake	NT 07604263	
25	Ce	2 of	"	
26	Ce		NT 07664271	
27	Li	Pitchstone	NT 07624266	
28	Li	Flint	"	
29	Li	Pitchstone 2 of	NT 07624262	
30	Li	Chert	"	
31	Li	Pitchstone	c NT 07634275	
32	Li	Chert	"	
33	Li	Flint (worked?)	NT 07684276	
34	Li	Chert microlith	"	**Plate 13**
35	Li	Chert microlith?	NT 07724281	**Plate 13**
36	Li	Pitchstone	NT 07634264	
37	Li	Tuff Type VI axe flake	"	
38	Ce	"		
39	Li	Pitchstone	NT 076427	
40	Li	Pitchstone cores 2 of	c NT 07604278	
41	Li	Pitchstone 8 of	"	
42	Li	Flint	"	
43	Li	Flint knife	"	**Plate 14 & Fig 9**
44	Li	Siltstone	"	
45	Li	Chert 2 of	NT 07754287	
46	Li	Chert	NT 07744285	
47	Ce	"		
48	Li	Pitchstone 4 of	NT 07714283	
49	Li	Flint 2 of	"	
50	Li	Chert 2 of	"	
51	Ce	4 of	"	
52	Li	Chert core	NT 07554267	
53	Ce	3 of	"	
54	Ce	3 of	NT 07644272	
55	Li	Pitchstone 10 of	NT 07654280	
56	Ce	12 of	"	
57	Li	Chert 2 of	"	
58	Li	Flint 3 of	c NT 076427	
59	Li	Chert 5 of	"	
Brownsbank Farm No 6				
60	Li	Chert scraper	NT 07824262	
61	Li	Flint knife	(on terrace)	NT 081431 **Plate 14 & Fig 9**
62	Li	Flint scraper "	"	**Fig 9**
63	Li	Flint leaf arrowhead " "	**Fig 9**	
64	Li	Pitchstone 3 of " "		
65	Li	Chert end scraper " "	**Plate 14 & Fig 9**	
66	Li	Flint 3 of " "		
67	Ce	3 of " "		

68	Cannal coal	" "		
69	Li	Chert brown (freak?)""		
70	Li	Chert 15 of "		
Brownsbank Field No 4				
71	Li	Greywacke quern rubber	c NT 076427	
72 – 73	No finds			
74	Li	Pitchstone flake	**Fig 9**	
75	Li	Flint scraper	**Plate 14 & Fig 9**	
	76 -78	No finds		
78	Li	Flint scraper	**Plate 14 & Fig 9**	
	79 – 88	No finds		
89	Li	Chert leaf (arrow?)	**Plate 15**	
90	Li	Chert scraper/point	**Plate 15**	
	91 – 92	No finds		
93	Li	Flint scraper	**Plate 15**	
Field No 9				
MB/02/35	LiChert pebble rounded = hammer stone?			
MB/02/36	Li	Flint		
MB/02/37	Li	Chert 3 of		
MB/02/38	Li	Chert 9 of		
MB/02/39	Li	Flint	NT 07168 42624	
MB/02/40	Li	Pitchstone	ditto	
MB/02/41	Li	Chert	ditto	
MB/02/42	LiBluestone knife (**similar to Daer bluestone?)**			NT 07231 42588
MB/02/43	Li	Pitchstone	NT 07294 42625	
MB/02/44	Li	Flint	NT 07245 42788	
MB/02/45	Li	Flint	ditto	
MB/02/46	Li	Chert	NT 07244 42790	
MB/02/47	Li	Chert 5 of	NT 07198 42726	
MB/02/48	Li	Chert 8 of	NT 07169 42639	
MB/02/49	Li	Chert 11 of	NT 07165 42679 c25m scatter	
MB/02/50	Li	Quartz	ditto	
MB/02/51	Li	Flint 3 of	NT 07184 42700 c 5m scatter	
MB/02/52	Li	Pitchstone	ditto	
MB/02/53	Li	Chert 2 of	ditto	
MB/02/54	Li	Chert 11 of	NT 07244 42790	
Field No 11				
MB/02/58	Li	Flint	Upper area	
MB/02/59	Li	Cannal coal	ditto	
MB/02/60	Li	Chert core	ditto	
MB/02/61	Li	Chert 24 of	ditto	
MB/02/62	Li	Chert scrapers 2 of	NT 07170 42643 slope above wood c 50m scatter	
MB/02/63	Li	Pitchstone	ditto	
MB/02/64	Li	Chert 45 of	ditto	
MB/02/65	Li	Flint	NT 07955 42141	
MB/02/66	Li	Quartzite hammer stone	NT 08160 42065 terrace	
MB/02/67	Li	Flint	ditto	
MB/02/68	Li	Chert	ditto	
MB/02/69	Li	Flint	NT 07954 42100 c50m scatter on slope	
MB/02/70	Li	Chert cores 2 of	ditto	
MB/02/71	Li	Chert 32 of	ditto	
MB/02/72	Li	Chert scrapers 2 of	NT 08009 42132 c 50m scatter on slope	
MB/02/73	Li	Chert 5 of	ditto	
MB/02/74	Li	Flint	NT 94966 08892(found near 2000 excavation site)	
MB/02/75	Li	Pitchstone	ditto	
Field No 12				
MB/03/26	Li	Flint scraper	Random	
MB/03/27	Li	chert	5 of	ditto
MB/03/28	Li	Flint, transverse arrow?	ditto	
Follows Field No 11selective collection only of chert				
MB/04/144	Li	Chert Scrapers	2 of	Centred NT 0790 4215
MB/04/145	Li	Chert	41 of, inc. cores	Centred NT 0790 4215
144 & 145 are from a circa 100 metres scatter east of the farm and north of the plantation				
MB/04/146	Li	Pitchstone	NT 0790 4215	

MB/04/147	Li	Flint	NT 0793 42109
MB/04/148	Li	Chert Microlith	NT 07930 42109
MB/04/149	Li	Flint	4 of NT 07941 42150
MB/04/150	Li	Hammer Stone	Centre NT 0790 4215 see above
MB/04/151	Li	Hammer Stone	Centre NT 0790 4215 see above
MB/04/152	Li	Hammer Stone	Centre NT 0790 4215 see above
MB/04/153	Li	Hammer Stone	Centre NT 0790 4215 see above
MB/04/154	Li	Hammer Stone	Centre NT 0790 4215 see above

Follows Field No 13

MB/04/155	Flint scraper	NT 07900 42335
MB/04/156	Chert scraper	NT 07900 42335
MB/04/157	Flint	NT 07939 42273
MB/04/158	Flint	NT 07930 42284
MB/04/159	Flint	NT 07965 42284
MB/04/160	Flint	NT 07968 42288
MB/04/161	Chert core	NT 07950 42235
MB/04/162	Chert microlith	NT 07902 42403
MB/04/163	Cannal, bracelet fragment	NT 07882 42250
MB/04/164	Cannal & coal 9of	NT 07916 42308 50m scatter
MB/04/165	Cannal & coal 4of	not plotted
MB/04/166	Chert scrapers 2 of	not plotted
MB/04/167	Chert misc' 19of	not plotted

Follows Field No 14

MB/05/142	Haematite	07618 43105
MB/05/143	Chert scraper	07515 43130
MB/05/144	Flint barb & tang arrow	07261 42988
MB/05/145	Chert 2 of	07261 42988
MB/05/146	Pitchstone	07390 42910
MB/05/147	Flint	07390 42910
MB/05/148	Chert 2 of	07390 42910
MB/05/149	Flint knife?	07468 43076
MB/05/150	Burnt Agate/Flint? 1of	07499 43019

Follows Field No 15This field is not Brownsbank but belongs to Candy Bank Farm

MB/05/151	Flint knife	08226 41858
MB/05/152	Flint burnt	08226 41858
MB/05/153	Chert	08226 41858
MB/05/154	Chert worked?	17846 21922 ? Wrong!
MB/05/155	Flint scraper	08267 41849
MB/05/156	Chert 2 of	08214 41567
MB/05/157	Chert 2 of	08110 41546
MB/05/158	Flint	08219 41848
MB/05/159	Chert 2 of	09248 41849

Follows Field No 16

NO FINDS

APPENDIX II

List of 35mm colour slides of site

BB 1	Testing the ploughsoil for finds
BB 2	Ditto
BB 3 - BB 10	Excavating the site
BB 11 - BB 12	Ditto showing F1 - F4
BB 13 - BB 15	Trench looking NW, showing F1 - F4
BB 16	Ditto looking W
BB 17	Close-up of F2 and F3, also showing burrows
BB 18	Close-up of F1
BB 19 - BB 20	Tractor power harrowing / rotovating the field
BB 21	Excavating F4
BB 22	Excavating F1 - F3
BB 23	Sections of F1 - F2, also showing rabbit burrow
BB 24	Section of F3
BB 25 - BB 26	F6 showing through F4
BB 27 - BB 28	Happy days - happy diggers
BB 29 - BB 30	F1 and F2 pits excavated
BB 31	F5 excavated

Appendix III Charcoal

Brownsbank Farm Excavation 2000

Archaeobotanical Report

Jennifer Miller and Susan Ramsay

Summary

The carbonised assemblages from three pit features at Brownsbank Farm indicate general occupation deposits including grains of wheat, hazelnut shell fragments and charcoal indicative of mixed deciduous woodland. A further feature revealed evidence of the burning of modern heath land. The Archaeobotanical results are very similar to those from the nearby Neolithic site at Melbourne.

Introduction

The features analysed during this study were identified during the excavation by Biggar Archaeology Group of a possible Neolithic site at Brownsbank Farm, near Biggar. The site had been discovered as a result of an ongoing programme of field walking in the area as part of the Pre-History North of Biggar Project (Ward 2000). The four features were shallow pits, of which the smallest, F1, was thought to represent a post hole, and F2 and F6 features, some other purpose, possibly storage, due to their larger size. Early Neolithic pottery and lithics were identified repeatedly throughout the fieldwalking and excavation, and quantities of both were also found in the above three pits together with concentrations of carbonised plant remains. The study was undertaken to identify the taxon composition for the charcoal and seed assemblage, and select material for AMS dating from F1 and F2.

Feature F3 was suspected to have more modern origins, and botanical analyses were undertaken to confirm or negate this speculation.

Method

Samples had been subjected to flotation prior to delivery to this laboratory. Flots of >3mm and >0.3mm were received, but no residues were presented for analyses. Sorting of samples and preliminary identification of carbonised cereal grains and other macrofossils was undertaken using low power microscopy at variable magnifications of between x4 and x45. Twenty charcoal fragments of varying size and condition were selected at random from each sample for identification. Experience has shown this number to give as accurate a representation of the taxon composition as possible within financial and time constraints. All plant macrofossils including carbonised cereal grains were identified as far as possible.

Internal features of charcoal fragments were examined using the reflected light of a metallurgical microscope at magnification of x200. Charcoal fragments were identified with reference to photographs and descriptions in Schweingruber (1990). Cereal grains were compared with drawings and text in Jacomet (1987), and modern and carbonised seeds with Beijerinck (1947) and the extensive modern reference collection at Glasgow University. Vascular plant nomenclature follows Stace (1997), except cereals which follow Renfrew (1973).

Results

The results for samples analysed from features F1, F2, F3 and F6 are shown in Table 1. The number of fragments and combined weight of individual charcoal taxa in each sample are shown together in the table.

Discussion of Results

Three of the four features analyses during this study (F1, F2 and F6) contained remarkably similar assemblages, and will be discussed together. F3 revealed a completely different story and will be discussed at the end.

The charcoal identified from features F1, F2 and F6 revealed evidence of utilisation of wood from mixed deciduous woodland, and including Betula (birch), Corylus (hazel), Quercus (oak) and Salix (willow). Other charcoal types included Maloideae (apple type) and Prunus spinosa (Sloe type). Maloideae included many fruit bearing trees of the Rosaceae family, but on this site the Maloideae charcoal identified is likely to be from rowan, hawthorn or crab apple. Unfortunately it is not possible to separate these taxa any further solely on the basis of charcoal anatomy. A similar situation exists for the Prunus spinosa type (sloe type) charcoal identified, which is most likely to be sloe itself, but which cannot be separated from the introduced taxa Prunus cerasifera, P domestica and P ramburii on the basis of charcoal anatomy.

It is unlikely that the woodland canopy was of an open nature because of the presence of several shade-intolerant tall shrubs including hazel and sloe, which will not flower or set fruit under a closed woodland canopy. This is an entirely typical lowland mixed deciduous woodland charcoal assemblage and probably represents the use of local resources.

Evidence of food preparation was evident from the features F1, F2 and F6 in the form of hazelnut shell fragments and carbonised cereal grains. The majority of cereal grains in all three features were of indeterminate type, but cf Triticum (cf wheat) was tentatively identified from F1, and Triticum sp dicoccum (cf emmer wheat) and Triticum sp (wheat) from F2. Since it is anticipated that the carbonised assemblages from these three features reflect the same general occupation scatter, it is likely that the greater frequency of the cereal grains in F2 reflects a larger sample size rather than events connected with deposition.

It is somewhat unusual that the cereals identified from features F1 and F2 were wheat, rather than barley (Hordeum vulgare sl) which is usually the most common cereal from Scottish sites of any period. This is most likely due to the location of this site in southern Scotland where the growing conditions are more conducive to the growing of wheat crops than they are in the more northerly areas of the country.

Most of the cereal grains were in a very poor condition, with a 'frothy' structure generally indicative of burning at a high temperature or when damp. Nevertheless, seven cereal grains from F2 were tentatively identified as emmer wheat, a primitive, hulled tetraploid what often found on archaeological sites of Neolithic date in suitable areas of Britain. It is now only grown as a relict crop in some parts of Eastern Europe, having been replaced by the more

productive and higher protein-yielding bread wheat (Triticum aestivum ss) which (most importantly) can be made into 'high rising' bread.

Emmer is part of a group which were the progenitors of the cultivated hexaploid wheats (Triticum aestivum sl) which evolved under cultivation (Zohary & Hopf 1993). However, the separation of carbonised grains of emmer from the cultivated hexaploid wheats (including spelt- T spelta and bread wheat – T aestivum ss) can be problematic, due to distortion and swelling of grains during the charring process. With this in mind, there is a chance that the seven cf emmer grains identified from F2 may actually be poorly preserved, atypical bread wheat grains of more modern origin, although this is considered unlikely. Consequently, although it is entirely possible that emmer wheat could have been grown in the Neolithic on a site such as Brownsbank Farm in the south of Scotland, it is recommended that a date be obtained from the grains in feature F2 to confirm an ancient provenance for those cereals, and discount modern stubble burning.

The small pieces of bone found in features F1, F2 and f6, together with the pottery fragments and lithics provide further evidence for the interpretation of these deposits as general background occupation debris.

Feature F3 was interpreted during excavation as a modern fire pit resultant from burning of heather heath land prior to the onset of modern agriculture within the last ten years. Examination of the carbonised assemblage from this feature confirmed this hypothesis, with abundant carbonised Ericaceae (heather family) woody stems and twigs, together with carbonised flowers of Calluna vulgaris (heather) and other remains of heath land indicator taxa. No charcoal of any other woody taxon was found in this feature, and together with the observation of burnt soil under the fire pit layer, this would indicate burning of vegetation in situ. This is further confirmed by the absence of bone, pottery or lithics from this feature.

Comparison with Melbourne Farm

The charcoal assemblage from the features at Brownsbank Farm is very similar to that identified by the authors from the 1996 and 1997 excavations at Melbourne Farm. The same open, mixed deciduous woodland is very much in evidence; including birch (Betula), hazel (Corylus), oak (Quercus), willow (Salix), sloe type (Prunus spinosa type) and apple type (Maloideae, old name Pomoideae). The only taxon found at Melbourne but not Brownsbank was cherry type (Prunus padus/avium type), but this minor difference is probably due to the greater number of samples analysed from Melbourne.

The absence of alder (Alnus) charcoal from both the Brownsbank and Melbourne results is interesting and may be significant, given the early age of these sites. Alder is a tree which has a complicated post-glacial colonisation record in Scotland. The date of alders first appearance in the Holocene is extremely site-dependent and it is possible that alder was not present in this area at the time of occupation of either of these two sites. However, alder is also a tree which tends to colonise wetter habitats, and it may simply be absent from these samples due to a lack of suitable habitats or non-selection by the site occupants for whatever reason.

{Note by T Ward: both sites lie relatively high on the hill flanks above the valley floor, and neither is located near spring courses which would still be evident. This is typical of both Neolithic and Bronze Age habitation sites in upper Clydesdale and upper Tweeddale where the selection of settlement sites is clearly and deliberately placed away from water sources, the nearest springs or burns being hundreds of metres away from the house site. Certainly, in this part of Scotland, keeping the house site dry was a major consideration in the selection of location. Any alder trees were likely therefore to have been on the valley floor where wetter conditions would have prevailed}.

The abundance of fragments of hazel nut shell at Melbourne indicates that this resource was capitalised upon by the community at this site, as it was at Brownsbank. However, the cereal record for Melbourne is poor by comparison to Brownsbank. The few identifiable grains found at Melbourne were all barley (Hordeum vulgare sl). This contrasts with the situation at Brownsbank where all the identifiable grains were wheat. The two sites are of a similar altitude and are located relatively close to each other. Either site would probably have supported the cultivation of both cereal types. Unfortunately the small number of cereal grains from Melbourne and few contexts at Brownsbank are not enough to validate the significance of any difference between the two sites.

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Table 1

		Feature			
Charcoal	**Common name**	**F1**	**F2**	**F3**	**F6**
Betula	birch	1.1g (8 fgmts)			0.1g (1 fgmt)
Corylus	hazel	1.55g (9 fgmts)	4.35g (16 fgmts)		0.8g (6 fgmts)
Corylus nutshell fragments	hazel nut shell	0.2g (18 fgmts)	0.6g (15 fgmts)		0.1g (3 fgmts)
Ericaceae	heather family			4.5g (20 fgmts)	
Maloideae	apple type		0.5g (2 fgmts)		
Prunus spinosa type	sloe type	0.1g (1 fgmt)			
Quercus	oak	0.3g (2 fgmts)	0.3g (2 fgmts)		0.2g (3 fgmts)
Salix	willow	0.15g (1 fgmt)	0.3g (1 fgmt)		
Indeterminate					0.2g (2 fgmts)
AMS date fragment		*Corylus* 0.55g	*Corylus* 0.85g		
entire sample weight		38.0g	125.7g	56.3g	3.1g
Carbonised cereals					
Triticum cf dicoccum	*cf* emmer wheat		7		
Triticum sp	wheat		21		
cf Triticum sp	*cf* wheat	2	8		
cereal indeterminate		6	47		4
Carbonised macros					
Calluna vulgaris flowers	heather			112	
Calluna vulgaris leafy shoot	heather			1	
Cyperaceae rhizome fgmts	sedge family			2	
Potentilla erecta seed	tormentil			1	
Scirpus sp seed	club-rush			1	
small Ericaceae stems	heather family			abundant	
bone fragments		1			
Modern remains					
Carex pilulifera seed	pill sedge			2	
earthworm eggs		2		5	
Persicaria maculosa seed	redshank			1	
Stellaria media seed	chickweed			1	
roots				occasional	

Appendix IV Radiocarbon dates

AA-42172(GU9302)			
Brownsbank Farm	Trench No1	F1	Corylus
Radiocarbon Age BP	4960+-45	Delta 13C rel. PDB	-25.90/00
Calibrated Age Ranges	1 Sigma	cal BC3784 – 3664, cal BP 5733	- 5613
	2 Sigma	cal BC 3911 – 3649, cal BP 5860	– 5598
AA-42173(GU-9303)			
Brownsbank Farm	Trench No1	F2	Corylus
Radiocarbon Age BP	4865+-45	Delta 13C rel. PDB	-26.20/00
Calibrated Age Ranges	1 Sigma	cal BC3692 – 3639, cal BP 5641	– 5588
	2 Sigma	cal BC 3709 – 3538, cal BP 5658	– 5487