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Unenclosed prehistoric settlement and early medieval pits at Macallan Distillery, Craigellachie, Moray

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Unenclosed prehistoric settlement and early medieval pits at Macallan Distillery, Craigellachie, Moray

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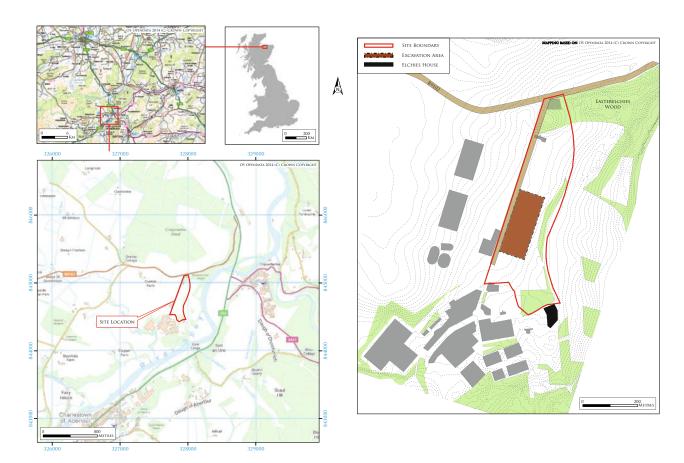
The excavation of a greenfield development at the Macallan Distillery, Craigellachie, Moray has revealed the remains of four episodes of heavily truncated settlement activity on a gravel terrace above the River Spey. In the Middle Bronze Age there was pit-digging activity, followed by a Late Bronze Age settlement consisting of at least two, and probably four, post-ring roundhouses and a four-poster. A single ring-ditch roundhouse represents Middle Iron Age settlement, and activity in the ninth to twelfth centuries AD is represented by a number of large rubbish disposal pits possibly associated with two post-ring roundhouses. A small assemblage of macroplant, charcoal and burnt bone was recovered, as well as a small amount of prehistoric pottery, a few coarse stone artefacts and metalworking residues.

2. INTRODUCTION

The Macallan Distillery is located to the west of the River Spey, east of Craigellachie and north of Charlestown of Aberlour (Illus 1). The proposed development area of 7.5ha is largely covered by fields and woodland, which are themselves relic elements of the parkland associated with Easter Elchies House. This post-medieval laird's house was largely rebuilt around 1985 and now forms part of the Macallan Distillery administration buildings.

The excavation area lies on a gravel-rich terrace of relatively level ground at a height of about 130m OD. Immediately behind the terrace to the west the ground rises steeply to 160m OD, while to the east the land slopes gently down to the valley of the River Spey, which lies some 300m away. The location of the features reported here is centred on NGR: NJ 278 447.

In January 2014, a 10% evaluation of this greenfield site revealed numerous archaeological features concentrated on the terrace, and



Illus 1 Location map

subsequently a programme of topsoil stripping over an area some 175 x 75m was undertaken by AOC Archaeology Group.

3. EXCAVATED FEATURES

After the removal of the overburden, the exposed surface was hand-cleaned to identify features. The excavation of all features associated with the structures involved the removal of 100% of the archaeological sediment by hand, while the excavation of the isolated features involved the removal of 50% of the archaeological sediment by hand, unless finds or other anthropic inclusions dictated otherwise.

In total, six possible structures have been identified: four post-ring roundhouses (RH1 to RH4), a ring-ditch roundhouse (RH5) and a four-poster structure (Illus 2). The excavations uncovered nearly 40 scattered pits and post-holes that could not be clearly associated with a structure. Unless these contained artefactual material or a rich ecofactual assemblage, they were not investigated further. A large quarry pit containing 19th-century artefacts was also uncovered towards the northern boundary of the excavation.

Radiocarbon dating of an assemblage of 18 samples has distinguished four distinct phases of activity on the site (Table 1 & Illus 3). However, as with all heavily truncated sites, there are issues of taphonomic security and ascribing specific structures to these phases is not straightforward. The main difficulty lies in determining whether RH2 and RH3 are Late Bronze Age or early medieval structures. The features that can be more confidently ascribed to phases are described below in chronological order and the arguments relating to RH2 and RH3 are discussed separately.

3.1 Middle Bronze Age (MBA) pits (Illus 4)

Pit [4038] produced the earliest radiocarbon date on site, alder charcoal from the single fill (4039) dating to 1681–1503 cal BC (SUERC-56541). Pit [4038] was one of three closely spaced pits, the other two being [4040] and [101], lying on the southern edge of the excavation area. All three pits were sub-circular in plan, over 1.0m in diameter, with rounded profiles and single stony fills with

charcoal. It seems probable that this group of pits are contemporary and that there was a phase of pitdigging activity in the MBA on the site.

3.2 Late Bronze Age (LBA) unenclosed settlement (Illus 4, 5 & 6)

RH1, RH4, the four-poster structure and Pit [4065] were all dated to the LBA, specifically a 250-year period between 1050 and 800 BC (Table 1).

3.2.1 RH1

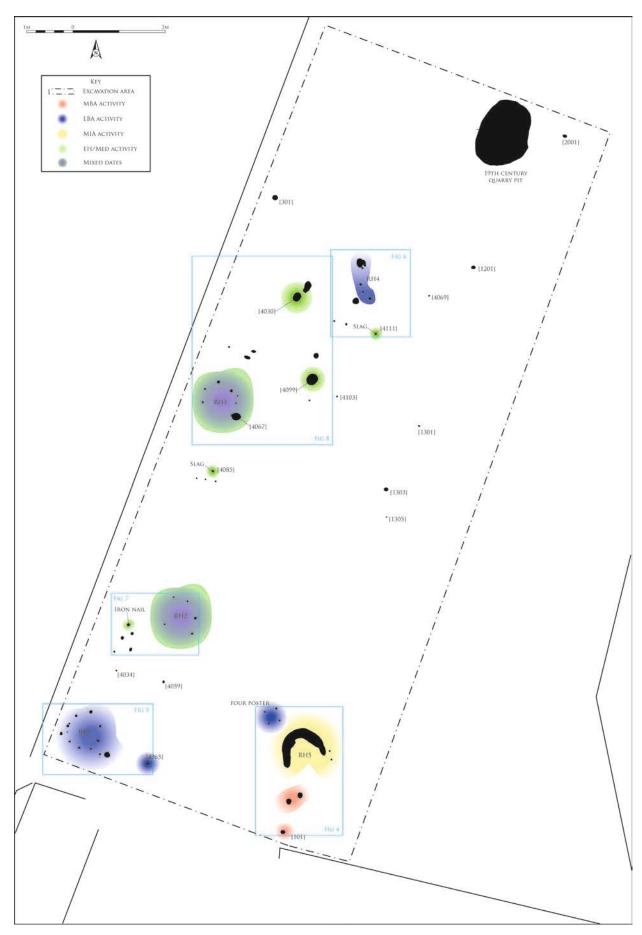
RH1 was the best preserved post-ring roundhouse of the four examples uncovered during the excavations (Illus 5). It measured 8.0m in diameter and consisted of a post-ring of eight post-holes. All were well defined and ranged in size from 0.3m to 0.65m in diameter, with an average size of 0.45m. Depths ranged from 0.12m to 0.20m. The distance between the post-holes varied from between 2.5m and 3.5m. The conjunction of Post-hole [4032] with Post-hole [4018] may represent evidence of repair and renovation of the structure, while the two smaller post-holes on the western side of the structure, [4006] and [4010], may have provided additional support or might be the remnants of internal divisions.

No features were found within the area defined by the post-ring, but given the shallow nature of all of the structural post-holes, it is likely that any internal features, such as a hearth, have been completely ploughed away. Outside the post-ring there are three features, Post-hole [4063] and Pits [4008] and [4061], which may also be associated with the roundhouse. Pit [4008] could have lain within the structure, while the larger pit, [4061], would almost certainly have lain immediately outside the roundhouse. Post-hole [4063] may have formed part of a porched entrance lying to the south-east. This interpretation is reinforced by the evidence for post replacement on the post-ring at this point, the junction between structure and porch always being the most vulnerable to damage and decay.

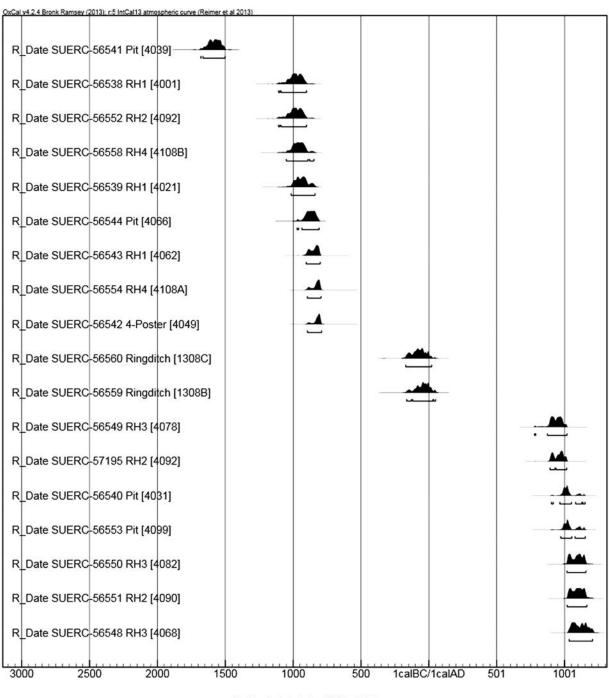
A single find (SF02), a coarse stone 'pounder', was recovered from Post-hole [4004], while two body sherds from the same prehistoric vessel came from the fill of Post-hole [4063]. A total of 165 cereal caryopses were recovered from RH1, most of which were barley. Some 61.1g of charcoal was

Table 1 Radiocarbon dates

Lab no.	Structure/ feature	Context	material	Species	uncal BP	Calibrated 1-sigma	Calibrated 2-sigma	δ ¹³ C (‰)
Middle Bronze Age								
SUERC-56541	Pit	[4039]	charcoal	Alnus glutinosa	3306 ± 35	1623 - 1531 BC	1681 - 1503 BC	-26.40
Late Bronze Age								
SUERC-56538	RH1	[4001]	charcoal	Corylus avellana	2827 ± 35	1016 - 925 BC	1109 - 902 BC	-26.80
SUERC-56552	RH2	[4092]	charcoal	Corylus avellana	2827 ± 35	1016 - 925 BC	1109 - 902 BC	-26.50
SUERC-56558	RH4	[4118]	cereal grain	Triticum sp.	2807 ± 35	1002 - 918 BC	1051 - 847 BC	-24.40
SUERC-56539	RH1	[4021]	charcoal	Corylus avellana	2789 ± 35	996 - 903 BC	1016 - 839 BC	-26.20
SUERC-56544	Pit	[4066]	cereal grain	Hordeum sp.	2731 ± 35	904 - 834 BC	971 - 809 BC	-23.90
SUERC-56543	RH1	[4062]	charcoal	Corylus avellana	2688 ± 35	894 - 873 BC	905 - 801 BC	-28.30
SUERC-56554	RH4	[4108]	charcoal	Alnus glutinosa	2662 ± 35	841 - 798 BC	896 - 795 BC	-26.70
SUERC-56542	4-poster	[4049]	charcoal	Betula sp.	2652 ± 35	834 - 797 BC	896 - 791 BC	-27.20
Middle Iron Age								
SUERC-56560	RH5	[1308C]	charcoal	Corylus avellana	2055 ± 35	152 - 02 BC	171 BC - AD 21	-29.30
SUERC-56559	RH5	[1308A]	charcoal	Corylus avellana	2036 ± 35	91 BC - AD 16	163 BC - AD 51	-25.70
Early medieval								
SUERC-56549	RH3	[4078]	charcoal	Corylus avellana	1103 ± 35	AD 895 - 985	AD 780 - 1019	-27.60
SUERC-57195	RH2	[4092]	cereal grain	Hordeum sp.	1084 ± 30	AD 900 - 993	AD 894 - 1017	-24.00
SUERC-56540	Pit	[4031]	cereal grain	Hordeum sp.	1015 ± 35	AD 985 - 1036	AD 904 - 1152	-24.40
SUERC-56553	Pit	[4100]	cereal grain	Hordeum sp.	1004 ± 35	AD 989 - 1117	AD 973 - 1154	-24.50
SUERC-56550	RH3	[4082]	charcoal	Alnus glutinosa	957 ± 35	AD 1025 - 1151	AD 1019 - 1159	-27.90
SUERC-56551	RH2	[4090]	cereal grain	Hordeum sp.	943 ± 35	AD 1033 - 1152	AD 1020 - 1165	-24.40
SUERC-56548	RH3	[4068]	charcoal	Alnus glutinosa	907 ± 35	AD 1044 - 1166	AD 1044 - 1166 AD 1035 - 1207	-26.30

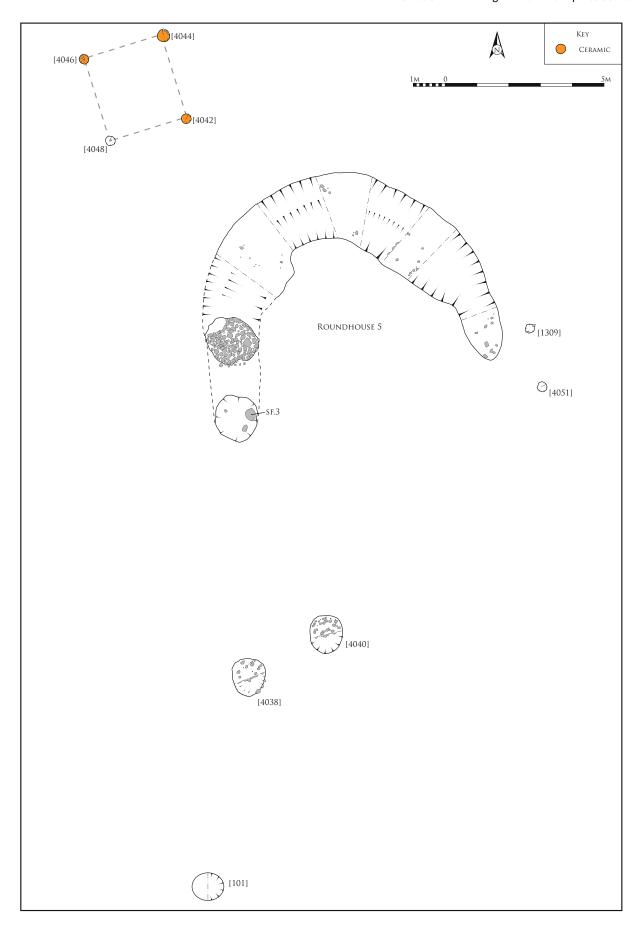


 $\textbf{Illus 2} \ \textbf{Excavation} \ \textbf{area} \ \textbf{showing all} \ \textbf{recorded} \ \textbf{features}$



Calibrated date (calBC/calAD)

Illus 3 The radiocarbon dates (graph produced using OxCal v4 1.7 Bronk Ramsey 2010; r:5 Atmospheric data from Reimer et al 2009)



Illus 4 The MBA pits, the LBA four-poster structure and Roundhouse $5\,$

recovered from RH1 features, 80% of which was hazel and more than half was roundwood.

Hazel charcoal from Post-holes [4000] and [4020] and Pit [4061] produced LBA dates of, respectively, 1109–902 cal BC (SUERC-56538), 1016–839 cal BC (SUERC-56539) and 905–801 cal BC (SUERC-56543).

3.2.2 Pit [4065]

Pit [4065] lies just over 10m east of RH1 (Illus 5). It was oval in plan, measuring 0.42–0.72m, and was 0.11m deep with concave sides and a flat base. As well as stones and charcoal, the pit contained over 100 cereal grains, most of which were barley. A barley grain was radiocarbon dated to 936–809 cal BC (SUERC-56544), making it contemporary with activity in RH1.

3.2.3 The four-poster

Just over 35m to the east of RH1 lay a four-poster structure (Illus 4). This was a very well-defined structure, with some of the best preserved post-holes on site. The four post-holes formed a near-perfect

square structure measuring 2.5m east to west by 2.7m north to south.

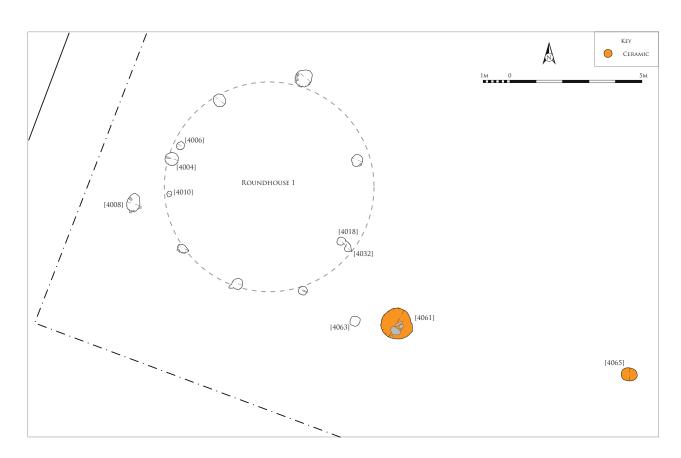
The post-holes had diameters of between 0.28m and 0.41m. Depths varied from 0.16m to 0.37m with straight sides, and all post-holes contained packing stones. A small ceramic assemblage consisting of four sherds, probably from the same vessel, was retrieved from three of the post-holes. Sooting showed that the vessel had seen use prior to its breakage.

No plant macroplant remains were recovered, but a small amount of charcoal identifiable as alder, oak and birch was recovered.

A radiocarbon date of 896–791 cal BC (SUERC-56542) was returned from birch charcoal from the fill of Post-hole [4048], placing the four-poster towards the end of the date range of activity associated with RH1.

3.2.4 RH4

RH4 was very heavily truncated and there is some doubt over whether it actually represents a post-ring roundhouse (Illus 6). It consisted of an arc of four

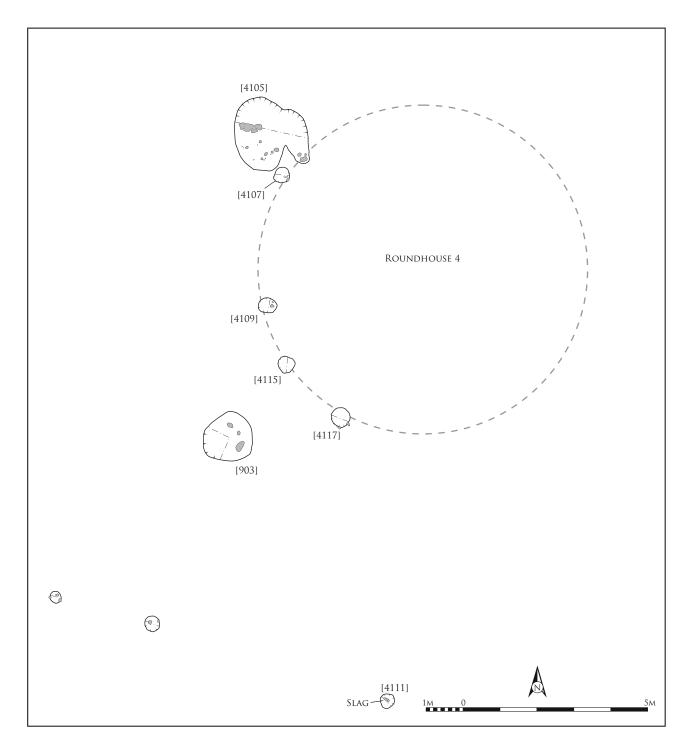


Illus 5 Roundhouse 1 and associated pits

post-holes, [4107], [4109], [4115] and [4117], and a neighbouring pit, [4105]. The arc of the post-holes suggests a post-ring diameter of 9.0m, with all the surviving features lying on the northern side of the projected roundhouse. The post-holes all contained a single fill and ranged in diameter from 0.34m to 0.48m. There was much greater variation in their depth, with some surviving to a

depth of only 0.18m, while Post-hole [4107] was 0.54m deep. This variation in post-hole depth raises the possibility that this cluster of features is more indicative of sequential building activity than the remains of a coherent roundhouse structure.

Pit [4105] lies immediately behind the projected arc of the post-ring. A likely post-hole on its western side would lie on the projected arc. This feature was



Illus 6 Roundhouse 4

amorphous with an undulating base. Three cereal grains, including a wheat grain, and a small amount of alder charcoal were the only identifiable finds from the features included within RH4.

A charred wheat grain from Post-hole [4107] produced a date of 1051–891 cal BC (SUERC-56558), while alder charcoal from the same post-hole produced a date of 896–795 cal BC (SUERC-56554). These dates are not contemporary with each other, which suggests contamination; nonetheless, one (SUERC-56554) is virtually identical to that retrieved from the four-poster, while the other (SUERC-56558) is virtually identical to the dates from RH1, suggesting that the features that comprise RH4 were open in the LBA.

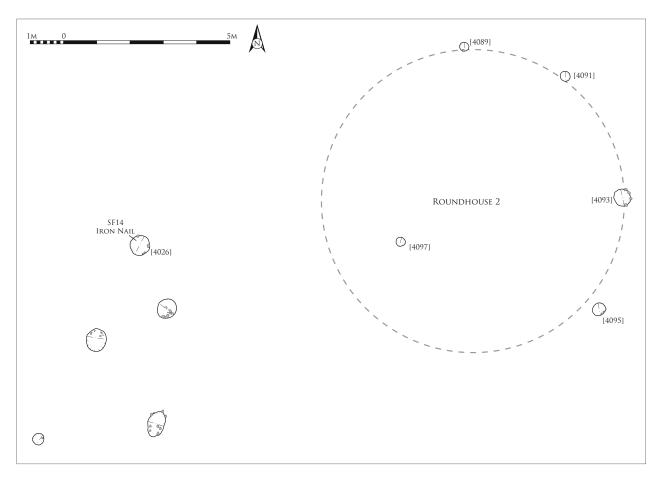
Another pit, [903], lying to the south-west of RH4, may be associated with its use.

Pit [903] was sub-circular, some 1.3m in diameter and over 0.5m deep with steep sides and a flat base. The single fill contained small amounts of charred barley and oats, and a small assemblage of birch, hazel and alder charcoal.

3.3 Middle Iron Age (MIA) settlement (Illus 4)

The only structure which produced MIA dates on the site is RH5, the remains of a ring-ditch roundhouse which lay off the terrace on a slight slope to the immediate south-east of the earlier LBA four-poster structure. RH5 consisted of a single large ring-ditch feature with two post-holes, [1309] and [4051]. The ring-ditch formed a crescent with an external diameter of c 9.5m and internal diameter of c 7.0m. The ring-ditch was relatively shallow, especially around the inner edge, with depths of no more than 0.3m. The fill consisted of a coarse sandy gravel with numerous charcoal flecks, mostly close to the base of the fill. At the western end of the feature there were two stone-filled depressions, one of which contained a saddle quern (SF03). A small macroplant assemblage was recovered from the ring-ditch, with barley and oat identified along with hazel, alder and birch charcoal.

No features were present within the interior of the roundhouse as defined by the ring-ditch.



Illus 7 Roundhouse 2

Post-holes [1309] and [4051] are physically close to the ring-ditch and may have formed part of the roundhouse. Both were well defined, deep and contained packing stones. Post-hole [1309] was sub-circular, measuring 0.35 x 0.5m, while Post-hole [4051] was slightly smaller with a more regular diameter of 0.35m. It is possible that these two post-holes formed an east-facing entrance to the structure.

Two samples of hazel charcoal from different slots through the ring-ditch both produced date ranges in the last two centuries BC, 171–21 cal BC (SUERC-56560) and 163 cal BC–51 cal AD (SUERC-56559).

3.4 Early medieval settlement (Illus 7 & 8)

Radiocarbon dates spanning the ninth to twelfth centuries AD have been retrieved from features in RH2 and RH3 and from two isolated pits (Table 1). However, while these seven dates clearly indicate settlement activity during this period, their interpretation is not straightforward. Firstly, they span over four centuries and they do not form a coherent group, ie the earliest and latest in the group do not overlap with each other and they cannot legitimately be averaged together. This suggests that the dates represent a disparate series of events which we cannot associate with specific structures because of the issues of contamination which are discussed below. The only features which can be confidently ascribed to this period are two large isolated pits lying between RH3 and RH4, [4030] and [4099] (Illus 2).

3.4.1 Pit [4030]

Pit [4030] is a large oval pit aligned north-west to south-east with steep concave sides and a concave base (Illus 8). It measures 2.0m long by 1.5m wide and is 0.45m deep. It contained a single stony and charcoal-flecked fill (4031), which produced the largest macroplant assemblage recovered from the site. The assemblage contained 472 items, 96% of which were cereal grains. Identifiable crops included barley (32%) and oat (27%), as well as some hulled barley and one wild oat. The only other food remains were 0.1g of hazelnut shell. This pit also produced one of the largest assemblages of charcoal, consisting of hazel and alder in relatively equal concentrations.

The size of the macroplant assemblage suggests deliberate deposition of rubbish, so the date from a barley grain of 904–1152 cal AD (SUERC-56540) can be considered taphonomically secure.

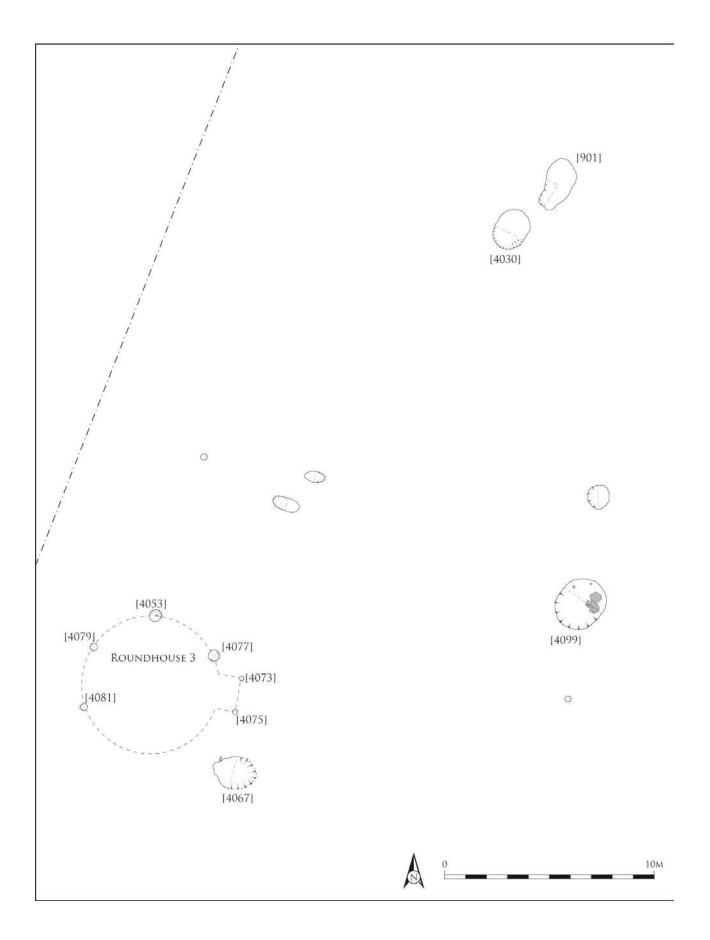
3.4.2 Pit [4099]

Pit [4099] was very similar to Pit [4030] in scale and form (Illus 8). It was a large oval pit with concave sides also aligned on a north-west to south-east axis and measured 2.6m long by 2.2m wide. It was 0.4m deep and the fill (4100) was stony and charcoal-flecked. Pit [4099] also contained a sizeable macroplant assemblage of 186 items dominated by barley (73%) with a lesser amount of oat (8%). The charcoal comprised hazel, alder and birch in equal measures. A charred barley grain from the fill was dated to 973–1154 cal AD (SUERC-56553), and again the size of the macroplant assemblage suggests that this was deliberate deposition and can be considered taphonomically secure.

The dates from the two pits are statistically indistinguishable, suggesting that they represent the same phase of pit-digging activity. Pit [901] lies geographically close to Pit [4030] and may be part of the same pit-digging activity. This large oval pit measured 1.8 x 1.3m with a steeply sloping profile and flat base 0.26m deep. The fill was very stony with a band of charcoal near the base. A macroplant assemblage of 59 cereal grains was dominated by barley (52%), with a smaller amount of oats (8%). The charcoal assemblage consisted of birch and hazel.

3.4.3 Other features

There are a number of features which are not dated, the contents of which, however, place them in the Iron Age or later periods. Two small pits, Pit [4085] some 10m south of RH3 (Illus 2) and Pit [4111] some 15m south of RH4 (Illus 6), both contained pieces of slag categorised as 'unclassified iron slag'. This type of material is a typical component of early ironworking assemblages (Crew & Rehren 2002: 87) and most likely represents rake-out material from smelting furnaces or smithing hearths (Heald et al 2011: 20). Pit [4085] also contained the largest concentration of hazelnut shell recovered from the site, as well as a few grammes of burnt



Illus 8 Roundhouse 3 and early medieval pits

bone. Fragments of an iron nail shank, (SF14), were recovered from Pit [4026], one of a group of four pits which lie about 5m west of RH2 (Illus 7).

3.5 RH2 and RH3: LBA or early medieval?

The dating of these structures is ambiguous; the excavated evidence for each structure is presented below and the dating is then discussed.

3.5.1 RH2

This cluster of five post-holes appears to represent the truncated remains of a post-ring roundhouse, RH2 (Illus 7). Four post-holes, [4089], [4091], [4093] and [4095], lie on an arc, the projected diameter of which would be 9.0m. The post-holes are regularly spaced along the arc, lying between 3.0m and 3.6m apart, and were well defined, if shallow, with an average depth of only 0.16m. The diameters of the post-holes measured ranged from 0.3m to 0.5m. A small post-hole, [4097], lay within the interior of the projected post-ring, but no other internal features were noted. No finds were recovered from the features associated with RH2. Charcoal from Post-hole [4089] suggests that it originally held an oak post which had burnt in situ. Hazel charcoal was also recovered and there was a small macroplant assemblage, which included hazelnut shell, some barley and a flax seed.

Single samples from Post-holes [4089] and [4091] were both initially dated, but they produced very different dates. A barley grain from fill (4090), the only fill of Post-hole [4089], produced a date of 1020–1165 cal AD (SUERC-56551), while hazel charcoal recovered from fill (4092), from Post-hole [4091], produced a prehistoric, Late Bronze Age date of 1109–902 cal BC (SUERC-56552). Subsequently, a second date was sought for Post-hole [4091] from a charred barley grain, which produced a date of 894–1017 cal AD (SUERC-57195).

3.5.2 RH3

RH3 also appears to be the heavily truncated remains of a post-ring roundhouse (Illus 8). It consists of an arc of four post-holes, [4081], [4079], [4053] and [4077], the projected diameter of which would be *c* 6.5m, while the other two post-holes, [4073] and [4075], may have formed an east-facing

porch structure (Illus 8). The post-ring post-holes all lie approximately 2.35m from each other. These post-holes were well defined and varied in diameter from 0.35m to 0.50m, but they were all relatively shallow, with depths of between 0.12m and 0.20m. The post-holes of the porch structure were smaller at 0.25m in diameter and shallower at 0.10m deep. Consequently, very few finds were retrieved. Burnt bone was retrieved from Post-hole [4077] and the small macroplant assemblage consisted almost entirely of barley, with a few oat grains. Sloe stones were also found. Charcoal was mostly hazel, with lesser amounts of alder and birch.

Hazel charcoal from fill (4078) of porch Post-hole [4077] produced a date of 780–1019 cal AD (SUERC-56549) and alder charcoal from fill (4082) of structural Post-hole [4081] returned a date of 1019–1159 cal AD (SUERC-56550).

An oval-shaped pit, [4067], lay close to the projected post-ring of RH3 (Illus 8). It measured 2.0m long by 1.6m wide and was 0.34m deep with stepped sides and a rounded base. The single fill (4068) was stony with flecks of burnt bone and charcoal. Alder charcoal from the fill produced a date of 1035–1207 cal AD (SUERC-56548).

3.5.3 Discussion

Some five radiocarbon dates spanning the ninth to twelfth centuries AD have been retrieved from features in RH2 and RH3, but RH2 has also produced an LBA date from one of the post-holes that produced an early medieval date (Table 1 & Illus 3). The picture is further complicated by the fact that the two medieval dates from RH2 suggest two distinct phases. So in RH2 there is evidence of at least three episodes of activity, but which of these, if any, relates to the actual construction and use of RH2 itself? Is the LBA charcoal date a contaminant from neighbouring LBA RH1, or are the early medieval cereal grains contaminants from the grain-rich Pit [4031] or from activity further upslope and outwith the excavated area altogether? The same questions apply to RH3, where at least two episodes of early medieval activity are represented.

RH1, RH2, RH3 and RH4 lie in a line strung out along the terrace, the land sloping away to the east, where the MBA and MIA structures lie below them. The overall topography of the site explains the lack of cross-contamination from these phases, as the plough is likely to have moved along the terrace rather than across the break in slope. RH2 and RH3 lie in a row between the two more securely dated LBA houses, RH1 and RH4, and before the radiocarbon dates were obtained it was assumed that RH2 and RH3 were also LBA in date on the basis of their post-ring ground plans. In the absence of parallels for roundhouse structures in the early medieval period (see SUMMARY AND DISCUSSION below), it is probably safest to assume that these four roundhouses constitute part of an LBA unenclosed settlement. The three pits, [4041], [4099] and [4067], bear witness to medieval activity on the terrace, and the associated settlement could lie upslope, bringing contamination downslope in the form of domestic debris (see SUMMARY AND DISCUSSION below).

4. SPECIALIST REPORTS

4.1 The lithic assemblage

R Engl

A small assemblage consisting of two pieces of modified flint made on locally derived, red Buchan flint was retrieved. The flint is fresh in appearance with surviving cortex, suggesting a pebble origin. Both of the artefacts appear to be Mesolithic in date. SF15 is a small notched bladelet retrieved from pit fill (4031) and is believed to be residual, given that the pit was radiocarbon dated to the 10th–12th century AD. SF01 is a small micro scraper recovered from the topsoil.

4.1.1 Catalogue

► SF01 Micro endscraper

Buchan flint. Made on small secondary flake. Semiabrupt retouch applied to the distal end. L: 13.8mm; W: 16.5mm; Th: 4.5 mm. Unstratified.

► SF15 Notched bladelet

Buchan flint. Made on small tertiary bladelet. Small retouched notch on proximal right-hand side. L: 13.8mm; W: 16.5mm; Th: 4.5mm. Context (4031), fill of Pit [4030].

The site lies upon a gravel river terrace and the flints demonstrate that there must have been some Mesolithic occupation of this site.

4.2 The coarse stone assemblage

D McLaren

Only three items of coarse stone were recovered during excavation: two cobble tools, which display very ephemeral signs of use, and an intact saddle quern. The quern (SF03) was recovered from the fill of RH5. These tools would have been used in conjunction with an upper stone, commonly referred to as rubbing stones, and would primarily have been used to grind cereal grain into flour. It has been produced from a large water-rounded boulder and, like both of the cobble tools, shows little evidence of being modified prior to being used as a tool. But unlike the handheld tools, the saddle quern displays evidence of more extensive use, indicated by the worn dished facet on one face. The boulder from which the saddle quern was produced was undoubtedly selected due to its coarse texture with frequent large quartzite inclusions, whose natural properties would have provided an excellent grinding surface.

One cobble tool (SF02) has seen use as a pounder, perhaps for processing grain or other foodstuffs, but could equally have been used in the preparation of clay for potting or to break down ore for use in metalworking. It came from the fill of a post-hole, [4004], that is part of the post-ring of RH1. The third tool (SF05) has seen very light, perhaps even singular, use as a rubbing stone. The lack of any evidence of preparation of the grinding surface in the form of pecking to produce a rougher and more efficient grinding surface is unusual and suggests that the tool was expediently used and readily discarded.

Cobble tools are not readily datable based on form alone but a later prehistoric (Late Bronze Age/ Iron Age) date is likely.

4.2.1 Catalogue

► SF02 Pounder

Elongated ovoid cobble with water-rounded, naturally smooth surfaces and rounded ends. One rounded end has been flattened by use and displays a distinct, circular, peckmarked facet (Diam:

26.5mm) which is pitted as the result of pounding. The opposite, slightly wider, rounded end has an irregular series of similar peckmarks suggesting light use. L: 165mm; W: 54.5mm; Th: 43mm. Context (4005), fill of Post-hole [4004], RH1.

► SF03 Saddle quern

Large plano-convex ovoid slab of coarse sandstone with gently rounded edges, split from a waterrounded boulder, damaged at one wide end. Basal surface gently rounded with shallow peckmarks around the circumference of the face. The boulder is very coarse sandstone with clear transverse grain and frequent large (max. 59 x 44mm) sub-angular quartzite pebbles which have been planed-off on one face as the result of abrasion from use, particularly towards the damaged edge. The grinding face is gently dished towards the centre on both the longitudinal and lateral axes. The way the boulder has been split has created a gently angled working face, ideal for use as a grinding surface. L: 457mm; W: 358mm; Th: 89 mm. Context (1308), fill of ring-ditch in RH5.

► SF05 Rubbing stone

Sub-rectangular, plano-convex, water-rounded cobble with light abrasion and smoothing from rubbing on one extensive naturally flat face. Associated with the area of rubbing is a light sheen, concentrated around the rounded circumference of the face towards one end of the stone, suggesting limited wear. The cobble does not display any sign of modification to the shape or surfaces prior to use. L: 174mm; W: 132mm; Th: 80mm. Unstratified.

4.3 The ceramic assemblage

D McLaren

Six small, degraded and fractured body sherds from coarse handmade pottery vessels were recovered during soil sample processing. In each case, only one face of the sherd survives, which necessarily limits the inferences that can be made about the type, form and date of vessel that they derive from. Based on microscopic examination of the fabric, a minimum of two vessels are recognised and associated radiocarbon dates suggest these are Late Bronze Age/Early Iron Age in date.

The condition of the sherds is informative as they are all heavily damaged and were fragmentary at the time of deposition but lack distinct softening of the edges that would be expected from a period of weathering, suggesting that they are residual incidental inclusions rather than purposefully deposited items.

4.3.1 The four-poster

Four sherds (23g) were found in the post-holes of the four-poster. The fabric is a fine, silty clay with frequent natural mica or feldspar flecks and occasional (approximately 30%) small quartz and mica inclusions which has fired hard and is dark-brown/black with oxidised (buff) surfaces. It is likely, based on the similarity of the fabric alone, that all four sherds derive from the same vessel. Two small sherds from one post-hole preserve the internal face of the pot and are sooted from use. A radiocarbon date of 896–791 cal BC (SUERC-56542) for the structure suggests a Late Bronze Age/ Early Iron Age date for the associated ceramics.

4.3.2 Pit [4061]

Two body sherds, no longer joining but almost certainly from the same vessel, came from the single fill (4062) of Pit [4061]. As with the sherds associated with the four-poster, the sherds from the pit preserve only the internal face of the pot, which is lightly sooted from use. One sherd has broken across an N-shaped coil junction. The fabric is very similar to the other sherds recovered. It is a fine silty clay with frequent natural mica or feldspar flakes with very few inclusions which has fired hard and is dark-brown in colour on the interior face and margin. A radiocarbon date of 905–801 cal BC (SUERC-56543) was obtained from charcoal from the same fill, (4062).

4.4 The iron assemblage

D McLaren

Of the three iron objects recovered during excavation, only two were retrieved from possible prehistoric/early medieval contexts. These are an iron holdfast or clench bolt, broken at one end (SF04) and a probable broken nail shank (SF14). Neither objects are closely datable.

The holdfast from Pit [4057] is a type of fitting used to rivet two pieces of wood together, providing a more secure join than a simple nail (Manning 1985: 132). They are a type of fitting favoured by shipbuilders but their use was not restricted to this and it could have been used for timber cladding as well as internal structural fittings.

4.4.1 Catalogue

► SF04 Iron holdfast or clench bolt, damaged

Short square-sectioned shank with a flat square head or rove at one end (W: 24.5mm; Th: 3.5mm); the opposite end is damaged (remaining W: 20mm). L: 35mm; Context (4058), fill of Pit [4057].

► SF14 Possible nail shank fragments

Two small fragments of fine, rectangular sectioned bar, tapering in length but broken at both ends. The largest of the fragments is distorted along the length. L: 20.5mm; Diam: 3mm and L: 11mm; Diam: 5.5mm. Retrieved from sample processing. Context (4029), fill of Pit [4026].

4.5 The vitrified material

D McLaren

A small quantity of vitrified material (148g) was recovered from the fill of two pits across the excavated area, [4085] and [4111]. The assemblage comprises multiple small, amorphous, fractured pieces of larger slag nodules. No 'diagnostic' pieces, such as plano-convex slag cakes or hammerscale, were recognised amongst the assemblage to confirm the stage of the ironworking process that the debris derived from and all of the pieces from the site have been categorised as 'unclassified iron slag'. Such 'unclassified slags' or 'amorphous slags' are typical components of early ironworking assemblages (Crew & Rehren 2002: 87) and represent rake-out material from smelting furnaces or smithing hearths (Heald et al 2011: 20).

It is often not possible to distinguish between the two processes by visual examination alone. However, based on the colour, density, morphology and magnetic levels, and on comparison of this material with other groups of early ironworking debris in Moray, it is likely that this debris was produced during secondary ironworking (blacksmithing) rather than primary smelting. Large quantities of

similar slags have been recovered from excavations of Iron Age and Early Historic sites at Grantown Road, Forres (Heald & McLaren 2008; Cook 2016); Birnie (Cruickshanks in prep; Hunter in prep a), Clarkly Hill (Cruickshanks in prep; Hunter in prep b) and Tarras Farm, near Forres (Will 1998).

No structural remains of furnaces or ironworking hearths were found during excavation. The quantities of waste are so small that they are likely to represent residual scattered material rather than deliberate dumps or in situ debris and could be seen as Iron Age through to medieval in date.

4.6 The ecofact assemblages

J Robertson

4.6.1 Introduction

A total of 68 bulk samples produced a small assemblage of charred macroplant, burnt bone fragments and a larger concentration of charcoal. The aim of this report is to analyse these environmental finds in conjunction with each other in an effort to characterise and understand the archaeological features from which they originated.

As described above, the archaeological features had been heavily truncated and modern contamination through bioturbation was evident in a majority of the bulk samples in the form of insect eggs, insect remains, plant roots and seeds.

The bone assemblage was comprised entirely of burnt fragments, most of which were smaller than 10mm and were poorly preserved. Consequently, few fragments could be identified to species and the bone was simply quantified by number and weight.

The results are presented below by phase. Only those features which produced relatively significant amounts of ecofactual material and can be ascribed a chronological date are described in any detail.

4.6.2 LBA settlement

4.6.2.1 RH1

A total of 165 cereal caryopses were recovered from six of the post-holes and Pit [4061] in RH1, but 66% of the assemblage came from a single post-hole. The identifiable assemblage consisted primarily of barley (72%), with one wheat and two oat caryopses. The only other finds were 0.2g of hazelnut shell, a grass caryopsis and two sedge nutlets.

Charcoal totalling 61.1g was present in three post-holes and Pit [4061]. Hazel constituted 80%, oak 14%, birch 4% and alder 2%. Hazel roundwood made up 51% of the total assemblage. Most features contained a mixture of species but Post-hole [4004] contained only hazel. The presence of so much roundwood of one species could indicate the burning of an object, such as a hurdle screen or basket.

A total of 0.7g of burnt bone fragments were collected from Post-hole [4019] and Pit [4062]. Only one of these fragments was larger than 10mm and none could be identified.

The charred cereals and bone are representative of domestic activity within RH1, which involved food preparation, cooking and the cleaning of hearths. This has resulted in small quantities of domestic waste becoming accidentally trapped within the surrounding features. The small volume of material suggests that this structure was regularly cleaned and probably well maintained.

4.6.2.2 RH2

The macroplant assemblage was small and came from the fills of three post-holes. Of 26 caryopses, 57% were identified as barley. The other edible foods were 2g of hazelnut shell and a single flax seed.

The charcoal consisted of 11.3g from Post-holes [4090] and [4092]. The charcoal from [4090] was comprised entirely of large oak fragments, which accounted for 10.3g. A small amount of hazel roundwood was found in [4092].

Small amounts of food and fuel debris have been accidentally reworked into these features. The relatively large concentration of oak in Post-hole [4090] suggests that this might represent the burning of a post rather than fuel debris.

This is the only structure and phase to produce flax. It may have had a role in the economy of this site, but with only a single example recovered this must remain speculation.

4.6.2.3 RH3

This structure produced a small assemblage of 74 charred macroplants from two pits and two post-holes, but 88% of the assemblage came from Post-hole [4077]. The cereal species present included barley (59%), a single hulled barley and two oat

caryopses. The other food remains were 2.3g of hazelnut shell and six sloe stones.

A total of 26.6g of charcoal was present in Pit [4067] and Post-holes [4077] and [4081]. The species were hazel, alder and birch and two species were present in each context. The fragments were concentrated in Pit [4067], which made up 19.3g of the total assemblage.

The largest concentration of bone noted on site was recovered from RH3. Post-hole [4077] contained 53.5g and Pit [4067] contained 5.4g. It was possible to identify a second phalange and five long bone shaft fragments all belonging to a medium-sized mammal.

The environmental remains from this structure are representative of domestic activities such as food preparation, cooking, fuel debris and cleaning. The presence of sloes within this feature is the first evidence on site for the exploitation of other wild food sources apart from hazelnuts.

4.6.2.4 Pit [4065]

This pit contained 136 cereal caryopses, of which 73% were identified as barley. This suggests that cooking debris was deliberately disposed of within the pit.

4.6.3 MIA settlement

4.6.3.1 RH5

A small macroplant assemblage was recovered from the ring-ditch and Post-hole [4051]. The cereal remains from the ditch slots consisted of two barley, one oat and six cereal caryopses. The only find from Post-hole [4051] was a single cereal caryopsis. The other food remains from the ditch slots were 0.1g of hazelnut shell. The other finds were four sedge nutlets and five poorly preserved seeds which could not be identified further.

The four slots from the ring-ditch produced 215.7g of charcoal, the largest concentration found on site. The species present were hazel (59%), alder (30%) and birch (11%). The charcoal from one slot was composed entirely of hazel whereas elsewhere in the ring-ditch the species were mixed. Both alder and hazel roundwood were present. Post-hole [1309] contained 3.6g of a mixture of hazel, alder and oak. The hazel in the post-hole was all roundwood.

There is very little food debris present in the ring-ditch but fuel debris was clearly disposed of

there. The concentration of hazel roundwood within the ring-ditch and post-hole could represent the burning of a hurdle screen or post.

4.6.4 Early medieval pits

4.6.4.1 Pit [4030]

This pit produced the largest concentration of charred macroplant recovered from the site. The assemblage contained 472 items, of which 30% could be identified as barley and 26% as oat; seven hulled barley and one wild oat caryopses were also present. The only other food remains were 0.1g of hazelnut shell. The weed taxa were common agricultural contaminants and also a small number of plants typically associated with damp habitats, ie two fat hen, one knot grass, one smartweed, five hemp nettle and ten sedge nutlets. This pit also produced the second largest concentration of charcoal found on the site. The assemblage weighed 58.8g and consisted of hazel and alder in relatively equal concentrations.

These remains are representative of food and fuel debris. The presence of small quantities of agricultural weed taxa suggests that the cereal was perhaps not thoroughly processed. The large concentration of environmental finds indicates that this pit was deliberately used for the disposal of domestic waste.

4.6.4.2 Pit [4099]

There were 186 macroplant remains from this pit, of which 73% was identified as barley and 9% as oat. The only other food remains were 0.07g of hazelnut shell. The weed taxa present included one fat hen, two knot grass, one smartweed, one wild radish, one hemp nettle and six sedge nutlets. The charcoal from this pit weighed 4.6g and alder, birch and hazel were present.

The relatively large concentration of cultivated cereal caryopses alongside a much smaller number of charcoal fragments suggest that this feature was used for the disposal of domestic food refuse alongside some fuel debris.

4.6.4.3 Pit [4085]

This pit contained 20.7g of hazelnut shell, the largest concentration recovered from the site. The only other macroplant material consisted of six barley caryopses. A total of 7.1g of charcoal was

present, consisting of oak, alder, birch and hazel in relatively equal amounts. The pit also contained 13g of burnt bone.

The mixture of plant food remains, charcoal and burnt bone represents food and fuel debris. The large concentration of hazelnut shell suggests that this material was probably used first as a food source and later reused as a fuel.

4.6.5 Discussion

While several features are relatively rich in terms of environmental finds, the overall small size of the macroplant assemblage makes it difficult to establish whether agricultural practices changed over time. Nonetheless, the agricultural practices that are seen elsewhere on prehistoric sites in north-east Scotland can also be detected here. Barley was typically the favoured cultivated crop throughout the use of the site, with the sporadic addition of oat during the Late Bronze Age and early medieval periods. At no time does wheat appear to have been grown and its presence is more representative of a weed contaminant rather than crop cultivation.

The macroplant assemblage from Grantown Road, Forres also shows that the exploitation of oats became more commonplace from the Early Historic period (Robertson forthcoming). This could reflect changing environmental conditions which either allowed or made necessary the production of a secondary crop alongside the primary cereal. Alternatively, the emergence of oats could reflect changing cultural attitudes which encouraged local communities to adapt their cultivation techniques and expand their available food sources.

Flax and sloes were found in the features within RH2 and RH3, structures which, it is argued above, may have been contaminated by medieval rubbish from upslope. We therefore cannot be certain whether these formed part of the LBA or early medieval diet.

The weed taxa was composed of agricultural crop contaminants such as fat hen, wild radish, corn spurrey, smartweed and hemp nettle, which are all easily left behind with the grain if is not thoroughly cleaned during processing. Species such as fat hen, corn spurrey and wild radish have been deliberately utilized as a food source for humans and used to bulk out animal feed, particularly in

times of famine. Reviewing the small numbers of the weed taxa present at Macallan Distillery, it is more probable that they were accidental inclusions within the cereal or growing nearby.

Sedge is a plant associated with damp waste habitats and meadows but it may also represent material collected for bedding and/or flooring. It has been found in flooring deposits on Cults Loch 3 crannog, Dumfries & Galloway, where organic conditions have preserved the stem as well as the nutlets (Robertson forthcoming). Charred sedge nutlets have also been found in hearth debris at Cults Loch 3 and it is argued that old flooring materials were burnt. It is possible that the small quantities of sedge found in the early medieval pits at Macallan Distillery were used in the same way.

5. SUMMARY AND DISCUSSION

Despite extensive truncation, the excavations at Macallan Distillery have uncovered evidence for four main periods of activity, in the Middle Bronze Age (MBA), Late Bronze Age (LBA), Middle Iron Age (MIA) and early medieval period, as well as two lithics indicating Mesolithic activity. The site lies on a gravel terrace above the River Spey, a prime location for settlement with sheltered, free-draining level ground positioned high enough to avoid seasonal flooding but still with easy access to the river, a major routeway in and out of the central Highlands to this day.

5.1 MBA activity

MBA activity is limited to a single dated pit, [4038], but it is probable that the neighbouring pits, which are very similar in size and fill also date to this period. Isolated pits are a common occurrence on excavations throughout Scotland, radiocarbon dating placing them on a spectrum ranging from 4000 BC to the first century AD (Cook & Dunbar 2008; Cook 2016; Engl & McLaren forthcoming). More often than not, the fills of these pits contain variations on the following constituents – charcoal, fire-cracked stones, burnt bone, pottery sherds and lithics. For example, at Kintore, Aberdeenshire there were dozens of prehistoric pits dated to the Early Neolithic through to the LIA, and whilst the function of some could be identified, as for

example cremation pits, the majority could not be assigned a definitive function (Cook & Dunbar 2008).

It is possible that the MBA settlement associated with the pit digging lay on the higher terrace to the west of the excavation area. At other highland sites such as Lairg (McCullagh & Tipping 1998: 209) and Navidale (Dunbar 2007: 165) in Sutherland, Bronze Age settlement often occurred at higher altitudes than the subsequent Iron Age and later settlement.

5.2 LBA activity

The LBA activity comprises an unenclosed settlement of either two or four roundhouses (see above) which lie $\it c$ 100m apart, a four-poster structure and various isolated pits. The extensive truncation suffered by the archaeological remains means that some of the key issues regarding LBA settlements, ie roundhouse architecture, roundhouse orientation, phasing, internal divisions etc cannot be fully addressed.

RH1 is a relatively complete example of a post-ring roundhouse, a building design which first appears in the Bronze Age and becomes ubiquitous in the Iron Age. Recent years have seen many examples excavated in the Highlands, Morayshire and Aberdeenshire (ie Barber 1997; McCullagh & Tipping 1998; Dunbar 2007; Engl & MacLaren forthcoming; Murray 2007; 2008; Cook 2016) which can provide us with comparanda for the structural elements which are missing in the examples at Macallan Distillery. For example, neither RH1 nor RH4 has a ring-ditch, a common element of larger Bronze Age roundhouses, but it is quite feasible that truncation has removed any such shallow features. It has been argued above that RH1 probably had an entrance porch to the south-east. This ground plan compares closely with the Type 4 roundhouses at Kintore, three of which are LBA in date and which are described as post-ring structures with an entrance porch constructed of two posts springing from the post-ring (Cook & Dunbar 2008: 324-6). The Kintore examples also had south-east-facing entrances. At Seafield West, Inverness, Structure F is also a Type 4 post-ring with a two-post porch to the south-east; this has been assigned an LBA date on the basis of associated artefacts (Cressey & Anderson 2011: 10). RH1 thus

appears to conform to a structural design common throughout north-east Scotland in the LBA.

The four-poster structure at Macallan Distillery is a typical example in terms of both size and form. Excavated examples have a long history of use dating from the prehistoric period onwards (Cook & Dunbar 2008; Cook 2016; Engl & McLaren forthcoming). Their function was commonly held to be grain or food storage but other non-storage functions have been postulated for at least some of the examples at Kintore (Cook & Dunbar 2008: 164). They are often found away from the main area of settlement and it has been suggested that they lay within specialist storage or processing zones (ie Cunliffe 1991: 26–7); this arrangement appears to be the case at Seafield West (Cressey & Anderson 2011: 11), at Beechwood (Engl & McLaren forthcoming) and at Culduthel (Murray 2007; 2008). The four-poster at Macallan Distillery lies some distance downslope from the LBA roundhouses so this may also be the case here, although truncation may well have removed evidence of closer settlement.

5.3 MIA activity

MIA activity at Macallan Distillery consists of a single ring-ditch roundhouse, RH5. Like the LBA post-ring roundhouse, the ring-ditch is a type of prehistoric construction commonly found throughout Scotland. At Kintore, where nearly half of the 30 excavated prehistoric structures were ringditch roundhouses, three variants were identified (Cook & Dunbar 2008: 324). RH5 appears to conform to the Type 3 variant, with no evidence for any structure internal or external to the ringditch, but with a possible porch entrance to the east. The lack of any other surviving features other than the ring-ditch could be a result of truncation but at Kintore three Type 3 ring-ditch roundhouses produced dates comparable to those from Macallan Distillery and all also had ring-ditches lying around the north or north-western perimeter of the structure, suggesting a conformity of design across the region.

In Cook's (2016) analysis of the Canmore database he identified 96 individual ring-ditch sites in Moray, all of them unenclosed and lying between 1m and 300m OD. Of the total, 57 consisted of single examples, while 39 contained two or more

examples. The apparently isolated example at Macallan Distillery would therefore be typical of the region.

5.4 Early medieval activity

The evidence for early medieval activity consists of seven radiocarbon dates, spanning the ninth-twelfth centuries AD, which have been recovered from two post-ring structures and three pits. The arguments for whether the post-ring structures should be considered medieval or LBA have been outlined above, and while an LBA date has been settled on there still remains some doubt, not least because the settlement evidence from the early medieval period is both limited and remarkably heterogeneous. At Kintore, for example, the five structures of Early Historic date recorded there vary considerably in size, shape and construction technique, with some structures defined only by erosional hollows, while others employ post-holes or slot trenches (Cook & Dunbar 2008: 356-7). In general, early medieval houses are sub-rectangular, even if their construction techniques differ; take for example the sunkenfloored structures found at Easter Kinnear, Fife (Driscoll 1997), the 'byre-houses' at Pitcarmick, Perthshire (Carver et al 2012), and the slot trench structures at Eldbotle, East Lothian (Morrison et al 2008; Hindmarch & Oram 2012: 257) and Newbarns, Angus (McGill 2004: 105-7). The Pitcarmick, Newbarns and Eldbotle structures have all produced dates which make them contemporary with the dates from the post-ring structures at Macallan Distillery. The sparse and disparate nature of the existing settlement evidence for this period makes it difficult to determine whether the variation in size, shape and construction is due to differences in function or whether they reflect regional choices.

Even so, circular structures of this date are currently rather anomalous. The recent excavations at Grantown Road, Forres have also revealed a post-ring structure of similar date (Cook 2016); Structure 10c consisted of a partial arc of six post-holes with a projected diameter of 9.5m and it produced a date of 985–1152 cal AD (SUERC-47065). This suggests that at least some of the undated post-ring structures that have been uncovered in north-east Scotland may not be as early as originally thought. It may be that the

sparsely populated gap in the settlement record at the end of the first millennium AD is more a product of missed dating opportunities and assumptions rather than an actual lack of archaeologically visible building styles and construction methods, as has been suggested by Dunwell & Ralston for Angus (2008: 138). However, at present the balance of probability must be that the post-ring roundhouses at Macallan Distillery are all LBA in date with contamination from medieval pit-digging activity and rubbish disposal which led to charcoal infiltrating the plough-truncated post-holes of the earlier LBA structures.

Pits with rich macroplant assemblages seem to be quite characteristic of early medieval settlement and have been found even where contemporary structural evidence is missing, as at Cliffburn Road, Angus where two large pits were excavated which dated to sometime in the eighth to ninth century AD (Dunbar 2012). They have also been found at Kintore (Cook & Dunbar 2008: 152-4), at Newbarns, Angus (McGill 2004: 106-7), and at Grantown Road, Forres where the bulk of the macroplant assemblage from the whole site came from just one early medieval pit dating to 680-900 cal AD (SUERC-21593) (Cook 2016). Although slightly later in date (11th-12th century AD and 13th-14th century AD), excavations of medieval remains at Newbridge, Edinburgh suggest that the outfields of the settlement were characterised by extensive pit digging (Engl & Dunbar 2016), so it is possible that the pits at Macallan Distillery represent activity on the edge of the actual settlement which might have been located upslope to the east, on the terrace now occupied by the distillery warehouses.

6. CONCLUSIONS

Despite severely truncated deposits, the excavations at Macallan Distillery have provided glimpses of settlement above the River Spey from the Early Bronze Age to the early medieval period. As earthfast post-built roundhouses are thought to have lifespans of little more than a generation (Barber & Crone 2001; Cowley 2003; Halliday 2007), these glimpses may actually reflect as little as 100 years of settlement over many millennia. Much of the settlement may have been ploughed away but elsewhere, where more extensive settlement evidence has been revealed, ie Kintore, the pattern appears to be one of a small community maintaining one or two houses at any one time, which over time moves across the landscape, abandoning an old stance and erecting new roundhouses, often only a few hundred metres away (Cook & Dunbar 2008: 347-9). The settlement at Macallan Distillery would appear to fit this model of a small self-sufficient community eking out an existence on a river terrace above the River Spey. Although the post-ring structures at Macallan Distillery have all been interpreted as LBA in date, the possibility remains that two of these structures are actually early medieval in date. This conclusion may need revising should other examples come to light which together with the example from Grantown Road, Forres might suggest that, at least in parts of Moray, the post-ring roundhouse may still have had a role to play in settlement, whether as a dwelling or an outbuilding, in the early medieval period.

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- Barber, J (ed.) 1997 The Archaeological investigation of a prehistoric landscape: Excavations on Arran 1978–81. Edinburgh: STAR Monograph 2.
- Barber, J W & Crone, B A 2001 'The duration of structures, settlements and sites: some evidence from Scotland', *in* Raftery, B & Hickey, J (eds) *Recent Developments in Wetland Research*. Seandálaíocht: Mon 2, Dept Archaeol, UCD & WARP Occ Paper 14. Dublin: Dept Archaeol, Univ College Dublin, 69–86.
- Bishop, R R, Church, M J & Rowley-Conwy, P A 2007 'Cereals, fruits and nuts in the Scottish Neolithic', *Proc Soc Antig Scot* 139:47–103.
- Carver, M, Barrett, J, Downes, J & Hooper, J 2012 'Pictish byre-houses at Pitcarmick and their landscape: investigations 1993–95', *Proc Soc Antiq Scot* 142:145–99.
- Cook, M 2016 'Prehistoric settlement patterns in the North-east of Scotland: Excavations at Grantown Road, Forres 2002–2013', *Scottish Archaeological Internet Reports* 61. http://doi.org/10.9750/issn.1473-3803.2016.61.
- Cook, M & Dunbar, L J 2008 Roundhouses, Romans and ritual: Excavations at Kintore, Aberdeenshire 2000–2006, Volume 1 Forest Road. Edinburgh: STAR Monograph 8.
- Cowley, D 2003 'Changing places building lifespans and settlement continuity in northern Scotland', *in* Downes, J & Ritchie, A (eds) *Sea change: Orkney and northern Europe in the later Iron Age AD 300–80*. Balgavies: The Pinkfoot Press, 75–81.
- Cressey, M & Anderson, S 2011 'A Later Prehistoric settlement and metalworking site at Seafield West, near Inverness, Highland', Scottish Archaeological Internet Report 47.
- Crew, P & Rehren, T 2002 'High temperature workshop residues from Tara: iron, bronze and glass', in Roche, H (ed) Excavations at Ráith na Ríg, Tara, Co Meath, 1997. Dublin: Royal Irish Academy, Discovery Programme Reports 6, 83–102.
- Cruickshanks, G in prep 'Iron in Iron Age Scotland: A regional study of production and use of Iron from c.800 BC to AD 800'. University

- of Edinburgh/National Museums Scotland, unpublished PhD thesis.
- Cunliffe, B 1991 *Iron Age Communities in Britain*. London: Routledge.
- Dunbar, L 2007 'Fluctuating settlement patterns in Bronze Age Sutherland: Excavations of a roundhouse at Navidale, Helmsdale', *Proc Soc Antiq Scot* 137:137–68.
- Dunbar, L 2012 'Unenclosed Middle Bronze Age settlement and Early Historic pits at Cliffburn Road, Arbroath, Angus', *Tayside and Fife Archaeological Journal* 18:14–26.
- Dunwell, A & Ralston, I 2008 Archaeology and Early History of Angus. Stroud: Tempus.
- Engl, R & Dunbar, L 2016 'A Roman road runs through it: excavations at Newbridge, Edinburgh', *Scottish Archaeological Internet Reports* 59. http://doi.org/10.9750/issn.1473-3803.2016.59.
- Engl, R & McLaren, D forthcoming 'The excavations of Neolithic and Beaker pit groups and a later prehistoric settlement at East Beechwood Farm, Inverness', *Scottish Archaeological Internet Reports*.
- Halliday, S P 2007 'Unenclosed round-houses in Scotland: occupation, abandonment and character of settlement', in Burgess, C, Topping, P & Lynch, F (eds) Beyond Stonehenge. Essays on the Bronze Age in honour of Colin Burgess. Oxford: Oxbow Books, 49–56.
- Heald, A, McDonnell, G & Mack, I 2011 'Ironworking debris', *in* Cressey, M & Anderson, S 2011, 20–4.
- Heald, A & McLaren, D 2008 'The metalworking',
 in Cook, M 2008 'Neolithic and Iron
 Age structures at Grantown Road, Forres,
 Morayshire', Northern Studies 40:3–22 (8–11).
- Hindmarch, E & Oram, R 2012 'Eldbotle; the archaeology and environmental history of a medieval rural settlement in East Lothian', *Proc Soc Antig Scot* 142:245–99.
- Hunter, F in prep a 'The excavations at Birnie, Moray'.
- Hunter, F in prep b 'The excavations at Clarkly Hill, Moray'.
- Manning, W H 1985 Catalogue of the Romano-British iron tools, fittings and weapons in the British Museum. London: British Museum Publications.

- McCullagh, R P J & Tipping, R (eds) 1998 The Lairg project 1988–1996: the evolution of an archaeological landscape in northern Scotland. Edinburgh: STAR Monograph 3.
- McGill, C 2004 'Excavations of cropmarks at Newbarns, near Inverkeilor, Angus', *Tayside and Fife Archaeological Journal* 10:94–118.
- Morrison, J, Oram, R & Oliver, F 2008 'Ancient Eldbotle unearthed: archaeological and historical evidence for a long-lost early medieval village', Transactions of the East Lothian Antiquarian & Field Naturalists' Society 27:21–45.
- Murray, R 2007 'Culduthel Mains Farm Inverness Phase 5. Excavation of a later prehistoric

- settlement: assessment report', unpublished report for Tulloch Homes Ltd.
- Murray, R 2008 'Data structure report of an archaeological excavation at Culduthel Mains Farm Phases 7 & 8', unpublished report for Tulloch Homes Ltd.
- Robertson, J forthcoming 'The macroplant assemblage', in Cavers, G & Crone, A forthcoming A Lake Dwelling in its Landscape: Iron Age settlement at Cults Loch, Castle Kennedy, Dumfries & Galloway. Oxford: Oxbow.
- Will, R 1998 'Excavations at Tarras by Forres', unpublished site report by GUARD: Report No. 567. Glasgow.