e-ISSN: 2056-7421

A multi-period settlement next to the River Spey, Craggan, Grantown-on-Spey

How to cite:
Leonie Teufel 2025 'A multi-period settlement next to the River Spey, Craggan, Grantown-on-Spey', *Scottish Archaeological Internet Reports* 111. https://doi.org/10.9750/issn.2056–7421.2025.111

A multi-period settlement next to the River Spey, Craggan, Grantown-on-Spey

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Funding
Gordon and MacPhail

e-ISSN: 2056-7421
DOI: https://doi.org/10.9750/issn.2056–7421.2025.111
Published by the Society of Antiquaries of Scotland.

Society of Antiquaries of Scotland
National Museums Scotland
Chambers Street
Edinburgh EH1 1JF
United Kingdom
www.socantscot.org

Registered Scottish charity no. SC010440

Editorial manager: Kate Bailey
Copy-editor: Rachel Cartwright
Production: Raspberry Creative Type, Edinburgh

Received 7 August 2024 | Accepted 11 April 2025 | Published 13 March 2025

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1. ABSTRACT

Archaeological works undertaken in 2019 and 2020 in advance of development of the Cairn Distillery, Grantown-on-Spey identified remains of a multi-period landscape spanning the Late Mesolithic to the medieval period. The earliest phase of activity on site was evidenced by residual material from the Mesolithic-Neolithic transition. A Late Neolithic cremation pit was also identified, comprising the cremated remains of at least one adult male. Following this funerary activity, the remains of a Late Bronze Age fire pit were identified. Additionally, at least three post-defined Middle Iron Age roundhouses and metalworking features were recorded. Late Iron Age and early medieval settlement and industrial activity was evidenced by the remains of at least three roundhouses, with fire and refuse pits, a four-post granary, a metalworking furnace, and metal waste pits. The artefact assemblage included worked and coarse stone, as well as metal finds. Notable stone finds included a Late Mesolithic chipped stone, several Late Iron Age rotary quernstones and a large millstone roughout, while Middle Iron Age and early medieval slag and metalworking waste were indicative of small-scale smelting at the site. The finds at Craggan represent a significant site along the River Spey, comprising multiple phases of settlement, funerary activity, and craftworking from the Mesolithic to the medieval period.

2. INTRODUCTION AND BACKGROUND

AOC Archaeology undertook archaeological work on land 2.2km southwest of Grantown-on-Spey (centred at NGR: NJ 01865 25612) between 2019 and 2020 (Illus 1 and 2). The fieldwork and subsequent post-excavation analyses were sponsored by Gordon and MacPhail in advance of a proposed new distillery with visitor centre, 350m southeast of Lower Gaich, Craggan, Grantown-on-Spey (NRHE reference: NJ02NW 168; Canmore ID 367915). An evaluation followed by a watching brief undertaken in advance of development of the Cairn Distillery uncovered evidence of prehistoric activity dating to the Mesolithic-Neolithic transition, a Late Neolithic cremation and Late Bronze Age activity. Settlement activity in the Iron Age comprised three Middle Iron Age roundhouses and a metalworking furnace, with a later phase of settlement represented by three Late Iron Age roundhouses. Fire pits, refuse pits, a post-defined structure, a metalworking furnace, and metal waste pits were dated to the early medieval period. Both Iron Age and early medieval settlement evidence confirmed the presence of grain processing on site, including four deliberately deposited quernstones and a quern or millstone rough out.

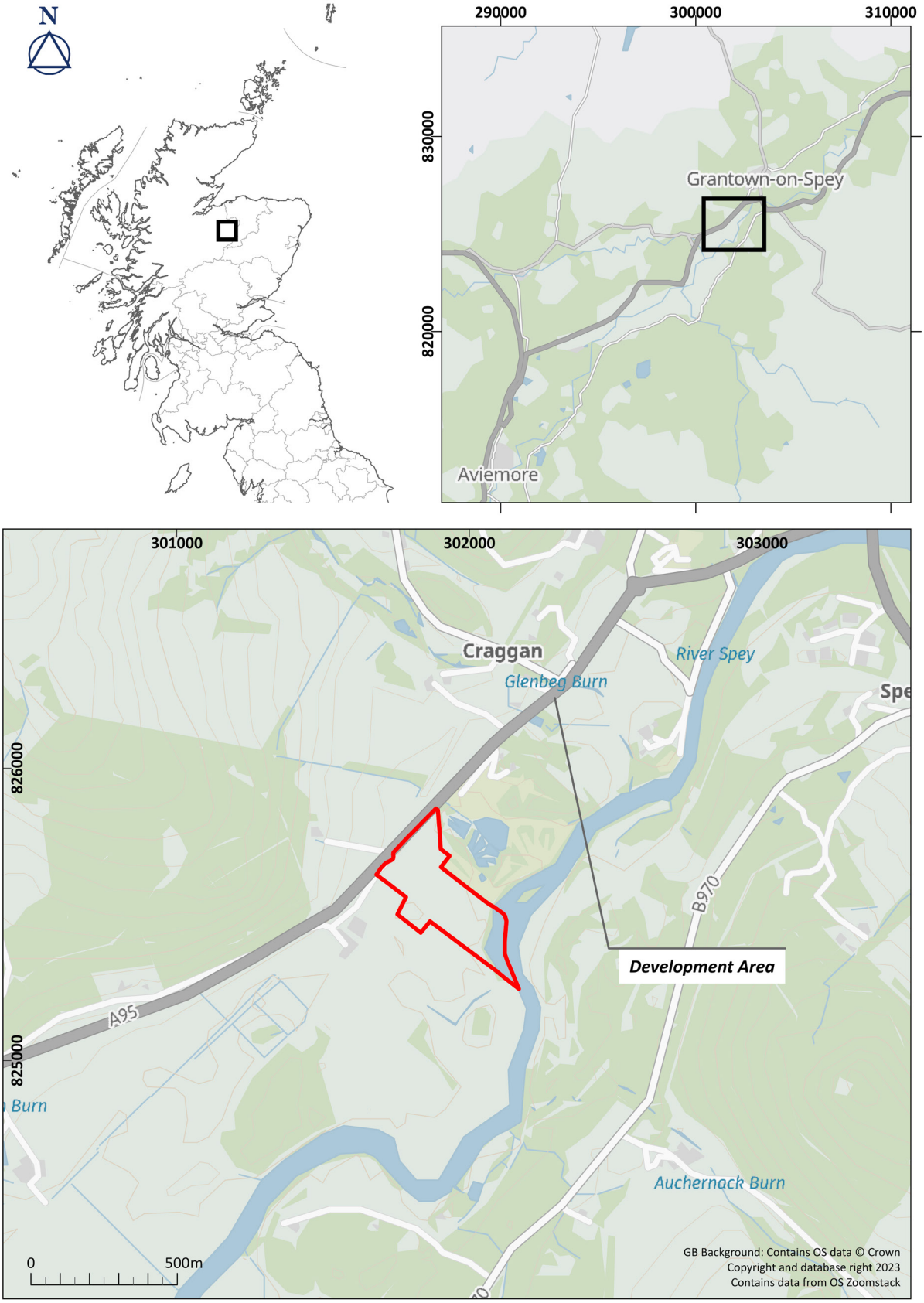
An evaluation was undertaken in 2019, which identified three putative structures and isolated features. Due to these findings, an excavation was undertaken during the stripping of topsoil in 2020 (Illus 2). The site comprised flat or gently sloping pasture fields, with topographic undulation as a result of differential glacial and alluvial activities and deposits. The River Spey formed the southeast boundary of the site, with ground sloping down toward the river. The archaeological features were mostly located on the higher points of the site and on sandy gravel, whereas the areas on-site where sand was encountered were mostly blank of archaeological activity.

2.1 Archaeological Background

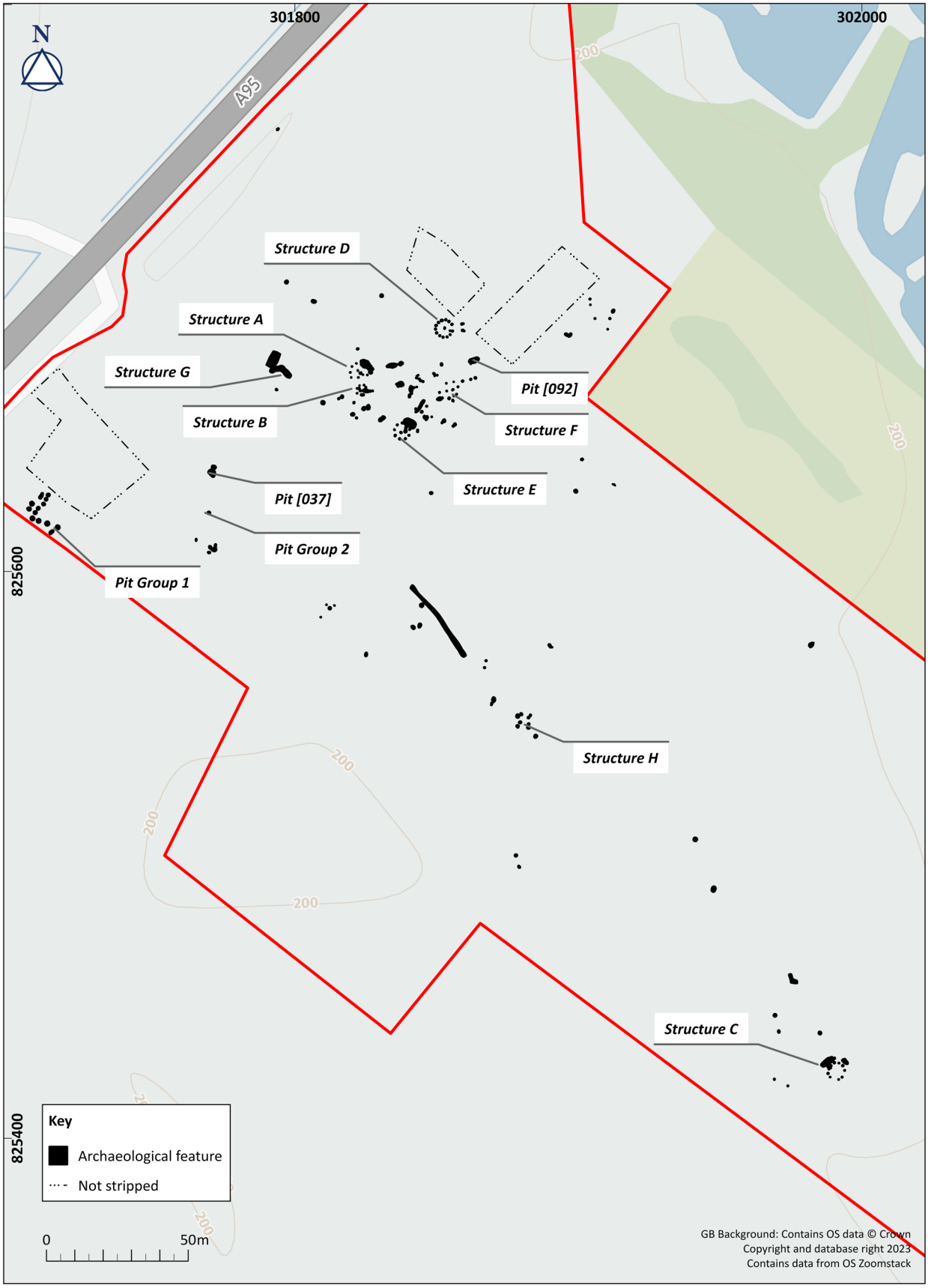
The landscape surrounding the site contained a range of recorded prehistoric sites, including standing stones at Tom Nan Carragh (Highland HER (HHER) MHG6788, MHG6789, and MHG6790), two cairns – Croftscalich (HHER MHG6820) and Gaich Wood (HHER MHG6817), two hut circles – Finlarig (HHER MHG50095) and Laggan Hill (HHER MHG29151), and a possible fort, Lower Craggan (HHER MHG6809).

Early medieval sites are located approximately 0.9km east of the development boundary, near the River Spey at Inverallen, including a Class I Pictish symbol stone and a cross-incised slab (Scheduled Monument Index No (SM) 2456). To the west, Finlarig church is an early Christian chapel (SM2707). Medieval sites also include Inverallen Church and associated holy well and carved stones. A range of post medieval activity is also evident, including farmsteads and the nearby township of Gaik.

Other recent archaeological fieldwork took place at Beachen Court (Murray & Williamson 2019), less than 3km northeast of the present site, where evidence of prehistoric settlement remains was also uncovered.



Illus 1 Location map (Sam O'Leary, AOC Archaeology; Contains OS data © Crown copyright and database right 2023)



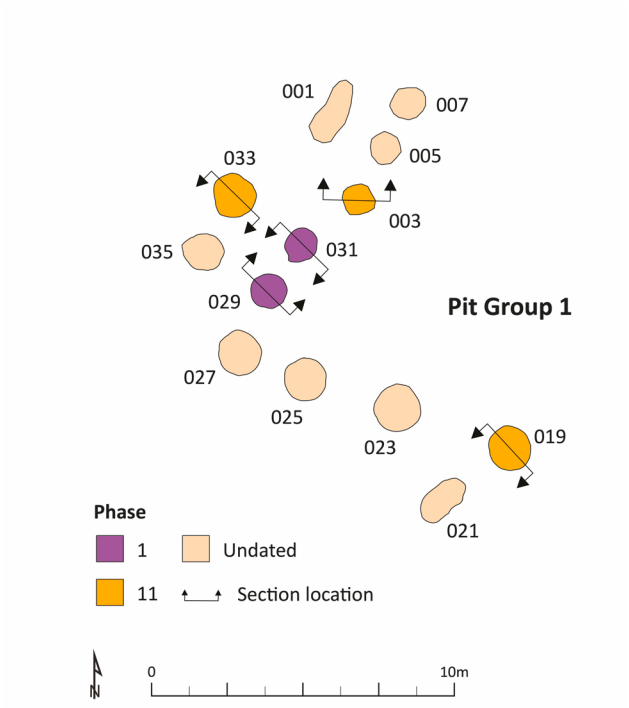
Illus 2 Overview of archaeological features (Sam O'Leary, AOC Archaeology; Contains OS data © Crown copyright and database right 2023)

3. ARCHAEOLOGICAL FIELDWORK AT CRAGGAN

Twelve phases of activity were identified at Craggan through excavation and post-excavation analyses.

3.1 Phase 1 Mesolithic-Neolithic transition

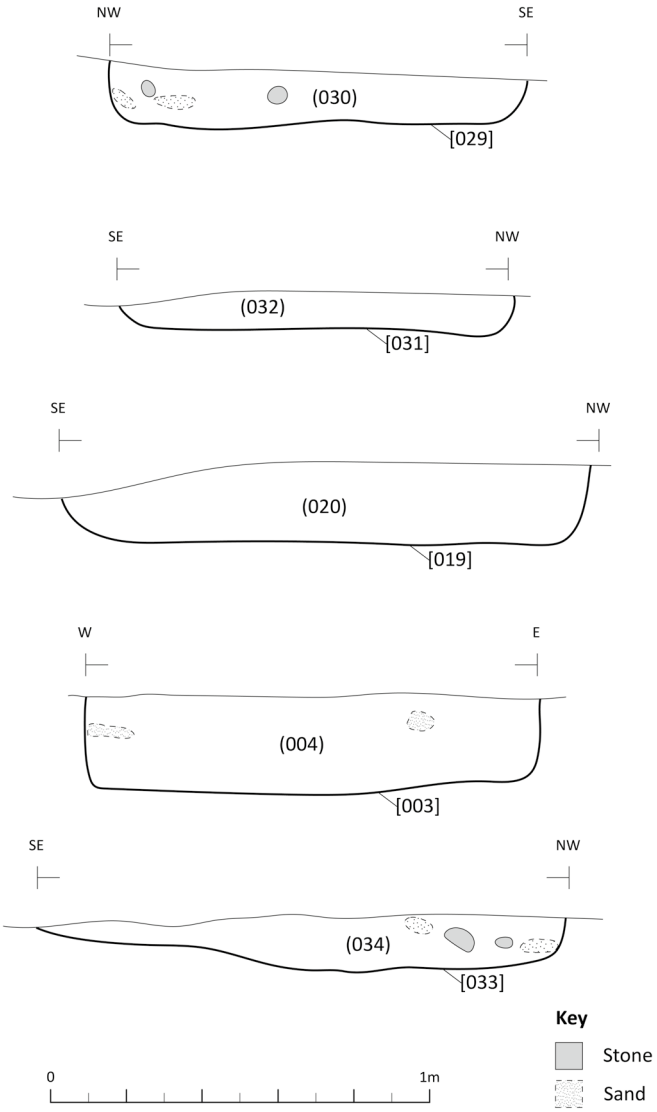
The earliest evidence for activity identified on-site relates to the Mesolithic-Neolithic transition. The material identified is likely residual material which had been deposited into later features (Illus 3). A radiocarbon date of 4241–4049 cal BC (95% probability; SUERC-104057) was obtained from pine charcoal from the fill of pit [031], and pit [029] contained a Late Mesolithic lithic (see below). The pits from which this material came are part of an L-shaped pit alignment (Illus 4); most of the pits within this alignment were sterile of finds and ecofacts and contained lenses of windblown sand, suggesting they were likely left open and gradually infilled. It is thought that this L-shaped pit alignment is medieval in date and it is discussed further below.



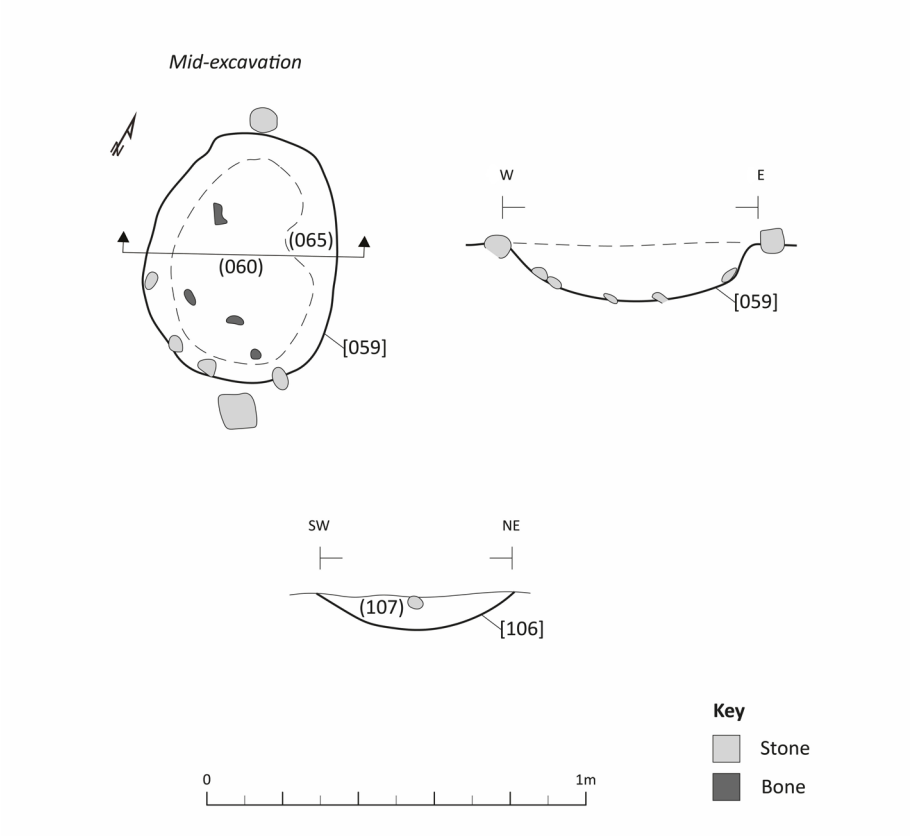
Illus 3 Plan of Pit Group 1 (Lindsey Stirling, AOC Archaeology)

3.2 Phase 2 Late Neolithic

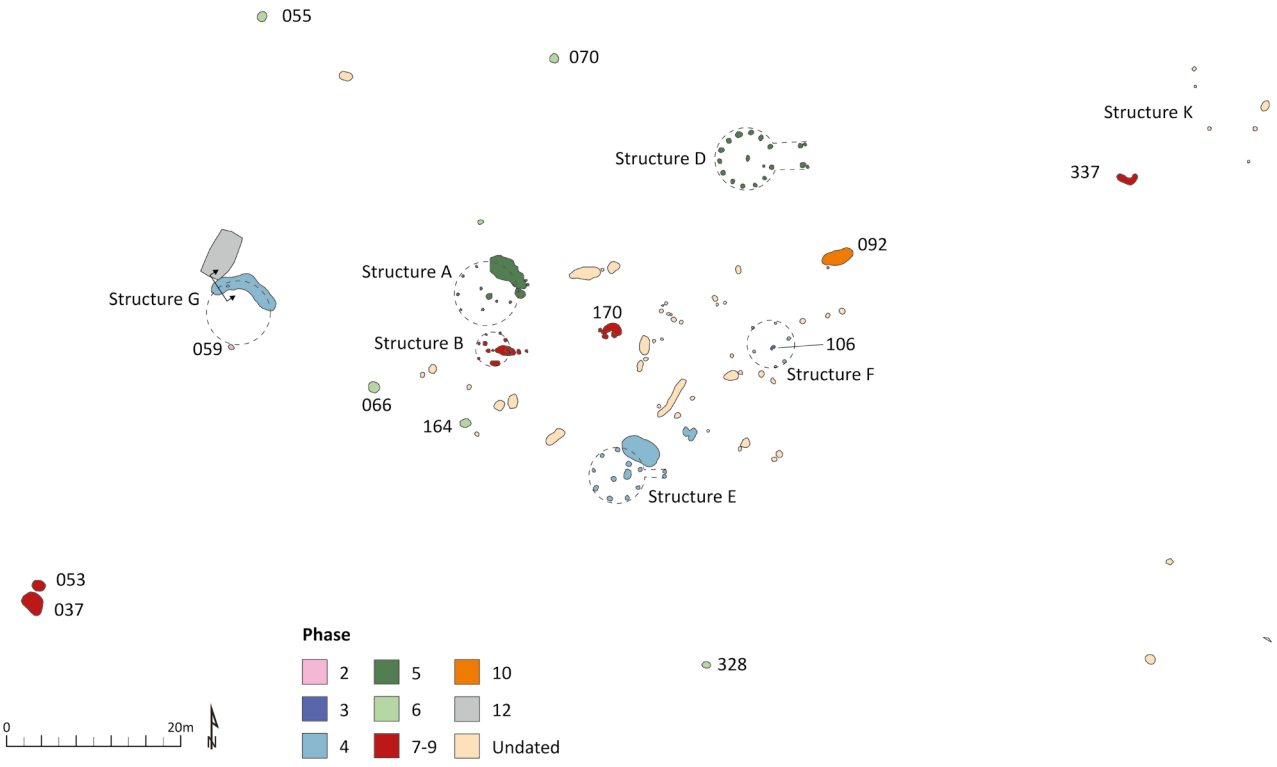
The second phase of activity is represented by a single isolated oval pit, [059], located in the area of later Structure G (Illus 5 and 6), which contained cremated human bone dated to between 2915 and 2774 cal BC (95% probability; SUERC-104060). Analysis of the cremated remains determined the presence of at least one adult, possibly a male under the age of 50 (see Section 5 Cremated Human Skeletal Remains, below).



Illus 4 Section drawings of Pit Group 1 (Lindsey Stirling, AOC Archaeology)



Illus 5 Drawings of cremation (060) and fire pit [106] (Lindsey Stirling, AOC Archaeology)



Illus 6 Plan of Structures A, B, D to G, and K (Lindsey Stirling, AOC Archaeology)

3.3 Phase 3 Late Bronze Age

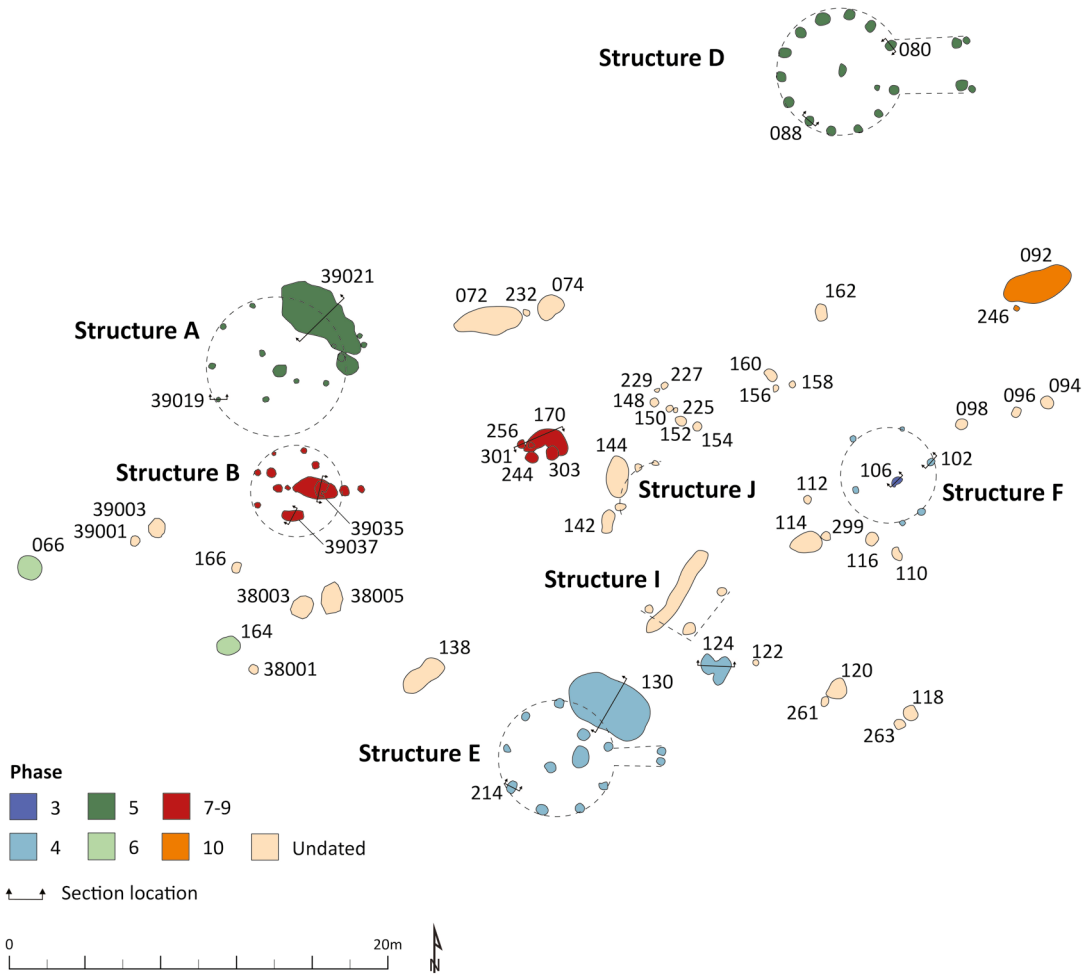
A single Late Bronze Age date was obtained from pit [106], located at the northern end of the site (Illus 5, 6, and 7). A large fragment of pine, which likely represented a post or structural element, was dated to 903–808 cal BC (95% probability; SUERC-104035). This feature was originally interpreted as a very shallow and truncated fire pit within a roundhouse structure (see Structure F). Due to the shallow and truncated nature of the feature, it is likely that it was not a part of Structure F but happens to be placed near it. This is the only feature that was dated to the Late Bronze Age on this site and it suggests that there was some activity on or near the site in this time period, but no larger-scale settlement.

3.4 Phase 4 Middle Iron Age

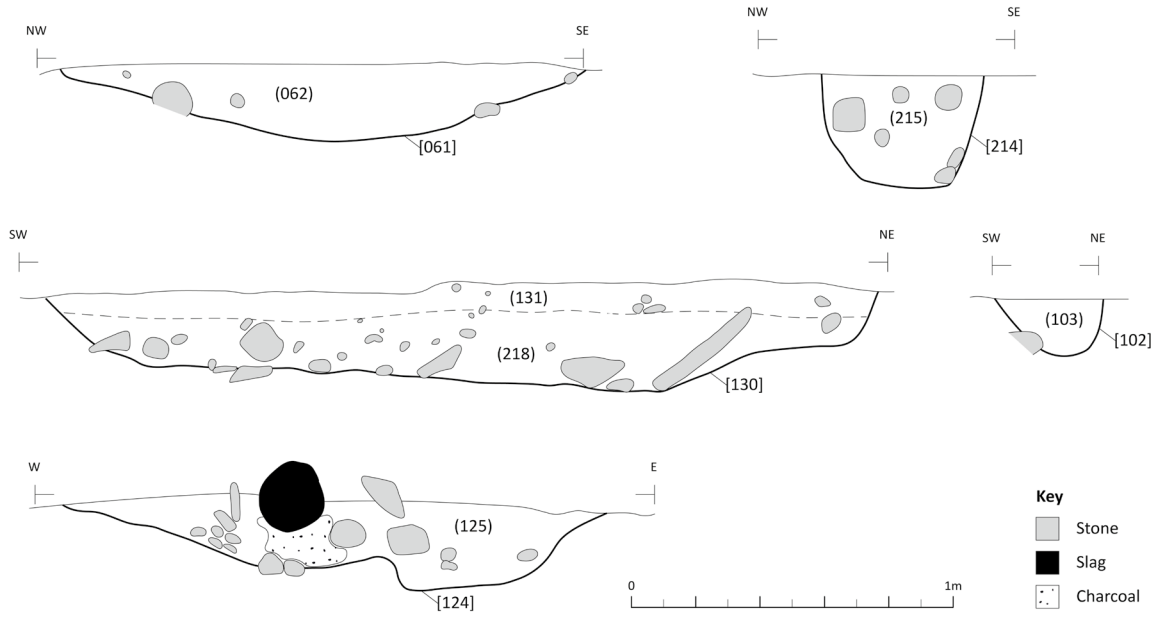
Three post-defined structures were dated to the Middle Iron Age: Structures E, F, and G.

3.4.1 Structure F

Structure F was a small, heavily truncated sub-circular structure, measuring 5.5m NW/SE by 4.6m NE/SW and comprising six postholes, located in the north of the site (Illus 7 and 8). Material from posthole [102] dated to between 400 and 209 cal BC (95% probability; SUERC-104036) indicate that the roundhouse was constructed and in use in the Middle Iron Age.



Illus 7 Plan of Structures A, B, D, E, F, I, and J (Lindsey Stirling, AOC Archaeology)



Illus 8 Section drawings of Structures E, F, and G (Lindsey Stirling, AOC Archaeology)

3.4.2 Structure E

Structure E comprised eight postholes, which together formed the post ring of a roundhouse measuring 6.1m in diameter (Illus 7 and 8). Most of the postholes contained burnt cereal and charcoal, representing redeposited domestic and fuel waste. Posthole [214] contained birch charcoal dating to between 336 and 51 cal BC (95% probability; SUERC-104034), which could be the remains of a structural post or stake. Due to the dated charcoal possibly being part of a structural element, this date may closely relate to the construction and use of the feature, indicating the roundhouse was constructed in the Middle Iron Age and was broadly contemporary with Structure F. Two postholes were located to the east and likely formed a porch with an entrance to the east.

A substantial segment of ring ditch [130] was identified on the north-east edge of the post ring, which was associated with activities taking place within the roundhouse structure. At the base of the ditch, a thin basal fill (259) had formed, containing burnt mammal bones and runned slag as well as domestic food and fuel waste. Overlying this fill was a series of 12 large flat stones [258] (mostly schist or granite) that had been laid along the base of the ditch to form a flat surface, likely for a working platform (Illus 9). At the northern end of the structure, the stones sloped downwards, suggesting the surface had slumped either during use or after the structure was abandoned. Above the stone surface, yellowish brown silt deposit (218) contained an iron fragment (RT218) as well as burnt mammal bones and domestic food and fuel waste. A fragment of alder charcoal, from this lower sealed deposit was dated to between 196 and 43 cal BC (95% probability; SUERC-104030). Fill (218) was then sealed by greyish brown silty sand fill (131), which contained burnt mammal bone, domestic food and fuel waste, as well as runned and mixed slag. Micromorphological analysis of these infill deposits shows they accumulated in an open and exposed environment, subject to chemical and biological weathering processes (L Roy 2022). They likely formed over a long period of time as material in the vicinity of the feature silted into the hollow once the structure was no longer maintained. Within the post ring of Structure E, three internal features (unlabelled on Illus 7) were identified: one posthole, [240], and two possible hearth features, [132] and [134].

Illus 9 Ring ditch of Structure E showing the stone surface [258], facing northwest (AOC Archaeology)

3.4.3 Metalworking feature

Directly to the north-east of Structure E, a small truncated ironworking furnace [124] was identified (Illus 7 and 8). It was filled with several different types of metalworking waste, including large fragments of smelting furnace bottom, runned slag, unclassified iron slag, and atypical slag spheres, as well as frequent charcoal (see Section 8. The Metal, below). One oat grain, four six-row hulled barley, one barley, and two hazelnut shell fragments were also identified, which were likely reworked into the furnace after it went out of use. Charcoal from this feature dated to between 361 and 154 cal BC (at 95% probability; SUERC-104048), indicating iron metalworking related to smelting was taking place in the Middle Iron Age, broadly contemporaneous with the Middle Iron Age structures.

3.4.4 Structure G

Structure G comprised a segment of curvilinear ditch [061] with a single small posthole cut into the southern edge, towards the western end (Illus 6 and 8) of the site. These features likely formed another roundhouse which had later been truncated. The ring ditch and postholes contained domestic food and fuel waste, which was likely unintentionally deposited once the structure went out of use. Micromorphological analysis of the ring ditch infill deposits shows that, similarly to Structure E, the fill accumulated in an open and exposed environment subject to chemical and biological weathering processes, indicating that the ring ditch filled in with surrounding material slowly after it was no longer maintained (L Roy 2022). Two dates were obtained from this feature, one between 394 and 208 cal BC (95% probability; SUERC-104037) and the other between 196 and 46 cal BC (95% probability; SUERC-104038), which indicates the feature was in use in the Middle Iron Age.

Activity on-site in the Middle Iron Age was therefore evidenced by a settlement of at least three roundhouse structures utilised for domestic activities, such as cooking, food processing, and small-scale ironworking.

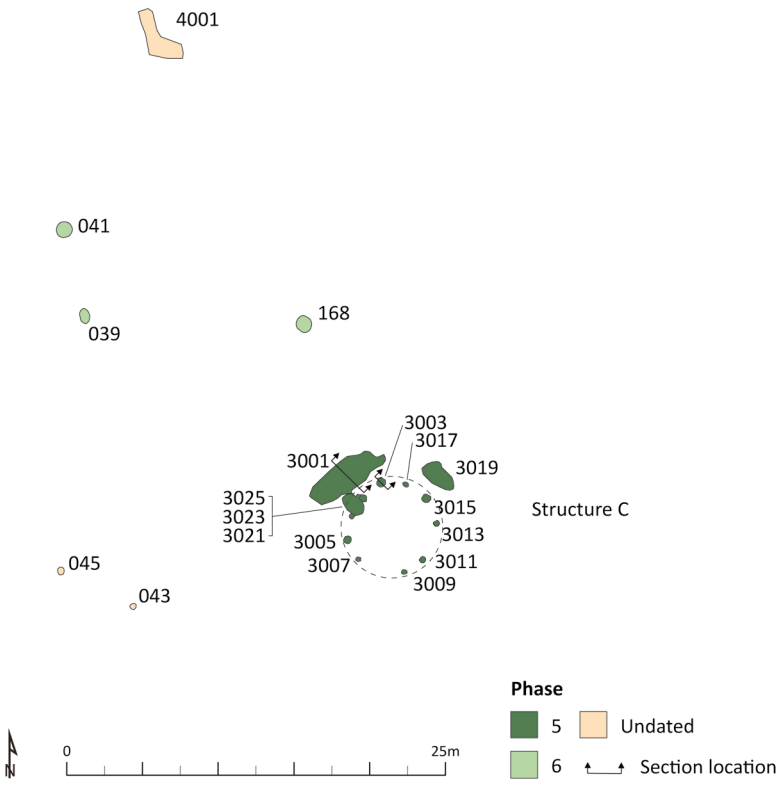
3.5 Phase 5 Late Iron Age

3.5.1 Structure C

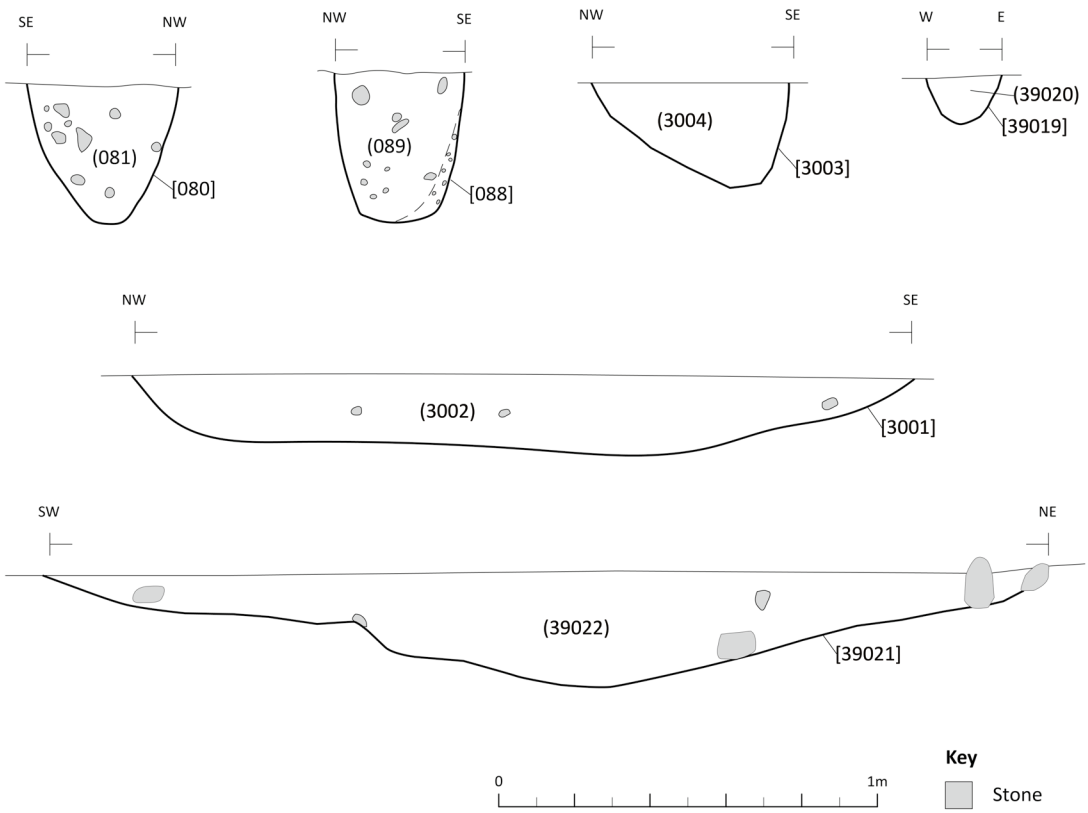
Structure C was located at the southern edge of the site, on a flat terrace on the edge of steeply sloping ground overlooking the River Spey. It comprised ten postholes, which formed a 5.7m diameter post ring, with an entrance either to the west or to the south (Illus 10 and 11). Most of the postholes had significant quantities of burnt cereal and charcoal, which related to redeposited refuse. A sample of hulled barley caryopsis from the fill of posthole [3003] was dated to cal AD 20–206 (95% probability; SUERC-95364), indicating the structure was likely constructed and in use in the Late Iron Age.

Two segments of a ring ditch, [3001] and [3019], were located along the northwest and northeast edge of the post ring. The larger ring ditch segment, [3001], contained three lower stones from a rotary quern (SF 01, SF 02, and SF 03), which appeared to have been deliberately placed in a line along the base of the feature (see below; Illus 12). The deposition of these querns occurred during construction as they were placed on the base of the feature, therefore suggesting that this building was primarily for grain processing. It also contained an iron nail or hinge pin (SF 05), and a fragment of a possible sheet-iron vessel (RT3002; see below). One of the largest assemblages of charred macroplant remains from the site was recovered from this feature. The macroplant assemblage comprised mostly six-row hulled barley, barley, and some naked barley, as well as a very small number of oats. Additionally, two hazelnut shells, three fragments of heather, and three fat hen seeds were identified. These remains and the quernstone assemblage suggest this structure was used to grind grain, perhaps on a relatively large scale. The fill also contained charcoal, including a fragment of possible alder post or stake that was dated to cal AD 68–217 (95% probability; SUERC-95363). This suggests the roundhouse was constructed and in use during the Late Iron Age.

The second segment of ring ditch, [3019], contained the largest concentration of cereal caryopses from the site. This part of the ditch was likely related to the deliberate disposal of food waste,



Illus 10 Plan of Structure C (Lindsey Stirling, AOC Archaeology)



Illus 11 Section drawings for Structures A, C, and D (Lindsey Stirling, AOC Archaeology)

Illus 12 Mid-excavation view of Structure C, facing east (AOC Archaeology)

either during the use of the roundhouse or as it went out of use. A large assemblage of charcoal, including hazel roundwood and a possible iron knife blade tip (RT3020), was also identified in the fill of the ring ditch.

Pit [3023] truncated the ring ditch [3001] and the post ring, indicating it was likely cut during or after the use of the roundhouse. Pit [3023] also contained a large macroplant assemblage and charcoal, likely representing deposition of waste material.

3.5.2 Structure A

Structure A was located to the east of Middle Iron Age Structure G (Illus 6) and consisted of a truncated post ring with at least four definite postholes, however, the remaining southern half was likely truncated by later activity (see Structure B). The structure that these postholes formed would have been at least 6.3m in diameter and likely formed a roundhouse similar to the better-preserved examples elsewhere on the site (Illus 7). Posthole [39019] contained cereal caryopses dating to cal AD 29–211 (95% probability; SUERC-95365), indicating the roundhouse likely dates to the Late Iron Age.

A segment of curvilinear ditch [39021] was identified on the northeast corner of the post ring, likely representing the truncated remains of a ring ditch (Illus 11). It contained birch charcoal (which may have formed part of a post), some hazel charcoal and cereal, representing the remains of food debris reworked into the ditch, and the upper stone of a rotary quern (SF 04; see below). Material from this feature dated to cal AD 893–1015 (95% probability; SUERC-95366), considerably later than the date from the post ring. As the curvilinear ditch respects the post ring and is in a similar location to where ring ditches have been found in the other roundhouses, the date was likely from intrusive material which might have come from the early medieval Structure B.

Four small postholes were identified at the southwest end of ring ditch [39021], on the edge of the feature. They likely represent a small structure arranged around the ring ditch, perhaps a screen or other partition related to the activities taking place in this part of the roundhouse. Pit [39047] could have been a continuation of ditch [39021]. Within the structure, four postholes and one pit were identified, which likely relate to internal structures, such as partitions or an internal post ring related to roof support.

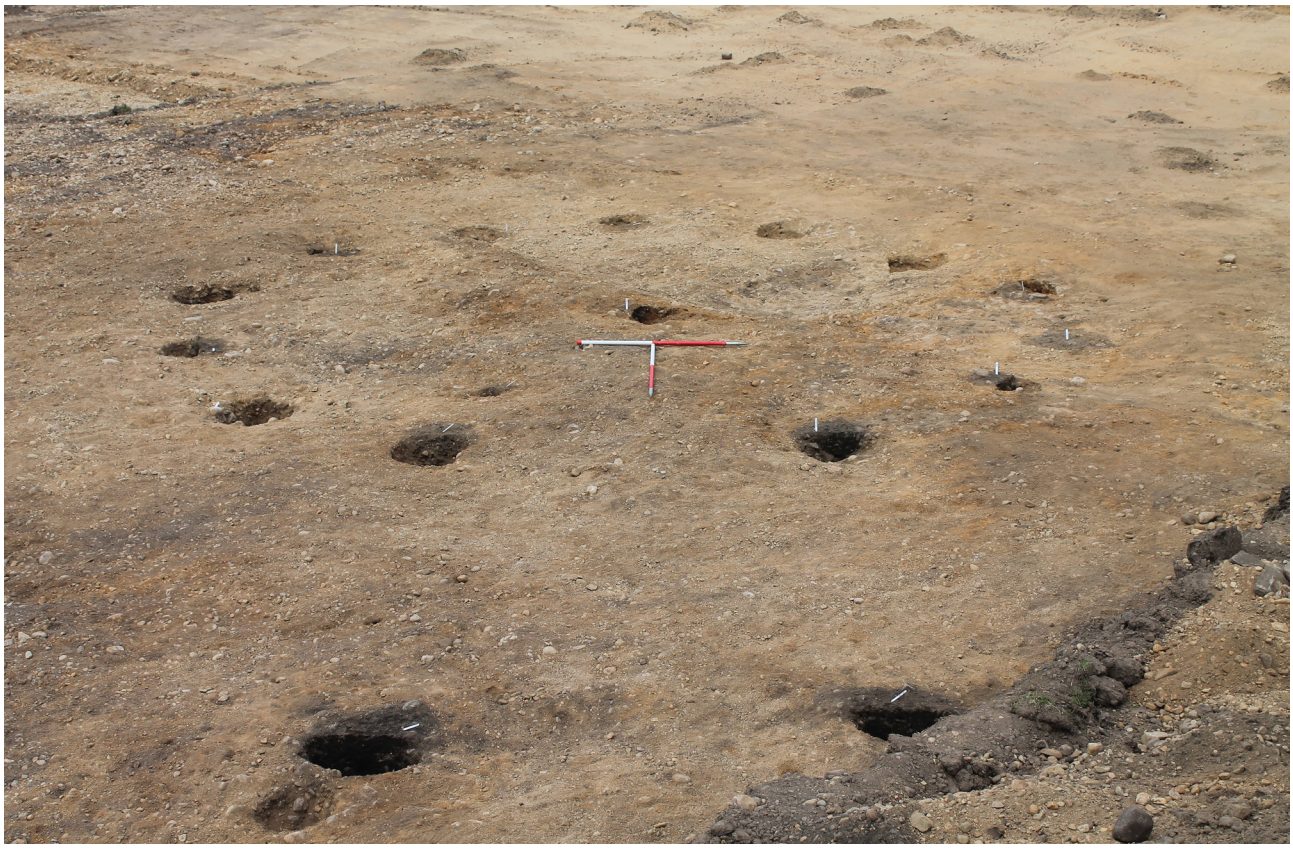
3.5.3 Structure D

Structure D was located slightly to the northeast of the focus of the Middle Iron Age settlement and comprised 13 postholes, which formed a 6.5m diameter post ring (Illus 7, 11, and 13). A substantial porch was identified to the east of the post ring, which comprised two large postholes, with two small postholes or pits set next to them. Six of the postholes of the post ring had a visible post pipe. The post packing fills had rare burnt bone and one posthole contained runned slag. The fill of posthole [082] also contained a natural mica-rich schist cobble (SF 19) with a severely heat-affected face (see Section 7 below). Radiocarbon dates were obtained from two postholes: charcoal from posthole [080] was dated to cal AD 120–237 (95% probability; SUERC-104028) while alder charcoal from posthole [088] was dated to cal AD 70–216 (95% probability; SUERC-104029), indicating that the structure was likely constructed and in use during the Late Iron Age, broadly contemporary with Structures A and C. Two internal features were identified: pit [315] in the centre of the post ring, which may have represented a very truncated internal hearth or fire pit, and internal posthole [178].

Structures A, C, and D represent three roundhouses of similar construction, two of which were placed close to the Middle Iron Age settlement, while one was located down the slope overlooking the River Spey. The specific location of the structures, respecting the location of the Middle Iron Age settlement, suggests that remains of this earlier settlement may have been visible at the time the Late Iron Age settlement was constructed. The radiocarbon dates from both settlement phases indicate two distinct periods of activity, perhaps with a short pause in activity between the Middle Iron Age and Late Iron Age phases.

3.6 Phase 6 early medieval

Two pits had charred material dating to Phase 6, post-dating the Late Iron Age settlement. One of these, fire pit [039], was located on its own about



Illus 13 Post-excavation view of Structure D, facing east (AOC Archaeology)

22m northwest of Structure C, at the south end of the site (Illus 10). It contained fire-cracked stones and birch charcoal dating to between cal AD 265 and 536 (95% probability; SUERC-104047), perhaps representing the remains of a structural element. In close proximity, two more fire pits, [041] and [168], were identified which also contained fire-cracked stones and birch charcoal as well as evidence for wattle screens, providing more evidence for burnt structural remains (Illus 10). All three pits had a similar shape in plan and profile and had a similar function and therefore it could be suggested that they were contemporary. Other fire pits identified on site with charcoal that suggest structural elements include [055], [168], and [199]. The seemingly isolated nature of these fire pits could indicate successive, short-term use of the site, or perhaps that settlement activity occurred within structures that have not left an archaeological trace, for example, turf or earth-built structures.

Pit [273] was located in the middle of the site, north of Structure C (Illus 14). It had two fills: the basal dark grey silt fill (307) contained cereal caryopses and hazel roundwood, while the upper brown sandy silt fill, (274), contained six-row hulled barley, poorly preserved cereal caryopses and a hazel roundwood fragment, representing a possible structural element. The fills likely represent remains of redeposited food waste, and the charcoal could possibly relate to a wattle screen. This material dated to between cal AD 420 and 542 (95% probability; SUERC-104045), indicating some form of settlement activity involving food processing around the 5th to 6th centuries AD.

Although only a limited number of the fire pits were dated, evidence of food processing waste, wattle, and other roundwood structures indicate settlement-related activities persisted after the Late Iron Age settlement in the southern section of the site. These features demonstrate there was either continued or, perhaps more likely, intermittent settlement activity between the 3rd and 6th centuries AD. It is possible that the settlement's nature or scale changed, or the type of structures evolved, leaving less archaeological evidence than the substantial post-built roundhouses observed in the Late Iron Age.

3.7 Phases 7 to 9 early medieval

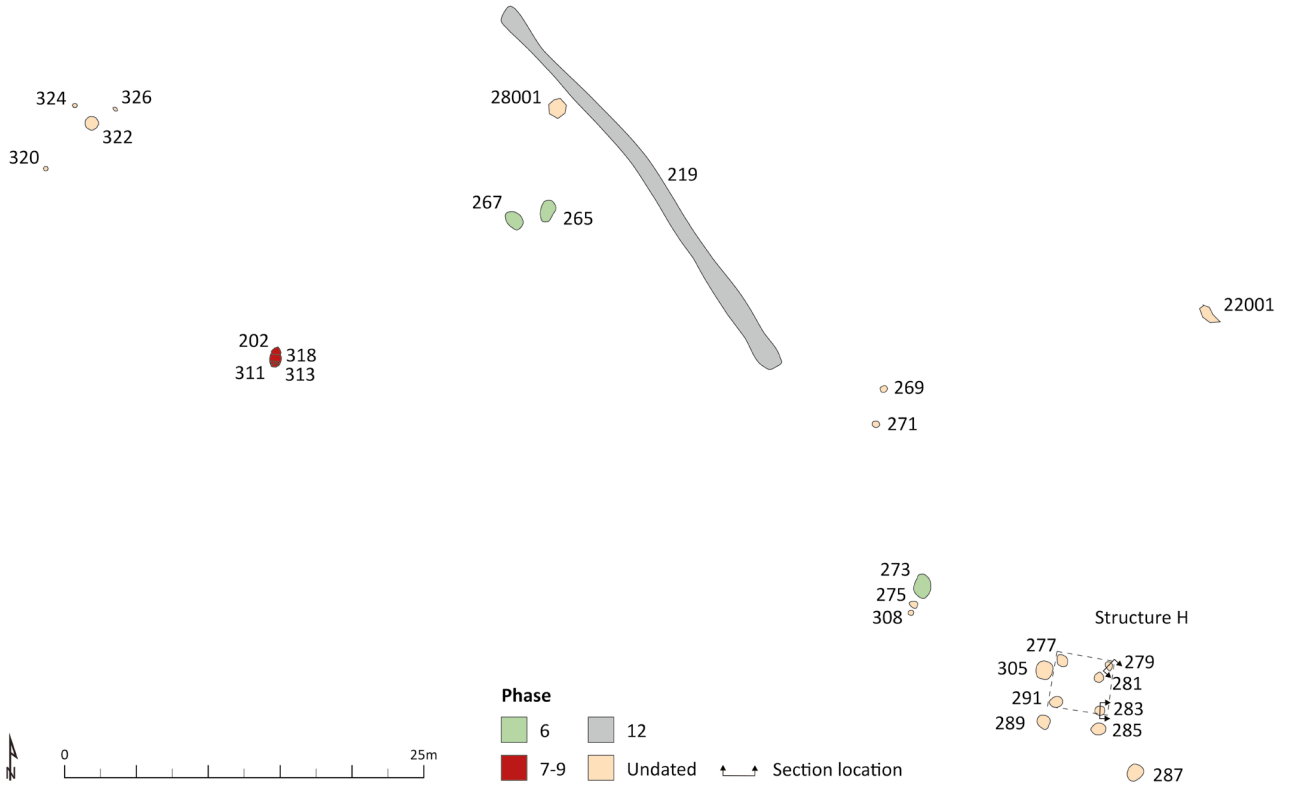
Phases 7–9, which may form a single, relatively prolonged period of activity, were represented by several features, primarily located across the north of the site, dating to the early medieval period.

3.7.1 Pit Group 2

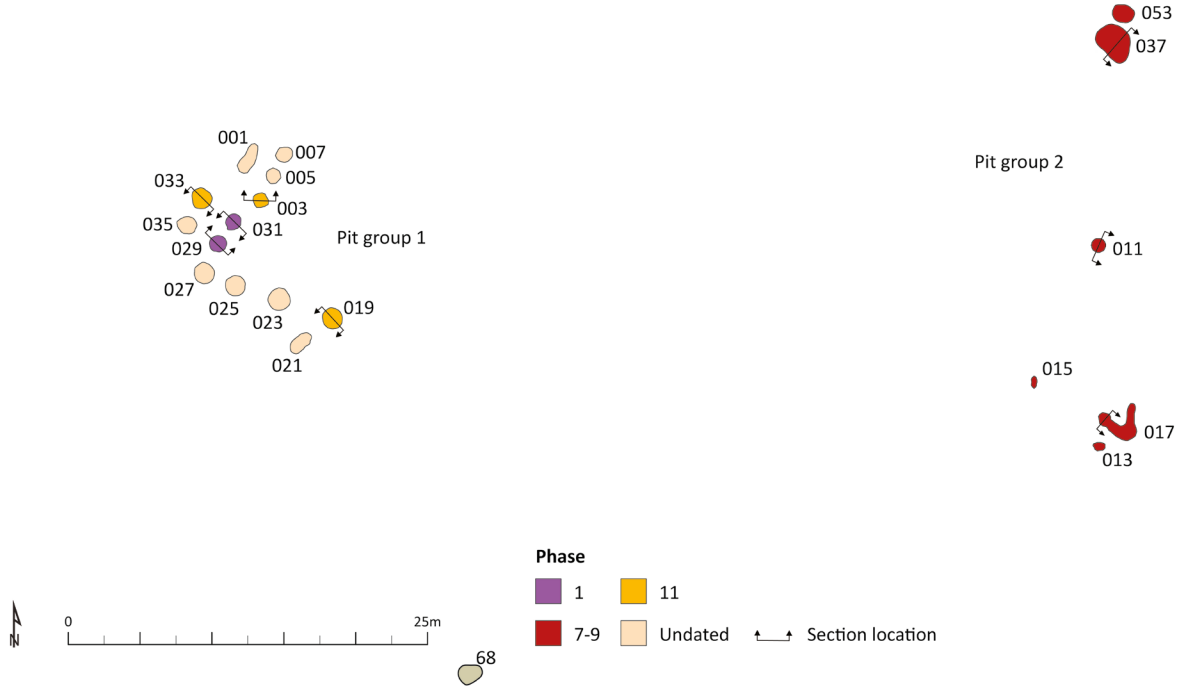
Pit Group 2 comprised four features, located in the northwest of the site and cut into natural sand deposits, unlike most of the other features, which were located on low gravel rises (Illus 15 and 16). The features were mostly sub-circular with a bowl-shaped profile and measured 0.4m to 0.45m wide and 0.8m to 1m long. Pit [017] was sub-circular at one end with a curvilinear continuation. The fills of these pits were generally composed of light reddish yellow sand with frequent charcoal and heat-affected redeposited subsoil. The macroplant and charcoal assemblages from these features was very similar and comprised cereal and charcoal derived from domestic food and fuel waste. The cereal assemblage from these features was large, with most having been found in pits [011] (400 caryopses) and [017] (183 caryopses). A sample of hulled barley caryopsis from pit [011] dated to cal AD 657–775 (95% probability; SUERC-104058). Birch charcoal from adjacent feature [017] had a similar date of cal AD 663–776 (95% probability; SUERC-104059). This feature contained cereal caryopses, fragments of straw, and charcoal, which may represent residual domestic food and fuel waste left in situ. The curvilinear shape of this feature could represent a flue, with the rounded end containing the in situ food and fuel waste, which could indicate that it was used as a rudimentary grain dryer.

3.7.2 Large pit [037]

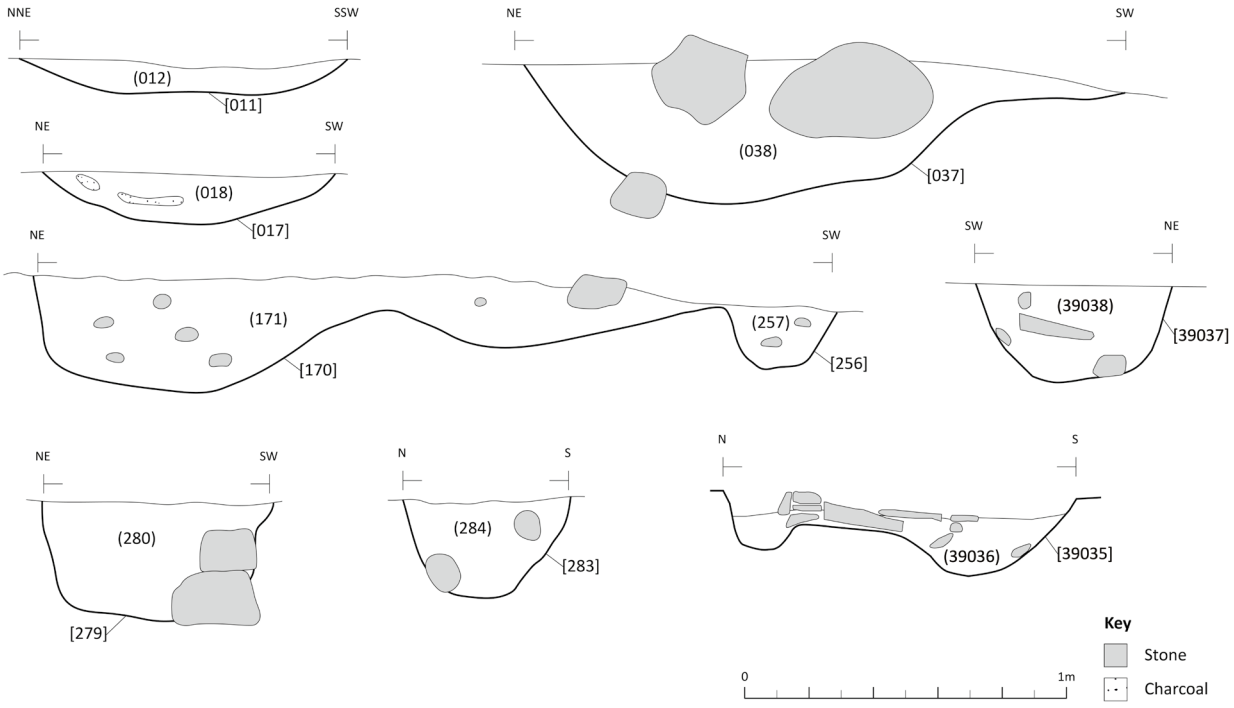
A large pit [037] was located north of Pit Group 2 (Illus 15). This feature contained SF 13, a roughout for a millstone or lower rotary quernstone (Illus 17) and SF 12, a lightly used quern or grinding stone (see below). The macroplant assemblage comprised cereal caryopses and some charcoal. The cereal was likely derived from crop processing, while the charcoal is fuel waste. The deposition of macroplant



Illus 14 Plan of Structure H and pits [202] and [273] (Lindsey Stirling, AOC Archaeology)



Illus 15 Plan of Pit Group 1, Pit Group 2, and [037] (Lindsey Stirling, AOC Archaeology)



Illus 16 Section drawings of pits [011], [017], [037], [170], [256], [39037], [39035], and postholes [279] and [283] (Lindsey Stirling, AOC Archaeology)

remains in conjunction with an unfinished mill or quernstone, could indicate the nearby presence of grain processing, with waste material disposed of together into the large pit. Oat cereal from this pit dated to cal AD 772–979 (95% probability; SUERC-104044), suggesting grain processing occurred sometime between the late 8th and the late 10th century AD. Located directly to the northeast of pit [037], another sub-oval pit [053] was excavated, its fill containing cereal caryopses, hazelnut shells, and charcoal. Pit [037] and [053] had similar environmental inclusions, and may be contemporary. The presence of two larger pits used to deposit waste material could indicate a substantial repurposing of the settlement area, with deliberate disposal of waste material either during restructuring or abandonment of the site.

3.7.3 Structure B

Structure B was located directly south of Late Iron Age roundhouse Structure A (Illus 7). It comprised a rectangular stone-lined hearth [39035] with five postholes surrounding it (Illus 18). The postholes did not form a coherent pattern in plan but probably related to the roof support of the structure, which likely had a turf or earth component which has not survived. Additionally, six pits were located within the structure (Illus 7 and 16). Hearth [39035] had a raised central base, which was paved with flat stones. It also had a small channel around the edge, perhaps related to erosion from repeated rake-out events. The subsoil around the edge of the feature appeared heat-affected. Its fill contained a small amount of barley and charcoal, and birch charcoal from this was dated to cal AD 777–971 (95% probability; SUERC-95370), indicating the structure was likely in use between the late 8th to late 10th century AD, broadly contemporary with the grain processing evidence from pit [037]. This activity could also account for the truncation of the southern part of the earlier Late Iron Age roundhouse, Structure A, and the unusual date of late 9th–early 11th century AD acquired from the fill of the ring ditch.

Pit [39037] contained a heavily distorted iron nail and alder charcoal dated to cal AD 776–969 (95%

Illus 17 Mid-excavation view of pit [037] showing roughout for a rotary quern or millstone SF 13, facing northeast (AOC Archaeology)

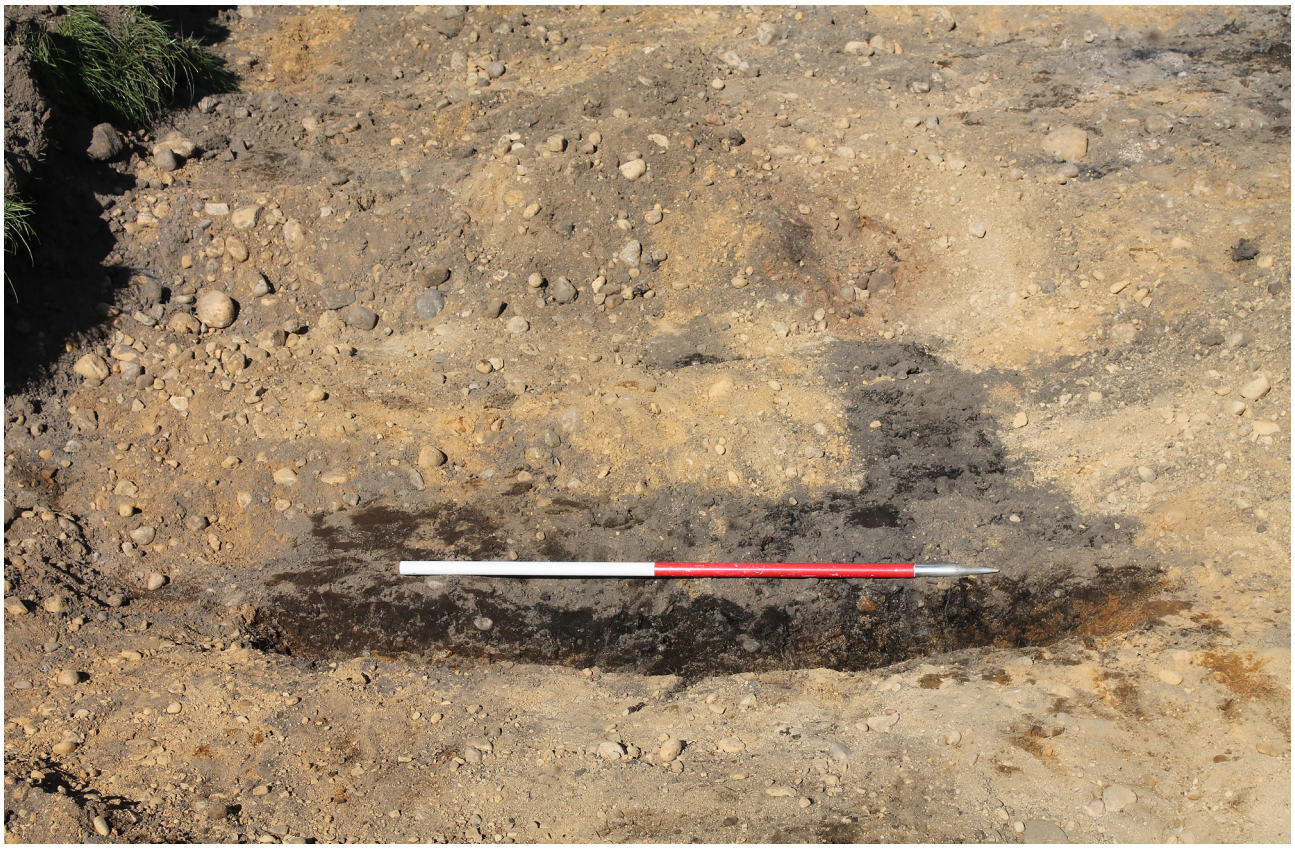
probability; SUERC-95371), broadly contemporary with the hearth. The nail was distorted, implying it had been removed from the wood prior to its deposition, suggesting the structure might have been deliberately demolished at the end of its life. Pit [39031] contained a tiny clear and colourless shattered glass shard (RT 39032; Bateman 2022). Structure B likely forms the remains of a post-defined building dating to the 8th–10th centuries AD, associated with nearby activity, including metalworking.

3.7.4 Metalworking features

A series of features associated with metalworking were identified dating to around the same period as Structure B. Pit [337] was located to the east of the Iron Age settlement features, 40m from Structure D (Illus 6 and 19). It was L-shaped in plan, and was filled with fire-cracked stones, charcoal, burnt mammal bones, and metalworking waste (see specialist reports in Sections 9. The Slag and Industrial Materials, 10. Animal Bone, and 11. Environmental Analysis, below). This feature was likely the truncated remains of an in situ smelting furnace (see below). Alder charcoal from the feature was dated to cal AD 885–994 (95% probability; SUERC-104055), suggesting ironworking was contemporary with Structure B.

Although only one definite furnace was identified relating to this period, further metalworking waste was present on the site, which could represent waste from features now lost to truncation. To the east of Structure B, a range of intercutting pits were identified (Illus 7). Pit [303] and posthole [301] were cut by pit [170]. The sandy gravel fill of pit [170] contained frequent alder, rowan, and birch charcoal, as well as cow teeth, cattle bone, and a mix of mammal bones, with a sample of rowan charcoal dated to cal AD 894–1025 (95% probability; SUERC-104049). It also contained various types of metalworking waste (see below). A second pit, [244], and posthole [256] were identified immediately next to [170] and also contained ironworking slag and charcoal. This cluster of intercutting features was associated with the repeated deposition of metalworking waste; the

Illus 18 Post-excavation view of Structure B, facing northeast (AOC Archaeology)



Illus 19 Southwest facing section of pit [337] (AOC Archaeology)

presence of several postholes implies some sort of structural feature, now indiscernible, in this area.

A similar cluster of intercutting features was identified 75m to the south of Structure E (Illus 14). Pit [202] contained charcoal, as well as metalworking waste (see below). Alder charcoal from this feature dated to cal AD 774–993 (95% probability; SUERC-104050). This pit was truncated to the south by pit [311], which contained charcoal as well as fragments of plano-convex slag cakes and unclassified iron slag. Birch charcoal from its fill was dated to cal AD 887–1012 (95% probability; SUERC-104054), indicating slightly later reuse related to the disposal of metalworking waste. At the southern end of pit [311], two postholes, [313] and [318], could represent the remains of a small structure.

Ironworking waste was identified in at least three locations across the northern half of the site. On-site metalworking was likely supported by settlement, but only one possible structure was identified, Structure B, suggesting that there might have been more settlement in the area. As well as the metalworking remains, there was evidence for grain processing and quern or millstone manufacturing, indicating that this was a specialist activity area, with other elements of the settlement possibly located elsewhere or not surviving in the archaeological record.

3.8 Late prehistoric to early medieval features

Structure H was a four post structure measuring 3.1m E/W by 3m N/S with four associated pits, located in the middle of the site (Illus 14). Each posthole was paired with a small pit located directly to the southwest of the posthole. The postholes were circular to oval in plan, each with a U-shaped profile. They measured between 0.50m and 0.75m wide and were filled by a dark brownish black silty sand. Each posthole was paired with a small pit located directly to the southwest. Pits [281], [285], [289], and [305] were generally sub-circular in shape with steeply sloping sides and a rounded base and measured 0.85m to 1.1m in diameter. The pits were generally filled by a dark brown to brownish grey silty sand. All the pits and postholes contained significant macroplant assemblages, comprising between 30 and 279 cereal caryopses, and some

Illus 20 Mid-excavation image of pit [092], showing stone surface [234], facing west (AOC Archaeology)

contained hazelnut shells. The charcoal assemblage was relatively small. Samples (SUERC-104039 and SUERC-104040) from two of the postholes, [279] and [283], were dated to 763–423 cal BC (95% probability) from hulled barley and cal AD 772–972 (95% probability) from birch charcoal, respectively. As the early date came from hulled barley and there are no other dates from the earlier time period, it is interpreted that this early material is likely residual. The macroplant assemblage from the structure points toward it being used as a granary. As a millstone was also found at the site, in a pit dated to the early medieval period, and as there were two additional pits in the surrounding area of Structure H that had an early medieval date, it is most likely that Structure H is early medieval in date. The macroplant assemblage and the shape of the structure would suggest that this structure represents a four post granary.

3.9 Phase 10 medieval

Large pit [092] was located to the northeast of Structure F (Illus 7). It contained a basal fill with charcoal and burnt bone, underlying stone surface [234] (Illus 20). Hazel charcoal from the fill was dated to cal AD 1053–1260 (95% probability; SUERC-104046) and likely dates to the use of the feature. A stone surface, [234], was comprised of very large, flat stones that varied in size, forming a flat surface. On top of the stones was a loose silty sand deposit (093), which contained rare charcoal, cereal caryopses, burnt mammal bone, fuel-ash slag, unclassified iron slag, and heat-affected soil, indications the area might have been used for metalworking. This stone surface would likely have been part of a larger structure but only one small posthole [246] was identified next to pit [092]. As medieval structures in the north of Scotland often appear to have a turf or earth component to them, it is possible that these flat stones were an internal element of a turf or earth building.

3.10 Phase 11 medieval

Pit [033] was part of Pit Group 1, which was located in the northwest corner of the site, to the west of the L-shaped pit alignment (Illus 15). The alignment

comprised ten pits, all with the same shape in plan, the same profile and very similar dimensions. The fills were also very similar and were mostly sterile with frequent lenses of windblown sand, making it hard to date these features. Environmental analysis also indicated that these features contained a very small amount of redeposited fuel debris, including the only oak material identified on the site. As noted above, two of the features contained likely residual material dating to the Mesolithic-Neolithic transition. Three pits from the pit group contained material suggesting the alignment was medieval or later in date. Pit [033] contained two oat caryopses, one of which dated to cal AD 1232–1378 (95% probability; SUERC-104056). This material was not entirely secure but the presence of other finds makes this date appear more plausible than an earlier, prehistoric one. The mixed nature of the fills indicates that this pit group is difficult to directly date and it is likely that some of the early material is residual. Other finds from this pit alignment included a possible iron nail in pit [003] and a large fragment of window glass from the 17th to 20th century in pit [019] (Bateman 2022). The topsoil covering these features was deep and did not contain medieval or modern material, and therefore it is more likely that the L-shaped pit alignment is medieval in date with residual Mesolithic-Neolithic material unintentionally redeposited within.

3.11 Phase 12 medieval and later

From the medieval period onwards, the site likely primarily saw agricultural or pastoral use. Drainage ditch [219] and modern ground investigation pit [063] are the most recent features identified on the site (Illus 14). Drainage ditch [219] likely represents a spade-dug drainage channel related to post medieval ground improvement for agricultural or pastoral purposes.

The area where archaeology was concentrated at Craggan was covered by a very shallow 0.2m topsoil, suggesting that the area had not undergone regular deep ploughing. The topsoil along the western edge of the site overlying Pit Groups 1 and 2 was the deepest, with material up to 0.9m. Much of this depth is presumed to be derived from colluvial deposits eroding off the higher ground to the north. The southern part of the site had a more consistent topsoil depth ranging from 0.35m to 0.6m. Notably, no ceramic sherds were identified within the topsoil across the site, suggesting the site had not seen significant agricultural intervention. The fields appear to have avoided intensive cultivation, as no evidence of plough scars was seen, which has allowed for the preservation of fragile archaeological deposits under shallow topsoil.

3.12 Undated features

A range of isolated features and small feature clusters identified on-site remain undated. These features remain undated due to a lack of artefactual evidence, and the limited number of radiocarbon dates that could be obtained during the present works; although further datable material was present within some features, not all were taphonomically secure – with truncation often being present. A number of these features were observed surrounding a cluster of structures in the northern part of the site. The features are most likely related to one of the phases of settlement activity, from the Middle Iron Age to Late Iron Age or early medieval period, to which the main structural remains and activity could be dated. In this area, two possible structures or feature groupings can be proposed. Structure I, comprising three postholes, [126], [210], and [212], could be the truncated remains of a four post structure similar to Structure H with the fourth posthole truncated by a linear feature (Illus 7). Structure J comprised three postholes: [146], [221], and [223], arranged in an arc which could tentatively be all that remains of a post ring of a round, post-defined structure. Two large oblong pits, [142] and [144], directly to the west of the postholes, could have formed a ring ditch running along the outside of the post ring (Illus 7).

Two post alignments were identified close to Structure F. Each alignment comprised three postholes arranged in a straight line. Postholes [094], [096], and [098] likely formed the remains of a post-defined fence line or boundary aligned east/west. Postholes [110], [112], and [116] likely also formed the remains of a post-defined boundary aligned northwest/southeast. These fragments of fence lines could have once formed part of a more

extensive boundary or enclosure system related to defining spaces within the settlement. It is uncertain, however, whether they are associated with Structure F.

Features in this area, such as the possible structural remains and fence lines, were all generally very truncated, making it challenging to determine their function. This truncation could indicate they are related to one of the earlier phases of settlement and have been truncated by subsequent activity. Another possibility is that they were related to turf or earth-built structures which do not survive well in the archaeological record.

Near the early medieval ironworking furnace, [337], was a cluster of three postholes: [330], [334], and [343], which could form another very truncated post ring (Structure K).

The full reports of the specialist analyses below can be found in the site archive to be deposited with the National Record of the Historic Environment of Scotland (NRHE).

4. RADIOCARBON DATING

Mike Roy

A total of 30 sub-samples were submitted for radiocarbon dating. All 30 samples were single entities (Ashmore 1999) and comprised plant macrofossil elements, predominantly cereal caryopses and charcoal, with one hazelnut shell, apart from a single cremated human bone sample. Dating was undertaken by the Scottish Universities Environmental Research Centre (SUERC). The material derives from fills of features associated with structures (Structures A to H), pit clusters (Pit Groups 1 and 2), and other features, including a number of iron working pits spread across the development area and discrete features, including pit [092] and pit [037], from the latter of which fragments of quernstone (SF 12 and SF 13) were recovered. A sample of cremated bone was also radiocarbon dated from deposit (060)/(065) from cremation pit [059]. Conventional radiocarbon ages (Stuiver & Polach 1977) for all 30 samples are presented in Table 1 and Illus 21. Calibrated date ranges were calculated using the terrestrial calibration curve (IntCal13) and OxCal v4.4. Bayesian modelling of 27 of the 30 dated samples was undertaken (not including dates highlighted grey in the table, which were of uncertain security).

The radiocarbon dates were analysed using a Bayesian approach, a form of Markov Chain Monte Carlo sampling, applied using the online program OxCal v4.4 (http://c14.arch.ox.ac.uk/). Details of the algorithms employed by this program are available in Bronk Ramsey (1995; 1998; 2001; 2009) and in the online manual. As noted above, the model includes data from 27 of the 30 samples, as the conventional dates of three samples appeared to be of uncertain security, perhaps representing the presence of residual (or intrusive) material. It should be noted more generally that many features on site appeared to be shallow and/or truncated, leading to a degree of insecurity in some of the material available for scientific dating.

Following the removal of problematic dates (samples SUERC-95366, SUERC-104039, and SUERC-104040), the model represents eleven phases of activity ranging from the Mesolithic-Neolithic transition to the medieval period, with floruits of archaeological activity in the later 1st millennium BC and early 1st millennium AD (Middle Iron Age and Late Iron Age Phases 4 and 5) and in the later 1st millennium AD (early medieval Phases 7 to 9). Two likely medieval features were recorded: pit [092] (Phase 10), and pit [033] (Phase 11). The model has good agreement (Amodel=107.7) between the majority of the radiocarbon dates, and only one date had an agreement of less than 90%. A sample of hazel charcoal (SUERC-104036) from the fill of posthole [102] had an agreement of 74.3%. A date with an agreement index less than 60% is considered to have poor agreement with the overall model and may represent intrusive material.

Table 1 Radiocarbon dating results from Craggan (grey highlight = not included in model)

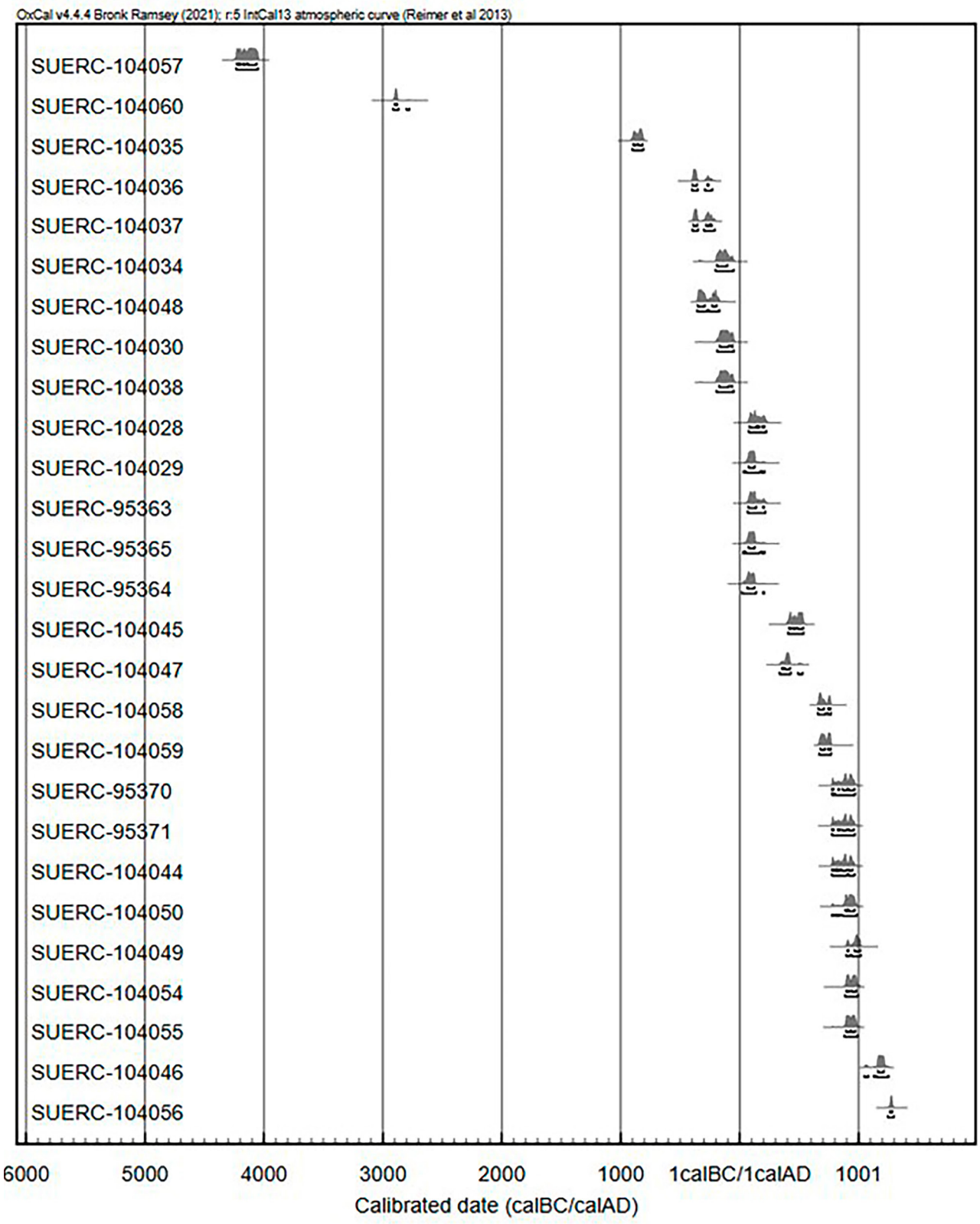
SUERC Code	Material	Context No.	Feature No.	Radiocarbon Age (BP)	Calibrated Date (95.4%)	δ13 C‰	Area	Phasing
SUERC-104057	Pine charcoal from pit [031], Pit Group 1	032	031	5313±26	4241–4049 cal BC	-27.0%	Pit Group 1	Mesolithic/ Neolithic = 1
SUERC-104060	Cremated human bone (long bone) from pit [059] in vicinity of ring ditch Structure G	060/065	059	4254±26	2915–2868 cal BC; 2802–2774 cal BC	-22.0%	Structure G	Late Neolithic = 2
SUERC-104035	Pine charcoal from fire pit [106], Structure F	107	106	2704±26	903–808 cal BC	-26.3%	Structure F	LBA = 3
SUERC-104036	Hazel charcoal from posthole [102], Structure F	103	102	2278±26	400–351 cal BC; 291–209 cal BC	-25.2%	Structure F	MIA = 4
SUERC-104037	Alder charcoal from ring ditch [061] Slot 2, Structure G	062 Slot 2	061	2261±26	394–350 cal BC; 305–208 cal BC	-26.5%	Structure G	MIA = 4
SUERC-104034	Birch charcoal from posthole [214], Structure E	215	214	2116±26	336–330 cal BC; 198–51 cal BC	-26.0%	Structure E	MIA = 4
SUERC-104048	Hazel nut shell from pit [124]	125	124	2180±26	361–154 cal BC	-23.7%		MIA = 4
SUERC-104030	Alder charcoal from ring ditch [130], Structure E	218 SE	130	2099±26	196–185 cal BC; 179–43 cal BC	-27.3%	Structure E	MIA = 4
SUERC-104038	Birch charcoal from ring ditch [061] Slot 3, Structure G	062 Slot 3	061	2104±26	196–46 cal BC	-27.3%	Structure G	MIA = 4
SUERC-104028	Birch charcoal from posthole [080], Structure D	081	080	1869±26	cal AD 120–237	-27.0%	Structure D	LIA = 5

Table 1 *cont.*

SUERC Code	Material	Context No.	Feature No.	Radiocarbon Age (BP)	Calibrated Date (95.4%)	δ13 C‰	Area	Phasing
SUERC-104029	Alder charcoal from posthole [088], Structure D	089	088	1899±26	cal AD 70–216	-26.4%	Structure D	LIA = 5
SUERC-95363	Alder charcoal from ring ditch [3001] Slot 1, Structure C	3002 (Slot 1)	3001	1881 ±27	cal AD 68–217	-26.4%	Structure C	LIA = 5
SUERC-95365	Birch charcoal from posthole [39019], Structure A	39020	39019	1901 ±27	cal AD 29–39; cal AD 50–174; cal AD 192–211	-26.4%	Structure A	LIA = 5
SUERC-95364	Cereal caryopsis (hulled barley) from pit/posthole [3003], Structure C	3004	3003	1913 ±27	cal AD 20–139; cal AD 197–206	-22.1%	Structure C	LIA = 5
SUERC-104045	Cereal caryopsis (hulled barley) from pit [273]	307	273	1595±26	cal AD 420–542	-22.1%		EM = 6
SUERC-104047	Birch charcoal from possible fire pit [039]	040	039	1647±26	cal AD 265–273; cal AD 354–442; cal AD 449–480; cal AD 494–536	-26.1%		EM = 6
SUERC-104058	Cereal caryopsis (hulled barley) from pit [011], Pit Group 2	012	011	1309±26	cal AD 657–710; cal AD 722–775	-24.6%	Pit Group 2	EM = 7
SUERC-104059	Birch charcoal from fire pit [017], Pit Group 2	018	017	1284±26	cal AD 663–776	-25.9%	Pit Group 2	EM = 7
SUERC-95370	Birch charcoal from hearth [39035], Structure B	39036	39035	1149 ±27	cal AD 777–793; cal AD 801–971	-26.9%	Structure B	EM = 8
SUERC-95371	Alder charcoal from pit [39037], Structure B	39038	39037	1154 ±27	cal AD 776–969	-25.8%	Structure B	EM = 8

Table 1 *cont.*

SUERC Code	Material	Context No.	Feature No.	Radiocarbon Age (BP)	Calibrated Date (95.4%)	δ13 C‰	Area	Phasing
SUERC-104044	Cereal caryopsis (oat) from pit [037] associated with quernstones	038	037	1156±26	cal AD 772–790; cal AD 821–979	-23.6%		EM = 8
SUERC-104050	Alder charcoal from pit [202]	203	202	1131±26	cal AD 774–785; cal AD 834–844; cal AD 877–993	-27.8%		EM = 9
SUERC-104049	Rowan charcoal from pit [170]	171	170	1071±26	cal AD 894–928; cal AD 946–1025	-27.3%		EM = 9
SUERC-104054	Birch charcoal from pit [311]	312	311	1102±26	cal AD 887–995; cal AD 1009–1012	-27.7%		EM = 9
SUERC-104055	Alder charcoal from pit [337]	338	337	1114±26	cal AD 885–994	-28.8%		EM = 9
SUERC-104046	Hazel charcoal from pit [092]	235	092	861±26	cal AD 1053–1075; cal AD 1156–1233; cal AD 1240–1260	-28.1%		Medieval = 10
SUERC-104056	Cereal caryopsis (oat) from pit [033], Pit Group 1	034	033	728±26	cal AD 1232–1242; cal AD 1258–1301; cal AD 1370–1378	-23.8%	Pit Group 1	Medieval = 11
SUERC-104039	Cereal caryopsis (hulled barley) from posthole [279], Structure H	280	279	2469±26	763–469 cal BC; 435–423 cal BC	-24.8%	Structure H	
SUERC-104040	Birch charcoal from posthole [283], Structure H	284	283	1171±26	cal AD 772–900; cal AD 918–960; cal AD 967–972	-26.1%	Structure H	
SUERC-95366	Birch charcoal from ditch [39021], Structure A	39022	39021	1088 ±27	cal AD 893–1015	-25.7%	Structure A	



Illus 21 OxCal plot of radiocarbon dates

5. CREMATED HUMAN SKELETAL REMAINS

Mara Tesorieri

Cremation pit [059] was located near Structure G. The cremation was excavated in the field in seven spits, each measuring 0.02m thick. Cremated bone was recovered from fill (060) through wet sieving in the laboratory. Fragmentation was relatively high, with the largest fragment (from spit 5) measuring 59.09mm in length. The largest percentage of fragments (291.04g, 49%) were recovered from the 5–10mm sieve, followed by the >10mm sieve with 147.06g (24.8%), the 2–5mm sieve with 141.19g (23.8%) and lastly, 13.54g (2%) was recovered from the <2mm sieve. Of the 592.83g of cremated bone, 226.16g (38.1%) could be identified to element. This included 42.35g of skull, where most of the fragments were identified as belonging to the cranial vault, with one fragment specifically belonging to the occipital bone. Several tooth root fragments were also recovered from spits 3, 4, and 5. A total of 4.1g of fragments was identified as belonging to the vertebral column (including the dens from cervical vertebra 2), 3.78g were identified as rib fragments (all body fragments), 5.21g upper limb fragments, and 1.8g were identified as belonging to the pelvic girdle. This included a small fragment from the right pubic bone, which included the lower half of the symphyseal face and part of the inferior pubic ramus. A total of 7.58g was identified as belonging to the lower limbs, 159.99g were unidentified long bones, and 1.35g were hand/foot bones, including both hand and foot phalanges.

The cremated remains from Craggan were possible to identify as belonging to at least one individual. Based on the thickness of cranial vault fragments and complete tooth roots, it is estimated that the individual was an adult. The presence of a fragment from the right pubic symphysis (from spit 6) provides tentative evidence for an age-at-death estimate and biological sex determination. Based on the subpubic concavity, the individual is a probable male. Caution must be taken, however, as determining biological sex should be carried out using multiple sexually dimorphic traits, along with metric analysis. While the cremation process resulted in taphonomic damage to the symphyseal face, slight ridging was still visible, suggesting the individual was under the age of 50.

The cremated remains belonged to at least one adult, a possible male individual. The cremation process can limit the amount of biological data obtained compared with inhumations (such as age, sex, stature, pathology, and trauma), but the cultural information associated with the processing of the dead that cremations can provide is just as valuable. Cremation in prehistory was a complex process involving extensive time, preparation, and resources (Lynch & O'Donnell 2007). While the assemblage is restricted to a single deposit, it is part of a small corpus of Neolithic cremation burials in Scotland and has limited but important potential to further understanding of cremation in the Neolithic period.

6. CHIPPED STONE

Rob Engl

A single piece of chipped stone was recovered during the works. The lithic was retrieved from pit [029] in Pit Group 1. The artefact was a Platform Rejuvenation Flake made from grey flint. The colour and cortex of the flint are indicative of material originating from the glacial deposits associated with the east of Scotland and suggest a local derivation for the raw material. The artefact suggests earlier prehistoric occupation of the site and is likely Late Mesolithic in date.

7. WORKED STONE

Dawn McLaren

Four intact rotary quernstones (SF 01–04; Illus 22), a lightly used saddle quern or grinding stone (SF 12), and a roughout for a large rotary quern or millstone (SF 13; Illus 22E) were recovered from contexts associated with two post-built roundhouse structures. Although the recovery of querns, particularly quernstone fragments, is not uncommon in association with later prehistoric roundhouse settlements in the north and northeast Scottish mainland, the pattern of distribution recognised at Craggan is worthy of note, as is the recovery of a very large quern or millstone roughout. The group of completed and worn rotary quernstones comprise a very neatly placed arrangement of three intact rotary quernstones (SF 01–03; Illus 22A, B and C) which had been deposited at the base of the ring ditch of a Late Iron Age roundhouse (Structure C) and a fourth intact quernstone (SF 04; Illus 22D), which was recovered from the ring ditch of a Late Iron Age roundhouse (Structure A), with an early medieval date from the ring ditch. The close but evenly spaced arrangement of the quernstones within Structure C, was found to follow the curvature of the feature and the stones had clearly been intentionally deposited with care. Whether the decision made by the Iron Age occupants of the roundhouse to lay down these quernstones in this position had a pragmatic motivation – perhaps to re-surface the ring ditch and use the quernstones as paving stones – or was undertaken for more symbolic reasons is impossible to prove with absolute certainty but there is strong evidence from elsewhere in Scotland, and across Britain more broadly, of the purposeful positioning of both saddle and rotary querns within Iron Age structures. The positioning of the Craggan quernstones certainly is suggestive of purposeful deposition, perhaps at the end of the life of the roundhouse. This report aims to describe the form, function, and condition of the quernstones and present some context for their unusual deposition and placement.

7.1 Form

Several forms of rotary quern are known to be in use in Scotland during the Iron Age, including beehive-, bun-, and disc-shaped stones, which previous studies have demonstrated display regional distributions (MacKie 1971: fig 5), with disc querns predominantly being used in the north and west, and buns or beehives to the south and east (McLaren & Hunter 2009: 105). Disc querns continued in use from the early medieval period and into the early 20th century in some areas of Scotland (Fenton 1978: 387).

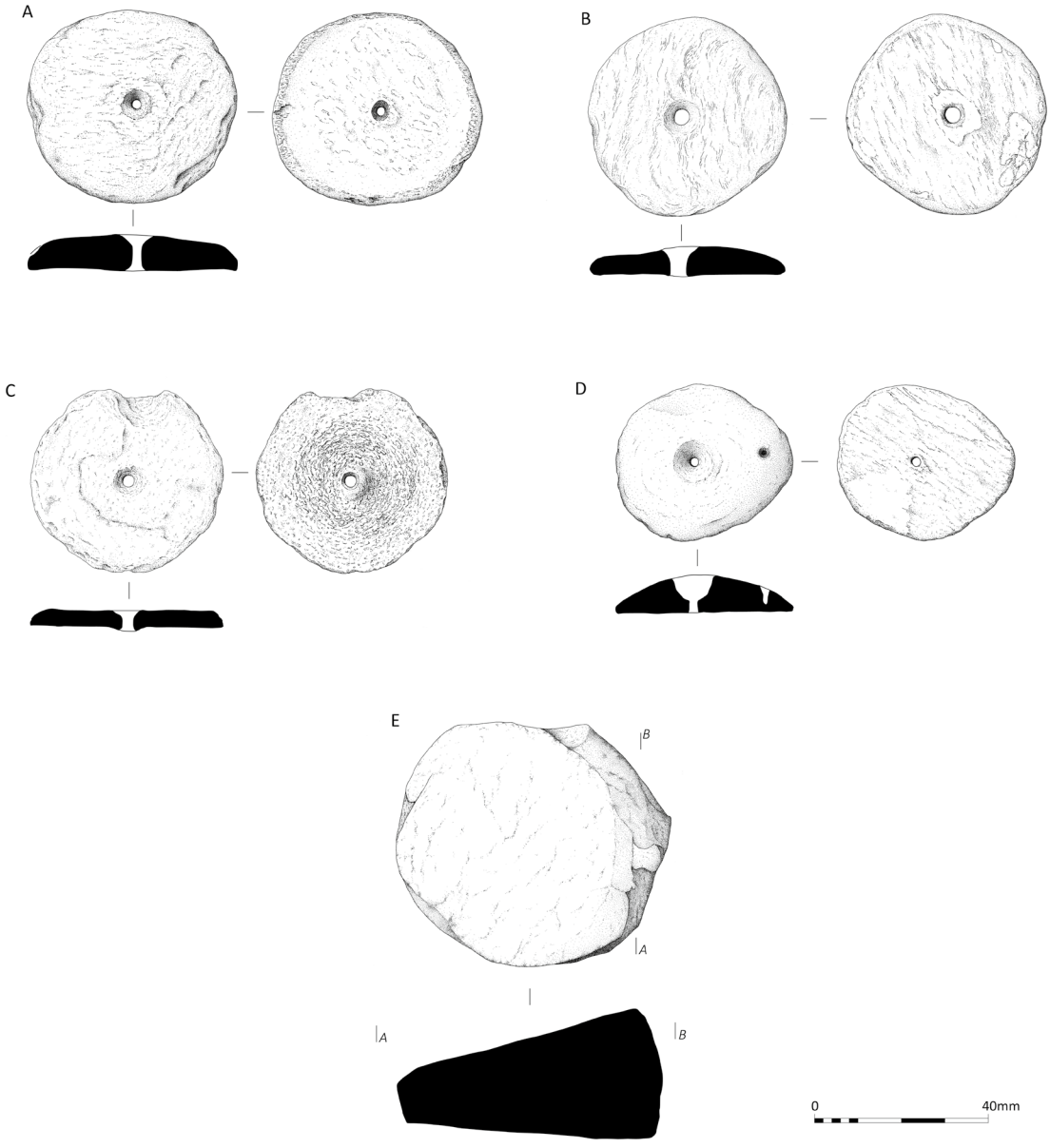
Disc-shaped querns are thin, wide stones with flat upper surfaces and three examples from Craggan (SF 01–03) conform to this type. They were intact, although one displays damage to the edge of the stone, and are recognised as basal stones due to their lack of handle sockets and the profile of the grinding surfaces. The lower quernstones have a central spindle socket which fully perforates the thickness of the stone. The spindle was an upright rod, typically of iron or wood, which would have connected the upper and lower stones during use and acted as the pivot around which or with which the upper stone would rotate. In most instances, the lower stone's spindle socket is conical and often shallow in depth, lacking evidence of wear to the interior of the socket, and thus indicating that the spindle was fixed into it. At Craggan, however, all three lower stones' spindle sockets fully perforate the disc, suggesting that these may have been adjustable, meaning that the distance between the upper and lower stones could be easily narrowed or widened by adjusting the height of the spindle from below using a simple mechanism (Mackie 1987: 5–8; 2007: 498), in a fashion very similar to more recent hand-mills used in the Northern Isles (Mitchell 1880; Fenton 1978: 389–90, 392–3).

In contrast, the fourth worn quernstone from Craggan (SF 04) is an upper stone and can be classified as a low bun-shaped quern. Bun-shaped stones are typically smaller in diameter than disc querns, are much thicker in proportion to their diameter, and have distinct rounded upper surfaces. This upper stone is distinctly oval in plan, likely reflecting the original shape of the large water-rounded or glacial erratic small boulder it was cleaved from, and displays a well-worn vertical handle socket positioned towards the apex of one end on the longitudinal axis of the stone. This quern

is described here as a 'low' bun-shaped quern as it is very shallow and thin. It was probably never as thick as the more typical bun-quern examples but the stone has undoubtedly become thinner due to the loss of material from the grinding surface resulting from wear.

7.2 Wear

The four quernstones are worn from use, each displaying varying levels of wear and in one case, damage. This wear is observed in the form of concentric abrasions and areas of polish which have built up on the smoother areas of the grinding faces as the result of rubbing against the cereal grains and the opposing stones' grinding surfaces during use. Lower stone SF 03 is particularly well-used as evidenced by the thinness of the stone, the build-up of polish, and abrasion from use, the distinct dished profile of the wide ring-shaped grinding facet and the subsequent creation of a raised lip around the perimeter of the face and central socket as a result of the loss of surface material from the grinding facet



Illus 22 Illustration of quernstones A: SF 01; B: SF 02; C: SF 03; D: SF 04, and rotary quern or millstone E: SF 13 (Orlene McIlfatrick)

through wear. This quernstone displays damage to one edge of the basal surface which has resulted in the loss of a large spall from the base and edge. Although the damage encroaches on the lip of the grinding face, it would not have been sufficient in practical terms to prevent the use of the quern. In contrast SF 02 has less pronounced signs of wear but the presence of rubbed and abraded areas of the grinding face demonstrate that it saw use prior to deposition.

The upper quernstone (SF 04) displays two notable aspects of wear. The first point of note is that the stone is a fairly dense mica-rich schist, which is not the best lithology to use for a quern as the stone tends to be friable and abrasion of the surfaces frequently causes the shedding of clasts and minerals during use. What can be seen on SF 04, however, is that the grinding face encompasses patches of a denser layer of quartzite. It appears that the stone was deliberately cleaved across a transverse vein of quartzite and it was this denser lithology that was utilised as the grinding surface, a selection choice also noted at Culduthel, Inverness (McGibbon 2021: 141). As so little of this valuable dense layer survives, it may well have been decided that the quernstone had come to the end of its use, resulting in its deposition.

7.3 Decoration

The upper quernstone (SF 04) is the only one amongst the group to display any form of decoration. Although very shallow, a narrow pecked groove encircles the central hopper of the upper surface. This creates a very slight collar which stands proud of the surface around the hopper and feeder pipe, into which the grain would be poured during use. Although decoration on rotary quernstones is not typical, a study of examples in Scotland (McLaren & Hunter 2009) found them to be more common amongst the corpus than originally thought and enabled them to be classified into four main types (Types 1 to 4), whilst Types 1 and 2 could be further broken down into seven sub-categories. The Craggan upper stone conforms to Type 1a of this classification (ibid: 115) which represents the most common and long-lived type of decoration noted amongst this group.

7.4 Roughout

A very large and thick disc-shaped roughout for a rotary quern or millstone (SF 13; Illus 22E) was recovered from pit [037] which contained numerous fractured stones and cobbles. The roughout had been placed, flat-face upwards, towards the centre of the pit, sitting on top of and surrounded by various natural slabs and large water-rounded cobbles. It had been produced from a thick slab or split fragment of a large ovoid glacial erratic boulder which displayed crude fracturing around the circumference of one face and adjacent edge to create a roughly disc-shaped thick slab. Little further working is in evidence and the stone is unperforated. Although a number of these stones (eg SF 09, SF 12b) were initially thought to be further broken quernstone fragments only one, SF 12a, displayed any sign of use or wear. These stones were all different lithologies to the roughout. No evidence of in situ working within the feature was determined. Although rotary quernstones are common finds on Iron Age and later sites in Scotland, roughouts, partially worked or unfinished examples remain rare (McLaren & Hunter 2009: 106) due in part to issues of recognition. The substantial size of this example is unusual for a household rotary quern and is more likely to be a millstone although its unfinished condition means that this cannot be stated with confidence. An oat caryopses recovered from the fill of the same pit [037] the roughout was found in has been radiocarbon dated, providing the date range of the late 8th to late 10th century AD (cal AD 772–979 at 95%; SUERC-104044) offering rare and valuable evidence of quern or millstone production during the early medieval period.

7.5 Other items of worked stone

Deriving from the same pit, [037], as the roughout was a very lightly used small saddle quern or grinding stone (SF 12a) which displays a small poorly defined area of abrasion towards the centre of one flat face.

Although not worked in terms of evidence of wear or modified for use, a mica-rich schist cobble (SF 19) from posthole [082] (Structure D) was severely heat-affected across one face.

7.6 Context and deposition

At Craggan, the intact bun-shaped upper quernstone (SF 04) came from the infill (39022) of a ring ditch [39021] of post-built roundhouse Structure A. The three intact lower stones (SF 01–03) similarly came from the infill (3002) of the ring ditch [3001] of roundhouse Structure C. Both roundhouses are Late Iron Age in date. The even spacing and careful placement of the three lower stones following the curvature of the ring ditch in Structure C was clearly intentional. Two (SF 01 and 03) were discovered with grinding faces obscured and lying downwards, whilst one (SF 02) was found grinding face up. The upper quernstone (SF 04) associated with the ring ditch in Structure A, was found with the grinding face down.

Although the position of the entrances to these two roundhouse structures was not well defined, it is likely that the ring ditches were located towards the rear of the structure. The recovery of quernstones from this area of the interior space of later prehistoric roundhouses is a pattern seen elsewhere such as at Aldclune, Perth and Kinross, where rotary querns were found in the rear of the roundhouse interior spaces during the later phases of use (Hingley et al 1998: 452) whilst in earlier phases, querns were typically deposited nearer the entranceways. At Birnie, near Elgin in Moray, quernstones and quern fragments were found in association with various roundhouse and hearth features across the site, with examples of similar disc-shaped schist querns noted in association with the ring ditch of at least one of the roundhouse structures (F Hunter, pers comm).

Even into the early modern period in Scotland, historical documentary evidence attests to quernstones being household tools of value (Fenton 1978: 389) and it can certainly be argued from archaeological evidence that the significance of querns (both saddle and rotary types) during the Iron Age went beyond their practical function as grinding stones for producing flour. This is demonstrated by recurring patterns of re-use, apparent purposeful or symbolic deposition, and even evidence of deliberate destruction, all three of which are in evidence in Scotland at sites such as Broxmouth Hillfort, East Lothian (McLaren 2013), inter alia. During the Iron Age, querns would have been everyday items with a vital functional role linked to the agricultural cycle, food production, and consumption, and in turn, the quern could have assumed a role as a symbol of agricultural fertility, as well as an important part of the household, becoming metaphors for key stages in the life course of individuals and the household more broadly (Williams 2003). This perceived symbolic role would thus require special treatment at the end of the use of the implement, either due to damage or breakage, extensive wear, or even the death of the user, owner, or maker (Heslop 2006; Peacock 2013: 162–78). This is hinted at by the deposition of certain examples in unusual or particular locations (Armit 2000: 584; Hingley 1993: 41; Heslop 2006: 73–80) or the need to break or damage or injure the quern. Not all quernstones appear to have been subjected to special treatment at the end of their useful life but the frequent placement in association with hearths, thresholds, metalworking features, as well as being built into particular areas of the floor or walls of structures suggests the incorporation of quernstones was often not simply pragmatic re-use as building stones (McLaren 2013: 317). The mechanisms and choices behind these apparent symbolic acts, in particular why some querns were treated in this way and why some were not, is not well understood but the special treatment of Iron Age quernstones is a re-occurring pattern that can be traced throughout Britain.

8. THE METAL

Dawn McLaren & Daniel Bateman

A total of 14 ferrous metal artefacts were recovered at Craggan. The finds included a wide range of objects, including a possible tip from an iron knife blade, nails and nail fragments of various sizes and forms, sheet metal fragments, and an incomplete but substantially intact pair of modern pliers. The finds survive in a heavily corroded and fragmented state, and X-rays were used to aid identification. Despite this, several of the smaller fragmentary pieces are not classifiable nor considered to be closely datable.

Ferrous metal find (SF 05) from ring ditch [3001], part of Structure C, is probably an incomplete nail, though it could also be a hinge pin or similar object. The head is flat and circular and has a broken circular-sectioned shank that is straight and non-tapering. The fragment does show similarities to Manning's Type 6 nail (Manning 1985: 133), having a flat circular head and circular cross-sectioned shank. Iron sheet metal, potentially from a vessel or container, also came from ring ditch [3001]. A bent rounded tip of an iron knife blade with a 'v'-shaped cross-section came from pit [3019], also part of Structure C. This possible iron knife blade was bent either during use or manufacture.

A probable nail shank and associated spalls, from pit [003], (Pit Group 1), has been slightly distorted potentially indicating that it had been removed from its fixture prior to deposition.

An incomplete heavily distorted iron nail was retrieved from refuse pit [39037] in association with Structure B. Like the example just described, the distorted condition of the nail implies it was deliberately removed from its timber fixture prior to its discard.

Several other fractured fragments of iron retrieved during sample processing remain unidentified due to their small and fragmentary condition. These include amorphous fragments of iron from pit [053]. From the topsoil a modern pair of pliers were recovered (SF 24). These will not be discussed further in this report.

The nails and nail fragments found at Craggan display evidence of distortion following removal from their timber fixtures. The nails are all hand-forged examples as indicated by the square-sectioned shanks but all are incomplete with missing or damaged heads making identification to specific nail types impossible. Based on the remaining length of the shank and the average diameter of the shanks, these appear to derive from small general purpose carpentry nails. As noted by Hunter (1999: 366), nails are surprisingly rare finds on Iron Age sites, a fact that cannot be simply dismissed as a result of poor soil conditions or other preservation factors. Chronology of the activity definitely plays a part as nails only appear to become more common in the later part of the Iron Age, from the 1st century AD onwards (ibid: 367). Routine recycling of metals also contribute to the picture as broken or exhausted iron objects could be re-forged, removing them from the archaeological record unless in special or unusual circumstances. A further hypothesis offered by Hunter (1999) is that nails were not routinely used in association with the construction of buildings until the Late Iron Age period and those encountered on Iron Age sites may well derive from internal fittings and fixtures and not from the structures themselves. This would suggest that Iron Age structures did not utilise nails for the construction of the roof. The limited quantity of nail fragments and their sparse distribution across the site would certainly corroborate this earlier interpretation.

9. THE SLAG AND INDUSTRIAL MATERIALS

Andrew Morrison

The evidence presented by the slag and industrial materials recovered from Craggan, suggests that both ferrous metal smelting and blacksmithing were taking place on-site during both the Middle Iron Age and early medieval periods, with the remains of in situ smelting furnaces also identified. The vast majority of the diagnostic metalworking residues identified (93.3%) were retrieved in association with three separate truncated features or feature groups, including the remains of two in situ smelting furnaces [124] (14.2%) and [337] (7.1%), and a large dump of metalworking waste or possible cleared-out smelting furnace feature group [170] (71.9%). A total of 6.3% of the diagnostic materials were retrieved in association with two intercutting discrete dumps containing evidence for both smelting and smithing, [202] and [311], while the remainder of the materials were recovered as residual finds later incorporated within various pit, ditch, and posthole fills across the site.

In situ evidence for smelting during the Middle Iron Age was identified to the immediate northeast of Structure E, with the dating of hazel from the smelting furnace remains [124], while another likely in situ smelting furnace [337] to the east of Structure D has been dated to the early medieval period. The large metalworking waste deposit or possible cleared-out smelting furnace [170], which also produced some evidence of smithing activity, was dated to the early medieval period. The intercutting, isolated dump deposits containing evidence for both smithing and smelting were also dated to the early medieval period.

This evidence demonstrates two distinct phases of smelting and likely smithing activities taking place on site during the Middle Iron Age and the early medieval period through the identification of in situ smelting furnaces [124], [337] and a possible cleared-out furnace and large dump of material [170], [202], and [311]. There is a distinct shift in smelting technology between the Middle Iron Age and early medieval features, with quantities of tapped slag present only within the early medieval furnace [337], the possible cleared out furnace [170], and the discrete dump [202], all of which date from between the 8th and early 11th centuries AD. Tapped furnaces, which allowed the molten slag to flow from the chamber, came into use during the Late Iron Age, Iron Age, and were also in use during the early medieval period and beyond (Tylecote 1986: 156).

Although it is not possible to determine the frequency, intensity, or scale of iron production taking place on site, or the amount of bloom, billet, or iron objects that were being produced or repaired, the diagnostic metalworking evidence identified (in both feature and recovered waste) is suggestive of small-scale smelting taking place during the Middle Iron Age, perhaps even a single episode, with more comprehensive metalworking activities taking place during the early medieval period, though still reflective of smaller-scale production. The evidence for metalworking on site is limited by the degree of truncation present, with only the bases of the pits of the possible furnaces surviving, and no in situ smithing hearths identified, allowing for the possibility that additional smithing and smelting features may once have been present and in use. It is possible that the smithing evidence identified may relate to the primary smithing of the blooms from smelting, rather than blacksmithing activities taking place within a smithing hearth, which could partially explain the absence of smithing hearths present on site.

The site does, however, add to the corpus of knowledge of iron production taking place in the Highlands of Scotland, near Inverness and the Moray Firth during the Middle Iron Age and early medieval periods. The most significant Iron Age ironworking site in the area, and indeed Scotland, is the site at Culduthel Mains Farm, south of Inverness and northwest of Craggan, which was a large-scale purpose-built Iron Age craftworking centre, producing evidence for iron smelting and smithing, as well as non-ferrous metal and glass production from the mid-4th century BC to the mid-4th century AD (Hatherley & Murray 2021: 31). A considerable number of smelting furnaces were uncovered which survived largely intact, and so well-preserved that many retained their final smelt still in situ, which can provide important insight into what the furnaces at Craggan may have originally looked like. The Craggan smelting furnaces, in comparison, survive only as the truncated bases of the furnace pits with

scraped-out hollows that the slag would have been raked into, in front of where the furnace once stood. Therefore, the evidence at Craggan is indicative of a non-specialist settlement site. Other nearby similar Iron Age ironworking sites include Seafield West, near Inverness, which produced evidence for in situ smithing activity (Heald et al 2011: 20), as well as smelting furnaces at Tarras and Grantown Road, and also Birnie, near Elgin, which produced over 210kg of ferrous metalworking waste representing the remains of both smithing and smelting activities (Dungworth & McLaren 2021: 166–7).

Evidence for ironworking during the early medieval period exists on a range of site types in Scotland including nuclear forts, duns, open settlements, crannogs, and monastic sites (Heald & McLaren 2008: 206). The monastic site of Inchmarnock produced rare and important evidence for in situ ironworking during the early medieval period (ibid), while the open settlement site of Lair, in Glen Shee, produced a considerable amount of material associated with both smithing and smelting activities (McLaren 2019). Good evidence for ironworking within nuclear fort sites has been identified at sites like King's Seat, near Dunkeld (Morrison Forthcoming), and further afield at Dunadd, in Argyll and Bute (McDonnell 2000), and the Mote of Mark, in Dumfries and Galloway (Crew 2006), amongst others.

The range and scale of ironworking activities taking place at Craggan during the Middle Iron Age and early medieval periods is difficult to quantify due to the pronounced truncation of features across the site, which includes the remains of smelting furnaces, and may also explain the lack of blacksmithing hearths identified, though the presence of smithing waste may be the result of the initial smithing of the bloom following the smelt. It is entirely possible that the scale of ironworking activity on site during both the Middle Iron Age and early medieval periods may be more extensive than the surviving evidence attests. Despite this, the Craggan assemblage is considered to be a valuable addition to the growing corpus of well-dated, well-stratified metalworking evidence from the northeast mainland of Scotland.

10. ANIMAL BONE

Amy Halliday

A total of 1,369 fragments (358.3g) were recovered from 76 contexts. The species identified were cattle (18), large mammal (such as horse, cattle, or deer; 19), medium mammal (such as sheep/goat or pig; 7), small mammal (such as dog, cat, or rodent; 5), and indeterminate mammal (1,320). Preservation of the bone was mostly poor with a smaller number described as adequate to good. Many of the fragments did not exceed 50mm and most were smaller than 10mm. The poor preservation was due to a combination of soil conditions with many of the fragments completely calcified prior to deposition. Of the 1,369 fragments assessed 1,302 were found to have been burnt. None of the bones showed signs of butchery, pathologies, or animal gnawing. The only bone from the site which can be identified to species came from cattle. Much of the bone is burnt and has derived from the re-deposition of domestic cooking and food waste although more detailed interpretation is not possible due to its poor preservation and fragmentary nature.

11. ENVIRONMENTAL ANALYSIS

Jackaline Robertson

11.1 The macroplant

A total of 7,209 charred macroplant remains were recovered from 132 deposits dated from the Neolithic, Iron Age, Late Iron Age, and medieval periods. The assemblage was composed of 6,770 cereal remains, three flax seeds (*Linum usitatissimum* L), 152 hazelnut shell fragments (*Corylus avellana* L), 11 fragments of heather (*Calluna vulgaris* L), two buds, and 271 weeds. The cereal was formed of 6,484 caryopses, one spikelet, 270 floret bases, two glumes, three straw fragments, and ten culm nodes. The cereal species were wild oat (*Avena strigosa* L), oat (*Avena* sp), six-row hulled barley (*Hordeum vulgare* L), two-row hulled barley (*Hordeum distichon* L), naked barley (*Hordeum var Nudum* L), barley (*Hordeum* sp), bread/club wheat (*Triticum aestivum/compactum* L), emmer (*Triticum dicoccum* L), and wheat (*Triticum* sp). The assemblage was concentrated within Structure C, Structure H, Pit Group 2, pit [037], and pit [28001] dated to the Iron Age, Late Iron Age, and medieval periods. Preservation of the macroplants ranged from poor to good with most described as adequate.

11.1.1 Crops

Cereal remains were recovered from the Iron Age, Late Iron Age, and medieval deposits. There was no surviving evidence of crop exploitation during the earlier Neolithic and Bronze Age phases of occupation. Given the small size of the cereal assemblage it was not possible to identify any changes in crop exploitation over the period of occupation. The most information that could be drawn from this assemblage was that six-row hulled barley and oats were among the more favoured cereal crops cultivated with two-row hulled barley, naked barley, bread/club wheat, and emmer having a much more minor role or representing weeds of the main crops.

Both barley and oats were economically important species throughout the occupation of this settlement and this was probably because these two species are more suited to the climate and growing conditions of the prehistoric and medieval landscape in Grantown-on-Spey. Similar results demonstrating the importance of these two crops have previously been reported at Kintore, Aberdeenshire (Holden 2002), Bertha Park, Perth (Robertson 2020), and NHS Highland Elective Care Centre, Inverness (Robertson 2022), as well as medieval sites including Perth High Street (Fraser & Smith 2011).

11.1.2 Nuts

A total of 152 hazelnuts were scattered among 38 contexts associated with the structures, pit groups, and isolated features dated to the Middle Iron Age, Late Iron Age, and early medieval periods. Interestingly, none were found in the Mesolithic or Neolithic features where they might typically be considered more common. There was no evidence of selective or deliberate disposal. Instead, the hazelnut fragments accumulated from discarded food debris and there was no evidence of largescale food processing, storage, or roasting of large caches of nuts within the surviving assemblage during any stage of occupation (Bishop 2019). What is obvious is that hazelnuts were routinely available in the landscape surrounding the settlement where they were collected as an additional food source with the shell perhaps recycled as a fuel kindling material.

11.2 The charcoal

The charcoal assemblage derived from both fuel debris and from structural elements. There was no evidence to suggest any wooden artefacts were present within any of the deposits. The species are all native and would have grown in the surrounding landscape. Alder, birch, and willow are found in damp habitats, while apple/pear/hawthorn/rowan, hazel, ash, and cherry grow in hedgerows, scrub, or more open woods. Pine prefers more acidic landscapes, whereas oak is adaptable to a variety of growing conditions (Linford 2009; Stace 2010; Martynoga 2012). The species that were consistently favoured throughout the occupation of the settlement were alder, birch, hazel, and pine suggesting these species grew locally and were consistently available. The lack of apple/pear/hawthorn/rowan, ash, cherry, and willow charcoal suggests that these trees had a more marginal role and may have been more difficult to access, or that they were only available seasonally.

11.3 Conclusion

The macroplant and charcoal assemblages from Craggan, Grantown-on-Spey are composed of a mix of domestic food and fuel refuse intermixed with some structural elements. Accurately identifying changes in agricultural practices, diet, wood exploitation, and economic status was difficult given that some of the features provided multiple dates. The information that could be drawn from the two assemblages was that cereal crops, in particular six-row hulled barley and oats, were of importance alongside hazelnuts and that a range of woodland species were consistently available in the surrounding landscape. The ecofacts demonstrate that both the prehistoric and medieval communities had access to a range of plant resources which were used for food, domestic fuel, and building materials.

12. DISCUSSION

The archaeological work undertaken at Craggan has uncovered a multi-period landscape with activity from the Late Mesolithic to the modern day. A focus of settlement activity in the Middle to Late Iron Age and early medieval periods was identified, with evidence for iron working, grain processing, food processing, and cooking. The landscape setting of the site is of significance as it is located next to the River Spey, which forms the natural routeway of Strathspey.

12.1 Earliest activity

The earliest activity on site is represented by a Late Mesolithic lithic from pit [029] and a late 5th millennium BC radiocarbon date from pine charcoal from pit [031]. Both of these pits were part of an L-shaped pit alignment located at the northeast of the site. Unfortunately, this alignment could not be confidently related to one phase of activity. Other pits within this group of features contained a broken iron nail that had likely been removed from its fixture, blue glass dating to the 17th to 20th century, and material dated to the 13th to 14th century AD. Their arrangement in plan and the similarity of the limited macroplant and charcoal within their fills suggests they are related to each other, but date to the medieval period, with residual earlier material redeposited. The lithics and Mesolithic date do, however, indicate a level of activity in this area in early prehistory.

L-shaped pit alignments are difficult to date but are frequently early prehistoric. Examples of similar sites include Keltie Bridge, Callander (O'Connell 2019), Warren Field, Crathes, Aberdeenshire (Murray et al 2009), and Wellhill, Perthshire (Brophy & Wright 2021).

12.2 Neolithic funerary activity

A single Late Neolithic (Phase 2) cremation burial was identified in the central northern area but appeared to be an isolated feature. The cremation was deposited in pit [059] and analyses of the cremated bone indicated it likely represents one adult male. There is limited evidence for Late Neolithic burials in Scotland and when encountered they tend to be part of a cemetery or monumental feature such as a stone circle, and are often associated with Grooved Ware pottery. The cremation cemetery at Forteviot, Perthshire presents an example of Late Neolithic burial. Nine deposits of cremated bone were identified there and analysis has confirmed that they represent the remains of at least 18 individuals (Brophy & Noble 2021: 1). Further Scottish cremation cemeteries include Balbirnie stone circle in Fife (Ritchie 1974) and Cairnpapple Hill, West Lothian (Piggott 1950; Barclay 1999). At all of these sites the scale of funerary activity and the number of cremated individuals is much larger than at Craggan. Craggan also does not have any grave goods, such as Grooved Ware or skewer pins, often seen at these sites. However, Craggan may represent, on a small-scale, this funerary tradition.

Within the Highlands only one other cremation burial has been dated to the Late Neolithic period, at Armadale, Isle of Skye (Peteranna 2011). The Late Neolithic cremation there was part of a much larger Bronze Age burial landscape and also contained grave goods in the form of three unburnt flint flakes.

Within the landscape surrounding Craggan standing stones have been identified at Tom Nan Carragh (HHER MHG6788, MHG6789, and MHG6790) and several possible burial cairns are known in the vicinity. This suggests that the Craggan cremation represents an element within a wider Neolithic ritual and funerary landscape. This find is a rare example of a likely single burial in this time period, making it an important example, enhancing understanding of Neolithic burial practices.

12.3 Late Bronze Age activity

A Late Bronze Age date (Phase 3) was obtained from a possible charred structural element or post identified within fire pit [106]. The fire pit was near Structure F, but due to the truncated nature of the features in this area it is uncertain that these features are related. The absence of other evidence for Bronze Age activity elsewhere on the site could indicate the settlement or structural activity relating to this period was of short duration.

12.4 Middle Iron Age settlement

During the Middle Iron Age (Phase 4) there is evidence of the landscape being occupied by a small

settlement comprising at least three roundhouses, Structures E, F, and G, and associated features. The roundhouses were all located within 50m of each other in the central northern area of the site, forming a discrete unenclosed settlement. Structure F was the earliest and the least well-preserved roundhouse. It was the smallest and could therefore have functioned as an 'outhouse' or 'workshop' such as those seen in and around settlement at Culduthel, Workshops 8, 18, and 22 (Hatherley & Murray 2021: 53). However, unlike Culduthel there is no evidence for craft activities being undertaken at Craggan during this period.

Structure E, to the southwest of Structure F, comprised a post ring with a porch at the west end, a segment of ring ditch which contained a stone surface, and three internal features. The function and use of the stone surface could not be identified but similar stone surfaces have been found at Kintore, where it has been suggested that the stones functioned as stands for equipment, possibly related to looms (Cook & Dunbar 2008: 333). Two radiocarbon dates obtained for this feature indicated Middle Iron Age use. Approximately 5m to the northeast of Structure E was a pit, [124], that contained an iron working furnace with a large amount of metalworking waste. The furnace was dated to the Middle Iron Age and is likely contemporary with roundhouse Structure E. Similar metalworking furnaces were found at Grantown Road, Forres, one of which was dated to 410–200 cal BC, a similar range as the Craggan furnace (Cook 2016: 4).

Structure G, represented by a segment of ring ditch and associated posthole, was very similar in size and shape to other Middle Iron Age roundhouse structures identified on the site and may therefore be another roundhouse. The radiocarbon dates from Structure G were contemporary with Structure E, suggesting that they were in use (or at least went out of use) at a similar time. This indicates that the settlement may have contracted significantly around the end of the Middle Iron Age.

Micromorphological analyses of the ring ditch fills for Structures E and G showed that as the ring ditches went out of use, they were infilled gradually, with some evidence for human activity in the general vicinity. There was then a period with no activity in the immediate vicinity during which they then fully silted up with more sterile material. This also suggests that the roundhouses were not deliberately demolished after they went out of use and may have continued to be discernible throughout the stages of decay, with the ring ditch remaining as a visible hollow for some time.

The micromorphological analyses also showed that the drift geology surrounding Structures E and G were significantly different from each other. This was also evident during excavation, as Structure G was cut into sand while Structure E was cut into sandy gravel. Across the entire site it was noted that the vast majority of features were dug in places where the natural subsoil was a compact sandy gravel and that areas of natural sand were not favoured for settlement. The areas of sand subsoil tended to be on lower-lying ground, more prone to waterlogging, or areas of undulating ground. In contrast, areas with sandy gravel subsoil were generally more even and on higher ground, and therefore more suitable for settlement. The natural geology and micro-topography of the site therefore likely played a significant role in the selection of settlement locations. Exceptions were Pit Group 1 (probably dating to the early prehistoric period) and Pit Group 2 (5th to 6th century AD) and some other isolated features that were located in lower lying areas.

12.5 Late Iron Age settlement

Radiocarbon dating suggests a gap in activity between the Middle Iron Age and Late Iron Age of at least 50 years, which could suggest a shift in settlement. The Late Iron Age settlement comprised three roundhouses, two of which were located in the northern half of the site, respecting the Middle Iron Age roundhouses while one was located near the River Spey, with evidence that this structure was used for grain processing. Micromorphological analysis (L Roy 2022) suggests that the ring ditches of Structures E and G continued to be infilled post-abandonment. Therefore, these Middle Iron Age structures may have been visible at the time of the Late Iron Age settlement and knowledge of them may have persisted. The Late Iron Age roundhouses were also structurally and in size similar to those in the Middle Iron Age, this could suggest that the building techniques were carried on from the

Middle Iron Age and reused in the Late Iron Age.

Within the Highland region a large range of other Middle Iron Age and Late Iron Age roundhouse settlements have been found, including Grantown Road, Forres; Birnie, Moray, and Seafield West and Culduthel, immediately south of Inverness. At Grantown Road, Forres the Middle Iron Age and Late Iron Age roundhouses measured between 5.8m and 12m in diameter (Cook 2016: 19). The Late Iron Age roundhouse structures, especially Structure 4 (ibid: 19), were very similar to Structure C at Craggan. At Birnie, Moray the roundhouses measured *c* 12m in diameter and were very well preserved, much larger than the features at Craggan. Birnie has been described as a likely 'key centre in the local area' (Hunter 2004: 1). At Seafield West (Cressey & Anderson 2011) 13 roundhouse structures were identified, including two with ring ditch segments but mostly post ring defined structures which measured between 7m and 9m in diameter. Similar finds were also identified at Seafield West including a quernstone, slag, and metal objects, however unlike Craggan, pottery was also found. At Culduthel (Hatherley & Murray 2021: 39) the workshops varied between 3.7m and 9m in diameter, whereas the houses varied from 9.7m to 12.5m in diameter. All the structures identified at Craggan fall within the diameter range of the workshops and are much smaller than the houses at Culduthel, but contain no material culture which would indicate they are used as workshops. Culduthel, Seafield West, Birnie, and Grantown Road are all settlements located in gradually undulating coastal plains and rich agricultural land, whereas Craggan is located within a narrower strath with mountainous terrain bordering either side. The location of Craggan in a more upland environment further from the rich coastal plains could explain the reason for the smaller size of the roundhouses and the smaller number of overall structures relating to each period. Craggan was likely a smaller rural agricultural settlement which used the River Spey and associated strath as a transport link to these richer and more extensive settlements.

The situation of Craggan in the landscape likely also influenced the roundhouse entrance location. The entrances to most of the roundhouses were on the east side, which was likely an adaptation to the local prevailing winds. It was noted during fieldwork that weather generally approached the site from the southwest due to the shape of the strath and the location of the hills along either side, meaning that the more sheltered location for an entrance would be to the northeast or east.

During the construction of the roundhouses the location was carefully chosen by the builders to utilise flatter, slightly elevated areas of the site. Structure C was located on its own near the river, on a small rise, perhaps indicating a deliberate placement away from the core of the settlement. It contained the largest cereal assemblages from the site, and three basal disc-shaped quernstones were recovered. The recovery of both a significant grain assemblage and quern fragments suggests that this was the location for processing grain, perhaps serving a function for the wider settlement. The structure's proximity to the river could be related to a need for a source of water for processing and preparing food.

The three quernstones in Structure C had clearly been intentionally placed in a straight line along the base of the ring ditch, which may have been towards the rear of the structure. Three small fragments of metal were also identified within this feature, a possible knife tip, nail, and sheet vessel metal. While these metal fragments most likely relate to causal losses or waste material, the three quernstones present an example of deliberate deposition. It is possible they were placed along the base of the ring ditch as convenient stepping stones or working surfaces, part of a functional arrangement related to the use of the structure, similar to the stone surfaces seen in Structure E and pit [072]. Structure A also contained a single quernstone within its ring ditch. This was an upper rotary quernstone, placed face down, suggesting a possible different deposition process to that represented in Structure C. However, both of these structures show that quernstones had been deliberately placed within ring ditches during the Late Iron Age. Other examples of this practice had been found at sites including Aldclune, Perth and Kinross (Hingley et al 1998: 452) and Birnie, near Elgin, Moray (F Hunter, pers comm), suggesting that this was a wider Late Iron Age phenomenon.

Structure D was well preserved and many of the postholes in this roundhouse still have visible postpipes, which suggest that, like the ring ditches of Structure E and G in the Middle Iron Age

settlement, the Late Iron Age roundhouses were left to decay in situ after the buildings went out of use rather than being demolished. Different theories have been proposed for the lifespan of a roundhouse. Cook & Dunbar (2008: 320) suggest that the likely time was perhaps between 15 and 30 years, based on their evidence from Kintore, with a longer lifespan achievable only if repairs were undertaken. At Castell Henllys, South Pembrokeshire, it has been suggested that the roundhouses stood for at least 30 years (Mytum & Meek 2020) and interestingly Harding (2023: 230) suggests that, depending on the method of repair, maintenance of the structures might not be easily observed in the truncated archaeological record. If the life spans of the houses at Craggan were around 30 years, then the Late Iron Age settlement probably went out of use by the end of the 3rd century AD at the latest.

12.6 Early medieval settlement

After a pause in settlement, the site was in use again around the end of the 3rd to 6th centuries AD. An isolated fire pit and a refuse pit, located to the south of previous settlement, indicates that activity was taking place during this time period.

From the 7th to the 11th century AD, more substantial activity was present, with what appears to be continuous settlement. The first evidence related to this period was Pit Group 2, located between Pit Group 1 and the Middle Iron Age and Late Iron Age settlement. Pit Group 2 included several fire pits, one of which could have been a rudimentary grain dryer, suggesting that grain processing was again occurring. Such activity was further substantiated in a nearby pit, [037], which contained a roughout for a millstone or large lower rotary quernstone, and also contained cereal likely derived from crop processing. At the same time that grain was being processed and quernstones were being manufactured on site, Structure B, which contained a large hearth, was in use. Evidence for grain processing and settlement has been found at early medieval sites such as Lair, Glenshee (Clarke 2019: 82; Strachan et al 2019: 45); however, the geographic location and the type of structure found at Lair are quite different to Craggan, as is Lair's upland environment. The structures at Lair were mainly turf-built with sunken floors and a hearth. These types of structure are unlikely to survive in an agricultural field or lowland environment, as at Craggan, and the best opportunity to identify them is through aerial photography. Possible sites have been identified in this way at Inchture, Perthshire, Inchcoonans, Balgarvie, Blairhall, Perthshire, and Leuchars, Fife (Noble & Evans 2022: 59). Investigation of such sites would allow more early medieval lowland settlements to be identified. A radiocarbon dating programme was also crucial for identifying the early medieval activity, as during excavation these features appeared indistinct from earlier, Iron Age, activity.

The most substantial evidence for metalworking at Craggan was also dated to the early medieval period and included a potential metalworking furnace, [337], and two pits that contained dumps of metalworking waste, including evidence for smelting and smithing. The metalworking was probably focussed on production and repair of everyday iron items and tools.

The settlement during the early medieval period was apparently quite limited in size, as Structure B is the only structure confidently attributed to this period. Further buildings could, however, have been formerly present but not surviving in the archaeological record, in particular if constructed of turf. The discovery of a rural settlement dating to the early medieval period is significant, as these types of sites are difficult to identify. Until recently, research in the North of Scotland has often focussed on high status sites such as hillfort settlements including Tap o'Noth, Craig Phadrig, royal settlements such as Barflat, Rhynie and coastal sites such as the promontory fort at Burghead (Noble & Evans 2022). The site at Craggan has no evidence of non-ferrous metalworking or any of the imported wares that would be present at a high status site, but is a rare opportunity to investigate and understand a more mundane rural agricultural settlement of the period. The source for raw material for iron is understudied in northern Scotland, but it is widely accepted that bog ore is frequently used (Hatherley & Murray 2021: 63). In the immediate landscape surrounding Craggan there are multiple areas of waterlogged ground that likely relate to palaeochannels, which could be the source for the bog ore and one factor that encouraged settlement and metalworking here.

A four post structure (Structure H) was also identified on site, which was likely an early medieval granary. The date of this feature could not be definitively proven, as one of two radiocarbon dated samples from this feature provided an Early Iron Age date. However, the interpretation of this structure as a granary is supported by a large macroplant assemblage, and the presence of a millstone roughout. Nearby pits with an early medieval date that also contained many macroplant remains would indicate that grain processing was occurring on-site during this time period, and therefore this granary feature is most likely early medieval in date.

There, however, have not been many early medieval four post granaries found, most features of this type being Iron Age in date. Two somewhat similar four post structures were identified during excavation at Grantown Road, Forres (Cook 2016: 12); these were dated to the Iron Age, between 350 cal BC and cal AD 30, slightly later than the Craggan Early Iron Age date. Another site with multiple four post structures was excavated at Kintore, Aberdeenshire (Cook & Dunbar 2008: 164), and a radiocarbon date obtained from one of these four post structures is very similar to the Early Iron Age date from Craggan.

Further afield, similar Early Iron Age four post structures have been discovered in England, near Reading (Brossler 2001) and at Danebury Hillfort in Hampshire (Cunliffe 2011: 94–5). These structures have been interpreted as specialist storage structures, located outside the main centre of settlement. The location of the four post structure at Craggan appears to be similar. The presence of a large quantity of burnt grain would suggest a grain storage feature that might have been burnt down or deliberately backfilled.

12.7 Medieval activity (11th to 13th centuries AD)

A large shallow pit, [092], with a flat stone surface likely formed a working surface of 11th to 13th century AD date. It is likely that this stone surface was once part of a larger structure, likely with a turf or earth-built structure covering it. It is rare to find such structures from this time period, and so this is an important addition to the archaeological record. Metalworking waste within the deposit surrounding the stones indicated that it had been used for craft processes, in the vicinity of metalworking activity.

13. CONCLUSIONS

At Craggan a significant multi-period landscape was identified with activity spanning from the Late Mesolithic to modern day. Mesolithic activity on site was limited, but it is likely that the River Spey, and the natural routeway of Strathspey, has played a significant role in attracting people to exploit and settle this landscape repeatedly. This was followed by Late Neolithic funerary activities likely as part of a wider ritual landscape. It was, however, during the Iron Age and the early medieval period that the site was at its height – seeing a shifting range of small-scale settlement.

Throughout these various iterations of settlement, there was no evidence for buildings being deliberately destroyed or backfilled. Instead, these structures appear to have gone out of use and been left to decay. New structures were often positioned nearby but respected the locations of the previous structures, which were probably still discernible as decayed buildings. This was a dynamic settlement, perhaps representing the Iron Age and early medieval community expanding and contracting over time. It is likely inhabitants reused this location, on multiple occasions, due to its raised topographical position in the foothills of the Cairngorms, its proximity to the routeways through the region and access to the natural resources in and around the River Spey. These same factors have led to the recent development of the Cairn Distillery, appropriately continuing the practice of grain processing evident here since at least the Iron Age. Craggan is now a new home for an ancient craft, demonstrating the continued pull of this site by the Cairngorms and the River Spey in the modern era.

14. ACKNOWLEDGEMENTS

All members of the excavation and post-excavation teams are thanked for their efforts. Fieldwork was managed by Mary Peteranna and Cathy MacIver. Lindsey Stirling and Orlene McIlfatrick prepared the illustrations, while the post-excavation team at AOC Archaeology undertook finds analyses, environmental reporting, and micromorphological analysis. Thanks are due to Gordon Cook of SUERC for the radiocarbon dating. Advice and comments were kindly provided by Cathy MacIver, Martin Cook, and Mike Roy. The project was overseen by Kirsty Cameron, archaeologist at the Highland Council Historic Environment Team, and was funded by Gordon and MacPhail.

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