New dates for enclosed sites in north-east Scotland: results of excavations by the Northern Picts project

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ABSTRACT

This article presents the results of a programme of investigation into the enclosed settlements/forts and promontory forts of north-east Scotland, undertaken as part of the Northern Picts project. Reconnaissance excavations are reported on for nine sites: Crathie Point and Durn Hill, northern Aberdeenshire (Banffshire); Barmkyn of North Keig, Hill of Keir, Hill of Christ's Kirk and Cnoc Cailliche (Wheedlemont), central Aberdeenshire; and Doune of Relugas, Knock of Alves and Wester Tulloch, Moray. Targeted excavation was undertaken at all examples and in the majority of cases produced a basic chronology for key phases of occupation/enclosure at the sites in question. Thirty-two new radiocarbon dates are presented, with a number of sites producing Iron Age dates, but a smaller number also revealing early medieval phases of occupation and use.

INTRODUCTION

One major lacuna in the archaeological record for 1st millennium AD Scotland is the dearth of settlement sites from the mainland and that has a major impact on addressing the social changes that occurred in this period (eg Wainwright 1955a; Wainwright 1955b; Ralston 1980; Ralston 1987; Alcock 1988; Shepherd 1993: 85; Ralston 1997; Alcock 2003: 27; Ralston 2004; RCAHMS 2007: 130; Driscoll 2011: 263; Noble et al 2013). In north-east Scotland, in the areas that became core regions of Pictland (Woolf 2006; Woolf 2007; Fraser 2009; Evans 2014), the settlement evidence post the end of the 2nd century AD is very sparse and this sparsity has constituted one of the major 'problems' of Pictish archaeology (eg Wainwright 1955a, Wainwright 1955b; Carver 2011). However, the situation has improved markedly in the last decade with new excavations in north-east Scotland revealing new site-types and producing a more robust chronology for Iron Age to early medieval enclosed and unenclosed settlement (eg cf Haselgrove et al 2001: 25, 86; Cook 2010; Cook 2011a, Cook 2011b; Cook 2013a, Cook 2013b; Noble et al 2013). This article builds on the recent progress, outlining the results of a series of excavations that have begun to flesh out even further the number of dated examples from this region. The results outlined help address the nature, chronology and social dynamics of a range of enclosures. The sites investigated, which are presented in local groups below, are: Crathie Point and Durn Hill in northern Aberdeenshire (former Banffshire); Barmkyn of North Keig, Hill of Keir, Hill of Christ's Kirk and Cnoc Cailliche in central Aberdeenshire; and Doune of Relugas, Knock of Alves and Wester Tulloch in Moray (Illus 1). Site selection was based on proximity to major sites investigated as part of the Northern Picts project, but a range of smaller enclosures were also targeted in order to test examples thought most likely to yield early medieval occupation evidence.

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ILLUS 1 The study area and sites targeted for excavation. (© The University of Aberdeen)

AIMS AND METHODS

The sites in question were excavated from 2014– 17. The project built on recommendations of the ScARF Iron Age and Medieval panels that recommended keyhole excavation to collect dating evidence for enclosures/forts to provide rapid assessment of the basic chronologies of site-types across a region (eg ScARF 2012a, ScARF 2012b). The ScARF Medieval panel also recommended the investigation of possible centres of consumption and power to assist in the understanding of the economic and social activities associated with such locations (ScARF 2012b). The approach adopted for the enclosed sites reported on here involved survey and desk-based assessment, followed by targeted excavation of key features to obtain dating material. Trenches were opened using standard archaeological methods and samples were retrieved for dating. All results were recorded using drawing and dGPS survey.

SITES INVESTIGATED

NORTHERN ABERDEENSHIRE (FORMER BANFFSHIRE)

Forts of any description are not particularly common in what is now northern Aberdeenshire, but in 2014 the two nearest to the findspot of the Gaulcross Pictish hoard (Noble et al 2016) were targeted for excavation to provide dating evidence. The first was on the coast at Crathie Point, and the second inland on Durn Hill.

Crathie Point (NGR: NJ 5483 6717, Canmore ID 17947)

Crathie Point is a promontory fort situated on a prominent peninsula of land c 1km west of Sandend village and bay on the Banffshire coast. Two earthen ramparts set some 50m apart cut across the neck of the promontory on the southwest. The inner, which stands up to 1.5m high and 7.5m thick, is flanked by ditches (each c 3m broad) to either side. The outer rampart has been heavily ploughed down, and where bestpreserved forms a low bank 7.5m in thickness and 0.3m in height. The inner rampart encloses an area of 1.25ha, but only c 0.47ha is usable space (Lock & Ralston 2017: SC2957). In 2006, a plane table survey was conducted which recorded the two ramparts and an artificial 'pond' between (Irving et al 2006: 18).

The 2014 work included the excavation of a trench from the edge of the inner rampart across the external ditch (IIlus 2) (Sveinbjarnarson & Noble 2014a). The inner rampart was identified and the upper part (104) excavated, which showed that it consisted of dumps of redeposited natural subsoil – a yellow clay in this case. Only the upper deposits of the outer ditch were excavated due to the extremely compact nature of the clay soils. From an upper fill (103) a charcoal lens was identified, a sample that produced an Early Iron Age date of 785–535 cal BC (95% probability; Beta-381814) (IIlus 3). The profile of the upper fills of the ditch indicates that (103) may have been part of a recut of the



ILLUS 2 Site plan and trench at Crathie Point. (© The University of Aberdeen)



ditch, suggesting some refurbishment of the fort; the sample may represent material freshly accumulating within the fill or may represent redeposited charcoal. The 'pond' proved to be a modern feature (under the bank, pieces of concrete and glass were identified). The finds suggest that the pond was dug sometime during the 20th century.

Durn Hill (NGR: NJ 5710 6383, Canmore ID 17973)

Durn Hill is located c 1.5km east of Fordyce on a low hill that dominates the surrounding area. The perimeter comprises three lines of enclosure, measuring overall c 280m north/south by 160m transversely (Illus 4). The outer and innermost lines of enclosure are shallow narrow trenches surviving on the surface as hollows up to 0.9m wide and 0.3m deep. The middle line is similar, but on the south-west side the boundary becomes more substantial, with a 3m-broad ditch flanked internally by a bank 4m thick and 0.6m high. An entrance causeway c 4.5m wide crosses the ditch in the centre of this sector, matching gaps in the inner and outer lines. Following the description drawn up for the RCAHMS Marginal Lands Survey in 1956 (Geddes 2013), the Ordnance Survey in 1961 suggested that the Durn Hill was an unfinished fort, comprising marker trenches and an unfinished ditch and rampart. This interpretation was confirmed by Feachem (1971: 27-8), but more recent scholarship has suggested these features are in fact the remains of palisades (eg RCAHMS 1997: 140-1; RCAHMS 2007: 103; Lock & Ralston 2017: SC2958). The 2014 work targeted the innermost enclosure with a trench $(1m \times 2m)$ across its line, quickly establishing that it was a palisade slot encircling the summit of the hill (Illus 5) (Sveinbjarnarson & Noble 2014b). The slot [220], c 0.4m wide and 0.6m deep, with stone packing and a clayey-silt fill (203), was flanked internally by what was probably a low bank of upcast (204). Charred material from the lower fill of the slot was subsequently radiocarbon dated to 760-410 cal BC (95% probability; Beta-381815), providing a terminus post quem for construction.



ILLUS 4 The Durn Hill enclosures. (© The University of Aberdeen)

CENTRAL ABERDEENSHIRE

In 2016–19, four enclosures in central Aberdeenshire were targeted as part of a programme of evaluation aimed at fleshing out the settlement chronology for this region and followed on from work at the high-status early medieval enclosure complex at Barflat, Rhynie (Noble et al 2013) and Murray Cook's work in the same region (Cook 2010, Cook 2011a, Cook 2011b, Cook 2013a, Cook 2013b). Two -Barmkyn of North Keig and Hill of Keir - were stone-walled and identified as possibly of early medieval date (RCAHMS 2007: 101; Cook 2013a: table 3), while the third was another supposed unfinished fort on Hill of Christ's Kirk. and the fourth a small fort on Cnoc Cailliche, Wheedlemont, near Rhynie.

Barmkyn of North Keig (NGR: NJ 5991 2004, Canmore ID 17701)

Barmkyn of North Keig is a bivallate stonewalled sub-circular enclosure or ring-fort lying on the summit of the Hill of Airlie. The heavily denuded inner wall encloses an oval area some 25-31m in diameter, whereas the outer enclosure surrounding it has a more substantial stone wall (5–8m thick and up to 1m high), with an internal diameter of c 45m (0.16ha) (Lock & Ralston 2017: SC2955). An entrance c 4m wide through the outer wall survives on the south-east. In early 2017, one trench was excavated across the outer wall and another in the interior, testing for the presence/absence of internal buildings/ occupation (Illus 6) (Sveinbjarnarson & Noble 2017a).



The trench in the interior $(2m \times 2m)$ revealed only a thin occupation or old ground surface layer (101) above natural subsoil. This layer had a concentration of large boulders embedded within it that could have been from a very denuded wall line (104). Charcoal (mixed - most likely from hearth waste) from (101) was dated to 370–170 cal BC (95% probability; SUERC-75120 2195). The trench $(3m \times 2m)$ across the outer wall was laid over the eastern terminal of the entrance on the south-east (Illus 6 and 7). The wall here survived up to 0.5m height and was composed of rounded stones of granite, sandstone and schist up to 0.5m in maximum dimensions, but generally smaller. The wall was a maximum of 3m thick at the entranceway and was located in the north-east corner of the trench, extending around 1m into the trench on the east and south sides. An orange-brown boulder clay was located across the trench and under the stone bank. Two features were located under the bank terminal. The first (1701) was a linear spread of charcoal running broadly parallel with the entrance. This was up to 0.08m thick and 0.4m wide. The deposit was a dark blackish-brown silt that was very charcoal rich. It lay directly on top of fire-reddened subsoil and terminated on its northern side just short of a post hole that was located at the inner bank edge. The post hole had a tan brown clayey silt fill (1703) with charcoal flecks throughout and measured 0.4m in diameter by 0.38m in depth. It was located in the northern baulk. Charcoal from (1701) and (1703) was dated to 390-200 cal BC and 360-110 cal BC respectively (95% probability; SUERC-87333 SUERC-87337). and The features here probably provide a terminus post quem for the wall or at least the wall collapse. In the absence of facing stones to mark the edge of the wall, it was impossible to determine whether these features related to some form of timberlacing within the wall core, or perhaps elements of the entranceway that had subsequently been covered by wall slump. In either of these scenarios, the dates may provide a close estimate for the construction of this part of the enclosing wall, though without larger-scale work this will remain uncertain.



ILLUS 6 Barmkyn of North Keig, site plan and trenches excavated. (© The University of Aberdeen)



ILLUS 7 Trench 2 at Barmkyn of North Keig. (© The University of Aberdeen)

Hill of Keir (NGR: NJ 8175 0832, Canmore ID 19341)

Hill of Keir is a stone-walled enclosure or ringfort enclosing an area of 0.14ha (RCAHMS 2007: 101) (Illus 8). There are various breaks in the wall on the north side, but these are likely to be modern, and the original entrance may have lain on the east. Two trenches were dug – one in the interior and one over the wall on the east (Sveinbjarnarson & Noble 2017a). Trench 1 $(2m \times 2m)$ in the interior revealed a thin layer of peat (101), *c* 0.02m thick, which on the northside trench sealed a possible denuded wall line (104), with an occupation horizon (102) abutting the wall line and extending to the south (Illus 9). A small sondage was dug through both, showing that the occupation horizon survived to only 0.02m in thickness and the wall line had been severely truncated. Charcoal from the occupation horizon (102) was dated to 660–800 cal AD (95% probability; SUERC-72293).

The trench $(6m \times 1m)$ across the enclosure wall on the east side demonstrated that it was composed of rounded and angular boulders (Illus 10). Within the trench the wall spread was up to 2.8m thick, with larger stones roughly demarcating both wall faces. The stones in the wall were mainly granite and up to 0.6m in maximum dimensions, though there are much larger boulders elsewhere along its line. About 1.5m of interior was revealed, with a charcoalrich clayey silt (201) abutting the inner wall face. Under the core of the wall was a mid-brown clayey silt (202) with occasional charcoal. It was up to



ILLUS 8 Hill of Keir, site plan and trenches excavated. (© The University of Aberdeen)



ILLUS 9 Mid-excavation photograph of the interior trench excavated at Hill of Keir showing the occupation horizon (102) abutting a possible wall-line (104). (© The University of Aberdeen)

0.1m thick and around 2m wide. This overlay a yellow silty clay (204) with patches of dark silt and charcoal that lay directly on the natural. Charcoal from deposit (202) was dated to 360– 110 cal BC (95% probability; SUERC-87339). The precise origin of this charcoal is uncertain, but it clearly provides a *terminus post quem* for the construction of the wall.

Hill of Christ's Kirk (NGR: NJ 6018 2742, Canmore ID 18141)

Three trenches encircling the top of the Hill of Christ's Kirk (Illus 11) were, like Durn Hill, first recorded as the marker trenches of an unfinished fort, though subsequent interpretation suggested that they were more likely to be palisade trenches (RCAHMS 2007: 103; Lock & Ralston 2017: SC2960). The innermost lies eccentrically within the interior of the outer two, leading the RCAHMS to suggest that the inner enclosure may date from a different period, and in size it resembles the areas enclosed by stonewalled enclosures such as Barmkyn of North Keig and Hill of Keir (RCAHMS 2007: 103). The inner enclosure at Hill of Christ's Kirk is circular, *c* 40m in diameter, and the two outer enclosures are oval, up to 80m and 105m across,



ILLUS 10 Hill of Keir – plan of Trench 2. (© The University of Aberdeen)

respectively. The palisade slots survive on the surface as slight depressions, up to 1.2m wide and 0.2m deep. The excavations involved a stripand-map trench $(5m \times 5m)$ in the interior of the innermost enclosure and small trenches across the three lines of palisade (Sveinbjarnarson & Noble 2017a). Trench 1 in the interior identified a thin deposit in the western part of the trench. This was identified as the possible floor layer of a structure (Illus 12). The possible floor layer (101) was a thin mid-brown loamy deposit that contained charcoal, a sample of which returned a date of 420-230 cal BC (95% probability; SUERC-72301). A possible post hole [103] lay in the south side of the trench, but was not excavated.

Trench 2 $(4m \times 1.5m)$ extended across the inner palisade line. The palisade slot was identified in the centre of the trench under a deposit of grey-brown sandy loam slope wash. The palisade cut [204] was *c* 0.3m wide and would have been *c* 0.3m deep (Illus 12). The fill (203) was a greyish-brown sand with charcoal,

a sample from which was dated to 410-210 cal BC (95% probability; SUERC-72304). Trench 3 $(5m \times 1.5m)$ was placed over the middle palisade line. Here the palisade slot had stone packing within the central fills (Illus 12), which comprised an upper mid-brown deposit of sand (302) and a lower greyish-brown sand with some gravel (305). Charcoal from the lower fill (305) was dated to 510–370 cal BC (95% probability; SUERC-72311). Trench 4 ($4m \times 1.5m$) extended over the outermost palisade. Here thicker hillwash layers, or slumped soil from an upcast bank (402, 403), were identified overlying the palisade slot. The palisade slot [406] was up to 0.55m wide, but narrowed to the base and contained two fills. The upper (404) was a midbrown sand, filling a groove apparently cut eccentrically into the top of the palisade trench, and may represent the fill of a recut created during the later dismantling of the palisade. The lower fill (405) was a brown sand with fine gravel (Illus 12). Charcoal from the lower fill (405) was dated to 770-430 cal BC (95% probability;



ILLUS 11 Hill of Christ's Kirk, site plan and trenches excavated. (© The University of Aberdeen)

SUERC-72312), which, like the dates from the other two palisade lines, provides a *terminus post quem* for the of palisade.

Cnoc Cailliche, Wheedlemont (NGR: NJ 4729 2605, Canmore ID 17215)

Excavations at the enclosed site on Cnoc Cailliche (also known as Wheedlemont) were carried out as part of the Rhynie Environs Archaeological Project in summer 2017 (Noble et al 2017). It lies just over 1km west of the village of Rhynie (Illus 13). Oval on plan, the enclosure appeared on the surface as a heavily robbed stone rampart/wall with an outer ditch and counterscarp bank, together enclosing an area of a little over 0.11ha (Lock & Ralston 2017).

Trench 1 was located on the south-west to investigate the line of the wall and the external ditch. The trench identified a complex stratigraphic sequence that includes, perhaps, multiple phases of enclosure construction. The earliest feature in this sequence consisted of a V-shaped cut [042], measuring 0.5m wide at the

top by 0.35m deep (Illus 14 and 15), that was filled at the base by a loose orange-brown clay silt with angular stone inclusions (041), and by a deposit of large angular stones with a turfy soil matrix (037) initially thought to be the base of a wall. Two Mesolithic dates (SUERC-77944 and SUERC-77945) from (041) suggest redeposited charcoal had been included in the makeup of these fills, most likely from turves cut from the site or nearby. On the interior of [042], and also cut into the subsoil, there was a small sub-round pit [038] measuring c 0.4m by 0.35m. Both [042] and [038] were sealed by (025), a level, loose brown clay silt deposit with small stone inclusions. To the rear of [042], and cut through the tail of (025) into the subsoil, was a second linear feature, with a roughly bowl-shaped profile [044] and measuring 1m wide by 0.5m deep (Illus 14 and 15). Its fill was a sandy silt deposit (004) containing frequent large angular stones. Charcoal from the matrix of (004) was dated to 370-190 cal BC (95% probability; SUERC-77929) and 370-200 cal BC (95% probability; SUERC-77928), providing terminus



ILLUS 12 Plan of interior trench and sections across the three palisade lines at Hill of Christ's Kirk. (© The University of Aberdeen)



ILLUS 13 Cnoc Cailliche, site plan and trenches excavated. (© The University of Aberdeen)

post quem dates for this feature and *terminus ante quems* for [042] and (025). Thus, a complex series of features were found upslope in Trench 1. It may be that [042] and [044] were successive phases of wall, but both appear of relatively slight construction, their thickness rather less than the more typical 3m thick walls found on many forts. Alternatively, it could be that both were components of the same rampart with later stone robbing confusing the situation. Or indeed both might represent palisade slots with (025) a very denuded bank/wall that separated two phases of timber enclosure. The complexity of this sequence will only be clarified by larger scale excavations.

The ditch [007] within Trench 1 was a minimum of 2.5m wide, bowl-shaped and c 0.8m deep (Illus 15). The basal fill was a brown clay silt (005), which mounted the inner scarp to overlie the tail of the deposit of loose

brown clay silt with small stone inclusions (025) that sealed the earliest phases of the perimeter. The upper fill of the ditch was a dark brown clay silt with small angular stones (006) and, like (005), was clearly derived from deposits upslope. To the west of the ditch was a spread of redeposited natural (019). This formed a low bank of upcast material running along the outer edge of the ditch, likely created during the excavation of the ditch. Over time, some of this had slumped back into the ditch and lay on the western edge of the ditch cut. Two Mesolithic dates were obtained for charcoal samples from the lower ditch fill (005) (SUERC-77933 and SUERC-77934). These dates are similar to those from (041) and likely to reflect the same source material, introduced into the fill from deposits upslope.

Trench 2 was located to explore the interior of the fort (Illus 16). Deposits on the top of



ILLUS 14 Remains of stone wall (004) with earlier cut below [044], Cnoc Cailliche. (© The University of Aberdeen)

the hill were relatively shallow, with bedrock encountered in places just below the root mat. Within the trench a number of possible occupation deposits/features were identified, but none were more than 0.1m deep. A spread of thin compact dark grey-black silt with occasional angular stones and charcoal inclusions (022) was identified across the western end of the trench and interpreted as a possible occupation horizon/floor layer. Charcoal from this layer was subsequently dated to 370–190 cal BC (95% probability; SUERC-77935) and 370–200 cal BC (95% probability; SUERC-77936). As (022) was cleaned, several cut features were identified within it or adjacent, including two sub-round pits measuring c 0.8m across and 0.1m deep [030] and [045]. Between these was an elongated shallow pit [043] measuring c 0.9m × by 0.5m, filled with black clay silt (040) with frequent charcoal inclusions and two large flat stones on



ILLUS 15 Sections through the ditch at Cnoc Cailliche. (© The University of Aberdeen)

the southern edge. This feature was interpreted as a possible hearth. Charcoal from (040) was dated to 410–210 cal BC (95% probability; SUERC-77939) and 370–200 cal BC (95% probability; SUERC-77943).

To the east of [043] was an arc of thin dark grey-black clay silt (046) with stone inclusions. It measured approximately 1m wide and curved north-east to south-west. A small slot was excavated through this at the southern end, demonstrating it had a depth of c 0.05m. It was interpreted as the base of a possible turf wall, perhaps enclosing the cut features and occupation areas to the west. At the southern end of this deposit, a sub-round cut feature [008] was identified as another possible pit. Outwith this area, a narrow elongated cut [033] was recorded, measuring 0.7m length by c 0.1m wide and aligned roughly north to south.

Trench 3 was situated to confirm the location of the entrance gap through the ditch and rampart. The excavation of this trench revealed the terminal of a c 1.5m wide rock-cut ditch [036], quarried into bedrock to a depth of 0.8m (Illus 15). At the base of this ditch was dark-brown clay silt with frequent small angular stones (035). Two radiocarbon dates were obtained from charcoal from (035), showing that the ditch incorporated charred material dating to 370–190 cal BC (95% probability; SUERC-77937) and 380–200 cal BC (95% probability; SUERC-77938). Overlying (035) was a light-brown clay silt with frequent



ILLUS 16 Plan of Trench 2 at Cnoc Cailliche. (© The University of Aberdeen)

small angular stones (034). The upper fill of the ditch (013) was a dark-brown clay silt with small occasional stone inclusions. To the south-west of the ditch cut was a spread of stones (012). This deposit of stones ranged in size and was within a friable dark-brown clay silt. They did not form a coherent structure.

MORAY

In Moray, the Northern Picts project has been evaluating a series of forts in the wider environs of Burghead to attempt to construct a regional chronological framework for the development of enclosed sites. Three examples are reported on here. Two are forts, one being on Knock of Alves, a hilltop commanding the coastal plain in the hinterland of Burghead, and the other the Doune of Relugas, which is set back into the hills in the valley of the River Findhorn. The third is another stone-walled enclosure at Wester Tulloch.

Doune of Relugas (NGR: NJ 0039 4955, Canmore ID 15755)

Doune of Relugas is a conical hill lying in a bend of the River Divie, near its confluence

with the River Findhorn, c 8km south of Forres. The summit is defined by a low rampart and encloses an area measuring c 48m east/west by 27m transversely (Illus 17) (Lock & Ralston 2017: SC2923). This enclosure has been severely impacted by a modern garden wall and revetment, which have used the fort wall as a foundation, and by a modern clearance cairn and shrubbery. There may have been an entrance on the east. On the north and west a lower rampart and ditch defend the most easily traversed slopes on these sides of the hill. The outer ditch is c 5m broad and 2m deep, with a rampart on its outer edge measuring 5m thick and 1.5m high. Vitrification is first mentioned here in a description drawn up at the end of the 18th century (Statistical Account of Scotland 1793, 8: 565), and vitrified stone in the inner rampart was identified subsequently during the RCAHMS Wartime Emergency Surveys (HES: MS36/275; HES: MS124/3) and again during the preparation of the RCAHMS Marginal Lands Survey in 1957 (HES: MS36/181; HES: DC31564; Feachem 1963: 139-40). During excavations by Sir Dick Lauder, 'Roman pottery' is said to have been found during excavations on the summit and five ring-headed pins survive from the site, one in Marischal Museum, University of Aberdeen, and four in the National Museums Scotland (Fanning 1983; Ralston & Inglis 1984: 25). Forestry work in 1975 revealed part of the rampart on the east side, along with charcoal and animal bones (Keillar 1975: 33; Shepherd & Tuckwell 1977: 23).

During the excavation, extensive landscaping was identified with deep stratigraphy in most trenches masking the underlying archaeology (Sveinbjarnarson & Noble 2016a). Due to the depth of deposits, it was only in Trench 1, the largest trench, that a proper sequence could be established. This trench $(4m \times 1m)$ was located in the northern part of the summit enclosure (Illus 18). The topsoil (100) was a black and organic-rich sandy silt up to 0.5m thick. Much of this may have been garden soil brought in during 19th-century landscaping. Below, in the north end of the trench, was a deposit of tightly packed stones in a red clay matrix (103), which was interpreted as the fort rampart; charcoal from the soil matrix returned a date of cal AD 890–1020 (95% probability; Poz-82327 1090). This date is relatively late compared to those



ILLUS 17 Plan of Doune of Relugas and excavated test-pits/trenches. (© The University of Aberdeen)



ILLUS 18 East-facing section of Trench 1 with photograph of rampart core (103) and lower occupation horizons, Doune of Relugas. (© The University of Aberdeen)

from deposits at the south end of the trench and therefore may represent a phase of refortification of the upper rampart in a period centred on the 10th century AD. An adjacent cut feature [110] - a large pit or section of a ditch – contained three fills (101, 102 and 104). Context (101), which probably represents the fill of a secondary recut, contained large fragments of stone rubble and sand, while (102) was a dark sand and (104) had the appearance of being decayed turf. Charcoal from context (102) returned a date of cal AD 1030–1210 (95% probability; Poz-82328).

At the south end of the trench, the sequence and stratigraphy was straightforward with a succession of layers (105, 106, 107, 108 and 109). These were 0.1–0.2m thick. The most recent, context (105), may have been later landscaping or levelling for it contained a high proportion of rubble. The layer below this (106) was a compact sandy silt best interpreted as an occupation horizon. Charcoal from (106) returned a date of cal AD 650–770 (95% probability; Poz-82414). Below this, (107) was a layer of sand that may represent a hiatus in occupation of the site, while (108) was another dark-blackish-brown sandy silt floor/occupation horizon, charcoal from which returned a date of cal 110 BC–AD 360 (95% probability; Poz-82329). By this stage, the trench was too deep to work in safely, but a small sondage in the south end showed that occupation horizons extend deeper (109). A larger and wider excavation would be needed to reach the lower deposits here, and in no part of the trench was natural identified.

Knock of Alves (NGR: NJ 1627 6295, Canmore ID 16214)

Knock of Alves is located just to the west of Elgin. The fort has been severely truncated in places, and the York Tower, a three-storey octagonal folly erected in 1827 to commemorate Prince Frederick, Duke of York and Albany, and an 1850s mausoleum to members of the Forteath family stand on the summit of the hill. The summit, termed here the upper citadel, encompasses an area of $c 38m \times 23m$ within a possible rampart (Illus 19), while a slightly lower area measuring $c 125m \times 23m$ (0.23ha) on the crest of the hill is defined by at least one further rampart, if not two (Lock & Ralston 2017: SC2932). Two more ramparts contour around the lower slopes of the hill on the east, north and west. Six trenches were excavated (Sveinbjarnarson & Noble 2016b). A trench $(4m \times 4m)$ on the summit identified four



ILLUS 19 Plan of Knock of Alves with trenches indicated. (© The University of Aberdeen)



ILLUS 20 Plan of Trench 1 within the interior of the upper citadel at Knock of Alves. (© The University of Aberdeen)

post holes ([108], [110], [103] and [105]) running in a linear arrangement, extending south-west to north-east, with a further possible post hole in the south-east corner of the trench [115], and all cut into the natural (Illus 20). In the southern half of the trench, large boulders were associated with a thin deposit of grey clayey silt (120) that may represent occupation towards the edge of the summit or slump from the rampart, but this deposit was left unexcavated. Post hole [105] was overlain by two large angular slabs of sandstone and two other stones lay a short distance to the south. Post hole [110], lay in the centre of the trench and had obvious packing stones and a black sand matrix with charcoal and a well-preserved cattle tooth. The tooth was dated to 400-200 cal BC (95% probability; SUERC-72299), providing a *terminus post quem* for this feature. Post hole [108] lay at the south-west corner of the trench and may have been associated with the rampart or an unrelated structure. Charcoal from the fill returned a date of 520–370 cal BC (95% probability; SUERC-72303), again representing a *terminus post quem* for this feature.

Trench 2, on the slope between the summit and the lower area on the crest of the hill, revealed only bedrock. More success was had with trenches over the outer ramparts towards the base of the hill on the north-west. Here, two trenches (3 and 5) verified both ramparts and ditches shown on the RCAHMS Marginal Lands Survey plan of 1957 (HES: DP044253). The inner rampart was very heavily truncated, but a shallow internal ditch c 2.5m in breadth was found in association (Illus 21). The ditch had three fills, with the upper two (302 and 301) in a recut. A sample from fill (302), a greyish

sand that contained significant quantities of charcoal, returned a date of cal AD 330–540 (95% probability; SUERC-72310). Beneath (302) lay a sterile orange-brown sand (303). The uppermost fill (301), a thick dark-brown



ILLUS 21 Section through the internal quarry ditch of the inner of the two outer ramparts on the north-west. (© The University of Aberdeen)

sand, capped the ditch and partly overlay the unexcavated rampart core. The outer rampart was heavily denuded and only a very truncated internal ditch or quarry scoop containing a single sterile fill was identified.

Wester Tulloch (NGR: NJ 0838 5602, Canmore ID 15766)

The monument at Wester Tulloch is a subcircular stone-walled enclosure located on a west-facing slope. It measures c 46m east/west by 43m transversely (Illus 22) within an outer wall predominantly made of rubble and 4.5–5m thick by c 0.4m in height. A roughly concentric stony bank encloses an area 20m in diameter within the interior.

Eleven test trenches were opened and excavated in order to ascertain occupation evidence and construction details of the enclosure (Sveinbjarnarson & Noble 2017b). The trenches were distributed over the whole monument and

where gorse cover allowed. The majority of them came down to natural subsoil under a thin root mat. Trench 3 abutted the inner bank and into the interior. This revealed the bank to consist largely of rounded stones with no obvious wall facing (Illus 23). A possible thin occupation spread was found on the inside of the bank. A sample of charcoal produced a date of 780-430 cal BC (95% probability; SUERC-75115). The only other datable deposits came from another possible thin occupation spread and a small post or stake hole in Trench 8 $(1m \times 1m)$. Below the topsoil a charcoal lens (801) was found across the trench. This was removed to reveal a small post hole [803], c 0.15m in diameter and 0.1m deep, that contained a charcoal-rich brown clayey sand fill (802). A sample of charcoal from (802) produced a date of 1010-830 cal BC (95% probability; SUERC-74986), and a sample from (801) a date of 930–800 cal BC (95% probability; SUERC-75119).



ILLUS 22 Plan of Wester Tulloch and excavated trenches. (© The University of Aberdeen)



ILLUS 23 Trench 3, Wester Tulloch. (© The University of Aberdeen)

DISCUSSION

The evidence outlined here adds important new data to our knowledge and understanding of the development and chronology of various enclosed sites and enclosure types in north-east Scotland, but any conclusions drawn must be set against the limitations imposed by small-scale sampling excavations. While ScARF recommends keyhole excavation to collect dating evidence for defended sites (ScARF 2012a), and the Historic Environment Scotland Policy Statement (2016: section 3.16) advocates minimal intervention. both laudable aims, it is the case that keyhole intervention may produce results that are not representative of either the wider site, or its morphological type. Apart from the problems of understanding the significance of stratigraphic contexts in short sections, the taphonomic contexts of the radiocarbon samples are not always easy to assess, while the small number of determinations available for each enclosure is itself a limiting factor. Hence the narratives we can glean from keyhole intervention are always going to be provisional until further investigation can be undertaken to confirm or refute the basic patterns and chronologies that have been recovered.

That said, the results from this programme of work generally conform to patterns identified elsewhere in Scotland. The dating outlined here suggests that the larger enclosed sites of northeast Scotland are likely to be earlier in the sequence. Durn Hill, at c 3.6ha overall, was the largest example investigated and returned an Early Iron Age date from charcoal from the inner palisade slot. The RCAHMS Donside survey (2007: 96-103) also suggested that larger sites were likely to be early, based on the relative sequence of successive perimeters visible on individual examples in eastern Scotland, as did excavation and dating of a number of Aberdeenshire sites by Cook (eg 2013a: 338–40). Excavation in neighbouring Angus suggests also that the larger hill-top enclosures tend to be early and date prior to 400 cal BC (eg Dunwell & Ralston 2008: 79). As it stands, as well as being potentially early

TABLE 1 Radiocarbon dates

Site	Lab No.	Material	Сотем	Radiocarbon Age (^{BP})	Calibrated date (95% confidence)
Crathie Point	Beta-381814	Charcoal	Charcoal from inner ditch upper fill (103)	2550 ± 30	810–550 cal _{BC}
Durn Hill	Beta-381815	Charcoal	Charcoal from inner palisade slot	2500 ± 30	790–530 cal _{BC}
Barmkyn of North Keig	SUERC-87333	Charcoal: Quercus sp	Charcoal from deposit (1701)	2239 ± 30	390–200 cal _{BC}
Barmkyn of North Keig	SUERC-75120	Charcoal: <i>Betula</i> sp	Charcoal from possible floor layer/old groundsurface (102)	2195 ± 33	370–170 cal _{BC}
Barmkyn of North Keig	SUERC-87337	Charcoal: Quercus sp	Charcoal from posthole fill (1703)	2165 ± 30	360–110 cal _{BC}
Hill of Keir	SUERC-87339	Charcoal: Corylus sp	Charcoal from under enclosure wall (203)	2166±30	360–110 cal _{BC}
Hill of Keir	SUERC-72293	Charcoal: Betula sp	Charcoal from possible floor (102)	1270 ± 27	cal AD 660–800
Hill of Christ's Kirk	SUERC-72301	Charcoal: Betula sp	Charcoal from possible floor (102)	2309 ± 30	420–230 cal _{BC}
Hill of Christ's Kirk	SUERC-72304	Charcoal: Alnus cf glutinosa	Inner palisade fill (203)	2280 ± 30	410–210 cal _{BC}
Hill of Christ's Kirk	SUERC-72311	Charcoal: <i>Betula</i> sp	Mid-palisade fill (305)	2345 ± 30	510–370 cal _{BC}
Hill of Christ's Kirk	SUERC-72312	Charcoal: Corylus avellana	Outer palisade fill (405)	2470 ± 27	770–430 cal _{BC}
Cnoc Cailliche	SUERC-77928	Charcoal: <i>Betula</i> sp	Wall matrix (004)	2201 ± 23	370–200 cal _{BC}
Cnoc Cailliche	SUERC-77929	Charcoal: Corylus avellana	Wall matrix (004)	2198 ± 26	370–190 cal _{BC}
Cnoc Cailliche	SUERC-77933	Charcoal: Pinus sp	Basal ditch fill (005)	5329 ± 29	4260–4050 cal _{BC}
Cnoc Cailliche	SUERC-77934	Charcoal: Pinus sp	Basal ditch fill (005)	5282 ± 28	4240–3990 cal _{BC}
Cnoc Cailliche	SUERC-77935	Charcoal: Corylus avellana	Floor layer (022)	2199 ± 26	370–190 cal _{BC}
Cnoc Cailliche	SUERC-77936	Charcoal: Betula sp	Floor layer (022)	2210 ± 26	370–200 cal _{BC}
Cnoc Cailliche	SUERC-77937	Charcoal: <i>Betula</i> sp	Basal ditch fill (035)	2192 ± 26	370–190 cal _{BC}
Cnoc Cailliche	SUERC-77938	Charcoal: Corylus avellana	Basal ditch fill (035)	2230 ± 23	380–200 cal _{BC}
Cnoc Cailliche	SUERC-77939	Charcoal: <i>Betula</i> sp	Possible hearth fill (040)	2272 ± 26	410–210 cal _{BC}
Cnoc Cailliche	SUERC-77943	Charcoal: Betula sp	Possible hearth fill (040)	2214 ± 26	370–200 cal _{BC}
Cnoc Cailliche	SUERC-77944	Charcoal: Pinus sp	Charcoal within wall slot (041)	5380 ± 28	4340-4070 cal _{BC}

	(cont)
	dates
TABLE 1	Radiocarbon

Site	Lab No.	Material	Context	Radiocarbon Age (BP)	Calibrated date (95% confidence)
Cnoc Cailliche	SUERC-77945	Charcoal: Pinus sp	Charcoal within wall slot (041)	5405 ± 29	4340–4170 cal _{BC}
Doune of Relugas	Poz-82329	Charcoal: Corylus avellana	Occupation horizon: context 108	2165 ± 30	360–110 cal _{BC}
Doune of Relugas	Poz-82414	Charcoal: <i>Corylus avellana</i> Charcoal one season of growth	Occupation horizon: context 106	1325 ± 30	cal AD 650–770
Doune of Relugas	Poz-82327	Charcoal: Betula	Re-fortification? Rampart: context 103	1090 ± 30	cal AD 890–1020
Doune of Relugas	Poz-82328	Charcoal: Corylus avellana roundwood 8 rings	Fill of cut feature: context 104	900±30	cal AD 1030–1210
Knock of Alves	SUERC-72303	Charcoal: Salix sp	Posthole [108]	2354 ± 30	520–370 cal _{BC}
Knock of Alves	SUERC-72299	Animal tooth: bos sp	Posthole [110]	2251 ± 30	400–200 cal _{BC}
Knock of Alves	SUERC-72310	Charcoal: Alnus cf glutinosa	Ditch fill (302)	1643 ± 30	cal AD 330–540
Wester Tulloch	SUERC-74986	Charcoal: Corylus cf avellana	Context 802; TP8	2775±33	1010–830 cal _{BC}
Wester Tulloch	SUERC-75119	Charcoal: Corylus cf avellana	Context 801; TP8	2723±33	930–800 cal _{BC}
Wester Tulloch	SUERC-75115	Charcoal: <i>Corylus</i> cf avellana	Context 302; TP3	2480 ± 35	780–430 cal _{BC}



ILLUS 24 Comparative plan of Doune of Relugas, Knock of Alves and Mither Tap. (© The University of Aberdeen)

in the sequence, Durn Hill is an exceptionally well-preserved fort in north-east Scotland with much of both inner and outer palisades traceable on the surface. A middle palisade line is also present, which was elaborated on the southwest side near the entrance by a short section of rampart and ditch. The focus on creating an elaborate entranceway and the relatively slight nature of the palisade trenches suggests a site constructed as much for show as for defence (cf Cunliffe 2005: 30–1; Dunwell & Ralston 2008: 82). A similar emphasis on elaborate entranceways can probably be found in association with other slight defences at large enclosures such as the outer fort at Dunnideer and the enclosure at Knockargety Hill, where the ramparts to either side of the entrances are larger than elsewhere (RCAHMS 2007: 100). In terms of size and date, it is also interesting to note that the outer palisaded enclosure at Hill of Christ's Kirk, while much more modest than Durn Hill, produced the earliest of the dates from the three lines, with the middle and inner producing progressively younger dates (Table 1), but all dating to the Iron Age with no indication of later activity.

The date from Crathie Point may suggest that relatively modest promontory forts were also in use in the Early Iron Age, but the context of the date should invite particular caution with high potential for redeposition of earlier material in an upper ditch fill. Both Iron Age and early medieval promontory forts are known in the Moray Firth and east coast regions, but again the larger examples are perhaps more likely to be early (eg Greig 1970; Greig 1971; Ralston 1980; Ralston 1987; Ralston 2004).

An increasing focus on forts with larger ramparts, but enclosing smaller areas from c 400 cal BC onwards has been noted in other studies (eg Cook 2013a: 344) and can also be identified in the dataset reported here. Confirmed occupation and construction of a walled and ditched enclosure has been confirmed for the fort at Cnoc Cailliche in the period c 400–200 cal BC. The form of Cnoc Cailliche, with a robust ditch and rampart enclosing a modest interior, seems very different in form and character to sites such as Durn Hill.

Occupation from 400-100 cal BC was also documented at Doune of Relugas, Knock of Alves and Barmkyn of North Keig, though whether any of the latter dated occupation horizons necessarily relate to enclosing elements will only be refuted or confirmed by further work. In this respect, the dates from Barmkyn of North Keig are likely to be the most secure given that they come from what appear to be timberwork incorporated into the core of the wall. The date from the foundation trench of the smallest palisaded enclosure and associated occupation in the interior settlement at Hill of Christ's Kirk appears also to fall within the period c 400-200 cal BC. The size and character of enclosures such as Barmkyn of North Keig, Cnoc Cailliche and Hill of Christ's Kirk fits more comfortably with the interpretation of these as enclosed settlements of some kind, an interpretation supported by the presence of possible floor layers of denuded structures within their interiors. Within the dataset there is no evidence for the construction or occupation of enclosed sites in the last centuries cal BC or early centuries AD. Outwith this current project there are enclosed sites in the study area that may have seen episodes of construction or refortification in this period – such as Cullykhan and Green Cairn, both Aberdeenshire – though the relevant dates have very large errors and the full reports of each remain unpublished (Greig 1970; Wedderburn 1973). Gentles' archaeomagnetic dating at Tap o' Noth, Aberdeenshire, suggested destruction in the last centuries cal BC (Gentles 1993: 20), but recent work by the Northern Picts project at Tap o' Noth may refine the dating sequence for this site.

Perhaps the most important results of the dating project outlined here are the dates for early medieval occupation, particularly as early medieval enclosed sites and settlements of any kind are so rare compared to those known from the Iron Age (Cook 2013a; Ralston 2004; Driscoll 2011: 264; Noble et al 2013). Excavations at the Doune of Relugas show a sequence of activity that spans the late 1st millennium AD and into the early 2nd millennium AD and include a date from a rampart core that suggests fortification or refortification in the late 1st millennium AD. Charcoal from a probable recut of the internal quarry ditch of one of the outer ramparts at Knock of Alves suggests activity sometime in the period from the later 4th to early 6th century AD; and perhaps refortification of an earlier Iron Age site.

The early medieval dates from Doune of Relugas are perhaps not surprising. Over two decades ago Shepherd (1993: 85) proposed on morphological grounds that this fort was likely to be an early medieval site, and the presence of five ring-headed pins also suggested early medieval occupation (Fanning 1983; catalogue nos 14, 43, 47 and 48; Ralston & Inglis 1984: 25). The current dating suggests that the early medieval defences were constructed on top of an earlier Iron Age site, and it seems likely that the Iron Age occupation was also enclosed, though more work would be needed to conclusively show that to be the case. Other major early medieval enclosures in Pictland also utilised the remains of Iron Age defences, such as Craig Phadrig, Inverness (Fig. 1), where finds of E-ware and a fragment of a mould for an escutcheon from a hanging bowl, plus a radiocarbon date from an occupation layer, all reveal an early medieval phase to the use of the fort (Small & Cottam 1972). Noticeably at Craig Phadrig, there was also tentative evidence for the reconstruction of the lower rampart during the fort's secondary historic-period phase of use (Small & Cottam 1972; Cook 2010), and recent work has confirmed that the early medieval phase of use included the construction of a palisade with a *terminus post quem* of the 5th–6th century AD that refortified the Iron Age oblong fort on the summit (Peteranna & Birch 2018).

At Doune of Relugas, the character of the site, with a relatively modest area enclosed by the upper rampart, and an additional rampart lower down the slope, invites comparison with a number of examples that have in the past been classified as 'nuclear forts', a type first proposed and explored by Stevenson (1949). In terms of numbers, only a handful of forts that conform to this definition (the definition of which and existence of which are debated - eg Lane & Campbell 2000: 93-4) have been radiocarbon dated, and the identification of the majority is based on their surface morphology (Feachem 1955; Ralston 2004). The most extensively investigated examples that broadly conform to Stevenson's definition in Pictland are Dundurn in Perthshire and Clatchard Craig in Fife (Close-Brooks 1986; Alcock et al 1989), though in both cases the available radiocarbon dates for the enclosing elements are limited in number. In north-east Scotland, only the Mither Tap, Aberdeenshire, conforms to the hierarchical layout of Stevenson's nuclear type and has long been suspected to be a Pictish stronghold (Dobbs 1949; Feachem 1955: 76; RCAHMS 2007: 105-7). Small-scale excavations conducted as part of path improvement by Forestry Commission Scotland here confirmed occupation in the 1st millennium AD (Atkinson 2007), but again the defences remain to be dated, though recent work by the University of Aberdeen may provide a firm chronology.

Mither Tap has two ramparts focused around a granitic tor, defining an upper and lower citadel. The upper citadel at Mither Tap encloses an area of similar dimensions to the upper enclosure

at Doune of Relugas (Illus 24), albeit much of the area at Mither Tap is severely limited by the presence of the summit tor. The total area enclosed by the two sites would have also been similar when the lower ramparts are accounted for. However, it seems likely that there were various phases of rampart construction at Doune of Relugas and it remains to be seen to what extent the inner and outer enclosures were ever a unitary scheme. At Doune of Relugas, the earliest 1st millennium AD occupation layer was dated to the 7th-8th century AD, but a sample from the rampart core (103) was dated to a period centred on the 10th century AD. It seems likely that it relates to a refortification of an original Iron Age and perhaps earlier Pictish wall or rampart enclosing the summit, but again larger-scale work needs to be undertaken to fully clarify the sequence. As well as 1st millennium AD activity, there was also probably a phase of occupation in the 11th-12th centuries AD, represented by the date from the cut feature at the rear of the summit rampart.

At Knock of Alves, the form of the hill and its multiple ramparts at different positions on the hillslopes again raise the possibility of a citadel within a series of outer enclosures, though like Doune of Relugas, it seems likely that any early medieval defences reused an Iron Age fort. The current work certainly confirmed Iron Age occupation on the summit. The summit area is $c 38m \times 23m$ – smaller than that at Doune of Relugas – but the lower ramparts at Knock of Alves enclose a larger area.

The dating of the smallest enclosed sites reported on here is perhaps the least satisfying and it has proved difficult to definitively date the stone-walled enclosures targeted. The dates from Barmkyn of North Keig provide reasonably convincing evidence that this site at least is Iron Age, but equally, an early medieval phase cannot be ruled out. Though the features under the wall may be part of the wall, in reality they only give a *terminus post quem* date for its construction. Most of the interventions at the stone-walled enclosures were limited by the keyhole strategy adopted, and it is difficult to escape the conclusion that larger strip-and-map strategies would have a greater chance of identifying datable deposits that definitively relate to the structural components of the enclosures and their occupation. Hence the dating of these small enclosed sites of eastern Scotland is difficult to gauge. Murray Cook's recent work suggested that at least some of the smaller enclosures of northeast Scotland may be early medieval in date, such as the stone-walled and ditched enclosure at Maiden Castle, Aberdeenshire (Cook 2011a), but dating of similar sites in Perthshire has produced a more mixed bag. The most recently excavated have returned Iron Age dates (eg Strachan 2013), though evidence of early medieval activity has also been recorded (eg Taylor 1990; Hingley et al 1997; the SERF project results are also eagerly awaited).

The results of dating from Maiden Castle and from Cairnmore, also in Aberdeenshire, led Cook to extrapolate early medieval dates for a series of small enclosed sites across Donside (2013a). These included Cnoc Cailliche, Barmkyn of North Keig and Hill of Keir. The excavations at Cnoc Cailliche have conclusively shown that this was an Iron Age fort, while the results from Barmkyn of North Keig also suggest that this site is Iron Age. Wester Tulloch shares a similar morphology to Barmkyn of North Keig, but the dating evidence is inconclusive. The results from Hill of Keir suggest an Iron Age phase to the site, though whether the wall was constructed then or later is uncertain - the date comes from beneath it and provides only a terminus post quem. Nevertheless, the date from deposits within the interior suggests some form of early medieval activity, but again the character of this activity would require further work to address more fully. Given the uncertainties and variety of dates obtained for settlement at these smaller ring-forts, we cannot be certain of either their date or social status, or indeed whether they are a distinctive and typological group at all (contra RCAHMS 2007: 101; Cook 2013a: table 3).

CONCLUSIONS

The series of enclosure investigations reported on here has returned dates from a range of sites, with the largest enclosed example at Durn Hill likely to date to the Early Iron Age. Iron Age occupation was also confirmed at Crathie Point, the palisaded sites at Hill of Christ's Kirk, Cnoc Cailliche, Barmkyn of North Keig, Knock of Alves and Doune of Relugas. Early medieval phases of fortification or reuse were identified at Knock of Alves and Doune of Relugas. The character and dating of the stone-walled enclosures remains less certain. In terms of the 1st millennium AD, the new dates demonstrate that fort defences were created into the late 1st millennium AD and may have continued to be occupied and used in the early 2nd millennium AD (contra Driscoll 1998: 169; Ralston & Armit 2003: 225; Cook 2013a: 85). The dating outlined here adds a number of new early medieval enclosures and settlements to a distribution that has only begun to be fleshed out in recent years. The date from Hill of Keir shows some sort of occupation of small stonewalled enclosed sites in Aberdeenshire beyond the 6th century AD, with the lack of examples dating from the later 1st millennium AD in northeast Scotland prompting Cook to suggest major social change at that time (Cook 2011a: 219; Cook 2013a: 345). The addition of new early medieval sites or at least the demonstration of early medieval reoccupation of Iron Age sites is a particular success of the current dating project, contrasting with other larger-scale programmes of investigation elsewhere (eg Dunwell & Ralston 2008: 88-9; Haselgrove 2009).

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