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Survey and excavation at an Iron Age enclosure complex on Turin Hill and environs

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ABSTRACT

This paper presents the results of a programme of survey and evaluative excavation at a complex of five enclosures on Turin Hill in Angus, Scotland. This includes one large bivallate hillfort, an oblong fort and three smaller duns. The aim of the investigation was to re-map the surviving archaeological features and clarify the chronology of the sites. Geophysical survey was also undertaken and clarified various aspects of the enclosures on the hill, revealing a dense concentration of features within the interior of the large bivallate hillfort. Keyhole excavation was undertaken with basic chronological information being obtained for four out of five of the enclosures and dating samples from one other dun on the same ridge at Rob's Reed. All the samples produced dates falling in the Iron Age and importantly, despite their location overlooking the rich assemblage of early medieval sculpture at Aberlemno, there was no definitive indication of early medieval activity or settlement at Turin Hill or its immediate environs. Evaluation of the rampart of the large bivallate hillfort produced an Early Iron Age date, and as such, may represent one of the few dated forts from this time period presently known in Scotland.

INTRODUCTION

At the summit of Turin Hill in Angus, Scotland, a concentration of up to five enclosures, both hillforts and duns (small, unroofed stone-walled or embanked enclosures surrounding a settlement or activity), form one of the most remarkable sequences of enclosure building in the country (Illus 1 and 2). The earliest identifiable remains consist of a large bivallate hillfort. This is overlain by an oblong fort with three smaller duns lying along the summit. Despite the potential significance of the hill, there have been few archaeological investigations and no recorded excavations prior to those undertaken below. The 1st (1861–5) and 2nd (1901–3) edition Ordnance Survey maps record only the smaller hillfort and the central dun, with Christison (1899: 97) and Feachem (1955a: 74) producing plans of the entire complex. However, it was not until the work of Alexander and Ralston (1999) that a comprehensive assessment of the visible earthworks on the hill was completed. They recorded the five monuments and a series of potential hut platforms. While this helped to clarify the relative chronology of the sites, the absolute chronology remained outstanding. The later duns have received particular attention with scholars such as Fraser (2002: 58) and Driscoll (2011) tentatively suggesting that these could hint at an important early medieval settlement in the area, complementing the concentration of impressive Pictish Class 1 monuments and cross slabs located at Aberlemno, 2km to the north. While Alexander and Ralston (1999: 46) note that these forts could date to either the Iron Age or early medieval period, they suggest that if the duns were early medieval, then the presence of three of them on top of a major hillfort, located in the heart of the (minor) Pictish kingdom of Strathmore, invites speculation as to the function of the site. Indeed, Driscoll (1998a: 51) tentatively suggests Turin Hill could have been an important early medieval centre, suggesting that the Pictish cross slabs at Aberlemno may reflect an established tradition of religious patronage,

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Illus 1 Turin Hill, Angus, looking south-east. (© James O'Driscoll and Gordon Noble)

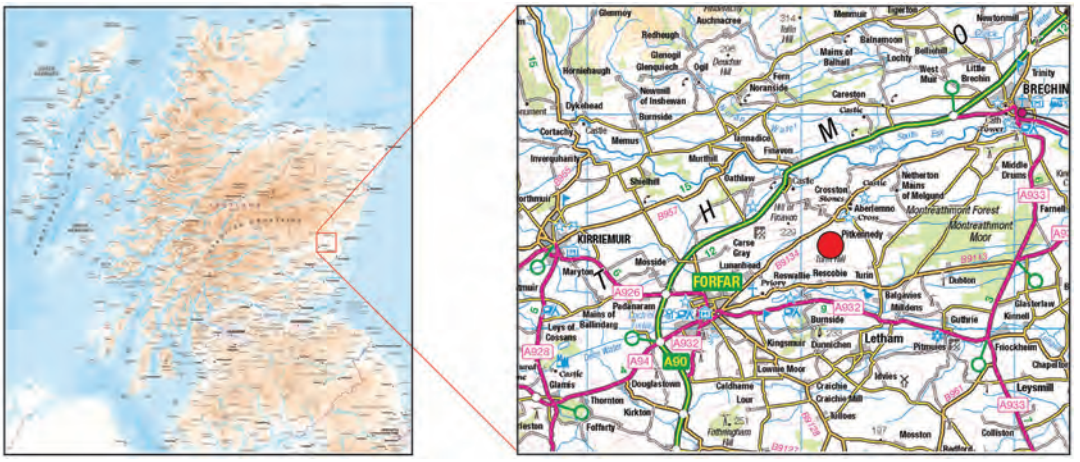
with the thane responsible for this patronage possibly being based on Turin Hill. However, a more recent assessment of the earthworks on the hill by Dunwell and Ralston (2008: 70–2) suggest that the duns were probably not built before the early centuries AD.

Turin Hill presented an excellent case study for the evolution of a hilltop through time, with targeted survey and excavation able to produce an outline chronology for this group of hillforts and duns. This article outlines the results of University of Aberdeen fieldwork at Turin Hill, which encompassed geophysical and photogrammetric survey and evaluative excavation to retrieve dating samples from four of the five enclosures on Turin Hill and from the dun of Rob's Reed situated on the same ridge, but 2.3km to the south-west. The fieldwork has produced the first radiocarbon dating for the complex of monuments and has added important detail on the character and dating of these sites.

TURIN HILL

The complex of fortifications on Turin Hill (NGR: NO 514 535, Canmore ID: 34899) comprises two hillforts and three duns (small stone-walled enclosures) located at the north-eastern edge of an of Old Red Sandstone ridge. The site lies approximately 6km to the north-east of the town of Forfar, with the summit overlooking Rescobie Loch to the south. The hill itself stands out in the local landscape, its southern limits defined by a series of distinctive craggy stepped terraces, in contrast with the more gentle northern approach.

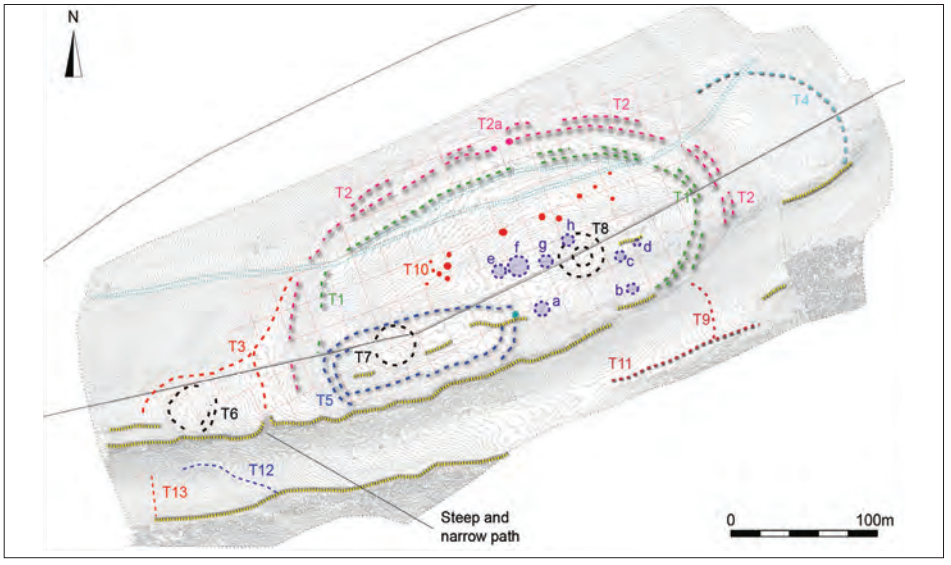
In 2018, a series of topographical (Illus 3 and 4) and geophysical surveys (Illus 5 and 6), with targeted excavation of key features, was undertaken to address the chronology and development of the forts and enclosures on Turin Hill. Drone derived photogrammetric survey (methods outlined in O'Driscoll 2018) was used to accurately map surface features, creating a Digital Surface Model covering an area of



ILLUS 2 Location of Turin Hill and Rob's Reed Fort, Angus, Scotland. (© James O'Driscoll and Gordon Noble)

27.41ha at a resolution of 226 points per m^3 (Illus 3 and 4). Gradiometry survey, with Scheduled Monument Consent, was then undertaken over an area of 4.88ha, incorporating the two hillforts and three duns at a resolution of 0.5m traverse and 0.125m sample intervals (Illus 5 and 6). The results of these surveys confirmed the main features identified by Alexander and Ralston (1999) and revealed a considerable number of new features that help to clarify the character of this complex of enclosures. Following this, Scheduled Monument Consent was obtained from Historic Environment Scotland to open five targeted trenches in order to address the chronology of these monuments and to better understand their relative dating and character. These were excavated on 4–8 June 2018 and were carried out by three staff and seven students.

ILLUS 3 Photogrammetry derived hillshade model of Turin Hill. (© James O'Driscoll and Gordon Noble)

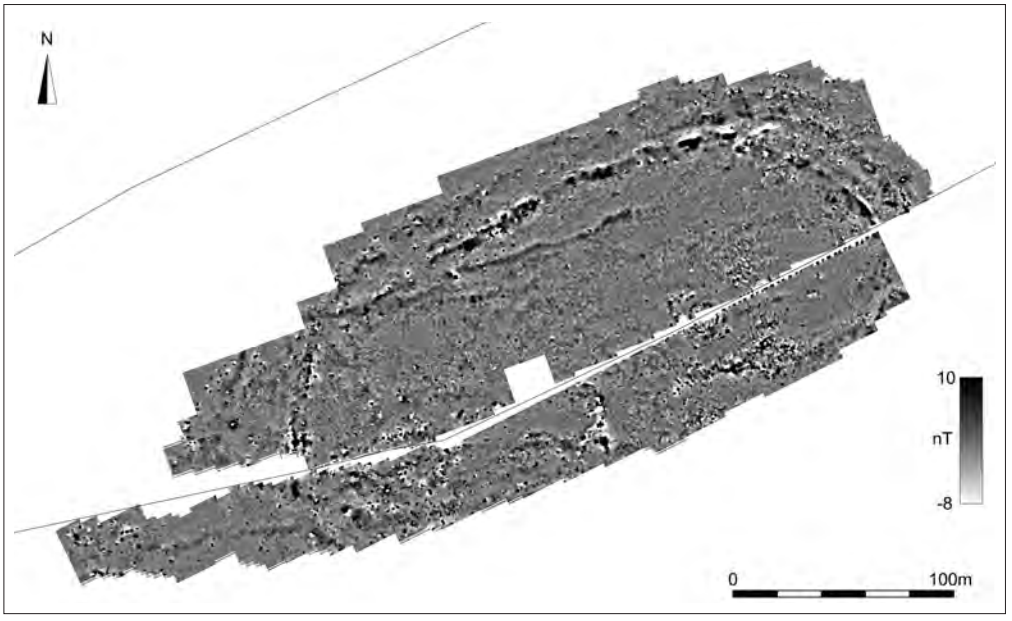


ILLUS 4 Interpretation of the photogrammetry survey at Turin Hill with individual enclosing elements and other archaeological feature transcribed and differentiated by colour and number. (© James O'Driscoll and Gordon Noble)

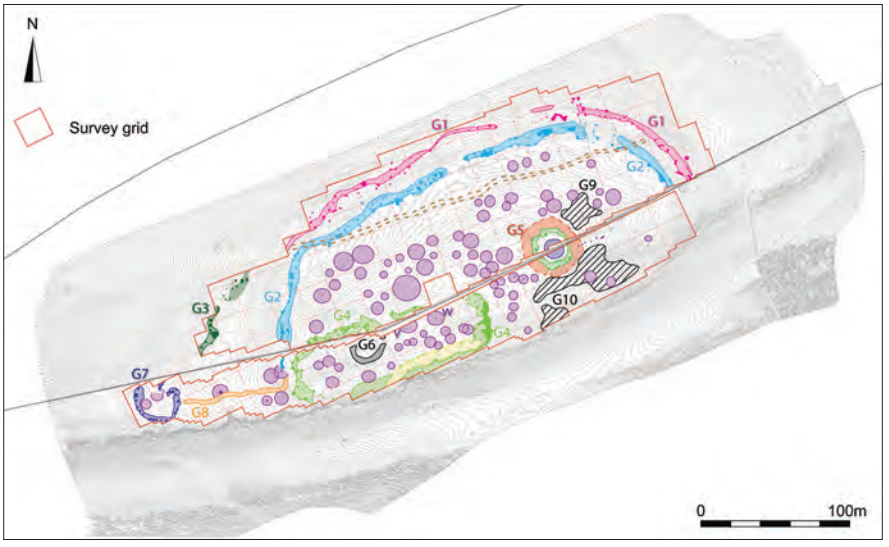
THE LARGER HILLFORT

The largest of the forts is bivallate, the enclosing elements cutting off the northern approach to the summit, with the distinctive terraced crags to the south forming a natural defence (Illus 1). It covers an area of 4.68ha, though only encloses approximately 2.91ha due to the widely spaced set of ramparts, which have largely been reduced to banks, protecting the northern approach. The inner bank of the hillfort (T1) is strategically positioned at the break of slope, which creates an imposing outline when viewed outside the fort from downslope (Illus 4). It ranges from 6.6m to 9.2m in thickness, and 0.21m high on the interior side but up to 2.3m high on the external side. In some instances, particularly to the north-east and east, there appears to be a linear depression at the crest of the bank which could represent a palisade slot or possibly a later stone robbing trench. About 12m to 15m outside the inner bank, a second line of enclosure comprises a bank 6.9m to 4.4m thick and up to 2.1m high on its external side (T2). Similar to the inner example, due to the significant slope, the bank appears much larger from the exterior. In places, the inner and outer faces of the rampart appear to survive as low earthworks about 3.35m apart, implying the intervening core has been subject to more severe robbing. Geophysical survey (Illus 5) shows both banks of the hillfort as a series of mostly positive magnetic readings intermixed with zones of uniform mid-range readings (G1–G3). The latter probably reflects the incorporation of large amounts of sandstone, which is magnetically quiet, while the positive readings might reflect some form of wooden elements, such as a palisade or timber-lacing being incorporated into the enclosing elements. This is further supported in places, where high readings (some as high as 86nT) on the crest of the inner bank, as well as the inner and outer edge of the bank on the western side of the fort, suggest wooden elements that have been destroyed by fire, though this remains to be confirmed by excavation. Most wooden features become visible in gradiometry surveys because they were burnt down, with this process significantly changing and enhancing the magnetic field of the material in proximity to the burning event.

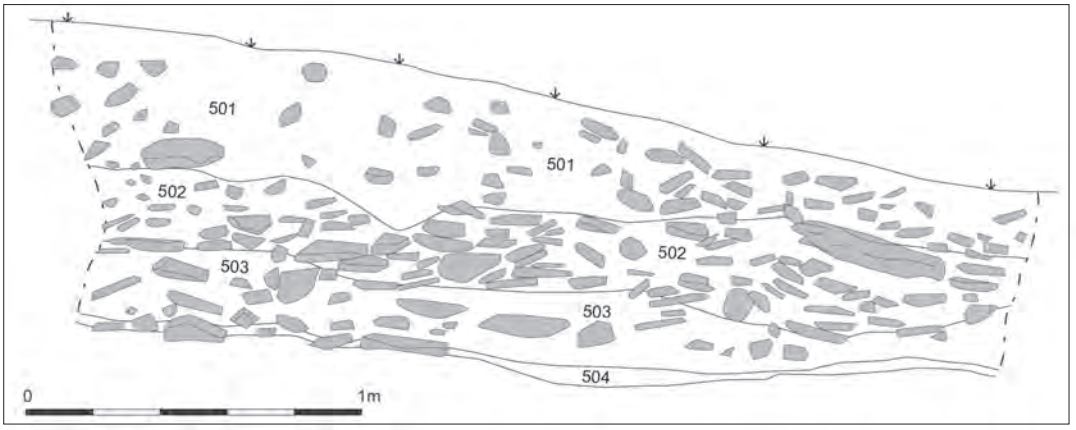
A possible entrance to the hillfort at the north (T2a) comprises a corresponding break in both the inner and outer enclosing elements, as well



ILLUS 5 Gradiometry survey results at Turin Hill. (© James O'Driscoll and Gordon Noble)



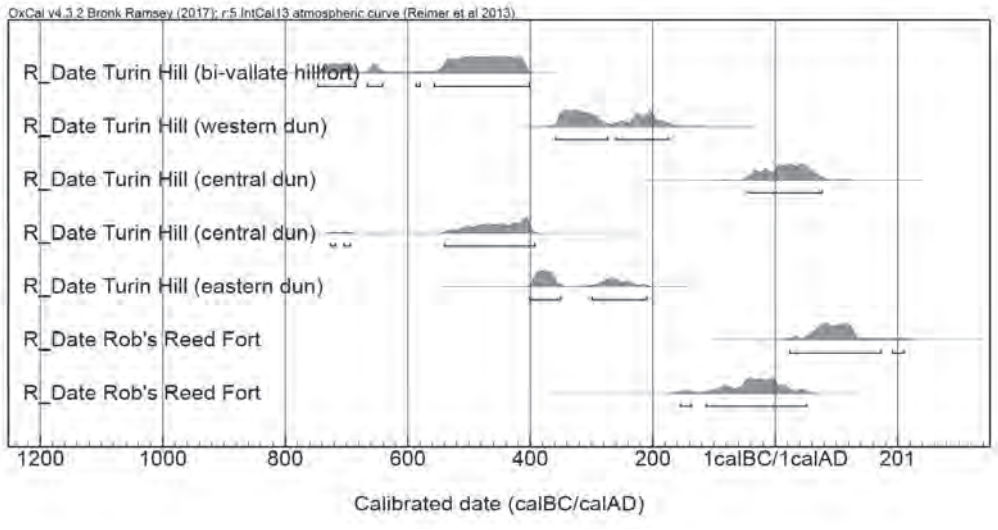
ILLUS 6 Interpretation of gradiometry survey results at Turin Hill, with anomalies of potential archaeological origin transcribed and differentiated by colour and number. (© James O'Driscoll and Gordon Noble)



Illus 7 Eastern facing section of Trench 5 at Turin Hill showing stratigraphy of the levelled bank of larger hillfort. (© James O'Driscoll and Gordon Noble)

as two notable mounds defining the terminals of the outer bank, both of which are approximately 4.5m in diameter. These create an entrance through the outer bank that is up to 5.7m wide, with the entrance through the inner bank being around 4.5m wide. There seems to be no obvious elaboration to this entrance, though two large anomalies, possibly postholes, at the terminals of the outer enclosure may suggest the hillfort was protected by a stout wooden gate. There are other breaks visible in the photogrammetry survey, though most are probably modern. Several breaks in the outer bank at the north do not have corresponding breaks in the inner enclosure. This may have been why Feachem (1963) suggested this was an unfinished hillfort.

Other identified features include an unrecorded low-relief bank (T3) that extends from the western side of the outer bank, before dividing in two, with the inner bank extending



Illus 8 Radiocarbon dates from excavations at Turin Hill and Rob's Reed Fort. (© James O'Driscoll and Gordon Noble)

towards the crags on the south while the outer bank extends to incorporate an area that includes the position of the western dun. This is curious, as the morphology (and dating – see below) of the enclosures on the hill suggests that the larger hillfort (T1 and T2) is earlier than the three duns. It may be that the extension T3 represents a later addition to the hillfort, one that is broadly contemporary with the construction of the duns. It may have been constructed to incorporate the western dun into the design of the larger hillfort. As such, it shows the importance placed on physically positioning the later duns within or in direct association with the earlier hillfort, possibly as a means of legitimising the power and authority of those using the monuments (see below). The inner bank of the T3 extension abuts the southern terrace-edge, though notably it also incorporates a steep, narrow path connecting the upper and lower platforms divided by the cliff face. To the north-east, a D-shaped extension to the hillfort is apparent (T4). This encloses an area of 0.84ha and was built in the 20th century as a practice firing range used during the Second World War by the Home Guard (Canmore 2019).

A 3m × 1.5m trench (Trench 5) was opened across the inner enclosure to obtain dating samples for a section of one of the ramparts of the larger hillfort. This revealed a thin layer of rampart collapse (501) overlying rampart core (502 and 503) (Illus 7). Though no obvious facing was identified, a number of thin, flat slabs could represent the robbed out remains of the inner rampart face. Underneath these rampart core deposits, a dark brown coarse sandy clay (504), with moderate amounts of small- to medium-sized pebbles, sat directly on the bedrock. This deposit included a fragment of animal bone and abundant charcoal, a sample of which produced a radiocarbon determination of 748–402 cal BC (95.4% probability; SUERC-82613, 2421 ± 30) providing a *terminus post quem* for the rampart construction (Table 1; Illus 8).

TABLE 1
Radiocarbon dates for forts on Turin Hill and Rob's Reed Fort, Angus, Scotland

Fort	*Lab No.*	*^{14}C result BP*	*95.4% calibration*	*Sample context*
Turin Hill (bivallate hillfort)	SUERC-82613	2421 ± 30	748–402 BC	Charcoal from occupation layer sealed directly beneath core of rampart
Turin Hill (western dun)	SUERC-80892	2183 ± 25	360–170 BC	Faunal remains from wall core
Turin Hill (central dun)	SUERC-82611	1980 ± 30	50 BC–AD 80	Charcoal from upper floor deposit abutting inner wall face
Turin Hill (central dun)	SUERC-82612	2382 ± 30	730–390 BC	Charcoal from lower midden deposit directly underneath the inner wall face
Turin Hill (eastern dun)	SUERC-80892	2183 ± 25	410–210 BC	Charcoal from palisade slot
Rob's Reed Fort	SUERC-82605	1906 ± 30	20–AD 220	Charcoal from upper floor deposit
Rob's Reed Fort	SUERC-82606	2030 ± 30	160 BC–AD 60	Hazelnut shell from primary hearth deposit

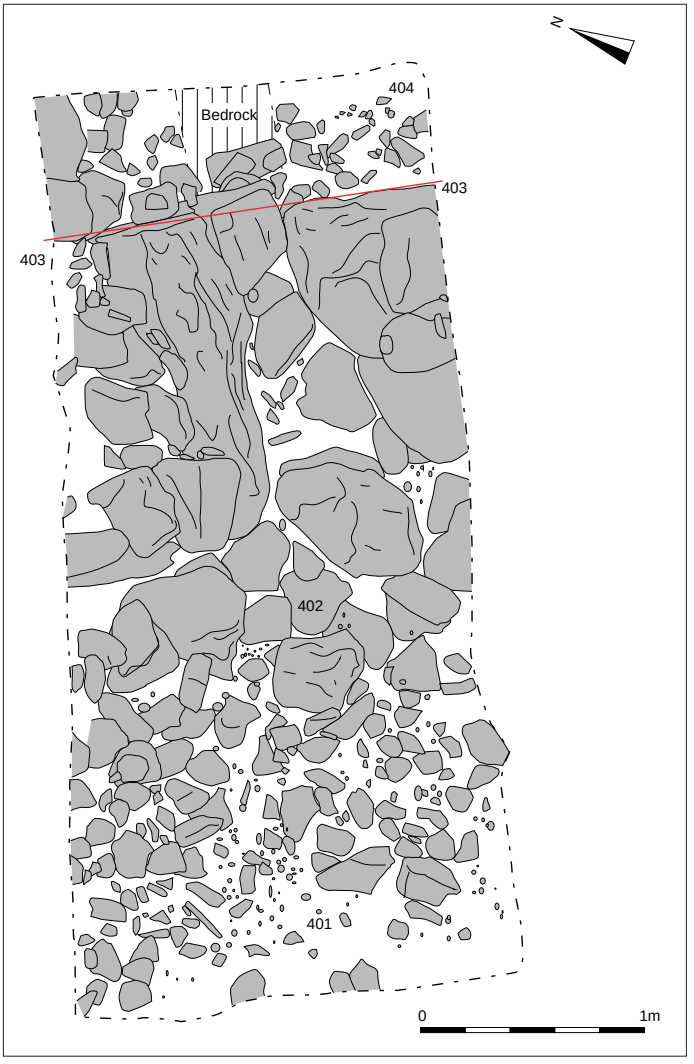
THE OBLONG FORT

Truncating the south-western section of the larger hillfort is an oblong fort (T5), which was not excavated (Illus 1; Illus 3; Illus 4). This

forms part of a wider group of morphologically similar monuments found in the north-east of Scotland (Childe 1935a, 1936; Small & Cottam 1972; Ralston 2006: 151; RCAHMS 2008: 101; Harding 2012: 86–7). These mostly comprise massive stone walled, oblong-shaped enclosures, with no obvious entrance or internal settlement. The enclosure wall usually shows signs of vitrification, a process requiring temperatures in excess of 1000°C (Ralston 2006: 146). Oblong forts are thought to have been constructed around 400–200 BC (Cook 2010: 80–2). The oblong fort at Turin Hill has a total footprint of 0.67ha but encloses an area of only 0.31ha. It comprises a single collapsed and robbed-out wall, ranging from 7.9m to 13m thick and surviving up to 1.2m high. At the eastern and western sides, the photogrammetry survey shows two parallel, linear features separated approximately 7.5m apart that may be the remains of the inner and outer wall faces. The results of the geophysical survey reveal the wall-facing, as identified in the photogrammetry results, as a mixture of strong positive/negative readings (G4), and in some instances, the inner face is further defined by an external series of positive anomalies that may represent possible individual burnt timbers spaced approximately 0.6m apart (Illus 5 and 6). The strong readings of the wall-facing and possible posts are indicative of intensive and

ILLUS 9 Location of Trench 4 over the inner face of the denuded western dun, with outline of the enclosure marked by blue dashed line. (© James O'Driscoll and Gordon Noble)

prolonged burning, which intimates the former presence of a timber-laced rampart that may have been abutted by a wooden structure or series of structures, as has been identified in other examples of this fort type (eg Finavon: Childe 1935a, 1936). The core of the wall is defined by a more diffuse mixture of positive/negative readings. These readings are similar to the response encountered at burnt mounds, where heat-shattered stones have been mixed and redistributed over time by agricultural activity, creating a mix of positive/negative readings, while the high readings over the inner and outer facing may represent in situ burning associated with the deliberate destruction of the enclosing elements. Interestingly, there is a section of the wall core on its southern side that is defined by a lack of high or low readings. This may represent the lower (probably sandstone) core of the fort wall which had not been subject to burning.



ILLUS 10 Post excavation plan of Trench 4 at Turin Hill, showing the edge of the inner wall (marked by the red section line) and the internal core of the rampart. (© James O'Driscoll and Gordon Noble)

Illus 11 The central dun on Turin Hill under excavation, with location of Trench 2 and Trench 3 marked in red. (© James O'Driscoll and Gordon Noble)

Despite the geophysical evidence for burning of the oblong fort, there is no obvious evidence for vitrified stonework at Turin Hill, though the experiments of Childe and Thorneycroft (1938) and Ralston (1986) have shown how difficult it is to attain mass vitrification, and the remains of the oblong fort at Turin are now substantially turf covered limiting observations obtainable from surface survey.

THE THREE DUNS

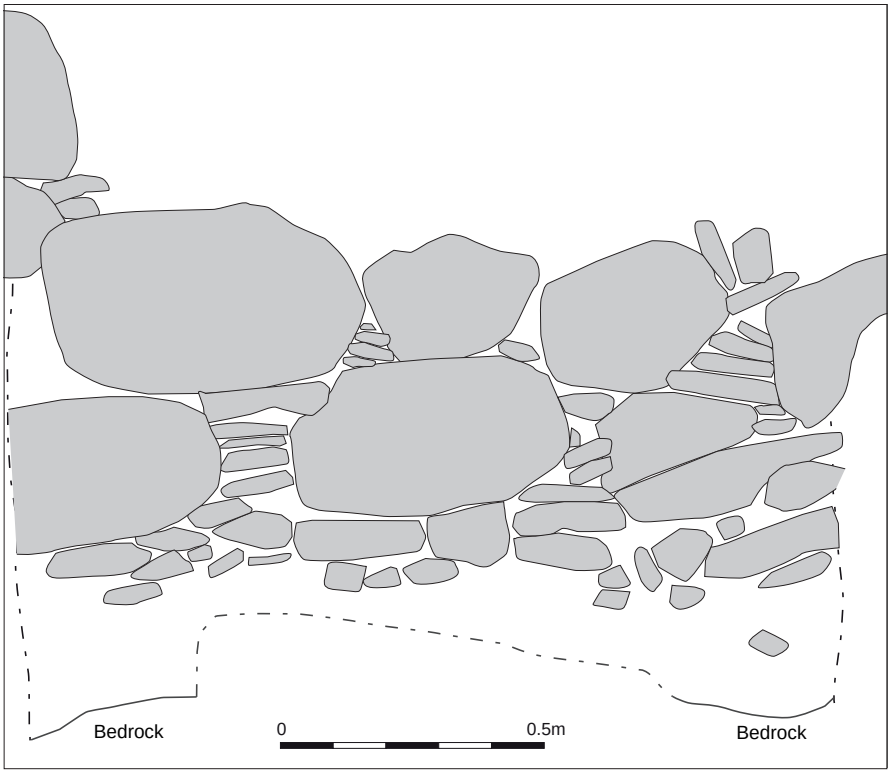
The western dun is heavily denuded and is apparent as a low circular earthwork 0.085ha in size (T6), though the area enclosed by this is significantly less; 0.023ha (Illus 4 and 9). It is best preserved at the south-east, where it survives to a height of 1.1m and is 8.8m thick. The site is faintly represented in the geophysical survey as a possible sub-circular setting of evenly spaced positive anomalies (G7) (Illus 5). The remainder of the bank is visible as a thin annular band of positive magnetic readings surrounded on either side by negative responses. Survey has also identified the presence of two possible structures within the interior that measure approximately 11m and 7m in diameter.

A 3.5m × 2m trench (Trench 4) was laid over the eastern side of the dun, extending from the top of the bank into the interior (Illus 10). This revealed an upper 0.4m deep layer of bank collapse (401). This deposit sat directly over a layer of in situ wall core (402) which consisted of medium to large angular stones set within a compact light brown clayey-silt soil matrix. A large mammal bone from this context returned a date of 360–170 cal BC (95.4% probability; SUERC-80892: 2183 ± 25), providing a *terminus post quem* for the construction of the dun. On the western side of the trench, the inner bank face (403) was exposed to a height of approximately 1m. Up to six courses of this face survived, with

ILLUS 12 Post excavation plan of Trench 2 in the central dun of Turin Hill, with inner wall face and abutting occupation deposits. (© James O'Driscoll and Gordon Noble)

the massive stones incorporated in the wall face measuring up to 1.5m long, 0.5m wide and 0.15m in depth. A small section in front of the face was excavated to bedrock. This revealed that the upper levels of the interior deposits consisted of bank collapse intermixed with a loose medium greyish-brown silt (404) approximately 1m deep. This layer contained large quantities of partly decayed animal bone, charcoal and a fragment of iron. Underneath this deposit, extending underneath the face of the bank, and sitting directly on undisturbed boulder clay, was a pre-bank floor layer (405). This layer represents pre-dun occupation of the hilltop. As a more reliable *terminus post quem* was obtained from in situ bank core material, this layer was not dated.

The central dun (T7) is the best preserved of the three. It is located on the south side of a field boundary that truncates the site and is positioned over the northern bank of the oblong fort. It has a total footprint of 0.09ha and encloses an area of 0.045ha (Illus 11), with two notable rectangular depressions the only features apparent within the interior. Its wall is on average 3.9m thick and up to 0.45m high. There are coursed facing stones visible on the inner and outer edges at the south-eastern side, comprising medium to large angular blocks of sandstone. There are two breaks at the east and west, though it is difficult to assess if these were original entrances. The photogrammetry survey hints that the western gap is likely to be modern as there is an indication of a slight, 4m wide, low-relief earthwork in this area (Illus 4). There are two notable depressions within the interior. The southern example is stone lined and measures 1.6m × 2.1m and is



Illus 13 Section of the inner wall face of the central dun on Turin Hill, showing chalking and general structure. (© James O'Driscoll and Gordon Noble)

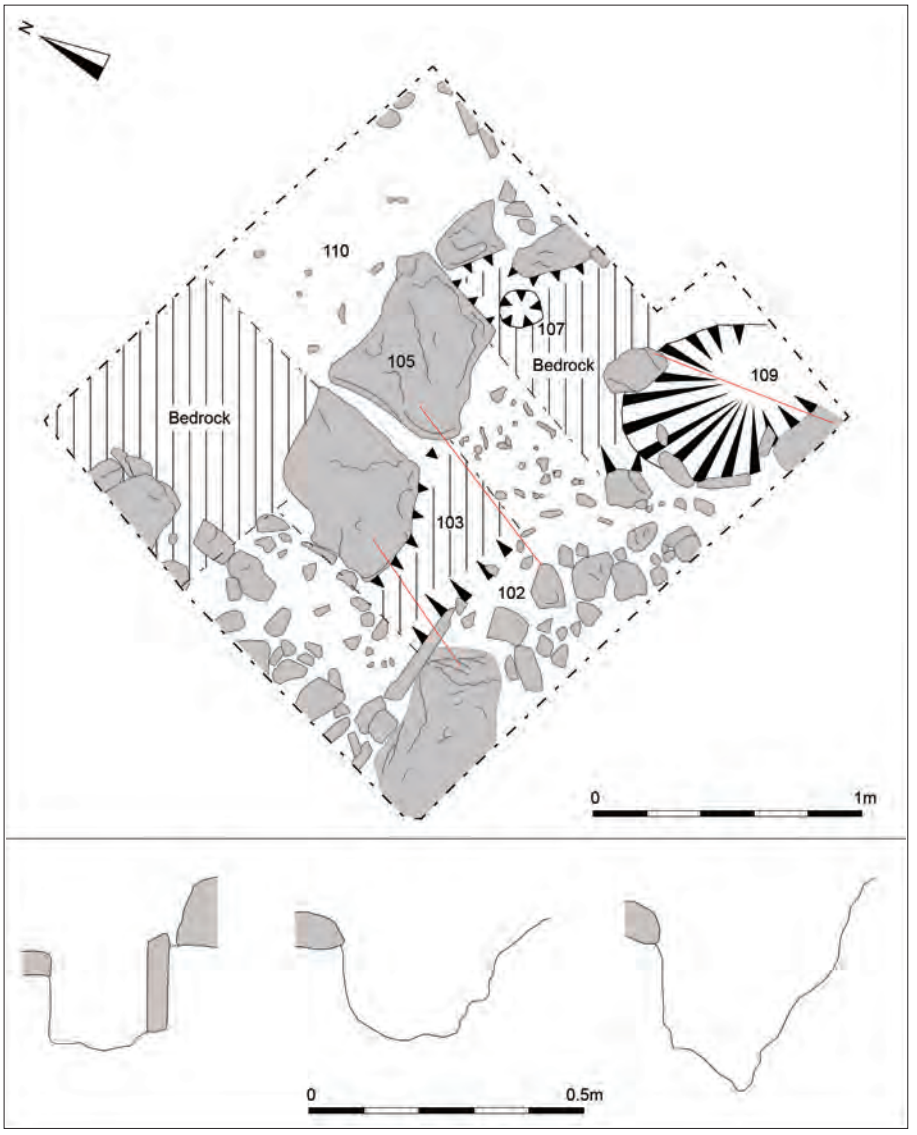
approximately 0.25m deep. The other example, positioned about 5m to the north-west, measures 1.3m in diameter and is up to 0.3m in depth. The walls of the dun are only faintly apparent in the geophysical survey results, probably due to the sandstone (a magnetically quiet material) used in their construction. Geophysical survey showed a further possible structure within the monument which measured about 8.2m in diameter.

To obtain dating information, a 2m × 2m trench (Trench 2) was opened against the inner face of the dun on the southern side (Illus 11). Excavation revealed the wall face survives to a maximum height of 0.78m, with 0.6m beneath the current turf line (Illus 12 and 13). The face consists of a mixture of large boulders with smaller flat slabs interspersed between these. Abutting the wall face, underneath wall collapse (201), alder retrieved from a floor deposit (202) produced a radiocarbon date of 50 cal BC to cal AD 80 (95.4% probability; SUERC-82611, 1980 ± 30). Another possible floor layer (205) sat directly on top of a large midden deposit (206) that overlay bedrock and extended under the wall line. A sample of birch from the basal layer returned a date of 730–390 cal BC (95.4% probability; SUERC-82612: 2382 ± 30), suggesting an Early Iron Age settlement deposit underlies the later dun. Another 1m × 2m trench (Trench 3) was opened within the interior to investigate one of the rectangular depressions. This revealed a 0.1–0.5m deposit of stone rubble collapse (301) covering the entire trench. This overlay a possible floor deposit (302) that lay directly on conglomerate bedrock. The deposit was deepest at the south-east where the bedrock dips down. It is likely that this rectangular depression is a more recent pit that has partly truncated an in situ floor level.

The eastern dun is apparent as two somewhat concentric earthworks and has a total footprint of 0.1ha, though it encloses an area of only 0.01ha (T8) (Illus 4). The outer bank is larger than the inner, measuring 4.1–7.6m thick and up to 0.35m high. It is apparent as an irregular band of positive magnetic readings in the geophysical survey (G5), though immediately outside of this, an additional band of uniform magnetic readings, representing an anomaly on average 6m wide, may represent an external ditch, increasing the diameter of the monument to approximately 43m (Illus 5 and 6). Usually we would expect ditch fills to produce positive magnetic readings resulting from the erosion of naturally magnetically enhanced topsoil. This might suggest that the ditch had been deliberately backfilled.

The inner bank measures 2.4–3.1m thick and is up to 0.3m high. Geophysical survey indicates that the inner earthwork is likely to have been the foundation for a timber structure, with responses up to 56nT, indicating that this

Illus 14 The eastern dun of Turin Hill with trench location highlighted in red and line of the two earthworks marked by segmented blue line. (© James O'Driscoll and Gordon Noble)



Illus 15 Post excavation plan of Trench 1 over eastern dun at Turin Hill, showing slot trench and post holes, as well as internal occupation deposits. (© James O'Driscoll and Gordon Noble)

had probably been destroyed by fire. Readings of this strength cannot be created by natural processes and do not naturally occur on this type of geology (as opposed to igneous bedrock). They are far stronger than those we would expect from an in-filled ditch. Comparable responses have been discovered at hillforts in Ireland, where extensive wooden palisades have been deliberately destroyed by fire (see O'Brien & O'Driscoll 2017). The composite monument may now be reconsidered as a univallate dun with bank and external ditch enclosing a large wooden structure. Unfortunately, no obvious features were apparent in the geophysical survey results within the interior of the inner structure/earthwork, primarily due to the effect of a modern stone wall and electric fence which mask features in this area.

ILLUS 16 Post excavation of slot [103] of the eastern dun on Turin Hill. (© James O'Driscoll and Gordon Noble)

To test the results of the survey, a 2m × 2m trench (Trench 1) was opened on the southern side of the inner enclosing element, with a 0.5m × 0.3m extension at the south-east (Illus 14 and 15). This revealed a partially collapsed stone footing (102) which overlay a series of large flat slabs (105) augmenting the U-shaped cut of a narrow east/west running slot trench [103] (Illus 16). The cut measured up to 0.48m wide and 0.28m deep. Its fill (104) consisted of a dark brown sandy-silt with some small angular stones and frequent concentrations of charcoal and burnt bone. In most instances, charcoal concentrations were found abutting the northern side of [103], against the large stones that defined the upper cut. This might suggest

that the timbers of the slot were placed against these stones and packed on the southern side with smaller stones. A sample of birch charcoal from this context produced a date of 410–210 cal BC (95.4% probability; SUERC-80892: 2275 ± 30), providing a *terminus post quem* for the structure. Two post holes [107] and [109], were associated with the slot [103], which together, likely formed the foundations for a large wooden structure confined by a bank and ditch. The larger post may have delimited an entrance to the structure, with the remainder of the structure walls being supported by a slot trench and low stone bank.

OTHER EARTHWORKS AND FEATURES

There are a number of other earthworks possibly associated with the forts on Turin Hill. T9 represents a low-relief bank identified by Alexander and Ralston (1999: 41), which cuts off access to the interior of the larger hillfort from the south-east (Illus 4). This area is the only accessible approach to the summit that is not defended by an earthwork or outcrop. It measures approximately 38m in length, 7.38m in width and no more than 0.22m in height and connects with a larger possible bank running ENE, positioned at the edge of a natural outcrop (T11). T11 measures 0.63m in height, 6.48m in width and 112m in length and is a curious earthwork as this area is protected by the natural topography. It could have been built to enhance one of the approaches to the summit. On the same ridge, about 400m to the WSW, two further unrecorded low-relief banks (T12 and T13) cut off the approach in this direction. T12 measures approximately 3.8m wide and 0.34m high and is apparent as a spread of medium-sized stones, while T13 measures 5.2m wide and up to 0.17m high.

Within the interior of the larger hillfort (T1 and T2), up to 14 raised flat-topped platforms are apparent in the photogrammetry results (T10) ranging 4.2–7.5m in diameter and up to 0.9m high. These may represent structures where the build-up of material over time raised the floor layers, resulting in these distinctive features visible on the photogrammetry model. More conventional settlement evidence scattered about the interior of the larger hillfort is apparent as eight circular platforms ranging from 3.2–14.5m in diameter (a–h). In addition, the geophysical survey identified further circular to sub-circular anomalies of 4–19m in diameter, substantially increasing the number of possible hut sites on the hilltop. A total of 84 possible structures have been identified, all of which are confined by the inner bank of the larger hillfort, though many of these responses are ephemeral features defined by a series of closely spaced pit-like features that may be interpreted as post holes. That fact that these are not strong anomalies suggests that, rather than being burnt, the posts and wooden structural elements either decayed in situ or were removed from their sockets – which were then left to naturally fill. A few examples have positive magnetic anomalies at their centre that probably represent associated hearths. There is an even distribution of these possible structures, with notable gaps near the inner face of the inner enclosure of the larger hillfort (G2) probably relating to modern machine trackways masking underlying archaeological features. Although most of the possible structures do not overlap or truncate one another, it is impossible to interpret the chronology of these features or their temporal relationship with each other without excavation and dating evidence, though the fact that they are confined by the larger hillfort might suggest they are broadly contemporary with this earlier phase of occupation.

ROB'S REED

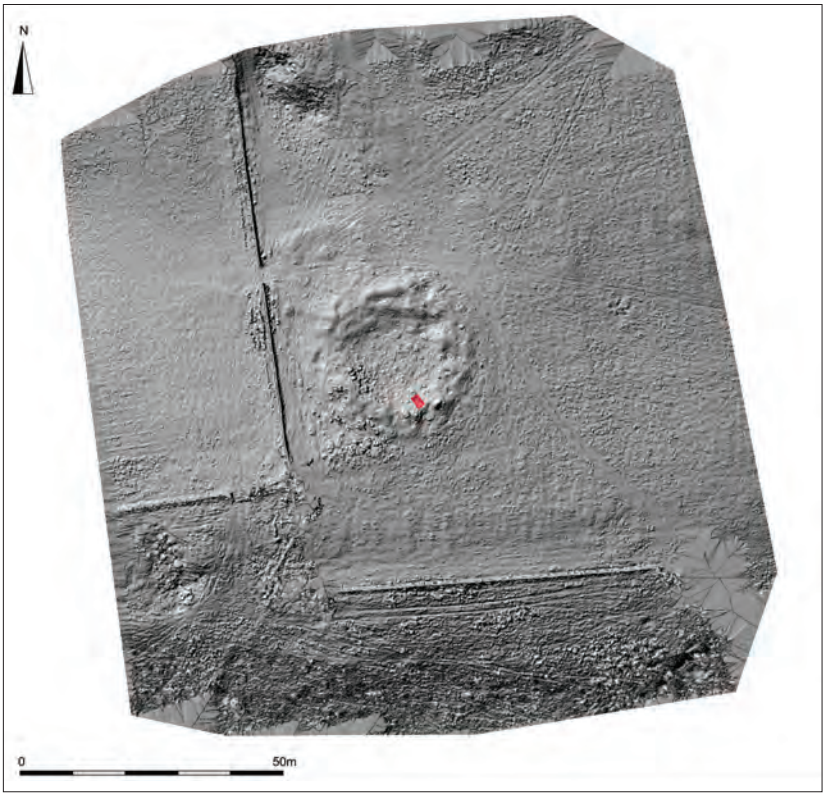
Rob's Reed (NGR: NO 49067 52434, Canmore ID: 33776) dun, approximately 2.4km to the south-west of Turin Hill, but on the same ridge of hills, was also the subject of sample excavation by the authors, undertaken on 2 and 3 July, in the summer of 2018 (Illus 1 and 17). Its close positioning and similarities in terms of size and morphology with those on Turin Hill made this another target for excavation.

Rob's Reed measures approximately 32m in diameter with an overall internal diameter of 16m, occupying a total footprint of 0.08ha and an internal area of 0.02ha. An electrical resistance

ILLUS 17 Rob's Reed Fort with the stepped crag of Turin Hill in the background. (© James O'Driscoll and Gordon Noble)

survey indicates that the bank consists of a band of grass-covered stones spread approximately 7.7m wide, though the bank itself is likely to be only about 2.8m thick (Illus 18). The bank today survives to a maximum height of 0.9m. There is a possible entrance at the southern side comprising a simple break about 2.5m wide. Traces of a possible small rectangular enclosure consisting of a 2.3m wide and 0.2m high bank abut the dun at the north-west.

A single trench was opened against the inner edge of the bank on its southern side, in order to obtain a basic chronology to compare with that obtained for the three duns on the nearby Turin Hill. The trench revealed an unstructured collapse (101) approximately 0.19–0.32m in depth (Illus 19). Larger stones representing an in situ wall core (102) were revealed at lower levels. The wall face (103) was revealed running in a roughly east/west direction (Illus 20). It was exposed to a height of approximately 0.55m, though the trench was not bottomed due to significant features encountered in front of the wall face. The wall face itself comprised a series of thin slabs laid to create a vertical face, though this had slightly buckled, with the upper levels being pushed out by the weight of the wall core. There are no signs that the wall comprised any wooden elements. Directly underneath the wall collapse (101) and abutting the upper levels of the wall face (103), a floor layer (104) consisting of a purple silty clay mixed with small pockets of dark orange clay with frequent charcoal and moderate amounts of small angular stones and rounded pebbles was encountered. This layer ranged from 0.19m to 0.28m in depth, with a sample of alder charcoal from it producing a date of cal AD 20–220 (95.4% probability; SUERC-82605, 1906 ± 30). Floor layer (104) sat on a 0.23–0.28m thick layer of medium size stones intermixed with a purple silty sand and small stones (105), which may have acted as a footing for the floor layer (104).



ILLUS 18 Photogrammetry derived hillshade of Rob's Reed Fort, with location of excavation trench marked in red. (© James O'Driscoll and Gordon Noble)

Underneath [105], a linear arrangement of thin stones placed on edge were set in line with the bank face [106]. These stones delimited a series of large, tightly packed slabs. The structure (106) likely represents a large hearth (Illus 20). A thin compact layer of burnt material (107), 0.02–0.08m in depth, comprising a dark brown sandy silt intermixed with frequent amounts of charcoal and short-lived wood species, lay on top of the hearth stones. A hazelnut shell from this layer returned a date of 160 cal BC to cal AD 60 (95.4% probability; SUERC-82606, 2030 ± 30). A sterile medium brown sandy silt [108] was apparent in between the wall face [103] and hearth [106]. The depth of this deposit is unknown as the trench was not bottomed to protect the hearth. It is possible that the material was purposefully deposited to secure the edge of the hearth, though further excavation is required to confirm this. As the hearth was left in situ and as such the base of the inner wall for the dun could not be excavated, no construction or *terminus post quem* dates were obtained for the construction of the dun, though a probable *terminus ante quem* date suggests the monument is Roman Iron Age or older.

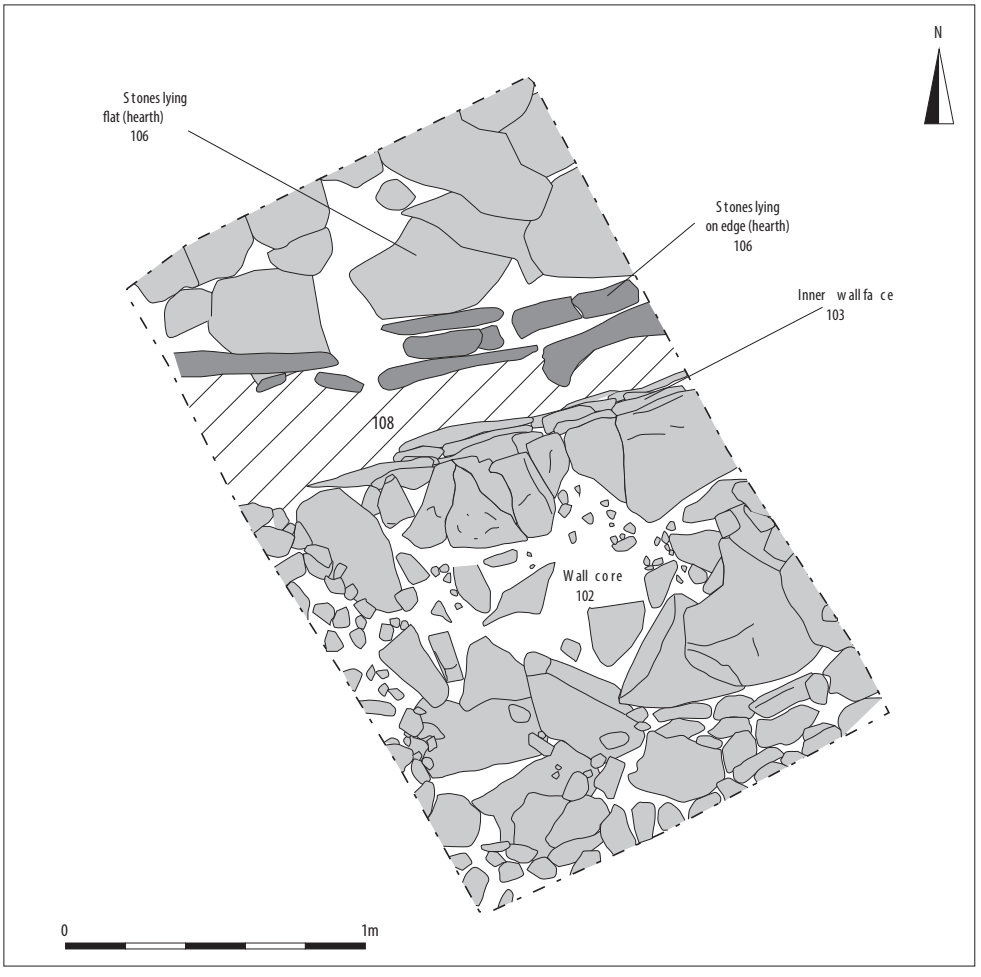
DISCUSSION

EARLY HILLFORTS IN SCOTLAND AND BRITAIN

The earliest monument on the hilltop is the large bivallate hillfort. This is confirmed by radiocarbon dating, with material below the core of the bank returning the earliest date obtained, 750–400 cal BC (95.4% probability), providing a *terminus post quem* for its construction. Stratigraphically, the inner bank of the larger hillfort is truncated by the oblong fort, suggesting

a substantial period of time had elapsed between the bivallate fort and the oblong fort. The oblong fort is a type of monument with a construction horizon of *c* 400–200 BC (see below). Thus, it is probable that the bivallate hillfort on Turin Hill is a pre-*c* 400 cal BC hillfort, though considering the issues of radiocarbon dating for this period, a more precise date would be difficult to attain. It is possible that a considerable number of the hut structures identified in the geophysical survey relate to this phase as they are confined by the larger hillfort and, in some instances, are truncated by the later duns. Indeed, the central dun was found to lie over a substantial midden deposit (206) from which a charcoal sample was dated to 730–390 cal BC (95.4% probability; SUERC-82612: 2382 ± 30). This midden could relate to occupation contemporary with the bivallate fort. However, it could also be argued that the bivallate fort was built around an already existing open settlement. At Broxmouth in south-east Scotland, for example, evidence for a palisaded enclosure and two external roundhouses predated the construction of the hillfort (Armit & McKenzie 2013: 18).

Without excavation, the contemporaneity of hut structures at Turin Hill cannot be certain, particularly when we consider comparable



ILLUS 19 Post excavation plan of Rob's Reed Fort, showing inner wall face and edge of hearth. (© James O'Driscoll and Gordon Noble)

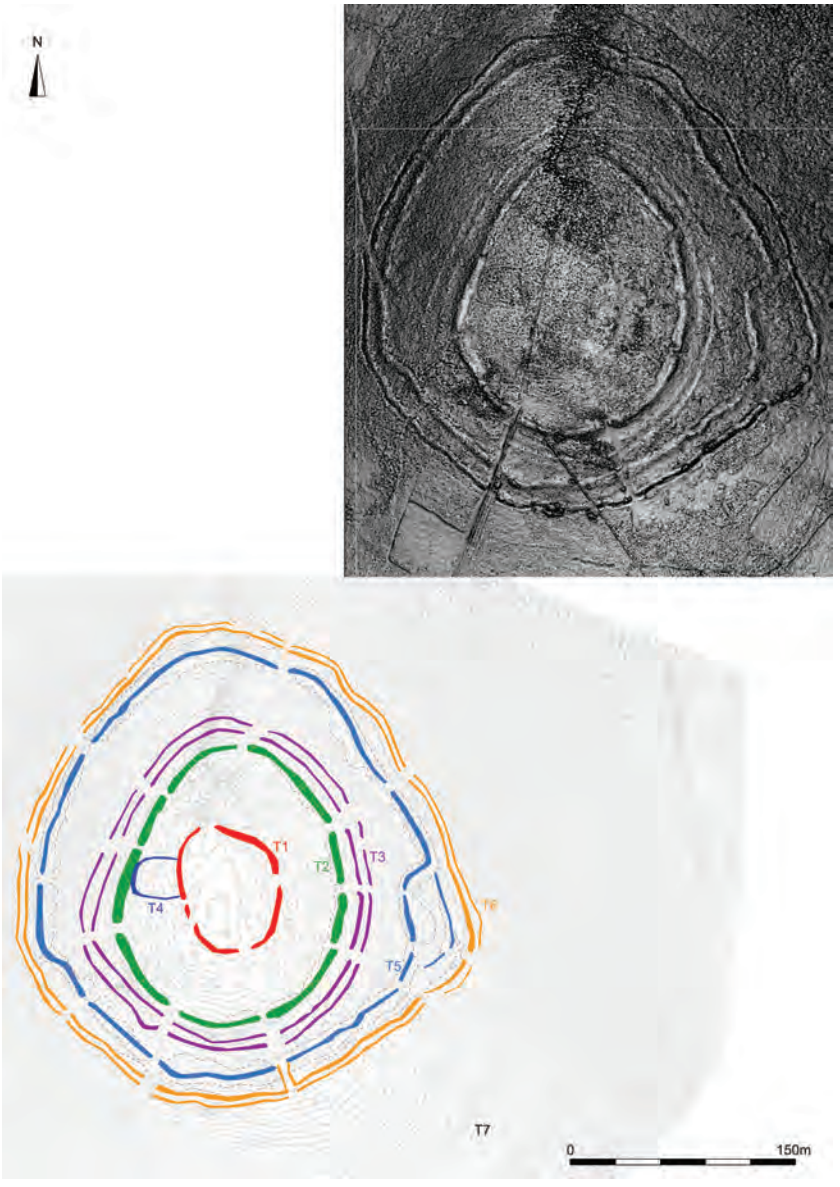
Illus 20 Post excavation photograph of the partially revealed wall face and the stone-lined edge of the abutting hearth. (© James O'Driscoll and Gordon Noble)

clusters of hut sites within Eildon Hill, near Melrose in the Scottish Borders, returned both Late Bronze Age and Roman Iron Age dates. Though the initial construction of the large bivallate hillfort at Turin Hill may have taken place before 400–200 BC, further investigation may show a more complex sequence that saw fluctuations in use and construction over the course of decades rather than centuries. At Broxmouth (Armit & McKenzie 2013), for example, a complex sequence of construction highlights the need for caution when assessing the construction and occupational history of fortifications based on relatively few radiocarbon dates – and particularly at sites without dates from secure construction contexts.

There are relatively few well-dated pre -400 cal BC forts in Scotland. Indeed, at other potential early hillforts, like Turin Hill, there remain problems regarding the security or representativeness of the dated material, such as at Dundee Law, Dundee (Driscoll 1995) and Hill of Barra, Aberdeenshire (Cook 2012), where single or small numbers of determinations are available or the the radiocarbon estimates have wide error margins associated – as at Balloch Hill, Argyll and Bute (Peltenburg 1982). Those sites that have early dates, such as Cults Loch (Cavers & Crone 2017) or White Castle, East Lothian (Cook & Connolly 2013), also cannot compare in terms of the size and scale of the larger hillfort on Turin Hill. Thus there are only a few parallels that can be cited. In terms of its size and early dating, Durn Hill in Aberdeenshire stands out as an example (Noble et al 2020). It comprises three lines of enclosure, the largest of which occupies a total area of 4.5ha. Excavation revealed that the narrow inner enclosure was a palisade trench having a *terminus post quem* date of 760–410 cal BC (95.4% probability; Beta-381815: 2450 ± 30), but the middle enclosure does include ditched and banked elements. While the dating of these potentially Early Iron Age forts is not very secure, others (eg Dunwell & Ralston 2008, RCHAMS 2008: 96–103; Cook 2013: 338, 340) have suggested that larger hilltop

forts in eastern and north-eastern Scotland are likely to be accurate, and Turin Hill tentatively corresponds with this trend.

Larger enclosures, such as Traprain Law in East Lothian (Hunter 2013) or Eildon Hill in the Scottish Borders (Owen 1992), have produced both Late Bronze Age and Roman Iron Age dates, though the enclosing elements at either site are not fully understood. At Traprain, Feachem (1955b: 87) has argued that there are four phases of enclosure, with Armit et al (1999: 30–1) suggesting the first enclosure horizon comprised



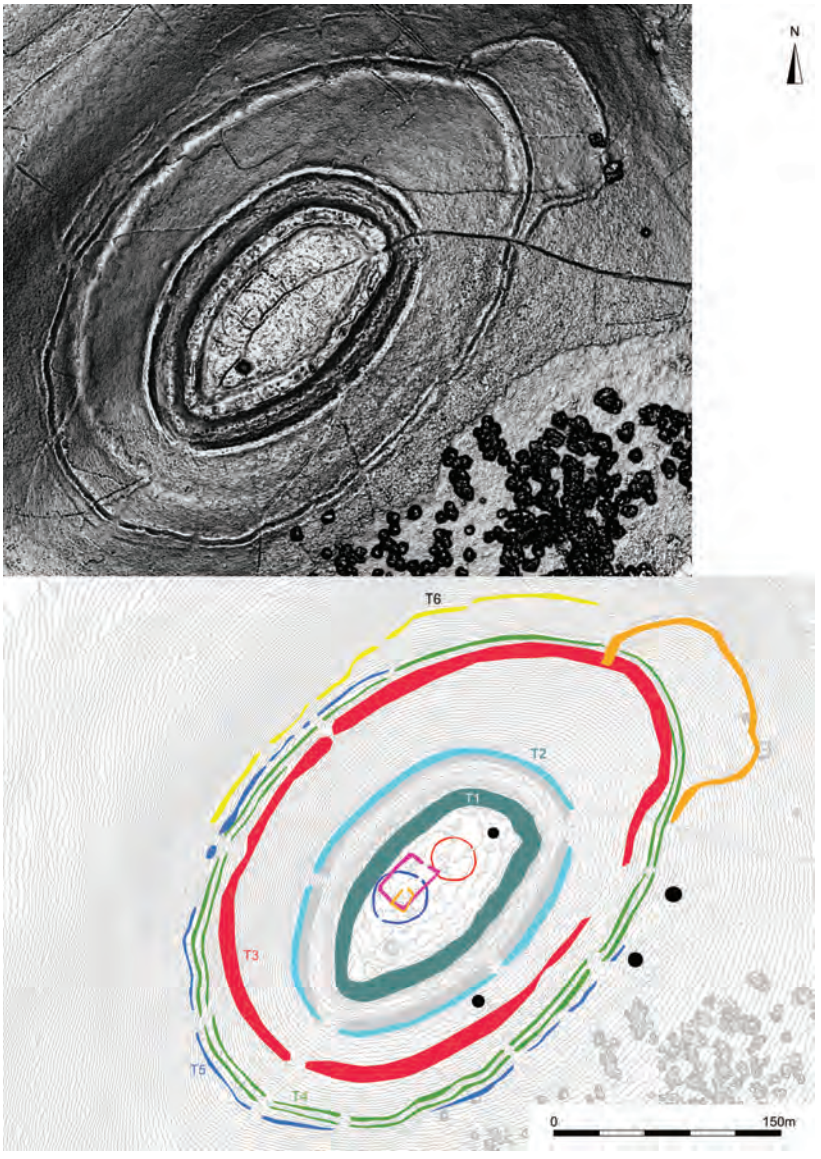
ILLUS 21 Photogrammetry derived hillshade model of the Brown Caterthun, Angus, with interpretation of the layout of the enclosing elements transcribed and differentiated by colour and number. (© James O'Driscoll and Gordon Noble)

a 4ha fort, its perimeter cutting off the northern approach to the summit with its southern extent unenclosed – a similar size and setting as the bivallate hillfort of Turin Hill. Radiocarbon dating from material directly underneath this bank, however, returned Late Bronze Age dates (Armit et al 2005: 55–6), though once again, this only provides a *terminus post quem*.

The Brown Cathertun in Angus, positioned just 13km to the north of Turin Hill, is another potential comparison in terms of its size and dating (Illus 21). It comprises a complex series of up to six enclosing elements which surround a total area of approximately 7.6ha, though projecting the line of an incomplete outer bank would increase this to 9.75ha. An internal, low relief oval ditched enclosure (T1) crowns the summit of the hill. This is surrounded by a much more substantial rampart some 6.8m thick and 0.52m high (T2), immediately outside of which are the remains of two low-relief ramparts (T3). A previously unrecorded U-shaped enclosure (T4) is apparent between T1 and T2. While the enclosures are not entirely concentric, they broadly follow the contours of the hill. Beyond these, another series of enclosures is apparent (T5 and T6), the southern halves of which do not conform to the shape of the hill. T5 comprises a 5.3m thick, and up to 0.61m high, rampart with a distinct kink in at the eastern side. Outside of this, two banks on either side of a ditch (T6) are reminiscent of those of the larger hillfort at Turin Hill. Appended to the south-western side of T6 are the remains of a ditch (T7). Excavation has revealed a complex, multi-phase sequence of construction which is not fully understood; however, the early defences included two pairs of enclosures dating to the Early Iron Age (Dunwell & Strachan 2007: 45). Radiocarbon dates from timber lacing within the inner bank of the outermost pair of enclosures returned dates that fall within the range of 780 to 400 cal BC (95% probability; Dunwell & Strachan 2007: 45).

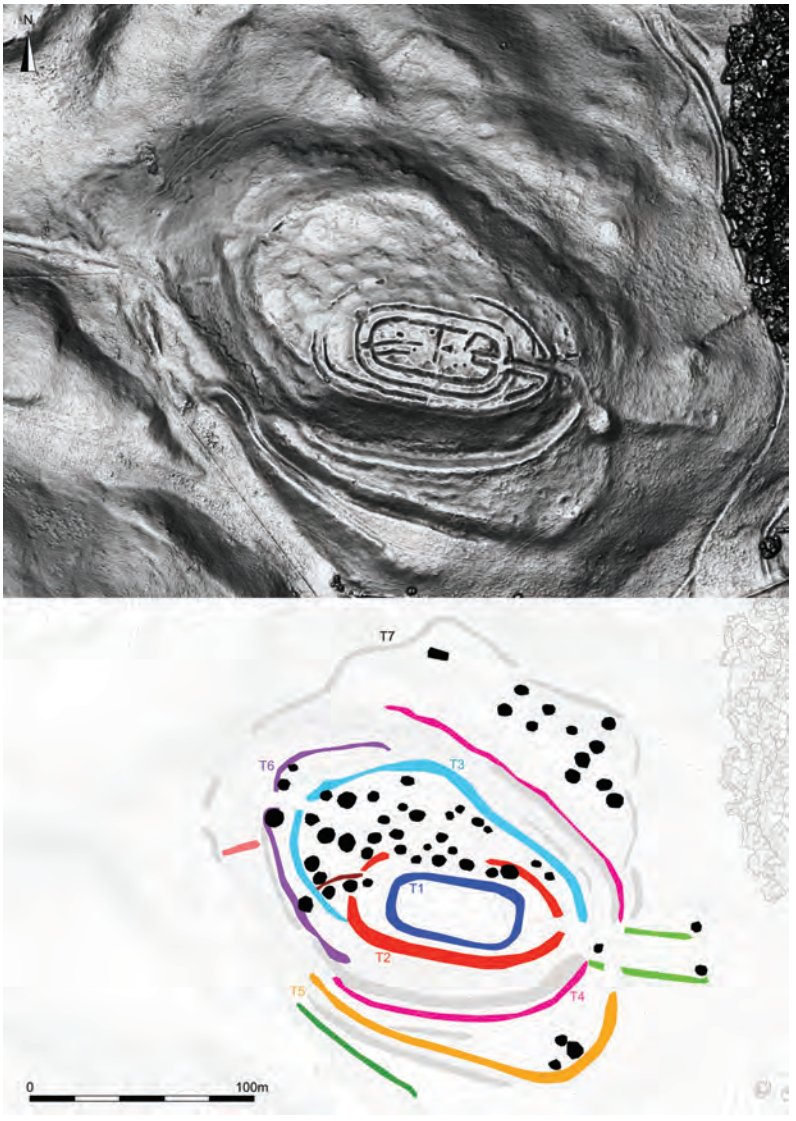
Less than 1km to the south-west, the White Caterthun occupies an area of 8.9ha and incorporates at least five enclosing elements including an oblong timber-laced vitrified fort (T1) at its centre (Illus 22). The latter surrounds a number of circular and rectangular structures of unknown date. Beyond a small scarp, a ditch and counterscarp bank (T2) surround the oblong fort, though excavation (Dunwell & Strachan 2007) revealed a more complex phasing with at least two additional palisades being recorded, indicative of multiple phases of construction. Beyond this, a robbed-out stone rampart is evident (T3) and this seemingly truncates the enclosing elements immediately beyond (T4). T4 comprises a rampart with an external ditch and possible counterscarp bank, though excavation again revealed evidence for at least two associated palisades and an additional external ditch (Dunwell & Strachan 2007). The latter is also apparent in the photogrammetry survey at the south and west (T5). Another enclosure (T6) is visible as an apparently unfinished line of interrupted ditches and elongated pits on the north-east. Finally, a D-shaped bank appended to the north-eastern side of T3 and seemingly truncating both T3 and T4 is also apparent. Unfortunately, excavations at the site did not retrieve any appropriate samples for radiocarbon analysis and therefore our understanding of the absolute chronology of the White Caterthun sequence is lacking. The multiple phases of enclosure, however, and the double banked enclosing element T4 are reminiscent of Turin Hill.

A similarly complex hillfort has been identified at Castle Law, Forgandenny, in Perth and Kinross, where multiple enclosing elements, including a central oblong timber-laced vitrified fort (T1), surround a cluster of circular platforms (Illus 23). Excavations by Bell (1893) have significantly confused the surface remains. The RCAHMS (see Lock & Ralston 2017 for summary of survey findings) recorded up to five phases of enclosure, including: a central oblong fort (T1), an oval enclosure most apparent at the south (T2), a pear-shaped bank underlying the oval enclosure and extending to the south-west (T3), a large rampart with internal ditch enclosing the lower terrace of the hill (T4) (most visible at the south) and finally, a series of ramparts and ditches surrounding the lower edge of the hill which, again, is most apparent at the south (T5). A number of scarps were also recorded by the RCAHMS, though the photogrammetry identifies



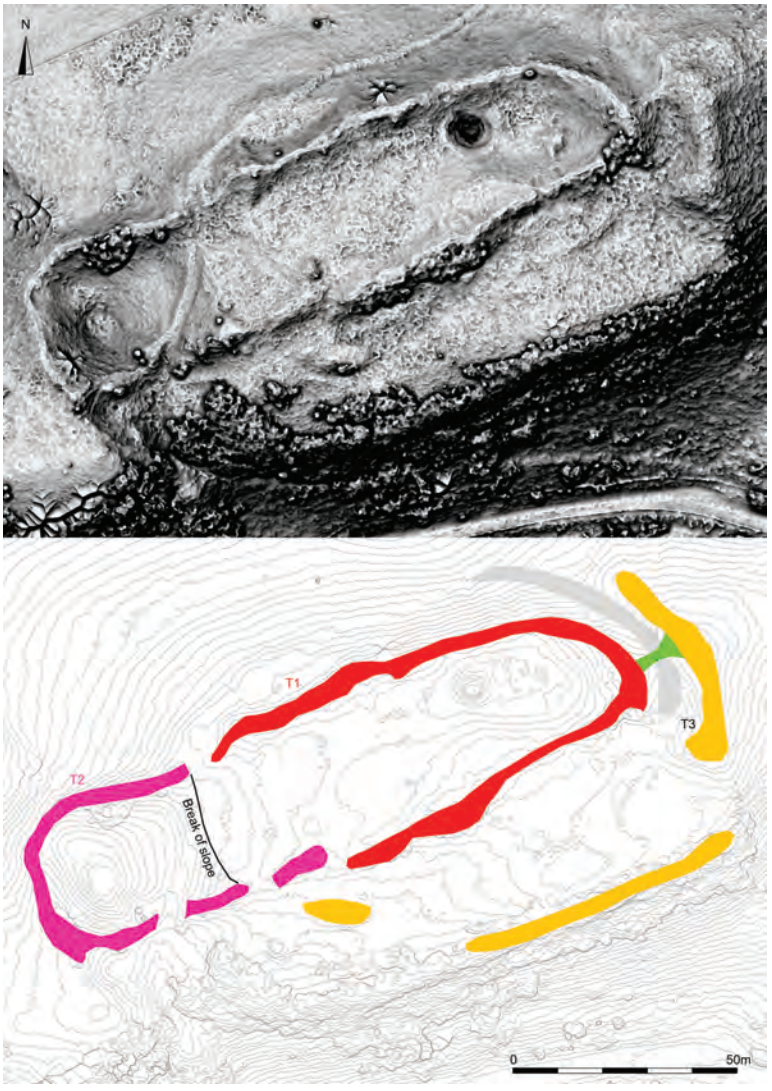
ILLUS 22 Photogrammetry derived hillshade model of the White Caterthun, Angus, with interpretation of the layout of the enclosing elements transcribed and differentiated by colour and number. (© James O'Driscoll and Gordon Noble)

these as a slight and narrow bank with an external ditch on the western side, with a partially in-turned entrance (T6), and the continuation of T4 on the north-eastern side. Photogrammetry survey has also revealed the partial remains of another ditch surrounding a group of circular and rectangular platforms to the north of the hill (T7). While the dating and relative phasing of the enclosures derived from the University of Glasgow SERF project, 'Excavations at Castle Law' awaits publication, the size and multiple phases of enclosure, as well as the presence of a central oblong fort and numerous hut platforms, is broadly comparable with Turin Hill.



Illus 23 Photogrammetry derived hillshade model of Castle Law, Forgandenny, Perth and Kinross, with interpretation of the layout of the enclosing elements transcribed and differentiated by colour and number. (© James O'Driscoll and Gordon Noble)

Overall, it must be admitted that our knowledge and understanding of a possible Early Iron age tradition of large fort building in Scotland is relatively undeveloped. While Haselgrove (2009: 230) and Armit (1997: 50–4) argue that some larger Scottish forts can be tentatively dated to the Late Bronze Age/Early Iron Age due to their size and landscape setting, Halliday and Ralston (2013: 229) are more cautious, arguing that these forts may not fit into a defined chronological horizon. As such, making any broad distribution maps based on size may be ineffective. Despite this, there has been a strong tradition of classifying forts by their size (see, for example, Christison 1894; Childe 1935b: 249–50; Harding 2004: 58–66; Halliday & Ralston



Illus 24 Photogrammetry derived hillshade model of Finavon, Angus, with interpretation of the layout of the enclosing elements transcribed and differentiated by colour and number. (© James O'Driscoll and Gordon Noble)

2013), albeit with each author using various subjective criteria to categorise their size and character. Halliday and Ralston (2013: 223), for example, use 2ha as their limit for large hillforts, recording 57 examples, though the more recent *Atlas of British and Irish Hillforts* identifies 78 examples above this threshold in Scotland (Lock & Ralston 2017). Feachem (1966) used 2.5ha as his cut-off point, while Childe (1935b: 206) used 4ha, the latter specifically noting Turin Hill as one of the few examples of large hillforts north of the Firth of Forth. While Childe describes these large hillforts as hilltop towns, the current evidence for occupation at these sites is patchy at best, though the density of possible occupation at Turin Hill, as recorded by geophysical survey, suggests that, for this site at least, this may not be a wholly inappropriate label, though much

work remains to be done to assess the density and dating of internal settlement of forts of this size and type.

Looking farther afield, large Late Bronze Age (1300–800 BC) and Early Iron Age (800–400 BC) hillforts have also been found in England and Wales – though again, these are relatively rare in comparison to the extensive numbers of sites dating to this period found in other parts of Europe (Primas 2002; O'Brien & O'Driscoll 2017; Hansen & Krause 2019). Late Bronze Age examples such as Taplow, Buckinghamshire, England (Allen et al 2009); Rams Hill, Oxfordshire, England (Bradley & Ellison 1975); Thrapston, Northamptonshire, England (Hull 2001) or Dinorben, Conwy, Wales (Gardner & Savory 1964) suggest that these early fortifications were relatively simple works enclosing no more than 1.5ha in total area. It is not until around the 6th and 5th centuries BC that more elaborate ramparts and ditches of defensive proportions were built, like Danebury (Cunliffe 1983) and Maiden Castle (Sharples 1991) in Wessex. Evidence of occupation at this time period varies. At one extreme, there are hillforts which were never occupied and show little trace of sustained use, while some were intensively occupied by a permanent population throughout the length of their life, such as Maiden Castle or Danebury (Harding 2012: 206; Cunliffe 2013: 305; Mytum 2013: 10). Sharples (2007: 120) has noted that there may be a link between the complexity of the enclosing elements and more intensive occupation of the interior. While we must be cautious in comparing two distinctly different patterns of enclosure (places like south-western England are characterised by a relatively intense density of large hillforts in comparison to Angus, Scotland, where there are very few recorded forts in general), by comparing the early hillfort at Turin Hill with the broader evidence from Britain, we might argue that the larger hillfort on Turin Hill fits favourably those dating to the 6th and 5th centuries BC, having a more complex and impressive set of enclosing elements and potentially intensive internal settlement, but much further work needs to be done to uncover the full sequence at Turin Hill and to characterise and date the interior settlement.

OBLONG FORTS IN SCOTLAND

Truncating the large bivallate hillfort at Turin Hill is an undated oblong fort. This monument is morphologically similar to those found at Tap o' Noth, or the nearby Finavon, which is located just 2.2km to the north. This type of monument is characterised by its sub-rectangular, or oblong, shape, massive timber laced vitrified walls and a distinct lack of an entrance (Cook 2010). They usually range from between 0.1–0.8ha in size and are usually placed in prominent hilltop locations (RCAHMS 2008: 101). The similar shape and design of these oblong forts might infer they belong to a single period of construction, however, the dating of these distinctive forts has been contentious. Earlier campaigns of excavation at sites such as Finavon, Angus (Childe 1935a, 1936; MacKie 1966, 1967) are now being complemented by more recent investigations of sites such as Craig Phadrig, Highlands (Peteranna & Birch 2019; see also Small & Cottam 1972), Dunnideer, Aberdeenshire (Cook 2010) and Tap o' Noth, Aberdeenshire (University of Aberdeen current excavations). Artefactual evidence and radiocarbon dating from these investigations, coupled with archaeo-magnetic or thermoluminescence dating at Finavon, Angus; Craig Phadrig and Knockfarril in Inverness and Tap o' Noth, Aberdeenshire (Gentles 1993; Sanderson et al 1988) suggests the construction and destruction of these sites in the period 400–100 BC, a chronological horizon supported by the most recent work at Tap o' Noth. A more defined Bayesian date range, supported by charcoal analysis of pollen sequences from Dun Deardail, suggests the fort was destroyed between 347 and 284 BC (Forestry Commission Scotland 2018: 42, 56).

While the chronology of these sites is now on more solid foundations, the function of these monuments is not well understood, with excavation having generally focused on the enclosing elements rather than internal features. The massive timber-laced stone walls and the general topographic setting would have made these impressive defensive works, though many have focused on the potential ritual and ceremonial function of this site type. Notably, a

number of these forts have large, internal wells, with the complete excavation of the example from Finavon producing fragments of a human skull, hinting at a possible ritual or ceremonial use (Childe 1935a, 1936; Harding 2012: 86–7). Finavon is a particularly striking comparison for the oblong fort on Turin Hill as it sits just over 2.2km to the north. It was excavated by Childe in the 1930s, who exposed a considerable length of the rampart and identified evidence for settlement against the northern inner face of the fort (Childe 1935a: 63). The excavations revealed the wall would have stood at least 4.3m high (Childe 1935a: 67), hinting at the potential monumentality of the now almost completely robbed-out example on Turin Hill. Finavon also shows some signs of chronological complexity, with Lock and Ralston (2017) noting that the oblong fort (T1) was probably extended at the eastern side (T2) and that it may overlie an earlier enclosure (T3) comprising a bank which, at the north-east, has an internal ditch.

The oblong fort on Turin Hill corresponds well with the sites described above, being of comparable shape and size, with no evidence for an entrance, possible indications of associated timber lacing and evidence that the enclosing elements were destroyed by fire. In most cases, these oblong forts have not revealed any definitive freestanding internal structures, however, it is difficult to assess the Turin Hill example in this regard. The possible hut structures identified within the oblong fort through geophysical survey are likely to belong to an earlier phase of occupation associated with the bivallate hillfort, though excavation is needed to clarify this.

DUNS IN EASTERN SCOTLAND

Morphologically, the three small duns on Turin Hill are similar and may be broadly contemporary, perhaps being built sometime after 400–200 BC, when the oblong fort was destroyed and abandoned. However, the dating is broad, with the eastern dun having a *terminus post quem* date of 410–210 cal BC (95.4% probability), the western dun a *terminus post quem* date of 360–170 cal BC (95.4% probability) and the central dun a *terminus post quem* date of 730–390 cal BC (95.4% probability) and a date of 50 cal BC–cal AD 70 (95.4% probability) for an upper floor layer. Thus, the three duns could have been built relatively soon after the destruction of the oblong fort, with the central example demonstrating a period of occupation that extended into the last century BC or 1st century AD. The dating of small enclosed duns of this kind has long been contentious. Taylor (1990) has identified morphologically similar sites in central Scotland that he terms duns or homesteads.

Sites of this form, such as Tombreck or Black Spout, show only Iron Age use (Strachan 2013), but others, such as Queen's View and Litigan (Taylor 1990), have finds that suggest early medieval phases, if not early medieval primary construction. Excavations at Aldclune, Perthshire, showed that Iron Age homesteads could be reused in the early medieval period, complicating the picture further (Hingley et al 1997: illus 2 and 3). A limited number of enclosures similar to Aldclune and some of the other larger Perthshire duns also occur in Aberdeenshire, where enclosures of a similar scale have recently been dated to the early medieval period (Cook 2011a, 2011b). Examples investigated include Maiden Castle on the slopes of Bennachie in Aberdeenshire (Cook 2011a), which featured remains of at least two successive enclosures: a thick stone-banked enclosure of around 20m in internal diameter was enveloped by perhaps successive phases of surrounding ramparts and ditches (attaining a maximum of 40m in overall diameter). Nonetheless, the radiocarbon dates from the Turin Hill examples and from Rob's Reed suggest all are Iron Age. This is important: although the dates are all *terminus post quem* determinations, it is likely that that these examples are Iron Age in date, given the consistency of dating across the four examples. It seems unlikely that they were constructed or remained in occupation in the early medieval period as has been speculated by a number of scholars, such as Fraser (2002: 58), Alexander and Ralston (1999: 46) and Driscoll (1998a: 51). While there is no radiocarbon evidence suggesting reoccupation of these sites in this

period, a simple carved cross (NGR: NO 5135 5349, Canmore ID: 34959) in the field boundary, within the central dun, might hint at some form of less substantial reuse of the forts on Turin Hill and locale – though it is more likely that this monument was a boundary marker rather than indicative of later reuse or occupation of the Turin Hill forts.

HILLFORT CLUSTERS AND REUSE

One final issue to consider is the density of hillforts and duns on Turin Hill. There are numerous examples of clusters of enclosed sites throughout Britain, such as the linear set of forts on the Ridgeway in southern England (Cotton 1962; Bell & Lock 2000), or the group of eight sites between Clywedog and Trannon on the eastern slopes of the Pumlumon massif in Wales (Brown 2009: 205), or the clusters of forts in Northumberland or the Borders – such as those on the Cademuir ridge in the Scottish Borders – or the more local Brown and White Caterthuns in Angus, and Castle Law in Perth and Kinross. The latter is a particularly good comparison, given the presence of a vitrified, timber-laced oblong fort on the summit, surrounded by multiple phases of enclosure construction and a cluster of settlement platforms. However, the addition of three possibly contemporary duns to two larger forts, as at Turin Hill, is a rare combination.

Cunliffe (1991: 537–8) argues that the close pairing of some hillforts may represent the archaeological manifestation of a system of partible inheritance, with the younger generations of important families building sites nearby or the family dividing assets after the death of a prominent leader (Williams & Mytum 1998: 144; Brown 2009: 225–6). At a cluster of eight small hillforts in Llawhaden, Pembrokeshire, Wales, between two and four of the sites were occupied at any one time, which led Williams and Mytum (1998: 140, 144) to argue that land and property of a household leader had been divided between successors. Harding (2012: 17) has also interpreted hillforts that occur in very close proximity on the same hilltop as reflecting the possible dual control of land by kin groups of equal status.

There are other potential explanations for the cluster of forts on Turin Hill. In an ethnographic context, on the North Island of New Zealand, for example, some Pā (large forts) were abandoned after the burial of a chief and new Pā were constructed close by, sometimes within a few hundred metres of the former. The ritual nature of the abandonment might explain why the builders of the later fort did not take advantage of the pre-existing defences. Armit has proposed a similar scenario for the Iron Age multi-vallate hillforts on Doon Hill, East Lothian, which lie a few hundred metres from each other (Armit 2007: 35).

We must also consider the deliberate reuse of Turin Hill, with at least three distinct phases of construction. This is something that is more common throughout Britain, with evidence for continued construction of enclosing elements at the nearby Caterthuns, or indeed in southern Scotland at Eildon Hill or Traprain Law. It is also notable that most of the oblong forts (including that at Turin Hill) appear to be placed within much larger fortifications (Halliday & Ralston 2013: 228), inferring these hills were significant places that were reused and altered a number of times.

While there are clear practical and strategic advantages to reusing an older enclosure, reducing the cost of labour and resources, there may also have been a deeper importance to reoccupying what were ancient central places of power. In ancient societies, links with the past were important as a way of legitimating power, status and claims to the land. In a seminal article, Bradley noted the striking juxtaposition of prehistoric and early medieval monuments, at certain royal landscapes in Anglo-Saxon England, as an attempt by later elites to legitimise their power and status through reference to the past (Bradley 1987). He argued that the selective appropriation of older monuments was a way to create fictitious genealogies, which were important in order to promote or protect the interests of a social elite and protect those institutions from challenge (Bradley 1987: 14–15). We can also identify this phenomenon in early medieval Scotland, with some royal centres such as

Dunadd, Argyll, and Forteviot, Perthshire, located within rich concentrations of prehistoric monuments (Driscoll 1998b; Lane & Cambell 2000). Indeed, a small concentration of cup-marked stones on Turin Hill (Sherriff 1984: 36) may suggest that the builders of the forts may have reimagined and reappropriated a previously important location.

Kristiansen and Larsson (2005: 45) believe that such control over media tied to closely related ancestry and origins, was crucial to legitimate rule in the prehistoric past. This is attested to in Late Bronze Age Ireland, where over 34% of the hillforts enclose an earlier burial monument (O'Brien & O'Driscoll 2017: 29). Even at the Late Iron Age provincial royal sites of Ireland, the large internally ditched enclosures were built around older monuments, with Newman (2007) arguing that features like the famous Banqueting Hall (Tech Midchúarta) at Tara were built during the early medieval period to facilitate the incorporation of older monument into royal inaugurations and ceremonies.

A physical link to the past, in the form of a large, highly visible fortification, would have been a visible way to legitimise an emerging elite's real or perceived link to the past, creating a perceived lineage that linked them to the surrounding land, resources and important people of the past. We might suggest a similar interpretation for the forts on Turin Hill, where high status figures deliberately reoccupied earlier fortifications as a means of visibly embedding their status and power within the landscape. Indeed, this may have extended into the early medieval period, with the setting in place of a series of cross slabs and other monuments at Aberlemno in the shadow of Turin Hill and a cross-marked stone on the hill itself.

But why Turin Hill? There are relatively few hillforts or duns in close proximity to Turin Hill, with only four recorded hillforts within 10km, as defined by *The Atlas of British and Irish Hillforts* (Lock & Ralston 2017). If we include duns, this increases to seven, while including the term 'fort' increases this to ten. It may have been the distinctive natural topography of the hill and the connectivity of the landscape in which it is set that drew generation after generation back to this location. The landscape position of Rob's Reed might hint at the broader significance of Turin Hill and the broader landscape it overlooked. Rob's Reed is positioned just 2.3km to the south-west of Turin Hill, on the same ridge-line, strategically located to overlook the broad expanse and approach from the south-west, an area which is visibly restricted from Turin Hill. The outlying dun at Rob's Reed may have been a strategically placed enclosure used to protect a core area in the later 1st millennium BC, the central focus being Turin Hill itself.

CONCLUSION

The excavations on Turin Hill have helped to clarify the relative and absolute chronology of the complex system of enclosures on the summit of the hill. Of particular importance is the identification of the large bivallate hillfort, potentially dating to before 400 cal BC. This fort in turn was overlain by an oblong fort, with three duns probably dating to the later 1st millennium BC or early 1st millennium AD, also constructed on the hill, with another dun of probable similar date on the south-west flank of the hill at Rob's Reed. Overall, the enclosures on Turin Hill represent a remarkable concentration and sequence of construction and this study has provided the first radiocarbon evidence that will help place these monuments in their wider chronological context, setting the study of these monuments on a more solid foundation for future investigation.

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