

Excavations on Dundee Law, 1993

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with contributions by Alan Leslie, Sheila Boardman & Hazel Moore

ABSTRACT

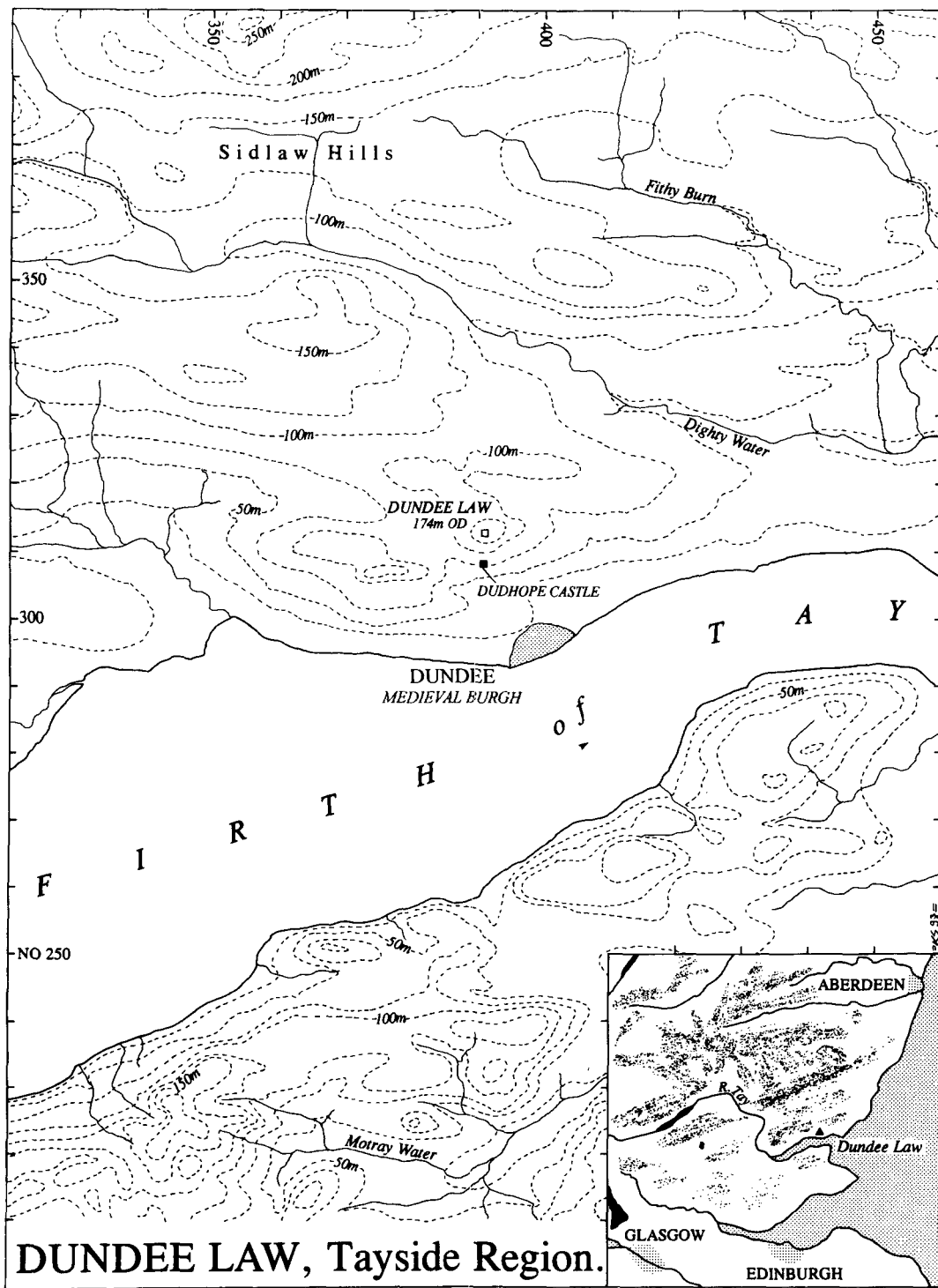
Excavations occasioned by environmental improvements have revealed fortifications on the summit dating from two widely separated eras. The first fortifications date from the Iron Age and were severely burnt and vitrified; the later earthwork fortifications were probably raised in the 16th century. Consideration is given to the form of the later earthworks and the historical significance of the Law to Dundee.

INTRODUCTION

The Law is the highest point in Dundee and dominates the city's skyline. Although it is now obscured from the town by buildings, it provides a distinctive landmark from the river or the Fife shore. Throughout the Middle Ages the steep-sided volcanic plug lay outside the burgh (illus 1) but was nevertheless identified with it (see below). Moreover it has long been recognized that traces of a rectilinear fortification survived on the summit of Dundee Law, which are clearly illustrated on Crawford's map of 1777 and his engraving *View of Dundee from the River*, dated 1793. The fortifications may just be visible in Slezer's *Prospect of the town of Dundee from the East* (1693; Cavers 1993, 55). The greatest part of the fortifications are a Scheduled Ancient Monument, the area to the south of the War Memorial being excluded from the protected area. Despite this long awareness of the fortification and their recognized importance to the national heritage, there has been no consensus as to their origins or historical significance. Published opinions range from the Iron Age to the 17th century (Warden 1880, 52) and Christison (1900, 53), who is usually a reliable guide on matters of date, was uncertain and concluded that the fort on the Law was 'an anomalous and puzzling work' (1900, 53).

The summit is nearly flat, with the northern end being slightly more elevated. Overall it is approximately oval in plan. The final ascent is extremely steep on all sides and to climb to the summit the modern road is forced to encircle completely the last 30 m of the ascent. The visible fortifications consist of noticeable, if unimposing, earthen banks which run with the long axis of the hill to define an approximately rectangular area. Nowhere do the banks stand more than about 1 m above the interior, and in places they have been entirely obscured by modern building on the hill. Only with the eye of faith can one discern the small D-shaped 'annex' recorded by Christison (1900, 52), on the northern end of the summit. The 'annex' has suffered from the presence of the radio mast and the transmission equipment building, which have removed most traces of the

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ILLUS 1 Location map showing the setting of Dundee Law and the extent of the medieval burgh as represented by Torrie (1990) (Based upon the Ordnance Survey map © Crown Copyright)

rampart. At the opposite end, the southern rampart has completely disappeared under the parking area around the War Memorial and the original entrance to the fortification from the south-east has been cut away by the road to the summit.

The most detailed plan of the fortifications (illus 6) is to be found on Collie's survey of Dundee (1850–2, sheets 44 & 57), which has been used to reconstruct the missing elements of the plan (illus 2). Not only does Collie's map present the complete plan without the modern features, but it apparently reveals details of the structure which are now less distinct than they were in the 19th century. The Collie map shows that at each corner there were round bastions which projected beyond the line of the rampart. These now survive only on the northern corners; subsequent use of the hill has rendered them irregular although they are still massive. As far as can be seen from Collie's map the original approach was by a track which began midway along the east side and ran south across the slope until it reached the southern end of a flanking earthwork. At this point the track dog-legged west to a gap in the earthworks inside the south-east bastion. This earthwork (rudely planned by Christison) has been largely obliterated by the modern road (illus 2, C–D). There may have been additional earthworks beyond the area covered by the plan; Warden observed that 'below the summit there is the appearance of several outworks' (1880, 52). Today the only visible earthworks in the grassy meadow east of the summit are field boundaries.

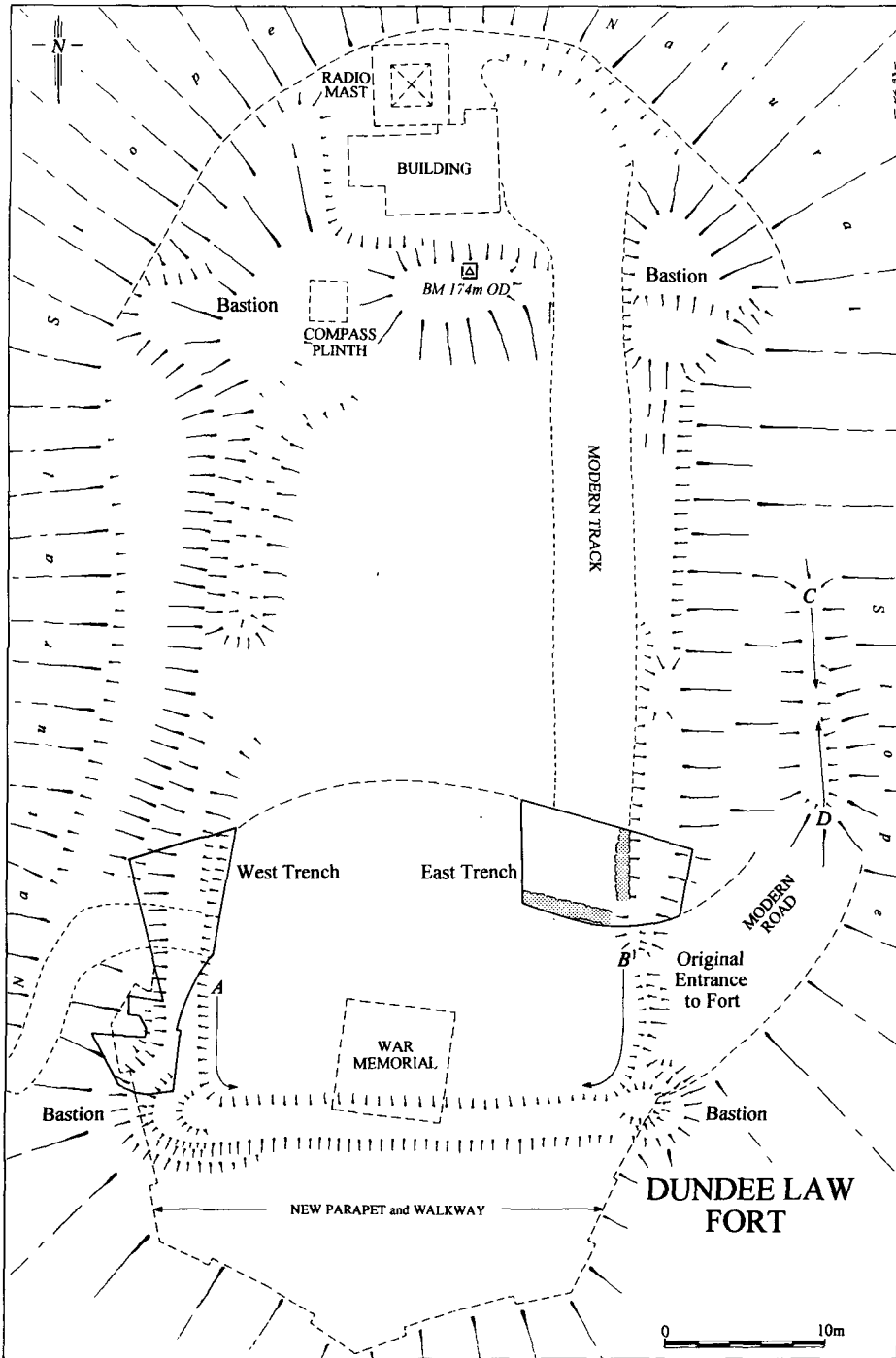
THE CIRCUMSTANCES OF EXCAVATION

The opportunity arose to investigate the earthworks on Dundee Law as part of a scheme of environmental improvements to the park containing the monument. The scheme, which was sponsored by Scottish Enterprise Tayside and by Dundee District Council, included limited landscaping works and improved visitor facilities which were intended to enhance the setting of Dundee's premier park. The most substantial works were the slight modification to the parking area and the provision of a parapet with seating on the south end around the War Memorial. The need for archaeological participation was identified at the outset, and archaeological advice was provided at every stage of the project; this allowed the excavations to be programmed into the overall construction works.

The approved design for the improvements on the summit encroached upon the Scheduled area at its southern corners, where the paved area was modified to provide coach access. In consequence, each of the trenches excavated included a stretch of the rampart, and the eastern one also included some 25 sq m of the interior (illus 2). The excavations took place in February 1993, under windy but dry conditions over a period of two weeks. As a result of the discoveries made in February, a further watching brief was mounted in July in an attempt to locate the south-west bastion.

PREVIOUS DISCOVERIES ON THE LAW

The only properly documented excavations on the Law were made as part of the preliminary investigations for the improvement scheme (Rideout 1990). This work involved re-excavating trenches dug for the electric cables within the Scheduled area, the cutting of a section across the northern rampart where it had already been cut by the modern track, and the opening of an area 5 m by 5 m in the angle formed by the northern rampart and the modern track to the radio mast. The re-excavation of the cable trench suggested that archaeological deposits survived in places where the depth of the soil approached 1 m. The 5 m by 5 m area revealed that below the topsoil there were archaeological deposits including rock-cut pits. No datable artefacts were recovered.



ILLUS 2 Dundee Law Fort, plane-table survey of upstanding remains. The earthworks shown where they have been destroyed by the War Memorial (between the points A and B) and by the road (between C and D) have been reconstructed from Collie's map of Dundee (1850-2); illus 6)

The section across the rampart confirmed Christison's suggestion that the ramparts were built of earth with very little stone.

Earlier discoveries have been made on the Law, but none is well documented. During the erection of the War Memorial a steatite lamp was discovered (NMRS NO 33 SE 32), which is discussed below. More recent construction work, during the erection of the mast in the 'annex', disturbed two lines of boulders which are the only evidence for stone-built ramparts. On the shoulder of the Law just north-east of the summit, discoveries were made of 'Ancient Arms, Human Bones etc.' (NMRS NO 33 SE 33). These discoveries were reported only as a note on the 1st edition of the Ordnance Survey map and presumably were unearthed during agricultural improvement or during the opening of the whinstone quarries, now filled in, on the north side of the hill. Just below the summit, on the south-east shoulder, a cist containing an unusual square jet 'button' was discovered in the later 19th century (Sturrock 1880, 266). If this find is taken as a guide it may be that the earlier finds were also broadly of Bronze Age date, although a later date is surely possible. In addition, there are several pieces of vitrified stone, which have been reported as coming from the Law, in the Dundee Museum and Art Gallery (NMRS NO 33 SE 32).

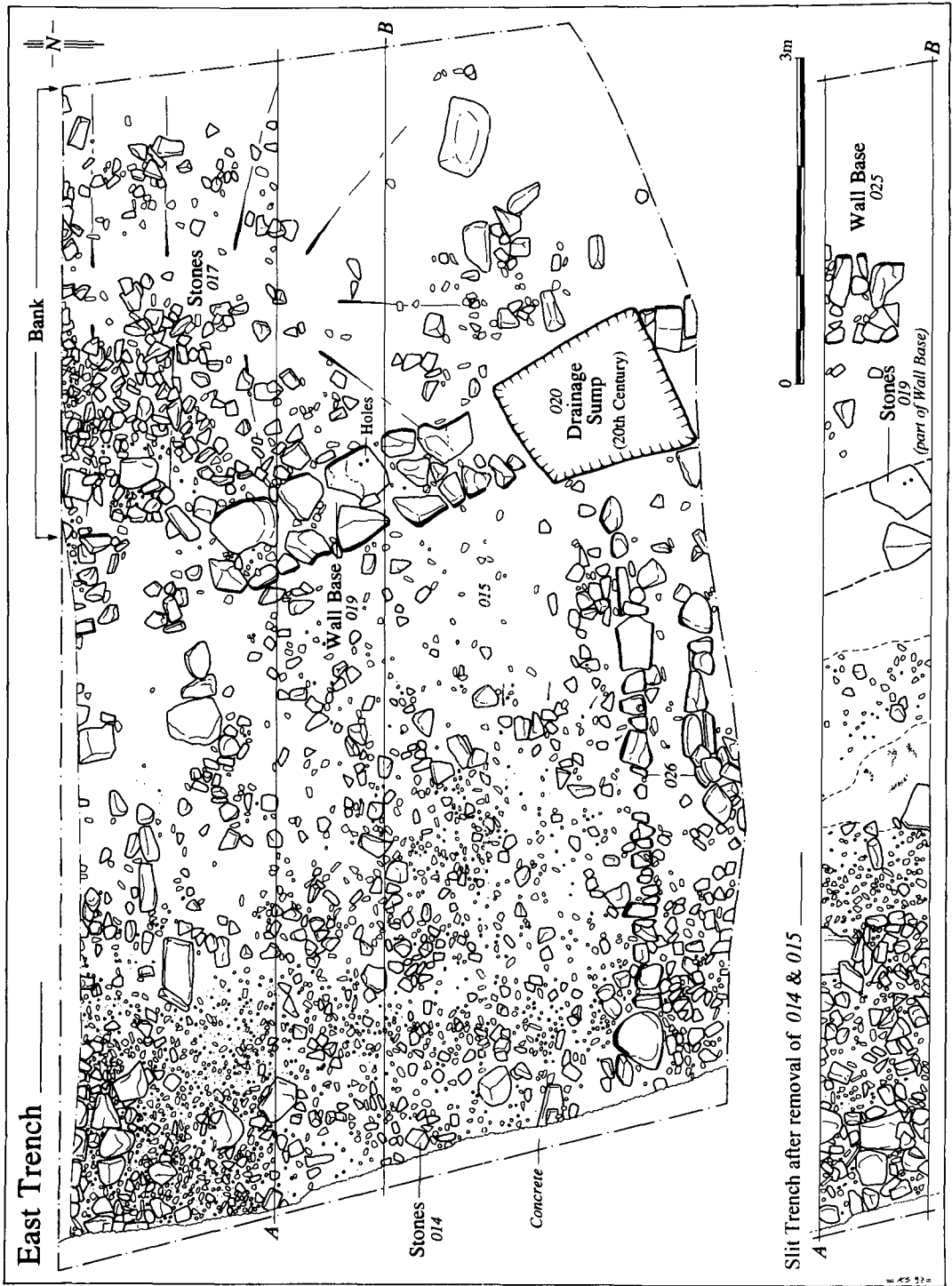
The most pressing question to be answered by these excavations was the fundamental one of date, although because of the previous evaluation work there was also a strong expectation that some archaeological deposits would be present within the interior. Thus a second objective was to determine what sorts of activity took place within the interior.

RESULTS OF SURVEY AND EXCAVATION

In association with the excavations, the opportunity was taken to make a plane-table survey of the earthworks (illus 2), since the most recent archaeological survey was that of Christison (1900, 52-3). The main result of the survey has been to reveal that the ramparts are not as regular or as rectilinear as the published plans suggest. The survey (and the excavations) reinforced the view that there was indeed a counterscarp bank on the west side. The long ramparts diverge slightly at the southern end, reflecting the actual shape of the hill. The rampart profile is not as regular as the existing plans had suggested. Approximately half-way along the long ramparts the profile changes, and the northern half appears to have a second, narrower, level of building. This feature is more pronounced on the western side. It is impossible to tell whether this is an original feature or the consequence of erosion during the last century.

The major discrepancies between Collie's survey (published 1850-2) and Christison's sketch plan, concern the bastions and a possible north-east approach. Christison did not recognize the bastions but saw instead projecting earthworks extending downhill from each corner, which he shows as terminating at approximately the bottom of the final ascent. As it survives today the north-west 'bastion' is a gentle swelling at the corner where the two ramparts come together, which projects beyond the line of both ramparts. It does not stand proud of the ramparts, nor is it perfectly round. Nevertheless it is there and large volumes of soil or stone have clearly been deposited on the slope below the corner. Similar build-ups of material, which swell out and augment the natural profile of the hill, are visible on the north-east corner and below the approximate site of the south-west bastion. On balance the surviving field remains are consistent with the presence of corner projections which might as well be regarded as bastions. Their exact form remains in some doubt and we should probably regard the perfectly circular forms of the Collie survey as idealized.

Christison's projecting earthworks and the second north-east approach are probably best ignored and may be attributed to heavy ground cover or poor draughtsmanship. Today on the east



ILLUS 3 Excavation plans of east trench

side, the modern road and the pine plantation obscure the evidence for most of the extent of Christison's projections. On the west side, it would seem more appropriate to treat the evidence as supporting the idea of bastions. Christison suggested a second approach (in addition to accepting the dog-legged track on Collie's plan) which came from the north-east and progressed between the flanking earthwork and the eastern rampart. This seems unlikely, but whether this was the original access cannot be now resolved.

THE EAST TRENCH (ILLUS 3)

The east trench was located just north of the point where the modern road reaches the summit and just north of the original entrance. Here modification to the paved area threatened the eastern bank and some of the interior. Most of the area investigated lay under the modern gravel track, with only the south-east corner being under grass. Stripping of the metalling and turf revealed the Victorian ground surface (which produced numerous finds), while under the turf a very rich organic loam (018) was exposed in the area of the rampart. Subsequently a local informant observed that in the recent past there had been flowerbeds in this area of rich loam. In places these late deposits extended to over 0.5 m below the modern ground surface. Once these modern deposits had been removed an area of silty organic soil (015) was revealed which became gradually stonier as one moved west until it formed a distinctive stony layer (014). This sounds reminiscent of the deposits encountered in the assessment excavations (Rideout 1990). Protruding through at this level were two stone-built features (019 and 026).

The more substantial feature (019) consisted of rough-hewn stone blocks set against the inner side of the east rampart in a line two stones wide with no bonding material. This may have formed the footing to an inner revetment for the rampart. It seems that the footings ran beyond the southern edge of the trench, but the presence of a modern pit (020) made it difficult to be certain. The northern extent of these footings was not established as it was overlain by a considerable build up of silt (015). This is reminiscent of the rude stone alignment in the rampart reported in the northern annex (see above).

The second stone feature (026) visible at this level was more ephemeral and lay approximately at right angles to the orientation of the east rampart. This slight feature consisted of a possible parallel setting of stones which might have been a drain. It was not further investigated.

Upon removing the former flowerbed (018) the body of the rampart was seen to consist of loose angular stones in the order of 0.1–0.15 m across; the space between the stones was filled with soil. This was not fully sectioned but, based on the evidence of the west rampart, this mass of small stones can be interpreted as the rampart core.

A slit-trench, 1 m wide and oriented east/west, was excavated through the interior deposits and the rampart. In the interior it was excavated to a further depth of approximately 0.3 m, but served only to expose more densely packed stones under 014 and further depth of silts under 015. Although the stratigraphical relationships were somewhat vague, it seems likely that levels exposed were contemporary with the rampart itself. To say that the stone chipping represented the demolition of masonry structures would be overstretching the evidence, but there certainly is sufficient evidence to suggest that it represented occupation residue.

The slit trench cut through the rampart at the point where much of the core had already been removed by the flowerbed; it revealed the end of a drystone wall (025) of similar dimensions to the presumed revetting wall (019). Because of the disturbance caused by the cultivation of the flowerbed it is impossible to know whether this terminal represents the real end of the wall. However this structure certainly lies below the core of the rampart which consists of dumped chipped stones (017). It may be an earlier structure also built along the break of slope.

No finds which might have helped to date the ramparts or associated features were recovered, nor was suitable material for radiocarbon dating recovered here. However, the contents of the modern pit added a further level of complexity to the structural history of the Law. This rectangular pit contained large quantities of vitrified stones mixed with modern debris. The pit served as a soak-away sump for a roadside drain which was probably dug at the time of the construction of the War memorial when the modern road was first paved. The vitrified stone confirms the earlier reports of vitrification, but it cannot be linked with the defences that were revealed in this area. It must be presumed that the vitrified stone came from a structure disturbed during the construction of the War Memorial.

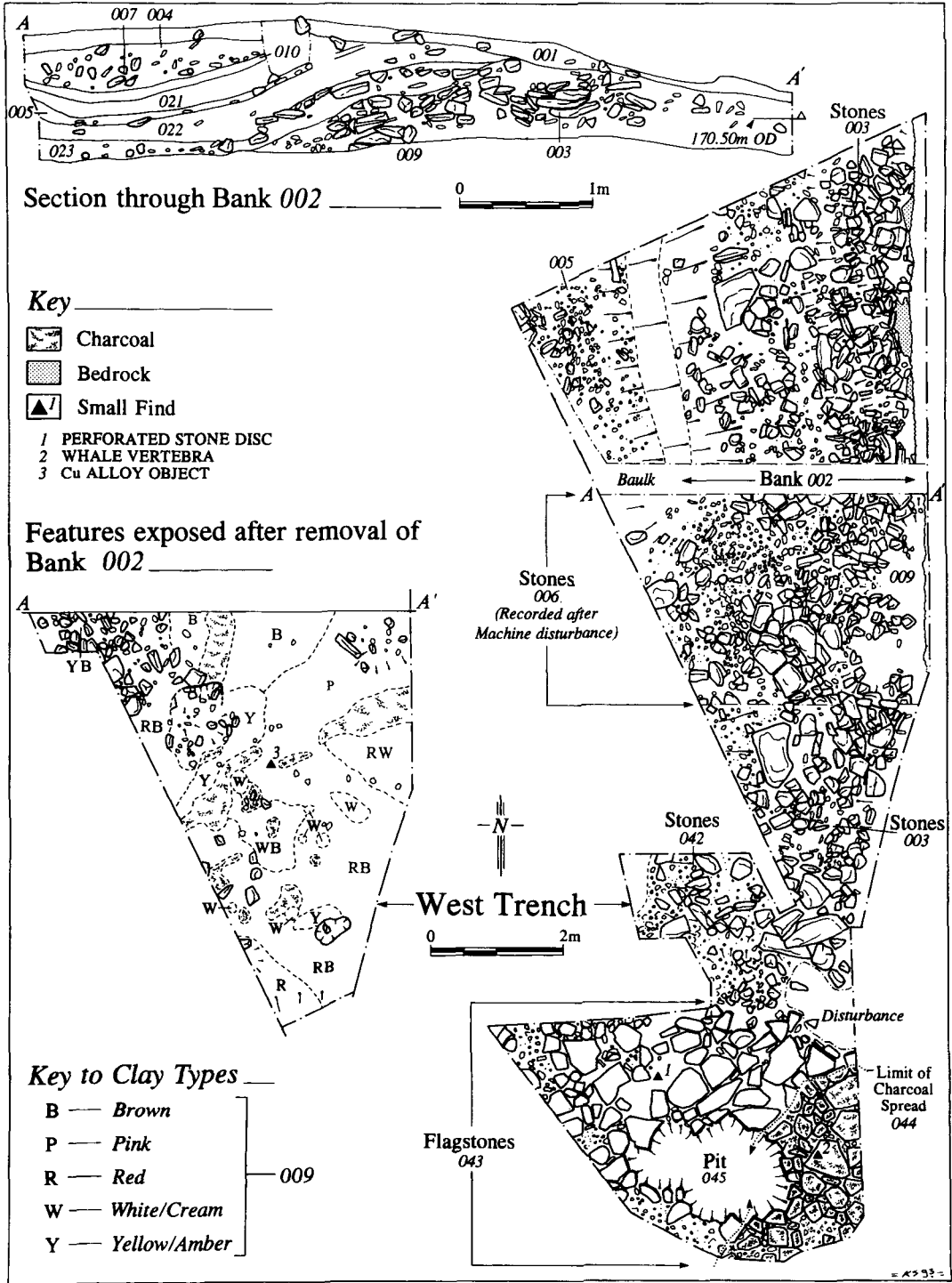
Because the sensitive archaeological deposits lay well below the level of the impact the improvement programme, and because the deposits appeared to be both deep and complex, it was decided not to investigate them further. Instead, steps were taken to ensure their protection during the construction work.

WEST TRENCH & SOUTH-WEST EXTENSION (ILLUS 4)

The excavations on the west were also designed to accommodate changes in the paved area, and to allow for a new footpath to the summit. Before excavation the west rampart was barely visible at this point and, prior to the archaeological excavations, had gone unnoticed by the contractor during the installation of the footpath. This disturbance exposed the body of the rampart, but removed little more than the topsoil. The rest of the area was completely excavated by hand. The watching brief developed into a small excavation, conducted just before the final improvements on the summit. It linked up directly south of the original trench (approximately 3.5 m south of the baulk labelled A–A' in illus 4). The initial stages of the watching brief/excavation were done mechanically. The peculiar shape of the trench was dictated by the presence of electric cables and of a lamp-post.

The structure of the rampart and the external ditch were most clearly observed in the section (A–A') laid out across the earthworks. The ditch contained over 0.75 m silt, some of which lapped over the crest of the rampart. Of the rampart itself only the core (003) and some of the tumble (023) could be identified with certainty. This core consisted of loose angular stone which, although similar to the core (017) revealed in the eastern trench, also contained much larger stones. These were largely sandstone slabs, but they were not coursed or bonded. The silt of the ditch did not contain large quantities of stone, so either the rampart was never particularly high or it contained a timber component. As the surface of the rampart was cleaned and as it was removed south of the section, particular attention was paid to the identification of evidence for timber work such as post-holes and beam slots. No signs of timber work were noted, but the rampart was very dilapidated in this area. Indeed, it was so dilapidated that in the extension (from a point about 3.5 m south of the baulk A–A') it was impossible to trace it for certain. The rampart core (003) petered out into a loose stone spread (042).

Upon clearing the bank away in the original excavation area, considerable evidence of burning was revealed. A mixed burnt deposit (009), consisting of white or yellow ashy spreads and patches of charcoal, overlay the natural subsoil which had been scorched pink and red. The vividness of the scorching suggested burning of great intensity. This episode of burning clearly predated *all* the rampart construction activity observed in the west trench, perhaps by some considerable period. No vitrified stone was found in the trench, but samples of charcoal sealed under the rampart provided a charcoal sample for a radiocarbon date (GU-3920). This yielded a calibrated age of 517–397 BC at one standard deviation (for full details, see below).



ILLUS 4 Excavation plans and section of west trench

The extension of the trench was intended to confirm the presence of the south-west bastion, to reveal its structure and to recover some further dating evidence. The build-up of material on the slope below the expected position of the bastion (mentioned above) was confirmed by observations of a rough stone base or revetment exposed during the construction of the new south-west footpath at a level some 7 m or 8 m below the summit. Unfortunately detailed evidence for the bastion could not be secured during the watching brief.

As has been mentioned, it proved impossible to trace the line of the rampart southwards with confidence, not least because of the presence of another flowerbed (the area marked 'disturbance' on *illus 4*). However, an area of flagstone paving (043) was discovered in the approximate location where the top of the south-west bastion was expected.

In the south-east corner of the trench the paving was sealed by a layer of charcoal and ash (044) about 0.05 m thick, which was *not* directly linked to the burnt layer (009) seen to the north. This second burnt deposit (044) contained a higher proportion of charcoal than the first (009) and appeared to have derived from a less intensive fire (there was no scorching of the ground). Within the charcoal and ash was the greater part of a whale vertebra. The ashy layer slumped into an irregular pit (045) which had been cut through the paving and its rubble base (047) to a depth of 1.0 m until it hit the rock and stiff boulder clay. Three fragments of samian ware were recovered from the primary fill (048) of the pit, which was completely sealed by the burning (044). A sample of the charcoal from the burnt deposit was submitted for radiocarbon dating (GU-3921). This yielded a calibrated age of AD 14–119 at one standard deviation (for full details, see below).

THE FINDS

Most of the finds came from the topsoil and are relatively modern. They include buttons, buckles, clay pipes, fragments of industrial pottery and mass-produced bottles and bottle-stoppers. These may be dated loosely by the small change collected from the same contexts (16 coins dating from 1861–1977). Collectively these finds should probably be regarded as the residue of picnics and other recreational activities.

The catalogue contains only those finds that are thought to be of the prehistoric or Roman periods. There were no definite medieval finds. The finds are grouped by material and the catalogue entries follow a format: Small Find number (context number, trench), and description.

POTTERY

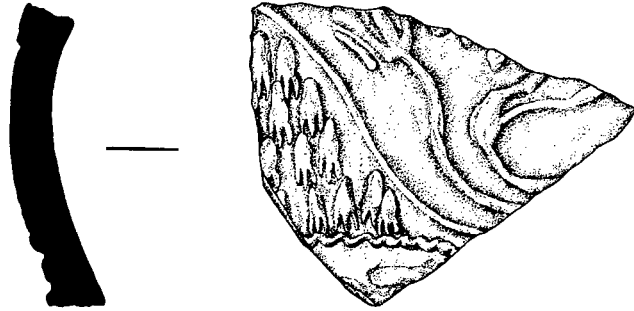
Three sherds of first-century samian pottery were recovered in a well-stratified fill of the pit (45) dug through the earliest levels in the west extension. Apart from these there was no pottery earlier than a single, abrade, Throsk-type body sherd from the topsoil, which probably dates to the 17th century.

The samian

Alan F Leslie

SF49 (48, W-x): Form 22/23, a single basal sherd, bearing evidence of a broken-off foot. The profile is relatively steep-sided, the base flat and the foot narrow. The sherd seems most likely to represent a dish of form 22/23. This form was relatively well represented within the Inchtuthil assemblage, but is more scarce elsewhere in Scotland (Pitts & St Joseph 1985, 316). 36 x 33 x 16 mm.

SF 51 (48, W-x): Form 37, a single burnt fragment (*illus 5*), displaying very clean, unabraded breaks. Almost entirely from the lower zone, the leaf-tip decoration is characteristic of Frontinus, where the device tends to appear in the divided, lower section of scrolls. Comparable examples are found in the assemblage from



ILLUS 5 Samian sherd (SF 51)

Inchtuthil (Pitts & St Joseph 1985, 320 D18), Strageath (Frere & Wilkes 1987, D37. 1986 v.11.6, Knorr 78) and Newstead (Curle 1911, 217 no 1). The piece may be identified as of South Gaulish origin, dating to the 80s AD. 38 x 33 x 6 mm.

SF 52 (48, W-x): Rim sherd of plain samian bowl, with no decoration. Lost in the field.

Metal

SF 38 (9, W): Strip of copper alloy. A narrow, but thick strip of metal folded over into a tight U-shaped profile, broken at either end. The slight curve along the length of the strip suggests that it served as the edging for a round opening. It is impossible to judge accurately the original size or form of the opening, but the material it edged was thin, 1–2 mm thick. Two joining fragments, over 37 x 5 x 4 mm. (Find spot marked 3 on illus 4).

SF 48 (48, W-x): Lump of corroded Iron. No obvious form. 32 x 12 x 6 mm.

SF 50 (48, W-x): Small tack of copper alloy. Most of the head is missing. 15 x 1.5 x 1 mm.

Stone

SF 13 (1, E): Lump of red flint or agate, a discarded core which has had several flakes removed. 30 x 22 x 17 mm.

SF 41 (18, E): Struck flake of chalcedony. The form is none-diagnostic. 20 x 17 x 6 mm.

SF 42 (40, W-x): Perforated disk of local red sandstone. The disk is roughly shaped on the edges but relatively thick. Its hour-glass shaped perforation has produced a hole about 8 mm in diameter, which shows no clear signs of wear or polish. More likely to be a loom weight than a spindle whorl. Overall 77 x 74 x 23 mm. (Find spot marked 1 on illus 4.)

Organic materials

SF46 (40, W-x): Whale vertebra, possibly deliberately shaped into a disk. Spindal process is missing and condition is fragmentary. Diameter 235 mm, by 28 mm. (Find spot marked 2 on illus 4.)

SF 47 (44, W-x): Turned bone handle. Burnt fragments of an approximately spherical knob made from the acetabulum of a medium sized mammal (eg pig or sheep). A circular central perforation 3–4 mm in diameter drilled completely through. This may have been the pommel of a composite knife handle. Overall diameter 33 mm, height 23 mm.

THE ENVIRONMENTAL STUDIES

Sheila Boardman & Hazel Moore

METHOD

Two samples (from contexts 009 and 044) were examined prior to submission for radiocarbon dating. Sample 009 was a bulk soil sample of c 13 l, while sample 044 was mostly hand-picked charcoal lumps. The samples were both processed via simple manual water separation. Soil in 1 l fractions was added to a bucket of water and gently mixed by hand. The floating material (flot) was poured off into sieves with mesh sizes of 1 mm and 300 microns. More water was added and this process repeated until no flots remained, and the heavy, sinking material (residue) was clean and free of soil lumps. The residue was washed then through a 1 mm mesh. Both fractions were allowed to dry slowly before being sorted.

The 1 mm flot was sorted in completion. The 300 micron flot has not been sorted. The residue was dry sieved using a 1 mm sieve. The larger (> 2 mm) fraction was sorted for charcoal and all other charred plant remains. One-eighth of the smaller (1–2 mm) fraction was checked for charred plant remains. Wood charcoal was not extracted from the latter.

RESULTS

The flots and residues of sample 009 produced yielded 7.7 g charcoal and 61 quantifiable plant remains as listed below.

Material	Species	Quantity	Comment
Charcoal	<i>Quercus</i>	168 pieces, 4.5 g	Over 50% mature wood
Charcoal	<i>Alnus</i>	4 pieces, 0.1 g	
Charcoal	Unidentified	–, 3.1 g	
Cereal Grains	<i>Hordeum</i>	11	hulled asymmetric
Cereal Grains	<i>Hordeum</i>	4	hulled symmetric
Cereal Grains	<i>Hordeum</i>	14+16 frags	hulled
Cereal Grains	<i>H. sp.</i>	17+17 frags	
Cereal Grains	<i>Avena sp.</i>	1	
	Cereal indet.	1+22 frags	
Wild Species	<i>Chenopodium album</i> type	3	
Wild Species	<i>Galeopsis tetrahit</i> agg.	1	
Wild Species	<i>Gramineae</i> (undiff.)	1 frag	
Wild Species	<i>Gramineae</i> (culm nodes)	4	
Wild Species	<i>Polygonum cf. persicaria</i> L.	1	
Wild Species	<i>P cf. lapathifolium</i> L.	1	
Wild Species	<i>Pteridium aquilinum</i> L. (pinnule)	1 frag	
Wild Species	<i>Rumex sp.</i>	1	
Wild Species	Indent. seeds	2	

The flots and residues of the hand-picked sample 044 yielded only charcoal as listed below.

Material	Species	Quantity	Comment
Charcoal	<i>Betula</i>	198 pieces, 10.6 g	Timber
Charcoal	<i>Alnus</i>	2 pieces, < 0.1 g	Timber
Charcoal	<i>Pomoideae</i> (rowan type)	3 pieces, 0.2 g	Small roundwood
Charcoal	Unidentified	–, 7.1 g	

RADIOCARBON DATES

The two samples were analysed by the Scottish Universities Research and Reactor Centre, which provided the calibrations based upon the University of Washington Radiocarbon Dating Program.

GU-3920 (context 009)

Radiocarbon Age: 2380±50

Calibrated at 1 sigma: cal BC 517–397

Calibrated at 2 sigma: cal BC 760–390

GU-3921 (context 044)

Radiocarbon Age: 1930±50

Calibrated at 1 sigma: cal AD 14–119

Calibrated at 2 sigma: cal BC 40–AD 203

ANIMAL BONE

Animal bone were recovered in small numbers from a range of contexts. The simple counts of identified fragments serve to indicate the range and quantity of material.

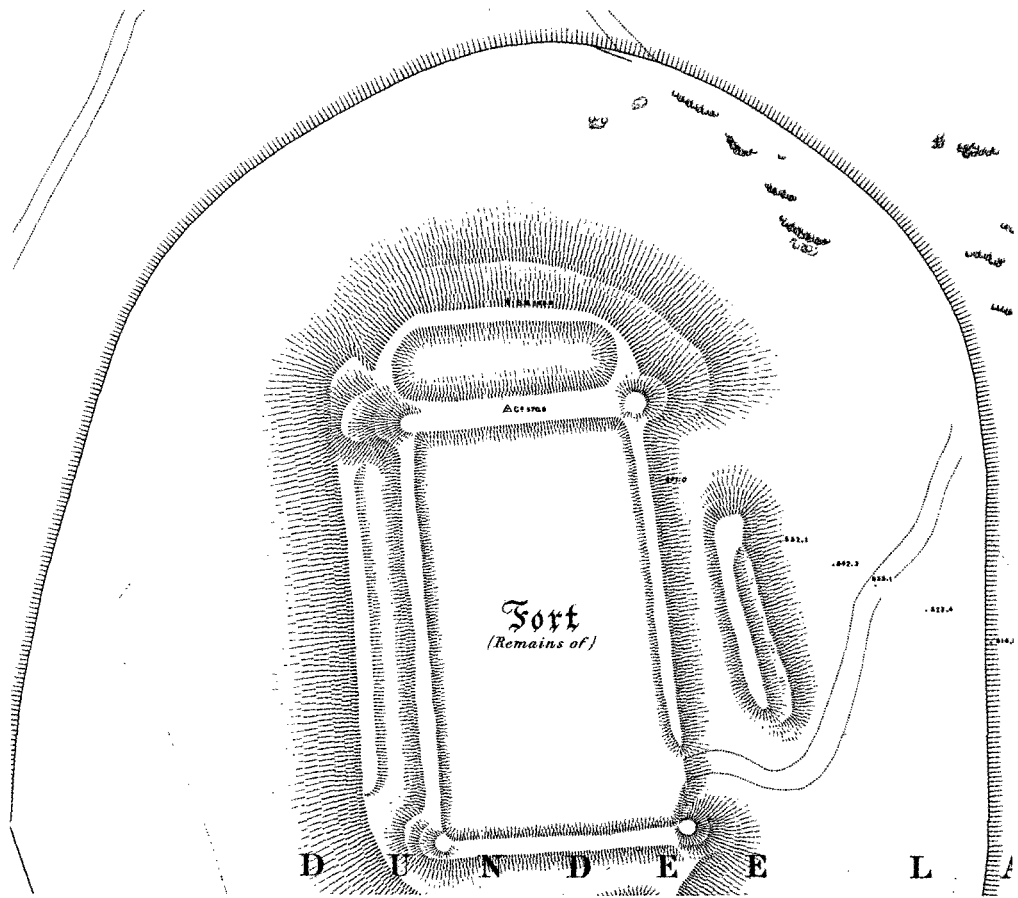
Context /Trench	Cattle	Sheep /Goat	Pig	Other	Unidentified	Comment
006/W	33	18	1	1 antler	200	
008/W		1 burnt				
009/W					4	burnt
015/E	1 tooth					
040/W	17	13	10	35	8	antler frags
048/W	12	6				

THE MAIN STRUCTURAL SEQUENCE

The excavations have shown that there were three broad periods of ancient use of the hill top. The radiocarbon evidence indicates that the first period of activity was in the Early Iron Age. The stratification of the Roman pottery and the radiocarbon date from the associated charcoal indicate another period of activity in the first or second century AD. The third phase of activity represented by the earthwork rampart is probably of post-medieval date.

The Iron Age phase includes the rough paving noted in the extension to the west trench and the intense burning below the earthen rampart in the west trench. The earliest levels in the east trench, including the stone alignment at the base of the rampart, may belong to this first phase of activity. The vitrified rock is present in sufficient quantities to suggest that it came from a timber-laced rampart, of which no traces were seen *in situ*. The only identifiable artefact which may belong to this period is the cup-shaped steatite lamp (illustrated in Coutts 1971, 67 & 75). This is now held in the Dundee Museum (Acc no 1964–55) and was reportedly found during the construction of the War Memorial.

The finds and features point to a relatively intense use of the hilltop, which was probably enclosed by a timber-laced stone rampart that became vitrified. The undated stone wall footings deeply buried under the eastern rampart cannot be linked with the vitrification and might be of any date from the Iron Age onwards. Either of these stone structures may have been what was encountered during the construction of the radio in the northern ‘annex’, suggesting that the ‘annex’ may have been part of this early enclosure of the summit. It would be typical of the hillforts of Angus and Perthshire for the rampart to follow the contours of the hill, resulting in an oval plan. Although the evidence for



ILLUS 6 Dundee Law fortifications as shown on Collie's map of Dundee (1850–2), sheets 44 & 57

permanent settlement is still sparse, it seems appropriate to regard Dundee Law as having been a hillfort. The most remarkable aspect of this activity was the evidence for a very intense fire, which could well be associated with the creation of vitrified stone that probably came from a rampart.

The Roman pottery and the radiocarbon date indicate that the hilltop was used again around the end of the first century. The only feature which can be firmly associated with this period is the pit cut through the paving which contained the pottery. Such a pit could be explained by the presence of a small Roman observation post, but is perhaps more likely to represent native activity.

The third phase represented by the earthwork fortifications, although the most visually prominent, remains the most obscure. The excavation and the survey revealed that its structure is more complex than was initially expected. It varied from one side to the other, with the area around the entrance having more elements, such as the inner stone revetting. The earthwork fortifications, while clearly a secondary phase, remain undated archaeologically because the excavations did not produce any suitable dating material. The complete absence of medieval or post-medieval pottery is striking and would indicate that little use was made of the hill prior to the construction of these fortifications. As a consequence, the 19th-century plan and the early accounts, which describe the fortifications before their damage by the War memorial, provide the best evidence for determining their date and historical context.

THE HISTORICAL CONTEXT OF THE EARTHWORK FORTIFICATION

The Law and its fortification have attracted speculation from a number of local Dundee historians. The account in *Angus and Forfarshire: the Land and People* by Alexander Warden is one of the most detailed. Not only did he provide one of the better 19th-century descriptions of the earthworks, which allows us to have confidence in Collie's map, but it also identified the fortifications with relatively recent historical periods:

The angles present the remains of circular towers, and an outer rampart may still be traced. The ascent was by an easy winding path to the east, and at the entrance of the fort, which was through a long narrow passage, the defences were strongest. Below the summit there is the appearance of several outworks, and the stronghold must, when entire, have been a place of considerable strength. Edward I, Montrose and Monck severally occupied the land with their forces, and the entrenchments they formed on and around it must have changed its previous appearance considerably. It is not known by whom the fort was erected, but it is probably the work of the ancient Britons (Warden 1880, 52).

Warden's instincts about the origins have been proved correct, but despite the repetition in more recent accounts, none of the three military leaders he cites is likely to have played any role in the creation of the earthwork fortification. Edward I is most unlikely; there is no known historical reference to support Edwardian building work within the barony of Dundee. Nor is there an appropriate gap in his itinerary when he might have personally seen to such an undertaking (Fiona Watson, pers comm).

It is much more likely that the earthworks date to the 16th or 17th centuries, when there were two possible circumstances for its construction: the 'Rough Wooing' and the War of the Covenant. Given the potential significance of historical events for establishing the date of the fortifications, it is worth reviewing the evidence in some detail. The fortification of Dundee during the War of the Covenant is well documented but there is no documentary evidence for the fortification on the Law itself during either Montrose's or Monck's raids (Torrie 1990, 101–7). During the War following the Covenant, Dundee, by virtue of its prosperity, was subject to attack by both sides. The first by Montrose in 1645 was more of a raid since he held the burgh for less than one day, although it is reported by a contemporary that 'Montrose stood upon the top of a hill close to Dundee looking upon this skirmish, ...' (Yeaman 1873, 66). That hill could well have been the Law. The speed of Montrose's activities make it unlikely that they would have fortified the Law especially in view of his lack of artillery. The second possibility relates to Monck's siege of Dundee in 1651. This was preceded by feverish attempts to strengthen the burgh's defences. Considerable municipal monies, £20,000 Scots (Yeaman 1873, 75), were allocated to fund the work, but Maxwell's relatively full account of the Council records (1886, 542–5) makes no reference to works on the Law, while there are many details about the dilapidated state of the burgh's walls and ports. Given that the expectation was for an attack by sea, defences on the Law might not have been an especially high priority. Whether Monck used the Law as his base is not reported; it would have been sensible, but it is perhaps rather distant from the burgh to have been effective and the earthworks seem too elaborate for such a short siege.

The Rough Wooing emerges as the most plausible context for the erection of the bastioned earthwork defence. An English garrison occupied Broughty Castle for over two years from later 1547 to early 1550 (Merriman & Summerson 1982). From this stronghold they attempted to control the Tay and her principal burghs and conducted prolonged campaigns on several occasions. The complicated political situation in which Dundee found itself has been discussed in detail by

Sir Francis Mudie (Mudie *et al* 1970) and his account has served as the basis for the following summary account. Broughty Castle was captured by the English, supporting the Protestant faction, in September 1547 so as to provide a secure base on the Tay. In October of that year an ‘assurance’ was arranged between the English garrison and Dundee, which housed a significant number who supported the Protestant cause. Under the terms of the ‘assurance’ the Dundonians agreed not to fortify their town and to allow the English to obtain supplies from the burgh; in exchange, the English agreed not to mount an attack. The ‘assurance’ was signed by leading burgh figures: two bailies, eight councillors and John Scrymgeour, who was Provost and Constable of Dundee.

The Scrymgeours were one of the most prominent families of the district, and had been granted the hereditary office of Constable of Dundee by William Wallace in 1298 (Stevenson & Torrie 1988, 41–2). Included in the grant were the lands of Dudhope, where there stands an impressive post-medieval castle which has been dated to c 1600 (MacGibbon & Ross 1887–92, vol 4, 270–5). It almost certainly occupies the site of the medieval castle. The Scrymgeours expanded their hereditary position as protectors of Dundee from the purely military to the political, and frequently served in the office of Provost.

The ‘assurance’ ended in December 1547 when Broughty Castle was brought under siege by Arran, one of the more aggressive members of the Catholic faction, who nevertheless failed to take the castle. Upon Arran’s withdrawal, the English responded by besieging and eventually capturing the town. The English held Dundee until January 1548, when Argyll relieved the town and forced the English back to Broughty. It was about this time that the English built an earthwork fort on Balgillo hill, a small eminence about 1 km inland from Broughty Castle. It was designed by an Italian engineer, Guiliamo di Rossetti (Mudie *et al* 1970, 26; *Cal State Papers Scot* 1, no 56), but nothing now survives. Once again, in August, the English returned to Dundee and, after another siege, took it. Accounts of the second siege make it clear that John Scrymgeour of Dudhope was one of the principal opponents to the English. During the course of this second occupation Dundee was burned. The departure of the young Queen Mary to France in July 1548, to marry the Dauphin, effectively ended the rationale for the English presence, but it was not until February 1550 that Broughty Castle capitulated and the garrison withdrew.

This rehearsal of the events of 1547–50 is important for several reasons. It demonstrates the nature of the warfare. Sieges were common, cannons were available to both sides and the defences recorded on Balgillo hill demonstrate that the English were prepared to invest in constructing earthwork artillery fortifications which were cheap and fast to build (Merriman & Summerson 1982, 696–7). The second point that emerges is the significant role played by the Scrymgeours as guardians of the burgh. Dudhope Castle must have been regarded as having played an important role in the defence of the town. Seen in the context of monitoring Dudhope, as opposed to Dundee itself, the earthworks appear to be aptly sited. The Law towers over the castle and a few well-placed cannons would certainly have diminished if not neutralized the military effectiveness of Dudhope.

One of the difficult aspects of dating the structure on the Law is that there are very few similar monuments in Scotland, although this is not surprising if it was constructed by the English. Perhaps the most closely comparable fort occupies the summit of Duns Law, in Berwickshire, where a post-medieval fortification has been raised within a hillfort. This is square in plan (about 62 m by 62 m) with square bastions projecting from each corner. The earthen ramparts stand less than 1 m high. The RCAHMS *Inventory* of Berwickshire notes that ‘it is considered to have been thrown up by General Leslie in 1639’ (1915, 66–7). The defensive layout of Dundee Law, although unusual, would be acceptable for the period, given the available space; moreover, the lack of pottery or clay pipes would fit better with the 16th than with the 17th century (D Caldwell, pers comm).

CONCLUSION

The excavations reported upon here, while revealing the potential significance of the Law, have not provided us with detailed or unambiguous insights into its history. Many of the most important observations were made in the 19th century and have all the limitations that we should expect of information more than a century old. Moreover, the structures that survive on the summit are complex and have not fared well in recent decades. Nevertheless, we are now in a better position to recognize the significance of the Law for the history of Dundee, and its significance for hillfort studies in the north-east. The relative scarcity of hillforts north of the Forth has been long recognized, but what has perhaps been less appreciated is the extent to which the hillforts of the north-east might differ from those in the Lothians. Dundee Law helps to correct this oversight.

A brief look at the cumulative evidence for activity on the Law shows that it has persistently been a focus for ceremonial and ritual activities from the time of the Bronze Age burial (probably including the reported discovery of the 'Ancient Arms and Human Bones'). The recent excavations will not permit us to comment authoritatively on the nature of the Early Iron Age and later Roman period occupation, but clear evidence for settlement was not abundant. I think it worth considering whether the Law may have been primarily a religious centre and whether this may have been, in part, a consequence of its distinctive topographical setting. Bradley has made the general point about the marking out of special hills with cup-marks in western Scotland (1993). It is, perhaps, no too far fetched to consider the enclosure (and perhaps even the vitrification) of hill tops as the marking out procedure in the north-east.

Be that as it may, it is little wonder that there should be such a close identification between the Law and the people who dwelt around it. Although we have only glimpsed the evidence for this in the ancient past, the notion of the link between the hill and the settlement persisted until the late 19th century (Yeaman 1873, 2). The name of Dundee itself evidently embodies the essence of the fortified hill. Without tracing the history of the name Dundee it is evident that this identification was well established by the end of the Middle Ages. Slezer's views of the burgh use the name *Taoduni*, hill of the Tay (Cavers 1993, 55–6). In *Scotorum Historiae*, Boece relates a foundation legend for the burgh, which establishes a direct identity with the hill. In the legend, Earl David of Huntingdon (brother of William I), returning from the Crusades, was caught in a storm at sea. Upon spying the Law, his first sight of land, he recognized it as a sign of salvation and declared that '*Donum Dei*' should be the name of the burgh. We may reject this false etymology, but Earl David was intimately associated with Dundee. The endowment of St Mary's is attributed to him and he certainly was the patron of Lindores Abbey, which had considerable property interests in the burgh. In fact, the abbey ultimately came to have authority over the Law as part of the barony of Hilltown of Craigie. The mere fact that in the 19th century Boece's story could still be retailed by reputable scholars (Yeaman 1873, 2) speaks for the contemporary perception of the significance of the Law to Dundee.

In the recent past too little attention has been given to the Law and too little care has been taken of its archaeological assets, perhaps because it has been surrounded by the expansion of the industrial burgh. If nothing else, these excavations have exposed a body of evidence pointing to the prominence of the Law in the consciousness of Dundonians which extends back to antiquity and confirms that it is a major historical asset of the city.

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