Research Report 177

ROYAL FORTEVIOT

excavations at a Pictish power centre in eastern Scotland

EWAN CAMPBELL AND STEPHEN DRISCOLL

ROYAL FORTEVIOT: Excavations at a Pictish power centre in Eastern scotland

SERF MONOGRAPH 2

Ewan Campbell and Stephen Driscoll

with contributions from Alice Blackwell, Nicholas Evans, Katherine Forsyth, Meggen Gondek, Mark Hall, Derek Hamilton, Adrián Maldonado, Tessa Poller, Susan Ramsay, and Ian Scott

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Front cover: David Simon's imaginative interpretation of the Pictish square barrows at Forteviot

Back cover: (left) Aerial view of the Site B square barrows under excavation (right) Detail from the Forteviot 2 cross

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ABBREVIATIONS

HES	Historic Environment Scotland
NMS	National Museums Scotland
NRHE	National Record for the Historic Environment
RCAHMS	Royal Commission on the Ancient and Historical Monuments of Scotland
NGR	UK National Grid Reference
SAS	Society of Antiquaries of Scotland
PMAG	Perth Museum and Art Gallery

SUMMARY

The SERF Project was a ten-year programme of survey and excavation which investigated the historical landscape of the lower valley of the River Earn, Perthshire, in eastern Scotland. It was conceived as an attempt to understand the history of a key area in the formation of the Kingdom of Scotland by tracing human impact on the area from the earliest prehistoric period to the present day, and in particular to investigate the relationship between the major prehistoric ceremonial landscape revealed by aerial photography and the early medieval royal centre at Forteviot. The project combined its research agenda with a University of Glasgow undergraduate field school designed to train students in a wide variety of archaeological techniques.

The first five years of excavation and survey, from 2007 to 2011, took place around the village of Forteviot, Perth and Kinross, where aerial photography had revealed a complex of cropmarks sites covering 26ha. This monograph discusses the evidence of the 1st millennium AD, when Forteviot was the site of the palace of Cináed mac Alpín, king of Picts (d AD 858), and the focus of extensive cemeteries revealed as cropmarks. These Pictish burial monuments were placed around an existing Neolithic and Bronze Age ceremonial complex which included a massive timber palisaded enclosure, at least four henge monuments (one with a massive cist inserted), a cremation cemetery, a ring-ditch, a standing stone and a timber circle. It is believed that the prehistoric monuments survived as upstanding landscape features until their destruction by Improvement agricultural practices in the 18th century, and that in the early medieval period they formed the focus of a royal ceremonial complex and assembly place. The Pictish period burials included square and round barrows as well as dug graves, some containing log coffins. A significant number of these burials were concentrated around a square enclosure of unusual form, which is interpreted as a ceremonial enclosure of the late 1st century AD similar to the Viereckschanzen or enclose cultuels found in Germany, the Netherlands and northern France,

constructed by Roman soldiers from the nearby camps in Forteviot and Dunning or from positions along the Gask Ridge frontier. Burials in the Pictish field cemeteries have been dated from the 4th century through to the 9th, after which burial seems to have been confined to the churchyard. A notable feature of the Pictish burial practice was the presence of cremations dating to the 8th/9th centuries, which is surprisingly late for the Christian period. Unlike the inhumations, these were placed within the prehistoric monuments, perhaps indicating disposal of socially aberrant individuals or of a particular involvement with the Celtic 'Otherworld'. Other signs of early medieval engagement with the prehistoric past took the form of massive pits dug in the centres of the henge monuments, the reuse of a Bronze Age cist, and deposition of prehistoric artefacts in Pictish graves. Within Forteviot village, excavations around the 18th-century parish church revealed it was built on medieval foundations, and burials of probable early medieval date were also found in the graveyard.

The main surviving evidence of this Pictish power centre lies in the sculptured monuments decorated in Insular Art style, which are catalogued in detail with all the monuments from the surrounding area. These include: the 2.6m high Constantine's Cross, believed on inscriptional evidence to have been erected no later than AD 820 to commemorate Custantin son of Uurguist (in Latin Custantin filius Fircus), king of the Pictish kingdom of Fortriu (AD 789-820); the Forteviot Arch, a unique lintel from a stone church with human figures; the Invermay Cross - a fragmented companion to Constantine's Cross; the cross-slab known as the Borestone of Gask; the Blackford Pictish symbol stone; and fragments of other crosses. Some of the figural sculpture is of outstanding quality, its iconography rich with royal references. Images of the Old Testament King David are juxtaposed with equestrian and martial figures possibly inspired by Roman precedents as mediated through Byzantium. It is proposed that the sculpture formed part of the ceremonial apparatus of Pictish royal

inauguration rituals. An early Christian hand-bell of cast bronze from the parish church is described in detail. No certain remains of the Pictish palace were found, but are believed to lie beneath the present buildings of the village.

The concluding discussion places the Pictish ceremonial complex within the context of Celtic royal sites, explores the apparent Byzantine influences behind the royal ceremonial practices of the 8th to 10th century, and positions Forteviot as having a decisive influence on the emergence of the Gaelic kingdom of Alba *c* AD 900.

The prehistoric remains are reported on in:

Brophy, K and Noble, G 2020 Prehistoric Forteviot: excavations of a ceremonial complex in eastern Scotland. CBA Res Rep 176. York: Council for British Archaeology

Résumé

Le projet SERF consistait en un programme de prospections et de fouilles archéologiques mené pendant dix ans dans le but d'étudier le paysage historique de la vallée inférieure de la rivière Earn dans le Perthshire, à l'est de l'Écosse. Son objectif était de déchiffrer l'histoire d'une région-clé dans la formation du royaume d'Écosse en relevant les traces d'influence humaine sur le paysage depuis le début de la préhistoire jusqu'à nos jours ; il portait surtout sur les relations entre une importante zone cérémonielle préhistorique révélée par photographie aérienne, et le centre royal de Forteviot au le haut Moyen Âge. Le projet a combiné les besoins de la recherche avec le désir de l'Université de Glasgow de conduire un chantier-école servant à former ses étudiants à différentes techniques archéologiques.

Les cinq premières campagnes de prospections et de fouilles, entre 2007 et 2011, se sont concentrées autour du village de Forteviot (Perth et Kinross) car c'est à cet endroit que les prises aériennes avaient révélé un complexe de traces visibles sur 26 ha. Le rapport présenté ici traite des données du premier millénaire de notre ère, lorsque Forteviot était le site du palais de Cináed mac Alpín, roi des Pictes († en 858 apr. J.-C.) ; les prises de vues aériennes démontrent la présence de cimetières de grande envergure. Les monuments funéraires pictes avaient été aménagés autour d'un complexe cérémonial du Néolithique et de l'Âge du Bronze comprenant un enclos massif cerné d'une palissade, d'au moins quatre « henges » (monuments circulaires), dont l'un contenait une importante tombe à ciste, d'un cimetière à crémations, d'un fossé circulaire, d'une pierre dressée et d'une structure circulaire en bois. Ces monuments préhistoriques étaient vraisemblablement encore sur pied au moment de leur destruction par les mesures d'amélioration de l'agriculture du XVIIIe siècle ; pendant le haut Moyen Âge, ils étaient au centre d'un complexe royal et d'un lieu de rassemblement cérémoniel. Les sépultures de l'époque picte comprenaient des tumuli circulaires et carrés ainsi que des tombes en pleine terre, dont certaines contenaient des cercueils taillés dans des troncs de bois. Un nombre relativement élevé de ces sépultures était concentré autour d'un enclos carré de forme inhabituelle interprété comme un enclos cérémoniel de la fin du Ier siècle apr. J.-C. ressemblant aux Viereckschanzen ou enclos cultuels d'Allemagne, des pays Bas et du nord de la France. L'enclos de Forteviot a probablement été construit par des soldats romains stationnés aux camps proches de Forteviot et de Dunning ou sur Gask Ridge, le long de la frontière. Les sépultures que l'on rencontre dans les champs funéraires pictes datent des IVe au IXe siècles apr. J.-C., alors qu'ensuite on ne les rencontre que dans le cimetière de l'église. La présence de crémations datant des VIIIe et IXe siècles, remarquablement tard pour l'époque chrétienne, est un trait notable des pratiques funéraires pictes. Contrairement aux inhumations, ces crémations étaient placées à l'intérieur des monuments préhistoriques, ce qui pourrait indiquer des dépouilles d'individus exclus de la société ou impliquer une allégeance à un « au-delà » celtique. De vastes fosses creusées au centre des monuments de type « henge », la réutilisation d'une tombe à ciste de l'Âge du Bronze et le dépôt d'objets préhistoriques dans des sépultures d'époque picte sont autant d'autres indices d'un engagement avec le passé préhistorique au Moyen Âge. Dans le village de Forteviot, les fouilles autour de l'église paroissiale du XVIIIe siècle ont démontré qu'elle a été édifiée sur des fondations médiévales ; des sépultures datant probablement du haut Moyen Âge ont également été découvertes dans son cimetière.

Les monuments sculptés représentent les traces les plus probantes d'un centre de pouvoir picte. Leur ornementation est de style insulaire et figure dans un catalogue détaillé de tous les monuments des environs. Ces derniers comprennent : la « Croix de Constantin », une croix de 2,6 m de haut qui aurait été érigée avant 820 apr. J.-C. pour commémorer Custantin, fils d'Uurguist (*Custantin filius Fircus* en Latin) et souverain du royaume picte de Fortriu (729–820 apr. J.-C) d'après une inscription ; « l'Arc de Forteviot », un linteau orné de figures humaines provenant d'une église en pierre; la « Croix d'Invermay », une croix fragmentée complémentant la « Croix de Constantin » ; un montant de croix connu sous le nom de « Borestone of Gask » ; la « Pierre de Blackford », une pierre à symboles pictes ; ainsi que d'autres fragments de pierres et de croix. Les sculptures figuratives sont en partie de qualité exceptionnelle, leur iconographie riche en références royales. Des représentations du roi David de l'Ancien Testament figurent à côté de personnages équestres et martiaux peut-être inspirés de modèles romains transmis par Byzance. Nous en déduisons que ces sculptures faisaient partie des cérémonies d'inauguration royales des Pictes. Une cloche à main en bronze coulé datant des débuts de l'ère chrétienne et provenant de l'église paroissiale est également décrite en détail. Aucune trace indubitable du palais picte n'a été relevée mais il est probable qu'il gise sous le village actuel.

En conclusion, nous situons le complexe cérémoniel picte dans le cadre des sites royaux celtes, examinons les influences apparemment byzantines des pratiques cérémonielles royales du VIIIe au Xe siècle apr. J.-C. et établissons que Forteviot a joué un rôle décisif dans la genèse du royaume gaélique d'Alba autour de 900 apr. J.-C.

Le rapport concernant les vestiges préhistoriques est publié sous : Brophy, K and Noble, G 2020 *Prehistoric Forteviot* : excavations of a *ceremonial complex in eastern Scotland*. CBA Res Rep 176. York : Council for British Archaeology.

ZUSAMMENFASSUNG

In einem zehnjährigen Programm erforschte das SERF Projekt die historische Landschaft im unteren Tal des Flusses Earn (Perthshire) in Ostschottland mithilfe von archäologischen Prospektionen und Ausgrabungen. Sein Ziel war, die Geschichte eines Schlüsselbereiches in der Entwicklung des schottischen Königreiches durch die Untersuchung der Auswirkungen der menschlichen Einflüsse auf das Gebiet von der frühesten Urgeschichte bis heute zu erläutern. Damit sollte insbesondere den Zusammenhang zwischen einer wichtigen zeremoniellen urgeschichtlichen Landschaft, die in Luftaufnahmen erfasst wurde, und dem königlichen Sitz von Forteviot im Mittelalter untersucht werden. Diese Forschungsfragen wurden mit einem Praktikum der Universität Glasgow kombiniert, in welchem die Studenten in verschiedenen archäologischen Techniken unterrichtet wurden.

In den ersten fünf Jahren, von 2007 bis 2011, wurden Ausgrabungen und Aufnahmen rund um das Dorf Forteviot (Perth and Kinross) unternommen. Dort hatten die Luftaufnahmen, Spuren eines Komplexes über 26 ha entdeckt. Der vorliegende

Bericht enthält die Angaben über das erste Jahrtausend n. Chr., als Forteviot der Herrensitz des Königs der Pikten, Cináed mac Alpín, (858 n. Chr. gestorben), und der Zentralpunkt von großen durch Luftbilder dokumentierten Gräberfeldern war. Diese piktischen Grabdenkmäler lagen rund um eine bestehende neolithische und bronzezeitliche zeremonielle Anlage, welche eine massive palisadierte Einzäunung, mindestens vier Henges (darunter eine mit einer wichtigen Steinkiste), ein Brandbestattungsfeld, ein Kreisgraben und ein aufrechtstehender Stein und eine Kreisanlage aus Holz enthielt. Wahrscheinlich blieben die urgeschichtlichen Denkmäler in der Landschaft erhalten, landwirtschaftlichen bis sie von den Verbesserungsmaßnahmen Jahrhunderts des 18. zerstört wurden. Im Frühmittelalter bildeten sie den Mittelpunkt eines königlichen zeremoniellen Komplexes Versammlungsplatzes. und Die Bestattungen der pikitschen Phase bestanden aus runden und viereckigen Grabhügeln sowie einfache Gräber, darunter einige mit Baumstammsärgen. Eine erhebliche Anzahl solcher Bestattungen konzentrierte sich um eine viereckige Einzäunung von ungewöhnlicher Form, welche als zeremonielle Anlage des späten ersten Jahrhunderts n. Chr. gedeutet wird und den Viereckschanzen in Deutschland, den Niederlanden und Nordfrankreich ähnelt. Diese Anlage wurde wahrscheinlich von römischen Soldaten aus den benachbarten Lagern von Forteviot und Dunning oder den Grenzposten auf Gask Ridge errichtet. Die Bestattungen in den piktischen Gräberfeldern werden vom 4. bis ins 9. Jahrhundert datiert; danach wurde offenbar nur im Kirchhof bestattet. Die Anwesenheit von Brandbestattungen in 8. oder 9. Jahrhundert, also überraschend spät in christlicher Zeit, ist eine bemerkenswerte Besonderheit der piktischen Bestattungssitten. Im Gegensatz zu den Körperbestattungen wurden die Brandbestattungen innerhalb der urgeschichtlichen Denkmäler beigesetzt, was vielleicht auf sozial ausgeschlossenen Individuen oder auf eine besondere Verbindung mit einer keltischen Auffassung des Jenseits hinweist. Große Gruben, welche in der Mitte der Henge-Denkmäler eingetieft wurden, die Wiederverwendung von einer bronzezeitlichen Steinkiste und die Deponierung von urgeschichtlichen Artefakten in piktischen Gräbern sind weitere Zeichen einer Verknüpfung mit der urgeschichtlichen Vergangenheit. Innerhalb des Dorfes Forteviot haben die Ausgrabungen rund um die Gemeindekirche aus dem 18. Jahrhundert gezeigt, dass diese auf mittelalterlichen Fundamenten gebaut wurde; Bestattungen, die wahrscheinlich frühmittelalterlich sind, wurden auch im Friedhof entdeckt.

Die wesentlichsten Belege, dass Forteviot ein piktisches Herrschaftszentrum war, sind die Zeugnisse der Bildhauerkunst im insularen Stil, die in einem detaillierten Katalog von allen Denkmälern in der Umgebung beschrieben sind. Dieser enthält u. a. das sogenannte Kreuz des Konstantins, ein 2,6 m hohes Kreuz, das spätestens um 820 n. Chr. errichtet wurde und eine Inschrift in Andenken an den Herrscher des piktischen Königreichs von Fortriu, Custantin, Uurguists Sohn (Latein: Custantin filius Fircus; 789-820 n. Chr.), trug; der sogenannte Bogen von Forteviot, ein einzigartiger Türsturz, der mit menschlichen Figuren verziert ist und zu einem früheren Kirchenbau aus Stein gehörte; das sogenannte Kreuz von Invermay, ein fragmentiertes Gegenstück des Konstantinkreuzes; eine Kreuzplatte, der sogenannte Borestone of Gask; der piktische Symbolstein von Blackford; und noch weitere Stücke und Kreuze. Einige von diesen figürlichen Darstellungen sind von hervorragender Qualität und ihre Ikonografie enthält viele königliche Bezugspunkte. Darstellungen des Königs David aus dem Alten Testament erscheinen neben Figuren von Reitern und Kriegern, welche sich vielleicht an römischen, durch Byzanz vermittelten, Vorbilder anlehnten. Wahrscheinlich spielten diese Skulpturen eine Rolle im zeremoniellen Apparat der Einweihungsrituale der piktischen Könige. Eine frühchristliche Handglocke aus gegossener Bronze aus der Gemeinde Kirche wird auch ausführlich beschrieben. Es wurden keine Spuren eines picktischen Palastes gefunden; dieser liegt vermutlich unter den Gebäuden des heutigen Dorfes.

Abschließend wird die pikitische zeremonielle Anlage im Rahmen der keltischen, fürstlichen Stätten gesetzt, der anscheinend byzantinischen Einfluss auf die zeremoniellen, königlichen Bräuche des 8. bis 10. Jahrhunderts wird untersucht, und die entscheidende Rolle von Forteviot in der Entstehung des gälischen Königreichs von Alba um 900 n. Chr. wird erwogen.

Die urgeschichtliche Anlage wird im folgenden Bericht behandelt:

Brophy, K and Noble, G 2020 Prehistoric Forteviot: excavations of a ceremonial complex in eastern Scotland. CBA Res Rep 176. York: Council for British Archaeology.

GEÀRR-IOMRADH

B' e Pròiseact SERF prògram a ruigh thar deich bhliadhnaichean le obair suirbhidh is cladhaich a bha a chuir air dòigh airson talamh eachdraidheil a rùrachadh aig làirig Uisge Èireann ann an Siorrachd Pheairt, aig taobh an Ear na h-Alba. Chaidh e a chuir air bhonn mar oidhirp gus eòlas a thoirt air adhart mu aon de na prìomh àiteachan a thug èirigh do rìoghachd na h-Alba. Chaidh seo a làimhseachadh le bhith a' toirt sùil air fianais a chaidh fhàgail leis na daoine a bha a' fuireach ann, bho thìm ro-eachdraidheil suas chun an latha an-diugh. Gu h-àraidh, chuirear sùil air an dàimh eadar am prìomh fhearann ro-eachdraidheil air an lorg le dealbhan bhon adhair a bha air a chleachdadh airson cuirmean deas-ghnàthaiche, agus an làrach rìoghail tràth sa mheadhan-aoisean aig Fothair Tabhaicht. Chuir am pròiseact an clàr-rannsachaidh ri chèile le sgoil fo-cheum aig Oilthigh Ghlaschu, agus bha e air a dhealbhachadh airson dòighean-obrach farsaing àrc-eòlaich a theagasg do na h-oileanaich.

Thachair a' chiad chòig bhliadhnaichean de dh'obair-chladhaich is suirbhidh eadar 2007 agus 2011, is ghabh e àite faisg air a' bhaile Fhothair Thabhaicht, Peairt is Ceann Rois, seo far an do sheall na dealbhan bhon adhair làrach le cruinneachadh de chomharran-barra le meud 26ha. Tha am monograf seo a' toirt bheachdachadh seachad air fhianais bhon a' chiad mhìle bliadhna AC, nuair a bha Fothair Tabhaicht an làrach aig suidhe Cináed mac Alpín, Rìgh nan Cruinneach (d AC 858), agus far an tug ealla air na gàrraidhean-chladha am follais nan comharran-barra. Bha na carraighean-tòrraidh Chruithnis stèidhichte mun cuairt làrach deasghnàthach bhon linn nua-chreagaich is Linn an Uamha. Ghabh seo a-steach tuaim mhòr fhiodha, is co-dhiù ceithir carraighean-heinnse (aon le leac-chiste mhòr ann), clach luath-chorp cuairtichte, cuairt-dhìg, tursa agus cearcall-fiodha. Thathar den bheachd gun do mhair na carraighean ro-eachdraidheil ann mar feartan-tìr slatach gus an tug leasachaidhean fearainn san 18mh linn briseadh orra, agus anns an thìm thràth sa mheadhan-aoisean bha iad ann mar làrach rìoghail

deas-ghnàthach. Bha barpannan cruinn is ceàrnagach ri lorg anns na tòrraidhean Cruithnis, a thuilleadh air uaighean air a chladhach, cuid dhiubh le cisteachanlaighe air a dhèanamh le fiodh. Bha mòran de na h-uaighean suidhichte timcheall geàrraidh-chruinn le foirm neo-chumanta, a tha air a mhìneachadh mar gheàrraidh deas-ghnàthaiche a bhuineas dhan chiad linn AC, coltach ris an Viereckschanzen no geàrraidhean cultuels stèidhichte anns a' Ghearmailt, Na Tìrean Ìsle agus taobh tuath an Fhraing. Air a thogail le saighdearan bhon Ìmpireachd Ròmanach a bha ann an campaichean ann am Fothair Tabhaicht agus Dunning, no bho shuidheachaidhean fad Druim an Gaisg. Tha uaighean air achaidhean Cruithnis ann bho an 4mh linn gu ruige an 9mh, às dèidh seo tha e coltach gun robh tiodhlacaidhean a' gabhail àite air fearann na h-eaglaise. B' e fianais gun robh na Cruinnich a' losgadh-cuirp aon de na feartan as inntinniche an seo, air thoradh nach robh an cleachdadh seo cumanta fhathast anns na 8mh is 9mh linntean ri linn buaidh nan Crìostach. Eu-coltach ris na tòrraidhean-chnàmha, bha iad air an cuir am measg nan carraighean ro-eachdraidheil, taisbeanair dhe seòrsa, gun robh seo air a chumail airson daoine a bha a-mach air còrdadh sòisealta, no aig an robh cus an sàs ann an saoghal 'eile' nan Ceilteach. Bha taisbeanairean eile ri lorg den dàimh eadar an tràth ìre meadhan-aoiseil agus an tìm ro-eachdraidheil, mar dhìgean mòra a chaidh a cladhachadh aig teis-meadhan nan carraighean-heinnse, an t-ath chleachdadh de leac-chistean bho Linn an Uamha, agus gu robh iarmadan-ealain air am fàgail anns na h-uaighean Chruinnich. Anns a' bhaile Fothair Tabhairt, dh'fhoillsich cladhach gun deach eaglais sgìreil 18mh linn a thogail air muin bunait meadhan-aoiseil, is chaidh tòrraidhean a lorg anns a' ghàradh-chladha is coltach a thàinig bho thràth sa mheadhan-aoisean.

Tha fianais ga lorg fhathast den làrach àrsaidh seo anns na carraighean le ìomhaidh-shnàighte a chaidh a dhealbhachadh ann an stoidhle eileanach, a tha clàraichte gu mionaideach le uileadh de na carraighean eile san àite timcheall air. Tha seo a' gabhail a-steach: Crois

Choiseim aig 2.6m de dh'àird, is thathar den bheachd air thoradh fianais snaigh-sgrìobhaidhean gun deach a chuir suas ro 820 AC airson Custantin son of Uurguist (ann an Laidean, Custantin filius Fircus), Rìgh rìoghachd na Cruinnis Fortriu (AC 789 - 820); An Arc Fothair, leac àrd-dorais inntinneach bho eaglais, le fiogairean-daonna; an Crois Invermay - crois chaoranach co-cheangailte ri Crois Choiseim; an leac croise leis an t-ainm The Borestone of Gask: Clach Chruinnis an Àth Dhuibh; agus caoranaich de chroisean eile. Tha cuid de na h-ìomhaighean daonna air a dhèanamh gu àrd ìre ealanta, is iad gu beartach samhlachail le iomraidhean rìoghail. Tha ìomhaighean de Rìgh Dhaibhidh san t-seann tiomnaidh ri taobh ìomhaighean de dh'eich, agus fiogairean nàimhdeil a bha air a bhrosnachadh leis na ciad Ròmanaich air an eagrachadh tro Byzantium. Thathar den bheachd gun deach an ìomhaigh a chleachdadh mar phàirt de na cuirmean deas-ghnàthaiche a bha a' toirt thùs-ghabhail do Rìoghalachd nan Cruinneach. Cha deach fianais dearbhte a' lorg air lùchairt nan Cruinneach, ach thathar den bheachd gu bheil iad ann fo làir thoglaichean a' bhaile.

Tha an co-dhùnadh a' stèidheachadh làrach deasghnàthach nan Cruinneach taobh a-staigh co-theacsa làraichean rìoghail nan Ceilteach, a' rùrachadh na buaidhean a ma dh'fhaoidte a thàinig bho ìmpireach *Byzantine* air cuirmean deas-ghnàthach rìoghail eadar an 8mh agus 10mh linn, agus a' toirt phròmhachais do Forthair mar àite a thug buaidh dearbhachail air fàs rìoghachd Gàidhealach na h-Alba *c* AC 900.

Chaidh aithris air an fhianais ro-eachdraidheil ann an: Brophy, K and Noble, G 2020 *Prehistoric Forteviot: excavations of a ceremonial complex in eastern Scotland.* CBA Res Rep 176. York: Council for British Archaeology

INTRODUCTION

with a contribution from Derek Hamilton

The lower valley of the River Earn is one of the most significant areas in Scottish archaeology. It holds one of mainland Britain's densest concentrations of early prehistoric ceremonial monuments, as well as being at the centre of the development of the early Scottish kingdom. Forteviot is documented as the site of the 9th-century 'palacium' of Cináed son of Alpín (Kenneth MacAlpin), one of the first kings of a united Scotland (d AD 858), but also has an outstanding collection of early medieval sculptured stone monuments. The Strathearn Environs and Royal Forteviot (hereafter SERF) project was set up in 2006 to investigate this remarkable concurrence, and the landscape that moulded human activity there over a period of at least five millennia. The present volume covers the evidence of the last two millennia of this period, from the Roman Iron Age through to the development of the modern village of Forteviot, including the major Pictish period remains. Today, Forteviot is a small rural Perthshire settlement, noted only for being an unusual example of a planned village in English Garden City style (Haynes 2000, 59-60), but the fields surrounding the village hide an unexpected wealth of archaeological remains.

Forteviot is important both in terms of the light it can shed on the development of the Scottish nation, which is one of the oldest in Europe, but also more generally on the use of prehistoric monuments in narratives of emerging power centres in early medieval Europe. Forteviot has received less attention from antiquarians than other iconic Scottish sites such as the castles of Edinburgh and Stirling, or the palaces at Scone and Linlithgow, probably because there was so little to see on the ground. The older historical sources are discussed more fully in Chapter 2, but early popular accounts and legends from the 17th and 18th centuries, although recognising the royal connections of Forteviot, are confused, misattributing ruined buildings to Malcolm Canmore (king of Scots 1057–93) and some legendary royal figures (Aitchison 2006, 19–30) (Fig 1.1). Part of the misunderstanding of the significance of the site in the early medieval period arose from the form of the place-name recorded in early sources (*Fothuírtabaicht/Fochíurthabaichth*), which led to misidentification of the site (Chapter 2.5). However, the publication of the discovery of the Forteviot arch (Skene 1857) (Fig 1.2) led to much increased interest in the site, culminating in Allen and Anderson's (1903, 319–28) account of the other sculptured monuments, including those from Dupplin and Invermay.

Recent scholarship has investigated the links between prehistoric and Late Iron Age/early medieval cultic sites in a number of areas of northern Europe. In Ireland, the rich historical evidence allows sites to be identified with confidence and for their religious and cosmological significance to be appreciated (Wailes 1982; Warner 2004; FitzPatrick 2004a; Schot et al 2011). The most famous of these sites is undoubtedly the Hill of Tara, with its particularly rich mythological and historical evidence and a great density of monuments (Newman 1997; Bhreathnach 2005), but it is far from unique. Studies of the provincial royal centres Emain Macha (Co Armagh; Lynn 2003), Dun Alinnie (Co Kildare; Johnson and Wailes 2007), Rathcroghan (Co Roscommon; Waddell et al 2009) and Cashel (Co Tipperary; Gleeson 2012), all reveal links with an ancient past as well as the construction of early medieval structures for kingship and assembly. When looking south to England for comparative material on royal centres, the main analogy is with the residence, place and cult centre at Yeavering assembly (Northumberland), which some now consider to be a hybrid British/Anglo-Saxon site (Hope-Taylor 1977; Frodsham and O'Brien 2005; O'Brien 2011). However, more examples of close relationships between Anglo-Saxon royal sites and prehistoric monuments are being recognised, for example at Sutton Courtney



Figure 1.1 View of Forteviot from the south-west (Brown and Jamieson 1830) showing the Water of May, St Andrew's church and village buildings, and the site of Haly Hill (Reproduced with permission of Glasgow University Library)

[Read to the Society January 23, 1832.]

Figure 1.2 The first published illustration of the Forteviot arch (Skene 1857), with a coin of Alexander I for (mistaken) comparison (Oxfordshire) and Grateley (Hampshire), though in England more often the relationship with prehistoric sites is to assembly places, burial grounds and execution sites (Williams 2006; Semple 2013, 194–222). In Scandinavia there are clear links between Late Iron Age cultic sites such as Gudme in Funnen, Denmark (Nielson *et al* 1994), and Uppakre in Sweden, 'the first Scandinavian building for which the term 'temple' can

1.1 Background to the SERF project

It was during reconnaissance flights over the rich arable fields of Strathearn in the summers between 1973 and 1977 that the prehistoric significance of Forteviot became apparent to aerial archaeologist Kenneth St Joseph. The 'unexpected features' observed - the spark that lit the fire that burns throughout the SERF Project and this book - were recorded as cropmarks, 'ripe barley, pale yellow in colour', and seemed little more than a collection of shapes and impressions upon first sight (St Joseph 1976, 56). Repeat flights saw these features recorded as cropmarks appear with increasing clarity and detail, and St Joseph recognised that several resembled Neolithic and Bronze Age ritual enclosures, dominated by traces of what he interpreted as an enormous timber palisaded enclosure (or 'stockade') enclosing some six hectares (St Joseph 1978). The level of detail in his descriptions, and the production of a sketch transcription, capture St Joseph's sense of wonderment and something of the significance of this discovery. Inevitably, the site became a focus for further aerial reconnaissance from the late 1970s onwards by other parties, resulting in the discovery of further detail amidst the prehistoric complex, but also features of a very different nature 500m to the north-east (see SERF1, section 2.3.1 for a more detailed historiography of aerial reconnaissance at Forteviot and a discussion of the cropmarks).

It was this latter group of cropmarks that opened the next chapter in the story of archaeological studies at Forteviot. The significance of these features, which included square enclosures and what appeared to be a cemetery of long graves, was recognised by the University of Glasgow's Professor Leslie Alcock, who suggested they belonged to a 'Pictish burial complex of Early Christian date, perhaps with pagan antecedents' (Alcock 1982a, 231). These Pictish period cropmarks were first transcribed by Lesley Macinnes (Fig 1.3), who was undertaking a PhD on Scottish cropmarks (*ibid*, fig 14.6). This discovery prompted Alcock to add Forteviot to his pioneering programme power centres of emerging rulerships (Andrén *et al* 2006). These studies of the prehistoric background to early medieval cult and assembly sites, and wider discussions around the issue of possible 'continuity' of belief or practice at this type of site (Bradley 1987), form the intellectual background to the SERF project.

be justly claimed' (Larsson 2007, 14-15), with later

of excavations at locations he termed Early Historic royal sites, and so a short season of excavation took place on the north side of the village in 1981 (Alcock and Alcock 1993; Fig 1.12, sites V–X). Although the results of this work were disappointing, encountering only post-medieval remains, and did not focus on the cropmark sites, Alcock's research highlighted the documentary, antiquarian, and sculptural evidence for the importance of Forteviot as a royal power centre from the 9th to 12th century AD. This work also highlighted the proximity of these cropmarks to the prehistoric complex.

The work prompted one of Alcock's postgraduate students (and future SERF Project co-director),

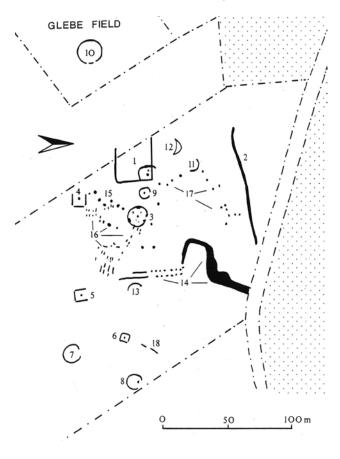


Figure 1.3 The first transcription of the Eastern Complex of cropmarks, by Lesley Macinnes (Alcock 1982a, fig 14.6)

Stephen Driscoll, to study the Earn valley for his PhD, looking at the relationship between the Picts and their past, and the development of lordship and the Scottish state (Driscoll 1987; 1998a). A driver of this research was the occurrence of significant prehistoric and early medieval cropmark sites very close to one another at Forteviot, with the cropmarks identified by St Joseph by this time regarded as representing a late Neolithic palisaded enclosure and several henge monuments (Kinnes 1986, 29; Harding and Lee 1987, 409-12; Darvill 1996), as confirmed to an extent by the excavation in the 1970s of an almost identical cropmark enclosure site at Meldon Bridge in the Scottish Borders (Speak and Burgess 2000). Independently, another former postgraduate student of Alcock's, Nick Aitchison (2006), later published an accessible scholarly account of Forteviot and its sculpture, again highlighting the intriguing co-location of major prehistoric and medieval power centres.

4

In 2006, the Department of Archaeology at the University of Glasgow was looking for a long-term project as the basis of its archaeological fieldschool for training undergraduates in excavation and survey techniques, within a community archaeology context. There had not been a Scottish archaeology department fieldschool based in Scotland since the end of the University of Edinburgh's Angus and South Aberdeenshire Fieldschool (ASAF) in 2000 (Dunwell and Ralston 2008). Historic Scotland (HS) was actively supportive of ASAF and similar ventures, and at this time the government agency was also proactively encouraging and funding academic research fieldwork projects through its Archaeology Programme (Barclay 1997). This was transformative, especially for the study of prehistory. The research excavations by Thomas in Dumfries and Galloway and Barclay in Perth and Kinross in the late 1990s to early 2000s shifted the historic focus of research from megaliths and Orkney to lowland earthwork and timber sites (cf Barclay et al 2003; Thomas 2007; 2015). Bradley's excavations at megalithic monuments in eastern Scotland over the same period (see for instance Bradley 2000; 2005; Bradley and Sheridan 2005) offered a re-evaluation of supposedly familiar monuments, insights into longterm sequences in the 3rd and 2nd millennia BC, and additional depth to our understanding of early and middle Bronze Age funerary practice. The proposed SERF Project fulfilled a number of key aims of the HS Archaeology Programme, such as 'regional approaches', 'multi-period studies', 'understanding the resource', and also addressed curatorial issues related

to 'damage to ploughed sites' (Barclay 1997, 19–21). SERF offered an opportunity for research and recommendations which could go some way to mitigating the problem that HS was, at the turn of the millennium, 'hindered by the lack of structured understanding of the temporal and functional relationships of ... elements recorded by field survey and aerial archaeology, and also by the processes [by] which destruction occurs' (Fojut in Dunwell and Ralston 2008, 10).

Furthermore, in the decade leading up to the start of SERF, 'national' research questions and priorities existed, in relation to HS and their Archaeology Programme (Barclay 1997, 28ff), but these were informally articulated and would not be formulated into Scotland's Archaeology Strategy until 2015. Today's research frameworks emerged as a concept in British archaeology after Planning Policy Guidance 16 (PPG16 - Archaeology and Planning) was introduced in 1990, the subsequent explosion of data from developerfunded work requiring quantification and synthesis (English Heritage 2014, 14). Olivier (1996) argued for an urgent need for research frameworks at both regional and national level. Around this time HS produced 'overarching research themes', some relevant to SERF (eg 'the contribution of archaeology to the understanding of the formation of the Scots kingdom' (Barclay 1997, 21)). Period-specific summaries produced by HS in 1997 (ibid, 28ff) identified regional imbalances (eg in Neolithic studies towards islands and Argyll) and key gaps in knowledge which were very much in our minds as SERF developed. Scotland's national research framework - Scottish Archaeological Research Framework (ScARF) – emerged in 2007 as a collaboration between HS and the Society of Antiquaries of Scotland, with the document published in its entirety in 2012 (ScARF 2012). The SERF Project commenced at the cusp of, and developed alongside, the establishment of ScARF, with two SERF Project directors participating in the steering committee (Driscoll) and as a period panel chair (Brophy); the impact of SERF and work at Forteviot is clear in these documents.

Within this intellectual and policy context, Forteviot seemed the ideal place to centre the fieldschool's project, having the potential to bring together then-current staff members and postgraduate research students working in different chronological periods, and being an area in which the archaeology department had already been involved for several decades. Kenneth Brophy (1999; 2004; 2007), Gordon Noble (2006) and Kirsty Millican (2009; 2016a; 2016b) were already working on Neolithic monumentality and cropmark archaeology, and around the time SERF was being conceived, overviews of the period were published by Brophy (2006) and Noble (2006). Later prehistory was the specialism of PhD research by Tessa Poller (2005) and Martin Goldberg (2009). For the early medieval period, in addition to Stephen Driscoll, Ewan Campbell, Meggen Gondek, and Oliver O'Grady, there was also a fortunate nexus of scholars working in the Scottish History and Celtic departments at the University with interests in the sculpture, history, and place-names of this area: Katherine Forsyth, Dauvit Broun, Simon Taylor, Nicholas Evans, and Thomas Clancy. The potential for cross-fertilisation between these disparate scholars, and other colleagues, including Chris Dalglish and Michael Given, was one of the clear benefits of choosing Strathearn as a study area with the opportunity not only to focus on the Neolithic and Pictish flourishing of Forteviot, but also to explore a much broader and more ambitious narrative. The co-directors of the first fieldwork phase of the project (Phase 1, 2006-2011) were Kenneth Brophy, Ewan Campbell, Stephen Driscoll and Gordon Noble, with Tessa Poller as Research Officer.

The core of the SERF project area is the modern parish of Forteviot, and the adjoining parishes of Dunning and Forgandenny, all within the modern administrative county of Perth and Kinross (Fig 1.4). These parishes stretch from the Ochil Hills in the south, across the valley to the Gask Ridge on the north side, thereby providing a cross-section through the different environments of Strathearn. The intensive agricultural activity on the better-quality lands has resulted in the removal of almost all the upstanding elements of archaeological monuments here so they now only exist as cropmarks. Agricultural activity in the area has intensified since the Second World War, and an important part of the project was to assess the impact this continuing cultivation is having on the underlying archaeological remains. As is discussed below (Chapter 2.7), it appears in places that up to 0.5m of topsoil has been lost through deep ploughing activity during the last hundred years.

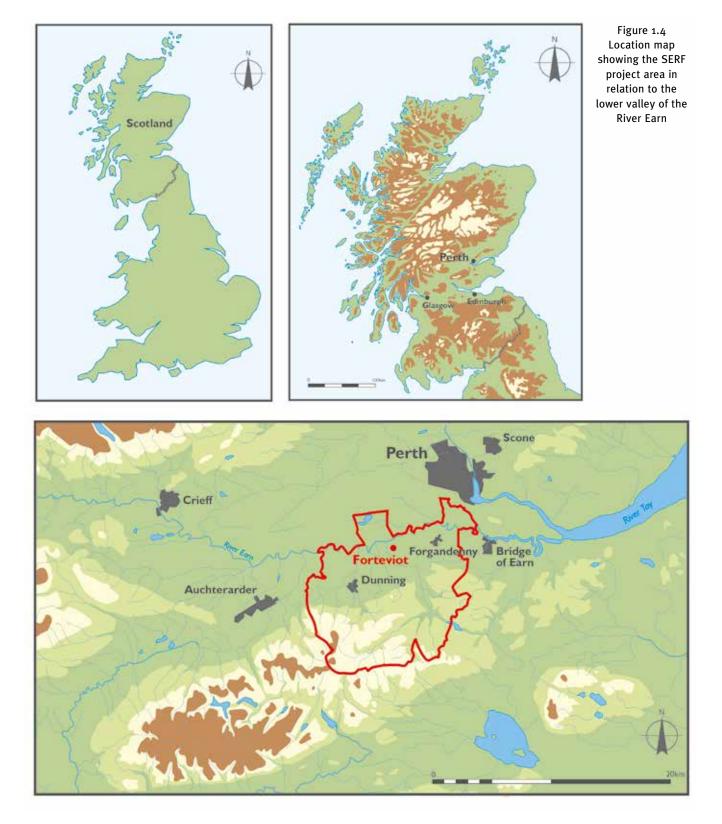
From the start of the SERF project there was an aspiration to involve members of the local community in our research and fieldwork. The excavations in and around Forteviot were carried out by a team of students, mostly from the universities of Glasgow and Aberdeen, often on their first dig, working alongside dozens of volunteers who gave up their time to help out, learn the skills of excavation, and lend us their local expertise. The volunteer and community elements of the project around Forteviot were co-ordinated by Perth and Kinross Heritage Trust staff David Strachan and Steven Timoney, while the Dunning Parish Historic Society facilitated relationships with the local community. Over the course of Phase 1 of the SERF Project, 184 students participated in the training programme, and we worked with some 120 volunteers. It was fundamentally important to the training received by all team members that they were working on an active research project, and not merely a 'training dig'. Other partnerships vital to the programme were with Historic Scotland (now Historic Environment Scotland (HES)), who agreed Scheduled Monument Consent on an annual basis, offered expertise, and were the major financial supporter of the project, and the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS, now part of HES), who provided new transcriptions of available aerial photographs and undertook survey and aerial reconnaissance both with and for us.

Preliminary fieldwork started in 2006 with a geophysical survey at Forteviot; the first excavation season took place in 2007, and subsequently annually. The initial plan was for a five-year programme of research (now called Phase 1), and this book covers the results of the 2007-2011 seasons. Phase 1 focused on Forteviot, with most of the fieldwork undertaken in the fields south of the village, and in green spaces within the village itself. A further five-year programme was then initiated, Phase 2, with the focus of activity moving to the nearby town of Dunning, located 4km west of Forteviot (with results reported in the third monograph in this series (Wright and Brophy forthcoming)). This was essentially the 'environs' element of the SERF project name, with work concentrated on a wide range of cropmark sites around Dunning, as well as investigations in that village. Running throughout Phases 1 and 2 of SERF was a complementary programme of upland fieldwork that lasted for a decade, including field survey and the excavation of forts, enclosed settlement sites, and a broch (reported on in Given et al 2019; Poller in prep).

In summary, the SERF Project was carried out on a grand scale, with the core study area some 150 square kilometres in extent, with over 50 excavations undertaken, and involving a large team of contributors and collaborators. Fieldwork has only just been completed at the time of writing, and post-excavation work, community initiatives, and the dissemination of results will continue for many years. ROYAL FORTEVIOT: EXCAVATIONS AT A PICTISH POWER CENTRE IN EASTERN SCOTLAND

1.2 Location and landscape

The River Earn runs from the eastern Highlands at Loch Earn, through the rolling country of rural Perthshire to join the estuary of the River Tay at Bridge of Earn, just south of the modern city of Perth (Figs 1.4 and 1.5). The lower reaches of the strath are bounded to the south by the uplands of the Ochil Hills, rising to over 400m, and to the north by the much lower Gask Ridge. The land is one of the most fertile areas of Scotland, with extensive cereal and potato production. The valley bottom is filled with silts, sands and gravels of fluvio-glacial origin, terraced in the late glacial and post-glacial periods. Marine



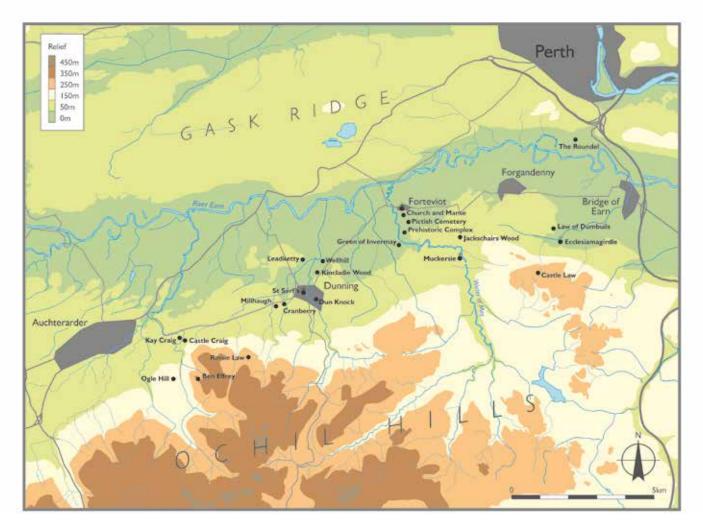


Figure 1.5 Location map showing all sites excavated by the SERF project 2007-19

clays of the late Devensian Errol Beds of the late glacial period of marine inundation underlie these superficial deposits and can seen outcropping in the Water of May at Forteviot. The detailed history of relative sea-level changes in late and post-glacial times has been widely debated (see Smith *et al* 2019 for full discussion). The Ochil Hills are formed from a series of mainly andesitic lavas and pyroclastic deposits of Lower Devonian age, separated from the sandstones and siltstones of the Lower Old Red Sandstone Scone Formation to the north by a series of faults (BGS 1985). The Old Red Sandstone sedimentary rocks are generally well-bedded, and much used as a local building stone.

The area chosen as the core of the project was the modern parish of Forteviot, together with the adjoining parishes of Dunning and Forgandenny (Fig 1.4). These parishes stretch from the top of the Ochils across the valley to the Gask Ridge, providing a cross-section through the different environments of the Earn valley. The wider landscape of the whole of the lower Earn valley was also studied to set the core area in perspective. Although the valley bottom is highly fertile, the slopes of the Ochils and Gask Ridge are more suited to pasturage, and the tops of the Ochils are now moorland, suitable only for rough grazing, forestry and wind turbines. As described above, the intensive agricultural activity on the better lands has resulted in the destruction of almost all the upstanding archaeological monuments, the majority of which are only visible as cropmarks on aerial photographs.

The area around Forteviot itself, the focus of this volume, lies entirely on the gravel terrace, and is bounded to the west by the Water of May. The Water of May is now canalised, but in the past was notorious for flash floods, which threatened to undermine the parish church at various times in the 18th and early 19th centuries (Meldrum 1926, 281–3; Aitchison 2006, 37–48). Numerous silted-up former channels and meanders can be seen as cropmarks on the aerial photographs. The full extent of this erosion is important to understand, given its role in the supposed

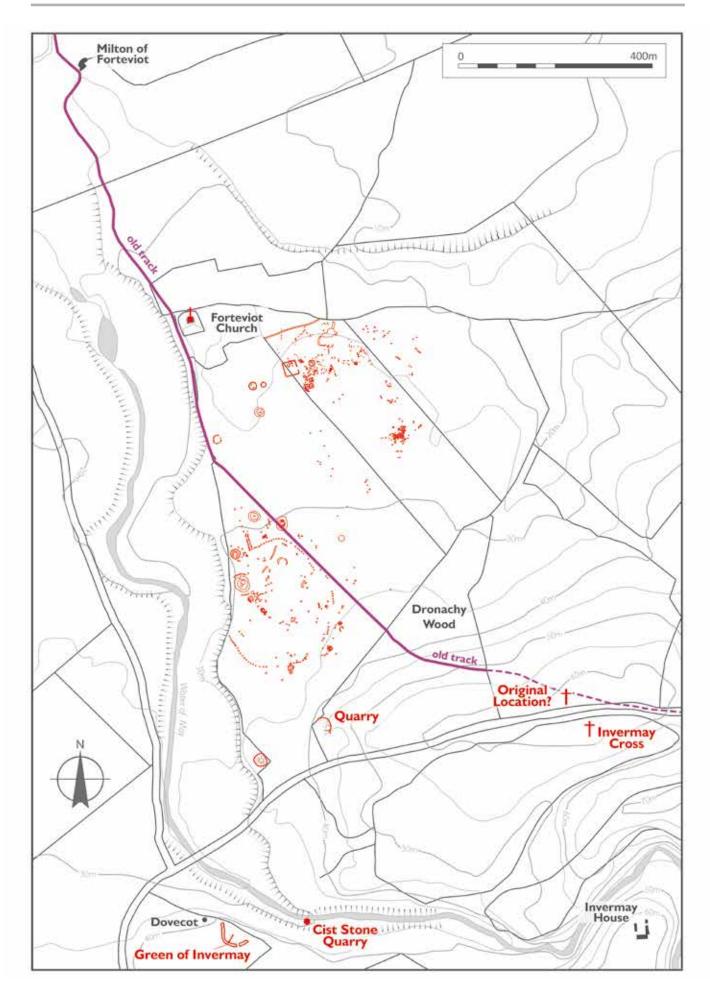


Figure 1.6 Topographic setting of the cropmark complexes, with route of old trackway linking the Invermay and Dupplin Crosses

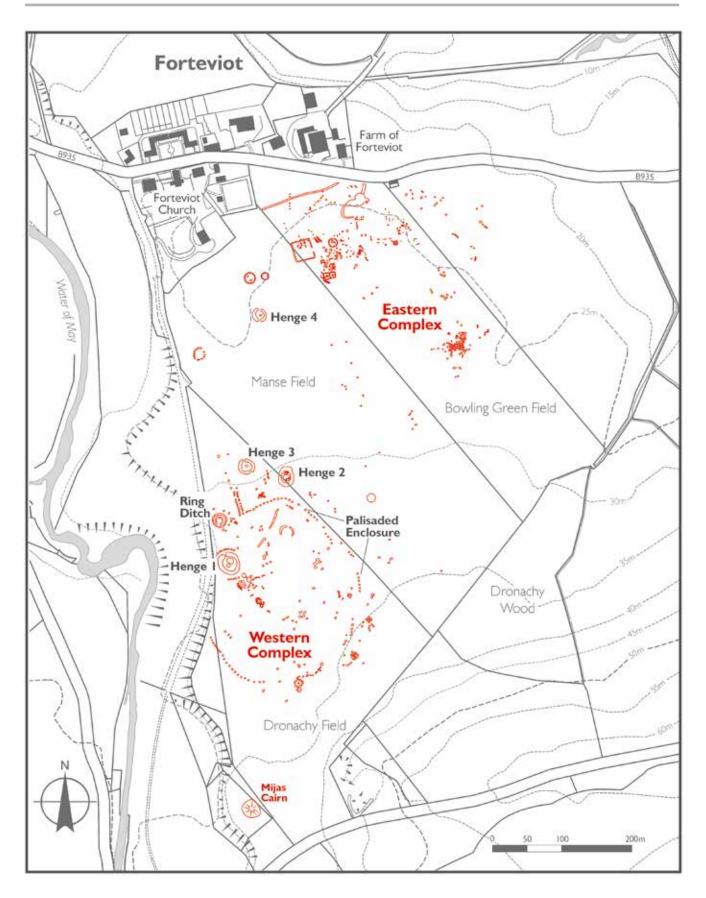


Figure 1.7 Transcription of the cropmarks in the Eastern and Western Complexes, with field names

washing away of the remains of Cináed's palace (see Chapter 6.1). The surface of the gravel terrace is now very flat, though with slight undulations and a slope northwards from a height of around 35m down to 25m OD (Fig 1.6). On aerial photographs, the surface of the terrace is covered in a complex pattern of silt spreads and old channels from the braided rivers of the immediate post-glacial period. As a result of the initial excavation season, we realised that these silt-filled areas represented areas not disturbed by modern deepploughing and were the areas where the best-preserved features could be found, although the features were often masked on the aerial photographs. The excellent soils of the area are formed from the silts which originally covered the gravel to a significant depth, but which have now been eroded by agricultural activity. To the south, the ground slopes up sharply towards the present Dunning to Bridge of Earn 'back road', providing a convenient viewing platform overlooking the ceremonial complex. To the north, the present floodplain of the Earn forms a boundary just north of the village. To east and west, the terrace continues uninterrupted for several kilometres.

The area of cropmarks falls within three presentday fields (Dronachy in the west, Manse in the middle and Bowling Green to the east): the two cropmark complexes are here labelled the Western and Eastern Complexes (Fig 1.7). The Western Complex contains a number of prehistoric monuments: a massive timber Palisaded Enclosure with attached avenue; four henges of which Henges 1 and 2 were excavated; and a Ring-ditch with central cists and a standing stone (Fig 1.8). The Eastern Complex contained a large Square Enclosure, and cemeteries containing the excavated Square Barrows 1 and 2, Round Barrow 1 and Unenclosed Graves 1-12. The northern part of Manse Field was originally a separate field - Glebe Field - belonging to the manse. The relative lack of cropmarks in the Manse Field between the two main concentrations was an issue that had to be addressed. A trackway runs from the Dunning to Forgandenny road, separating the Dronachy and Manse fields and continuing through the village, past the Mill of Forteviot, to the former ford and ferry over the Earn at Coble Haugh (which was replaced by the present stone bridge in 1766).

Figure 1.8 Reconstruction drawing by David Simon of the Neolithic palisaded enclosure, with the Highland peaks of Ben Vorlich and Stuc a' Chroin on the skyline

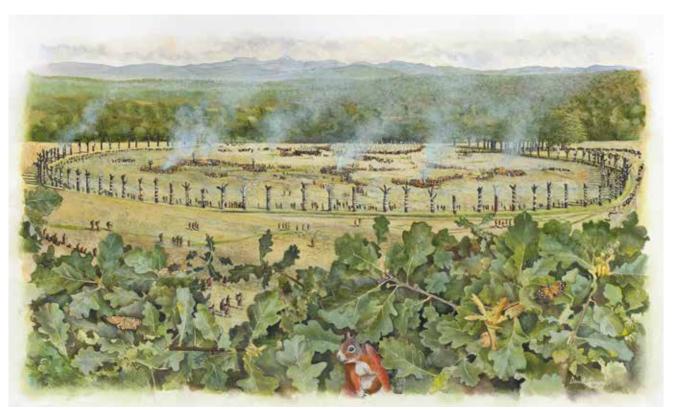




Figure 1.9 View from Forteviot, looking west up the Earn valley, with the Gask Ridge on the right, and the Highland peaks of Ben Vorlich and Stuc a' Chroin on the skyline. Site B square barrows under excavation in foreground, Site K top right

Although the prehistoric complex occupies a lowlying area, there are extensive views westwards up Strathearn, culminating in the prominent Highland peaks of Stuc a' Chroin and Ben Vorlich (Fig 1.9). These two peaks, which are visible from most of lowland Perthshire, may have had a particular mythical significance in the past, as with other prominent landmark mountains such as Schiehallion and Ben Lomond in Scotland, and the Paps of Ainu in Ireland.

The gravel subsoils and intensive cultivation in this area create very poor conditions for artefact and ecofact preservation. For example, most of the burials have no skeletal remains, except for occasional dental enamel. Except for the modern contexts there were very few finds of any kind except for burnt organic material, pottery and lithics, and even these were very sparse. Chronology was dependent on scientific dating, but the lack of organic preservation caused severe difficulties in dating the cemeteries in particular. The dating programme is discussed below (1.8).

Unfortunately, despite intensive searching, no waterlogged deposits suitable for local environmental studies could be found in the area, due to extensive drainage during the period of agricultural improvements. However, one important conclusion provided by the excavations (Chapters 2.7 and 5.5) was that the prehistoric monument complex had remained as upstanding earthworks until the post-medieval period, with no signs of settlement or arable agriculture despite being prime land (Fig 1.10). This in turn shows that the area must have been deliberately kept as an area of clear pasture, suitable for large-scale assemblies. Thus, even in the 1st millennium BC, when we have almost no evidence of activity on the site, the area retained some special status in the minds of the populace, a status which forms a link between the early prehistoric and early medieval ceremonial uses of the site.

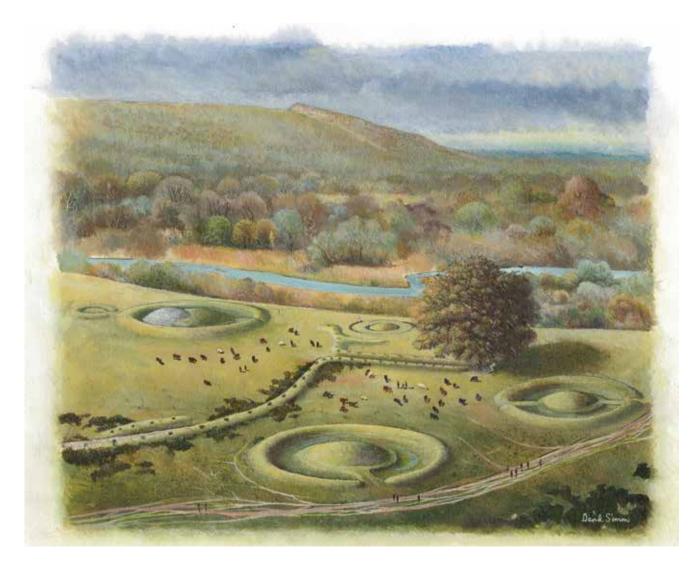


Figure 1.10 Reconstruction drawing by David Simon of the prehistoric complex in the late Bronze Age. These earthwork features would still have been visible in the early medieval period. Looking west towards Dunning with Rossie Law and Ben Effrey on the skyline

1.3 Research design

The Forteviot area was clearly a special place in the early prehistoric and early medieval periods. The overall research design for the SERF project was designed to answer a number of questions which arose from this conjunction. These included:

- What was the nature of the relationship between the two concentrations of activity at widely separated periods?
- What were the conditions that led to the selection of the area as special?
- What was the nature and chronology of the activity at these special sites?
- Where were the settlements associated with the ceremonial sites?
- What was the extent of the agricultural impact on the Scheduled Monuments?

These questions underlay the specific objectives of the SERF project, which was conceived of as a longterm (ten-year) landscape investigation incorporating excavation, remote sensing and survey work. As far as this volume is concerned, the team realised that there were particular methodological issues to be addressed in order to have a realistic chance of understanding the early medieval and later development of the complex. As with any large landscape project, especially one combined with a training fieldschool, the general objectives had to be balanced against the available funding, availability of access to sites, labour, time, depth of deposits and overburden encountered. The serendipity of discoveries such as the dagger cist burial in 2009, the giant pits encountered in the henge

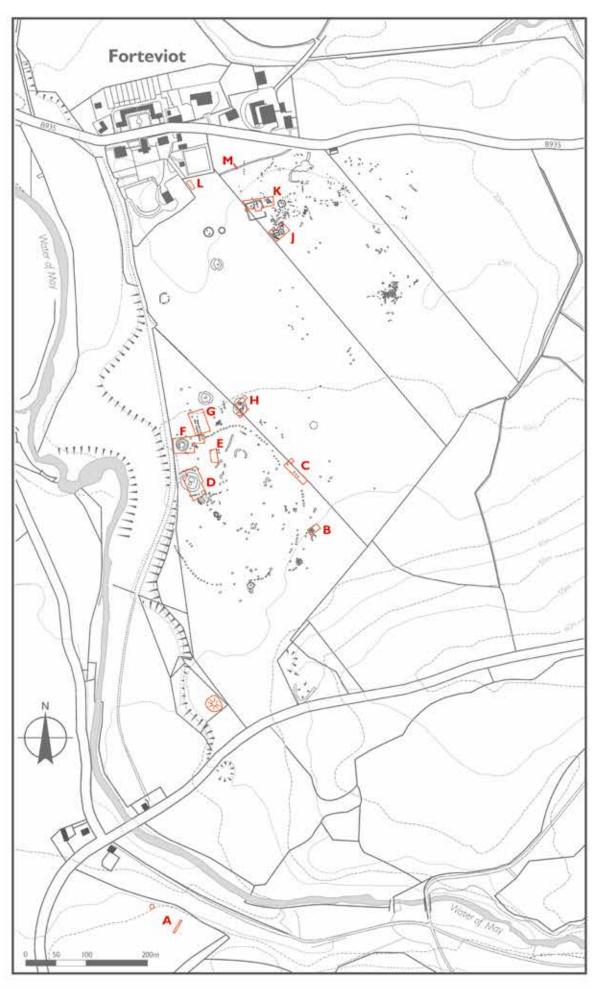


Figure 1.11 Location map of the excavated sites in the cropmark complexes

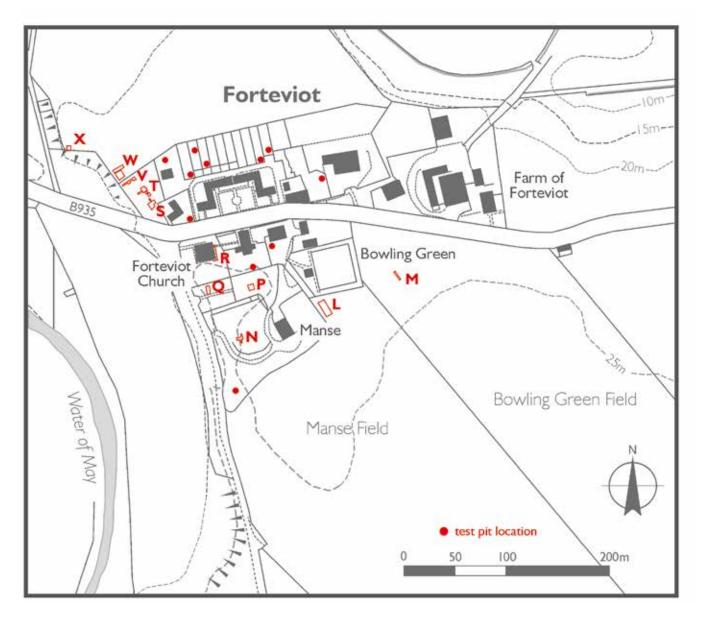


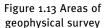
Figure 1.12 Location map of excavated sites and test pits in Forteviot village

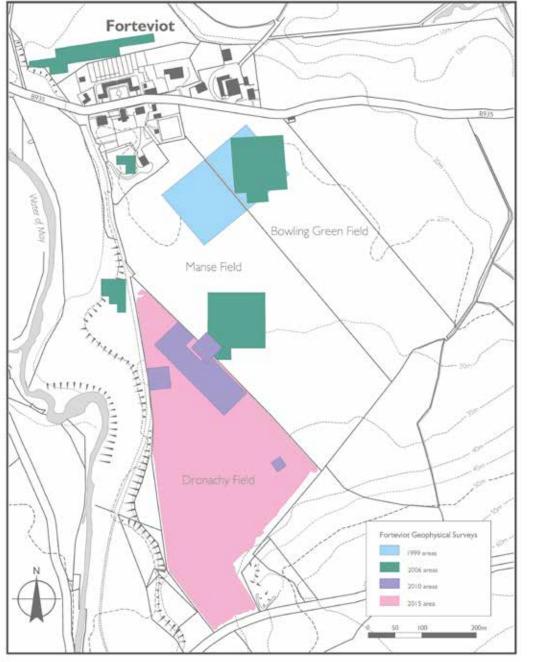
monuments, and the discovery of the broch at Pairney also skewed resource allocation.

As far as the 1st millennium AD in Forteviot was concerned, several subsidiary objectives to these overarching aims were immediately apparent:

- What was the extent, chronology and nature of the putative Pictish cemeteries?
- Was it possible to locate the '*palacium*' of Cináed son of Alpín?
- What happened to Forteviot as a settlement in the later medieval and modern periods?
- What was the nature of the Early Christian activity on the site?

The easiest of these questions to answer was the first. Cropmarks suggested that early medieval burials were scattered around the boundary of the western early prehistoric monuments as well as throughout the Eastern Complex. A programme of excavation of what appeared to be classic Pictish forms of square barrows, round barrows and rows of dug graves was designed to show the extent and variety of this burial evidence. Three main areas were excavated: in 2007 two conjoined square barrows and a series of dug graves; in 2009 a round barrow and scattered dug graves; and in 2010 another two conjoined square barrows. In 2011, further dug graves were encountered within the parish church graveyard, extending the area of burials to the north. A probable boundary ditch between the cemetery and the early medieval settlement area, identified from aerial photographs, was sampled in 2010 and dated to this period.





Locating a putative early medieval palace was a much more challenging task. This would probably have been a timber, post-built structure similar to known contemporary royal halls in Anglo-Saxon England such as Yeavering (Hope-Taylor 1977) or Cheddar (Rahtz 1979). If the site has not been destroyed by erosion, as antiquarian accounts had suggested, then it either lies under the present village buildings or in the surrounding fields, but it is not represented in the cropmark record. Initial geophysical survey in all the accessible areas around and within the village (Malcolm 2006; 2007) gave hints of buried features, but none looked very promising as early medieval buildings. However, in 2011, we opened two exploratory areas in the former manse grounds where geophysics indicated there were some structures.

To look at the development of the village, a programme of test pitting was undertaken using standard 1m by 1m square trenches, in order to scope the extent of the medieval village and the survival of deposits. However, permission to excavate larger trenches within the village was restricted to an area at the west end where Alcock had excavated in 1981, small areas of the churchyard, and within the former manse grounds.

The nature of the Early Christian activity on the

site posed similar problems to that of the *palacium*, as an early church would probably have been built of timber, but there was surviving evidence in the form of the sculptured stones (Chapter 8) and the hand-bell (Chapter 7.3). In our initial survey of the present parish church, built in 1778, we had noted signs of a medieval predecessor at the east end, so this area was targeted for a small investigatory trench next to the walls where there were no identifiable modern burials.

1.4 Methodology

The location of the excavation trenches is shown on Figures 1.11 and 1.12. The proposed trenches were located in the field by GPS in relation to the aerial photograph transcriptions, which were generally sufficiently accurate for this purpose. The cropmark sites to the south of the village were machine-stripped of topsoil under the supervision of senior members of staff. All the trenches were then hand-dug by undergraduate and postgraduate students along with local volunteers. The exception was the slit trench through the northern boundary ditch (Site M) which was machine-dug, with samples taken from the sections. Due to concern about the possibility of missing small artefacts, all potential medieval deposits were sieved, but no finds were recovered from this procedure. The lack of artefacts is one of the notable features of the excavations: it illustrates the lack of evidence for settlement of any period and the acute paucity of material culture from the early medieval

This volume is the companion to SERF Volume 1 (Brophy and Noble 2020), which reports on the prehistoric excavations which took place entirely within the Western Complex. Although the present volume concentrates on the excavations in the Eastern Complex, it also includes the relevant later features and sites excavated within the monuments of the Western Complex, and the separate site at Green of Invermay, 500m to the south of the Western Complex (Fig 1.11, Site A). In addition, it covers the excavations within the village and has extensive discussion of the early medieval sculpture and hand-bell. The survey and excavation work from Phase 2 of the SERF project, centred around the neighbouring village of Dunning, will be covered in SERF Volume 3 (Wright and Brophy forthcoming). A later volume will include all the hillfort excavations. Separate publications This practical work was augmented by a detailed survey of the documentary sources by Nicholas Evans (2008), which assessed the medieval references to Forteviot, and the wider history of the three core parishes of the study area. This included a database of all place-names which enabled distribution maps of different language elements to be produced, and further work on the place-names was undertaken by Peter McNiven.

period in Scotland as well as the aggressive soil conditions on the gravel terraces. The trenches and test-pits within the village were all dug by hand from the surface. Recording was by context, with three-dimensional recording of finds. The trenches were all backfilled by machine where possible, and turf re-instated. Aerial shots of the excavations were provided by Flying ScotsCam using kites and powered microlight orthocopter drones. All sites were surveyed by geophysical methods (resistivity and magnetometry) prior to excavation, but the results were generally poor and added little to the information gained from aerial photography. The reasons for this were investigated by Carmen Cuenca-García as part of her PhD (2012). A larger area was surveyed by SENSYS in 2015 (Fig 1.13), but again the results added little to the aerial photography evidence (Wright and Poller 2015).

1.5 Publication programme and archive (Table 1.1)

will cover the post-medieval upland survey work (Given et al 2019), and others a discussion of methodological issues relating to the aerial photographic record and geophysical surveys. For all the volumes, additional archive material such as detailed context descriptions, finds lists and specialist reports is available on the University of Glasgow's website, along with full Data Structure Reports from the interim reports (available at https://www.gla.ac.uk/schools/humanities/research/ archaeologyresearch/currentresearch/serf/furtherinformation/). More interpretative papers have discussed aspects of the prehistoric sites (Brophy and Noble 2012; Noble and Brophy 2011a; 2011b; 2014; 2015; 2017), and the historic period archaeology (Campbell 2019b; Campbell et al 2019). The archive will be deposited in the National Record for the Historic Environment.

Table 1.1 Summary of publications of the SERF project	
SERF Monograph series	
SERF 1 Brophy, K and Noble, G 2020 <i>Prehistoric Forteviot: excavations of a ceremonial complex in eastern Scotland</i> . CBA Res Rep 176. York: Council for British Archaeology	
SERF 2 Campbell, E and Driscoll, ST 2020 <i>Royal Forteviot: excavations at a Pictish power centre in eastern Scotland</i> . CBA Res Rep 177. York: Council for British Archaeology.	
SERF 3 Wright, D and Brophy, K forthcoming <i>Prehistoric Dunning: excavations of a farming and settlement landscape</i> . York: Council for British Archaeology.	
SERF 4 Poller, T forthcoming Hillforts of Strathearn	
Secondary reporting and syntheses	
Publication content	Citation
Neolithic pottery analysis from Phase 2 excavations	Alexander et al in prep
Phasing of Henge 1 and Henge 2	Brophy and Noble 2012
Possible Neolithic farming evidence from Wellhill, Leadketty	Brophy and Wright 2020
Overview of SERF Project	Campbell <i>et al</i> 2019
Overview of the aspirations of the SERF Project	Driscoll 2010
Antiquity Project gallery feature on the SERF Project	Driscoll <i>et al</i> 2010
SERF Project in a Pictish studies context	Driscoll 2011
Summary of upland survey method and results	Given <i>et al</i> 2019
Palisaded enclosure synthesis and Forteviot Palisaded Enclosure summary	Noble and Brophy 2011a
Summary account of excavations 2007–2009	Noble and Brophy 2011b
Forteviot and Leadketty palisaded enclosures	Noble and Brophy 2014
Forteviot Neolithic cremation cemetery	Noble and Brophy 2015
Forteviot Neolithic cremation cemetery	Noble and Brophy 2017
Mesolithic pit alignments in Scotland	Wright et al in prep
Popular publications	
Forteviot. Current Archaeology 231 (April 2009)	SERF 2009
Strathearn Environs and Royal Forteviot Project Report 2006–2009	SERF 2010

Table 1.1 Summary of publications of the SERF project

1.6 Terminology

There is a problem with terminology of the period covered by this volume, especially the earlier part, where labels include Roman, Roman Iron Age, middle/ late Iron Age, Pictish, Early Historic, Early Christian, Dark Age and many others. The most generally accepted European term for the later first millennium AD is early medieval, and that will be used here for the period c AD 400–1100. The use of 'Pictish' has cultural/ethnic associations which are debateable, and will only be used in specific situations of comparison

with other material, rather than as a period definition. In general, we will try to use neutral time-based units, such as 'early 1st millennium', or '8th to 10th century'.

During excavation, trenches were each given site and year codes which appear in the detailed accounts (eg FN10.05), but for ease of reference are here labelled as Site A, B, C ... etc (Figs 1.11 and 1.12). However, the context numbers (eg 3218) and special finds (eg SF5213) are original numbers, and can be found on the website data structure reports. The geographical terminology also requires clarification. At the outset of the project and in many of the interim data structure reports (DSR), Strathearn was used as a purely descriptive term in the modern geographic sense of the valley of the River Earn. However, in a medieval and early modern context, Strathearn refers to a territorial lordship (*Mormaerdom* or earldom), which defines quite a different, wider, area: the upper part of the valley from Forteviot westwards and south out of the Earn valley taking in part of west Fife. So for clarity, we will use Strathearn when referring to the political entity and the valley of the River Earn when describing the geography.

1.7 Chronology and phasing

Note

While human activity in the Forteviot area spreads over some 6000 years, the archaeological features excavated are not spread evenly throughout this time period. There were periods of intense activity, and other periods which left no archaeological record (Fig 1.14). This intermittent signature of human intervention in the landscape does not mean that occupation or settlement was intermittent – presumably people lived in and exploited this fertile landscape continuously. The large number of radiocarbon dates allows fairly precise dating of many monuments, permitting a general phasing of activity in the Forteviot area (Table 1.2).

The monograph follows normal CBA format for radiocarbon dates, but where dates based on radiocarbon determinations for particular contexts are given, the quoted dates follow the discussion in detail in by Derek Hamilton below. In some cases the full raw dates are not quoted in subsequent chapters, as these could mislead due to issues of taphonomy or Bayesian modelling. The SUERC numbers are given however, and the full data is presented in Table 1.3.

Early Prehistoric Earlier Neolithic 4000-3000BC Scatter of pits Phase 1 Earlier Neolithic 4000-3000BC Scatter of pits Phase 2 Mid-Neolithic 3000-2800BC Cremation cemetery Phase 3 Later Neolithic 2000-2800BC Iarge Palisaded Enclosure Phase 4 Chalcolithic 2600-2400BC Henges constructed Phase 4 Chalcolithic 2400-2200BC Henges constructed Dagger burial Dagger burial Dagger burial
Phase 2 Mid-Neolithic 3000-2800BC Cremation cemetery Phase 3 Later Neolithic 3000-2800BC Timber monuments: Phase 4 Later Neolithic 2600-2400BC Iarge Palisaded Enclosure Phase 4 Chalcolithic 2400-2200BC Henges constructed Phase 4 Chalcolithic 2400-2200BC Henges constructed
Phase 2 Mid-Neolithic 3000-2800BC Megaliths Megaliths Imber monuments: Iarge Palisaded Enclosure Phase 3 Later Neolithic 2600-2400BC Iarge Palisaded Enclosure Iarge Palisaded Enclosure timber circle rectangular timber setting Phase 4 Chalcolithic 2400-2200BC Henges constructed Conversion of henges to cairns/barrows Conversion of henges to cairns/barrows
Phase 3 Chalcolithic 2400-2200BC Megaliths Phase 4 Chalcolithic 2400-2200BC Iarge Palisaded Enclosure Image Palisaded Enclosure 1mber circle rectangular timber setting Phase 4 Chalcolithic 2400-2200BC Henges constructed Conversion of henges to cairns/barrows
Phase 3 Later Neolithic 2600–2400BC Iarge Palisaded Enclosure Imper circle timber circle rectangular timber setting Phase 4 Chalcolithic 2400–2200BC Henges constructed Conversion of henges to cairns/barrows
Phase 3 Later Neolithic 2600–2400BC timber circle rectangular timber setting Phase 4 Chalcolithic 2400–2200BC Henges constructed Conversion of henges to cairns/barrows
Phase 4 Chalcolithic 2400–2200BC Henges constructed Conversion of henges to cairns/barrows
Phase 4 Chalcolithic 2400–2200BC Henges constructed Conversion of henges to cairns/barrows
Conversion of henges to cairns/barrows
Dagger burial
Phase 5 Early Bronze Age 2100-1900 BC Food Vessel cremation
Barrow cemetery
Ring-ditch with standing stone
Later prehistoric and historic
Phase 6Later prehistoric1800–800BCEphemeral activity
Phase 7 Later Iron Age/Roman 100BC-AD300 Large square enclosure and scattered votive deposits
cemetery with round and square barrows and dug graves
Phase 8 Early medieval AD400-1000
early church/monastery
Pictish royal palace
Phase 9 Medieval AD1100–1400 Church, ringwork
Phase 10Post-medievalAD1600-presentVillage, church, fields and estates

Table 1.2 Summary phasing of the Forteviot archaeology

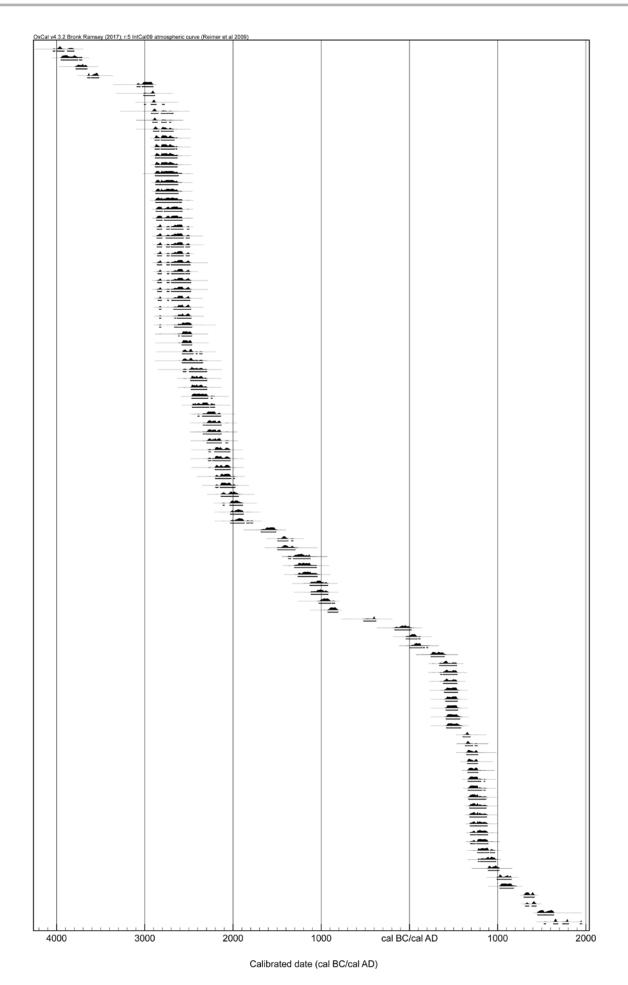


Figure 1.14 All radiocarbon dates from Forteviot represented as a sequence of probability curves for each date, which suggest a gap in activity during the Iron Age

1.8 Radiocarbon dating

with Derek Hamilton

A total of 137 radiocarbon dates are available from features excavated over the course of the five field seasons of the SERF project on the Forteviot site. Sixty-eight of those dates are presented here as they are either associated with putative later prehistoric or medieval monuments/features or are themselves later prehistoric or medieval when calibrated. Since dissemination of the project has been temporally divided into two volumes, there will be duplication in the presentation of some individual radiocarbon results, since there will be medieval dates in early prehistoric features and early prehistoric dates that are associated, though usually residual, with later prehistoric or medieval features. Duplication has been kept to a minimum, but without requiring reference to the earlier prehistoric volume.

All the samples were submitted to the Scottish Universities Environmental Research Centre (SUERC) in East Kilbride between 2007 and 2012. The samples were all single entities of short-life material (Ashmore 1999), and included charcoal and individual carbonised cereal grain. All samples were pretreated following the protocols of Stenhouse and Baxter (1983). The pretreated material was then combusted to CO_2 (Vandeputte *et al* 1996), which was cryogenically purified and converted to graphite using the method of

Slota *et al* (1987). The graphite was then pressed into aluminium target holders for subsequent AMS analysis (Xu *et al* 2004; Naysmith *et al* 2010).

The SUERC laboratory maintains rigorous internal quality assurance procedures, and participation in international inter-comparisons (Scott 2003) indicates no laboratory offsets, thus validating the measurement precision quoted for the radiocarbon ages.

The radiocarbon results are given in Table 1.3. These are conventional radiocarbon ages (Stuiver and Polach 1977), quoted according to the international standard set at the Trondheim Convention (Stuiver and Kra 1986), and calibrated with the internationally agreed curve of Reimer *et al* (2009) using OxCal v4.2 (Bronk Ramsey 1995; 1998; 2001; 2009). The date ranges in Table 1.3 have been calculated using the maximum intercept method (Stuiver and Reimer 1986), and quoted in the form recommended by Mook (1986) with the endpoints rounded outward to 10 years. The probability distributions seen in Figures 9.18 and 9.19 were obtained by the probability method (Stuiver and Reimer 1993).

The samples are discussed below, grouped by site. Unless otherwise stated, the date ranges provided are for the rounded 2-sigma confidence interval of the calibrated date.

Site Code	Lab Code	Context	Context Description	Material Dated	Radio- carbon Age BP	δ 13C ‰	Results expressed at 2 sigma (highest percentage)	Results expressed at 2 sigma (2nd highest percentage)
A	SUERC- 29219	921	Middle to upper ditch fill	Charcoal : Alnus	890 ± 30	-26.3	AD1040 (95.4%) AD1220	-
A	SUERC- 29220	922	Middle ditch fill, under stone collapse	Charred grain: <i>Avena</i>	800 ± 30	-24.4	AD1180 (95.4%) AD1280	-
A	SUERC- 29224	933	Middle ditch fill, ash layers / lenses on N side of ditch	Charred grain: Triticum aestivum	835 ± 30	-22.6	AD1150 (95.4%) AD1270	-
A	SUERC- 29225	934	Middle ditch fill,	Charcoal : <i>Betula</i>	960 ± 30	-26.3	AD1020 (95.4%) AD1160	-
A	SUERC- 29226	936	Possible collapse of rampart on S edge of ditch (Lowest fill)	Charcoal : Betula	930 ± 30	-26.3	AD1020 (95.4%) AD1170	-
A	SUERC- 29227	924	Upper fill, stone packing in palisade 931	Charcoal : Alnus	525 ± 30	-26.8	AD1390 (80.7%) AD1450	AD1320 (14.7%) AD1350
A	SUERC- 29228	932	Lower gravel fill within palisade trench	Charcoal : <i>Corylus</i>	3755 ± 30	-24.3	2290BC (78.5%) 2110BC	2100BC (16.9%) 2030BC

Table 1.3 Radiocarbon dates, calibrated using Oxcal 4.1

Site	Lab Code	Context	Context Description	Material Dated	Radio-	δ 13C ‰	Results	Results
Code					carbon Age BP	-	expressed at 2 sigma (highest percentage)	expressed at 2 sigma (2nd highest percentage)
В	SUERC- 37751	8040	Fill 15–10cm of pit 8039	Charred Grain: <i>Hordeum</i> vulgare	1370 ± 30	-24.0	AD610 (95.4%) AD690	-
В	SUERC- 37752	8040	Fill 15–10cm of pit 8039	Charred Grain: <i>Hordeum</i> vulgare	1285 ± 30	-23.9	AD660 (95.4%) AD780	-
C	SUERC- 37772	7081	Stony mid-fill posthole 7033	Charcoal: <i>Corylus</i>	1590 ± 30	-27.2	AD410 (95.4%) AD540	-
С	SUERC- 37773	7081	Stony mid-fill posthole 7º33	Charred Grain: <i>Hordeum</i> vulgare	1615 ± 30	-23.2	AD390 (95.4%) AD540	-
C	SUERC- 37777	7083	Palisade Posthole 7033 - Lowest fill	Charcoal: Quercus	4120 ± 30	-25.1	2780 (70.4%) 2580 BC	2870 (25.0%) 2800BC
С	SUERC- 37778	7083	Palisade Posthole 7033 - Lowest fill	Charcoal: Quercus	4165 ± 30	-25.6	2820 (75.8%) 2630BC	2880 (19.6%) 2830BC
D	SUERC- 29190	604	Lower fill of pit 531 in Henge 1	Charcoal : <i>Corylus</i>	1305 ± 30	-24.9	AD650 (95.4%) AD780	-
D	SUERC- 29194	611	Burnt deposit in pit 531 in Henge 1	Charcoal : <i>Betula</i>	1230 ± 30	-25.1	AD680 (95.4%) AD890	-
D	SUERC- 23242	364	Small pit around capstone	Charcoal : Alnus sp.	2355 ± 30	-27.2	520BC (95.4%) 380BC	-
D	SUERC- 29195	626	Lower fill of pit 531 in Henge 1	Charcoal : <i>Corylus</i>	3855 ± 30	-25.1	2460BC (79.9%) 2270BC	2260 (15.5%) 2200BC
D	SUERC- 29180	617	Cremation deposit	Charcoal : cf <i>Ulex/Cytisus</i>	235 ± 30	-24.5	AD1630 (48.1%) AD1690	AD1730 (35.3%) AD1810
F	SUERC- 37753	5600	Pyre Pit 5514 - Lower fill	Charcoal: <i>Corylus</i>	1145 ± 30	-26.9	AD810 (92.1%) AD980	AD780 (3.3%) AD790
F	SUERC- 37757	5600	Pyre Pit 5514 - Lower fill	Charred Grain: <i>Hordeum</i> vulgare	1085 ± 30	-23.6	AD890 (95.4%) AD1020	-
F	SUERC- 37761	5513	Pyre Pit 5512 - Upper fill	Charcoal: Alnus	1350 ± 30	-25.9	AD640 (87.7%) AD720	AD740 (7.7%) AD770
F	SUERC- 37762	5513	Pyre Pit 5512 - Upper fill	Charcoal: <i>Corylus</i>	1255 ± 30	-27.9	AD670 (89.6%) AD830	AD840 (5.8%) AD870
F	SUERC- 37888	5027	Thin lower fill at base of Pit 5034	Charcoal: <i>Corylus</i>	1555 ± 35	-25.1	AD420 (95.4%) AD580	-
F	SUERC- 37889	5027	Thin lower fill at base of Pit 5034	Charred Grain: <i>Hordeum</i> vulgare	1565 ± 35	-23.3	AD440 (95.4%) AD570	-
F	SUERC- 37895	5057	Central chamber of triple cist, basal lens of charcoal	Charcoal: <i>Corylus</i>	1595 ± 35	-26.7	AD400 (95.4%) AD550	-
F	SUERC- 37896	5057	Central chamber of triple cist, basal lens of charcoal	Charred Grain: <i>Hordeum</i> vulgare	1615 ± 35	-27.3	AD380 (93.9%) AD540	AD360 (1.5%) 370
F	SUERC- 45557	5059	Basal fill of southern chamber of triple cist	Cremated Human Bone	3600 ± 29	-22.8	2030 (95.4%) 1890 BC	-
F	SUERC- 45558	5513	Pyre pit 5512 upper fill	Cremated Human Bone	1287 ± 29	-27.6	AD670 (95.4%) AD770	-
F	SUERC- 45559	5513	Pyre pit 5512 upper fill	Cremated Human Bone	1233 ± 29	-28.2	AD690 (95.4%) AD880	-
G	SUERC- 21563	004	Spread of burning in situ in avenue	Charcoal : <i>Corylus</i>	1315 ± 40	-28.5	AD640 (95.4%) AD780	-
Н	SUERC- 37788	6140	Henge 2 upper ditch fill	Charcoal : <i>Corylus</i>	3310 ± 30	-26.7	1680 (95.4%) 1520BC	-

Site Code	Lab Code	Context	Context Description	Material Dated	Radio- carbon Age BP	δ 13C ‰	Results expressed at 2 sigma (highest percentage)	Results expressed at 2 sigma (2nd highest percentage)
Н	SUERC- 37866	6140	Henge 2 upper ditch fill	Charcoal: Salix	3575 ± 35	-24.7	2030 (87.1%) 1870BC	1840 (5.1%) 1820BC
Н	SUERC- 37783	6088	Charcoal-rich matrix overlying paving 6121	Charcoal: <i>Corylus</i>	1960 ± 30	-26.6	40BC (91.5%) AD90	AD100 (3.9%) AD120
Н	SUERC- 37787	6088	Charcoal-rich matrix overlying 6121 paving	Charcoal: Salix	1915 ± 30	-26.3	AD10 (92.9%) AD140	AD160 (1.3%) AD170
J	SUERC- 22835	045	Upper fill of BGr1 (SB1)	Charcoal : Alnus	2990 ± 30	-27.0	1320BC (91.5%) 1120BC	1370BC (3.9%) 1340BC
J	SUERC- 22836	045	Upper fill of BGr1 (SB1)	Charcoal : <i>Corylus</i>	3140 ± 30	-24.5	1500BC (90.2%) 1370BC	1340BC (5.2%) 1310BC
J	SUERC- 22837	045	Upper fill of BGr1 (SB1)	Charcoal : <i>Corylus avellana</i>	1265 ± 30	-24.9	AD660 (93.1%) AD830	AD840 (2.3%) AD860
J	SUERC- 22838	081	Post-hole next to grave 075 (SB1)	Charcoal: Prunoidae	355 ± 30	-25.8	AD1450 (95.4%) AD1640	-
J	SUERC- 22839	087	Lower fill of barrow ditch 030 (SB1)	Charcoal : <i>Corylus</i>	2965 ± 30	-24.6	1310BC (95.4%) 1050BC	-
J	SUERC- 22840	088	Lower fill of barrow ditch 030 (SB1)	Charcoal : Alnus	8025 ± 30	-24.8	7070BC (66.7%) 6900BC	6890BC (28.7%) 6820BC
J	SUERC- 22844	031	Upper fill of barrow ditch 030 (SB1)	Charcoal: Betula	2050 ± 30	-26.3	170BC (95.4%) AD20	-
J	SUERC- 22845	021	Upper fill of barrow ditch 020/058 (SB2)	Charcoal : Alnus	2865 ± 30	-26.3	1130BC (95.4%) 920BC	-
J	SUERC- 22846	033	Upper fill of BGr2 (SB2)	Charcoal : Alnus	980 ± 30	-26.8	AD990 (95.4%) AD1160	-
J	SUERC- 22847	033	Upper fill of BGr2 (SB2)	Charcoal : <i>Corylus</i>	925 ± 30	-25.5	AD1020 (95.4%) AD1180	-
J	SUERC- 22848	067	Post-hole next to BGr2 (SB2)	Charcoal : Salix	1240 ± 30	-25.3	AD680 (95.4%) AD880	-
J	SUERC- 22849	068	Lower fill of barrow ditch 020/058 (SB2)	Charcoal : <i>Betula</i>	8335 ± 30	-25.6	7510BC (95.4%) 7320BC	-
J	SUERC- 22850	068	Lower fill of barrow ditch 020/058 (SB2)	Charcoal : <i>Corylus</i>	2800 ± 30	-27.4	1050BC (95.4%) 830BC	
J	SUERC- 22854	101	Lower fill of BGr2 (SB2)	Charcoal : Corylus avellana	1175 ± 30	-23.3	AD770 (83.1.%) AD900	AD910 (12.3%) AD970
J	SUERC- 22855	070	Post-hole 069 under barrow ditch 028 (SB1)	Charcoal : <i>Corylus</i>	2940 ± 30	-24.5	1270BC (95.4%) 1040BC	-
J	SUERC- 22856	072	Middle fill of Unenclosed Grave 016	Charcoal : <i>Corylus</i>	1210 ± 30	-25.9	AD760 (83,2%) AD900	AD750 (12.2%) AD690
J	SUERC- 22857	104	Fill of large quartz pebble pit in SB1	Charcoal : Alnus		-26.4	AD760 (74.9%) AD890	AD690 (20.5%) AD750
К	SUERC- 29204	820	Initial silting of ditch 815 of Square Enclosure	Charcoal : Alnus	30	-29.7	3610BC (75.5%) 3520	3650BC (19.9%) 3620BC
К	SUERC- 29205	791	Lower silting of stone- filled pit 785 in Square Enclosure	Charcoal : Prunoideae	2850 ± 30	-27.5	1120BC (95.4%) 920BC	-
К	SUERC- 29206	717	Fill of pit 726 in Square Enclosure	Charcoal : Alnus	2725 ± 30	-25.9	930BC (95.4%) 810BC	-
К	SUERC- 29207	824	Charcoal rich deposit in pit 830 in Square Enclosure	Charred grain : <i>Triticum</i> cf <i>dicoccum/spelta</i>	585 ± 30	-23.8	AD1290 (65.9%) AD1370	AD1380 (29.5%) AD1420
К	SUERC- 29208	824	Charcoal rich deposit in pit 830 in Square Enclosure	Charcoal : <i>Corylus</i>	540 ± 30	-27.2	AD1440 (66.0%) AD1380	AD1310 (29.4%) AD1360
К	SUERC- 29209	782	Upper fill of central burial (BGr5) in RB1	Charcoal : Alnus	1580 ± 30	-25.2	AD410 (95.4%) AD530	-

Site Code	Lab Code	Context	Context Description	Material Dated	Radio- carbon Age BP	δ 13C ‰	Results expressed at 2 sigma (highest percentage)	Results expressed at 2 sigma (2nd highest percentage)
К	SUERC- 29210	833	Log coffin in Unenclosed Grave 12	Charcoal : <i>Quercus</i>	1720 ± 30	-26.9	AD240 (95.4%) AD400	-
К	SUERC- 29214	836	Log coffin in Unenclosed Grave 12	Charcoal : <i>Quercus</i>	1635 ± 30	-25.8	AD340 (95.4%) AD540	-
Μ	SUERC- 37749	9003	Lens of charcoal, middle fill of boundary ditch	Charcoal: Betula	1245 ± 30	-26.0	AD680 (95.4%) AD870	-
Μ	SUERC- 37750	9003	Lens of charcoal, middle fill of boundary ditch	Charcoal: Alnus	1270 ± 30	-25.9	AD660 (90.8%) AD780	AD790 (3.7%) AD810
Ν	SUERC- 43255	215	Basal fill of pit 214	Charred Grain : <i>Hordeum</i> <i>vulgare</i> sl	912 ± 29	-25.1	AD1030 (95.4%) AD1210	-
Ν	SUERC- 43256	215	Basal fill of pit 214	Charcoal : <i>Salix</i> sp	1108 ± 29	-27.2	AD880 (95.4%)1010 AD	-
Ν	SUERC- 43260	222	Occupation - trample on paving	Charcoal : <i>Salix</i> sp	922 ± 29	-27.1	AD1030 (95.4%) AD1180	-
Ν	SUERC- 43261	222	Occupation - trample on paving	Charcoal : <i>Corylus avellana</i>	944 ± 28	-23.5	AD1030 (95.4%) AD1160	-
R	SUERC- 43230	570	Articulated E-W burial running under the Phase 2 foundations	Human bone: (shaft of juvenile femur	918 ± 29	-21.0	AD1030 (95.4%) AD1190	-
R	SUERC- 43231	550	Unexcavated burial grave 551 Phase 2	Human bone (orbital fragment)	629 ± 29	-19.3	AD1290 (95.4%) AD1400	-
R	SUERC- 43232	571	Articulated E-W burial running under the Phase 2 foundations	Human bone (thoracic vertebra)	971 ±29	-20.5	AD1020 (95.4%) AD1160	-

Site A

The dates from Site A, and their Bayesian modelling, are discussed in 9.4.6.

Site B

There are two results (SUERC-37751/2) on single charred barley grains from a fill 8040 rich in burnt grain at 15–10 cm depth in oval pit 8039. The two results are not statistically consistent (T'=4.0; v=1; T'(5%)=3.8) at 2σ . They are, however, only slightly inconsistent and this could be the result of either reuse of the pit over time, or more likely one result is a slight statistical outlier. The later result (SUERC-37752) should be used as the better estimated date of the feature (cal AD 660–780).

Site C

There are two results (SUERC-37772/3) on a fragment of hazel charcoal and charred barley grain from the tertiary fill 7081 in the upper part of posthole 7033. The two results are statistically consistent (T'=0.3; v=1; T'(5%)=3.8) and could be the same actual age. The later result (SUERC-37772) provides the best estimate for the activity associated with this burnt material (cal AD 400–550).

Site D

Three dates are available from deposits associated with a large pit and one from a cremation deposit in the centre of Henge 1. SUERC-29180 is on a fragment of modern charcoal (cf. *Ulex/Cytisus*) from a Neolithic cremation deposit 617 amidst a deposit of stones disturbed by ploughing. There is one result (SUERC-29190) on a single fragment of hazel charcoal from context 604 of the lower fill in the large scoop/pit 531 in the centre of the henge, of early medieval date. There are two results (SUERC-29194/5) from the underlying basal contexts full of burnt material (611 and 626). These results are early medieval and Bronze Age in date, with the later date providing the best estimate for the formation of the deposit in cal AD 680–890. On the last day of the 2008 season a scoping sample in a small trial trench was taken from the pit associated with the capstone of the cist in case the excavations could not be continued the following year. Unfortunately the context cannot be related to those revealed in the 2009 excavation of the cist so its relationship to this feature is unclear. The result (SUERC-23242) is on a sample of alder charcoal that dates to 490–380 cal BC. The uncertainty of the association of the sample to the cist has raised concerns that the result is not an accurate reflection of the date of the cist which is known to date to the early Bronze Age (SERF1, 5.3.7).

Site F

There are two results (SUERC-37888/9) on a fragment of hazel charcoal and charred barley grain from the thin lower fill/concentration 5027 at the base of pit 5034. The two results are statistically consistent (T'=0.0; v=1; T'(5%)=3.8) and could be the same actual age. The later result (SUERC-37888) provides the best estimate for the activity associated with this burning (cal AD 420–580).

There are two other results (SUERC-37895/6) on a fragment of hazel charcoal and charred barley grain from a lens of charcoal 5057 in the central part of the triple cist within the ring-ditch. The two results are statistically consistent (T'=0.2; v=1; T'(5%)=3.8) and could be the same actual age. The later result (SUERC-37895) provides the best estimate for the activity associated with the infill of this cist (cal AD 390–540). There is one result from cremated human bone from the southern chamber of the triple cist (SUERC-45557). This gives an early Bronze Age date, which contrasts with the dates of the fill in the central cist (see Chapter 5.3).

There are two results (SUERC-37753/7) on a fragment of hazel charcoal and charred barley grain from the burnt material in the lower fill 5600 in pit 5514. The two results are statistically consistent (T^{*}=2.0; v=1; T^{*}(5%)=3.8) and could be the same actual age. The later result (SUERC-37757) provides the best estimate for the burning activity associated with this pit (cal AD 890–1020).

There are two results (SUERC-37761/2) on fragments of alder and hazel charcoal from the charcoal-rich upper fill 5513 in pit 5512. The two results are not statistically consistent (T'=5.0; v=1; T'(5%)=3.8) and suggest that the deposit is of material of mixed ages. The later result (SUERC-37762) provides the best estimate for the activity associated with this pit (cal AD 670–870). There are also two results from cremated human bone from the same context (SUERC-45558/9) that are consistent with this later date.

Site G

A fragment of hazel charcoal was dated (SUERC-21563) from a spread of *in situ* burning 004 in a shallow pit within the avenue. This activity is dated to cal AD 640–780.

Site H

There are four results available from two contexts associated with Henge 2. From a deposit 6140 in the henge ditch 6010 come two results (SUERC-37788 and -37866) on single fragments each of willow and hazel charcoal, respectively. The two results are not statistically consistent (T'=33.2; v=1; T'(5%)=3.8). The material is of mixed age and both results may well be residual. The later of the two dates provides a *terminus post quem* for when the ditch went out of use (1690–1500 cal BC).

Two further results (SUERC-37783 and -37787) are available from the charcoal-rich matrix 6088 overlying paving [6121] that seals the Henge 2 ditch. These two results are statistically indistinguishable (T'=1.1; v=1; T'(5%)=3.8) and so could be the same actual age. The later date provides the best estimate for the deposition of this material (cal AD 20–140).

Site J

The radiocarbon dating from Site J is centred on the features associated with the central graves and ditches of two square barrows. A total of seventeen radiocarbon dates are available from this site.

From SB1, there are three results (SUERC-22835–7) on alder and hazel charcoal fragments from two samples taken from the upper fill 045 of the central barrow grave BGr1. The three results are not statistically consistent and even the two results from the same sample 049 are inconsistent (T'=12.5; v=1; T'(5%)=3.8). This strongly suggests a mixed, or reworked, deposit. Given the deposit was interpreted as a likely dump into a surviving depression, the latest result (SUERC-22837) provides the best estimate for when this event took place (cal AD 660–860), though it may well provide only a *terminus post quem* for the event.

From the SB1 barrow ditch 030 there are four results in a stratigraphic sequence. Two results (SUERC-22839/40) are on hazel and alder charcoal from contexts (087 and 088) that form lower fills in the ditch. SUERC-22840 is Mesolithic in date and almost certainly a residual fragment of charcoal. Two contexts (031 and 021) in the upper fill were also dated (SUERC-22844/5). The two radiocarbon ages are separated by more than 800 years. The later of the two results (SUERC-22844) provides the best estimate for the upper infilling of the ditch (170 cal BC–cal AD 30) but only provides a *terminus post quem* for the event.

A fragment of Prunoideae charcoal was dated (SUERC-22838) from the fill 081 of a posthole next to the central grave 075 of SB1. The result is postmedieval in date (cal AD 1440–1650).

The fill 104 of a pit filled with large quartz pebbles associated with SB1 was also dated. The result (SUERC-22857) is on a fragment of alder charcoal and suggests the pit was in use in cal AD 680–890.

There are three results from two contexts relatable through the stratigraphy in the central grave BGr2 of barrow SB2. From the lower fill 101 there is one result (SUERC-22854) on a fragment of hazel charcoal. Two results (SUERC-22846/7) on alder and hazel charcoal are available from the upper fill 033. These two results are statistically consistent (T'=1.7; v=1; T'(5%)=3.8) and could be the same actual age, suggesting the deposit has been securely dated. Furthermore, these upper fill dates are significantly more recent than the one from the lower fill, and so respect the stratigraphic sequence. The latest date within the fills (SUERC-22847) provides a *terminus ante quem* for the infilling of this grave of cal AD 1020–1210.

From the fill 067 of a posthole next to the central grave 032 there is one result (SUERC-22848) on willow charcoal that suggests this feature dates to cal AD 670–890.

There are two results (SUERC-22849/50) on birch and hazel charcoal from the lower fill 068 of the barrow ditch 020/058. SUERC-22849 is Mesolithic in date and likely to be residual, while SUERC-22850 provides a *terminus post quem* for the infilling of the ditch (1020–850 cal BC).

There is a posthole 069 beneath the barrow ditch, and from a fill 070 there is a result (SUERC-22855) from a fragment of hazel charcoal that suggests this feature dates to 1270–1040 cal BC.

Finally, there is a result (SUERC-22856) on a

fragment of hazel charcoal from the middle fill 072 of an unenclosed grave which suggests the burial dates to cal AD 690–900.

Site K

Seven results are available from features and deposits associated with the Square Enclosure and round barrow at FC09. Material from two pits/postholes in the Square Enclosure was dated. SUERC-29205 is on a fragment of Prunoideae charcoal from the lower fill 791 of the stone-filled pit/posthole 785, while SUERC-29206 is on a fragment of alder charcoal from the fill 717 of pit/posthole 726. These features appear to be late Bronze/early Iron Age in date.

Two results (SUERC-29207/8) come from a carbonised cereal grain and fragment of hazel charcoal recovered from the charcoal-rich fill 824 in pit 830 in the Square Enclosure. The two measurements are statistically consistent (T'=1.1; v=1; T'(5%)=3.8) and could be the same actual age. The deposit has been securely dated, with the later result (SUERC-29208) providing the better estimate for the date of its formation (cal AD 1310–1420).

The upper fill 782 of the central burial BGr5 in the round barrow RB1 was also sampled. The result (SUERC-29209) on a fragment of charcoal from a burnt alder branch deliberately deposited in the grave suggests that the burial likely occurred in cal AD 410–530.

Finally, there are two results (SUERC-29210/4) on the remains of the log coffin of unenclosed grave UGr 12. SUERC-29210 is on a sample from 833, and SUERC-29214 is on a sample from 836. Both samples were from oak charcoal, and the measurements are not statistically consistent (T'=4.0; v=1; T'(5%)=3.8). Although SUERC-29210 is from a sample of outer rings and would be expected to more reliably date the coffin, the later result (SUERC-29214) provides the better date estimate (cal AD 340–540).

Site M

There are two results (SUERC-37749/50) from samples of birch and alder charcoal in the middle fill 9003 of the linear boundary ditch here. The fill is characterised as a lens of charcoal. The two results are statistically consistent (T'=0.3; v=1; T'(5%)=3.8) and could be the same actual age. The later result (SUERC-37749) provides the better date estimate for the filling of the feature (cal AD 670–880).

HISTORICAL CONTEXT

with Nicholas Evans

2.1 Setting out research questions

It is widely accepted that the now obscure village of Forteviot was once a centre of great political significance: the residence of no less a figure than Cináed son of Alpín (Kenneth McAlpin). This association with one of the pivotal figures in Scottish history confers on it a level of political importance, even if visual clues to this royal past remain largely hidden. Certainly, Forteviot's most striking and intriguing characteristic is its longevity. The first historical mention of Forteviot in AD 858 is as a Pictish royal palace, but we know from our excavations that by then it had been used as a burial ground and ceremonial centre for over 3000 years. Longevity, in itself, is not interesting, but Forteviot's political context makes this the most revealing place in Scotland to observe the fusion between native practices and Christian traditions. In this chapter we will explore how historical issues guided our research programme and have informed our consideration of the evidence for the interplay between ancestral monuments and early medieval politics.

Forteviot is important not simply as a guide to conceptual and ideological dimensions of kingship, although it undoubtedly is this, but it is also pivotal for our understanding of the evolution of civic administration during the transition from Pictland to Scotland in the 9th to 12th centuries. This transition saw a seismic shift in social practices from ones constructed around kin-based structures to institutions where power was defined by territorial control. Part of Forteviot's unique scholarly value is that it is well-placed to contribute to understanding this, in part because of its historic resources, but also because it occupies a revealing geographic position on the boundary between the ancient *mormaerdoms* (political districts) of Strathearn and Gowrie. This liminal setting contributes to appreciating Forteviot's significance.

It is commonplace to lament the scarcity of textual sources for early Scotland, but as Dauvit Broun observes in his discussion of the origins of medieval statehood, this poverty can be liberating by encouraging us to concentrate attention on analysing the evidence, rather than relying upon generic European models of social evolution (Broun 2015a, 7). Although Broun is not concerned explicitly with archaeology, such encouragement is valuable when grappling with the imperfections of the archaeological record. Archaeological evidence has the potential to illuminate the 'lived experience of being part of a polity' (ibid, 13). For the archaeologist, the pivotal evidence relates to the reuse of ancestral monuments within an ancient religious landscape which provides physical links to important, but ephemeral, social activities such as public assemblies and judicial courts. While these insights are of paramount importance for Scotland, they have a much wider value because they challenge the conventional centralising narrative of the formation of the European state. Scotland followed a different path, was structured differently, and worked differently (Broun 2015b; Taylor 2016).

This project follows in a tradition of scholarly curiosity about kingship in early Scotland which has, since the 17th century, identified Forteviot as central to the origins of Scotland (ably mapped out by Aitchison 2006, 37–45). A key goal of our investigations was to contribute to understanding Forteviot's role in the development of kingship and the Scottish nation. The historical notices of the 9th century, which are conventionally seen to mark the origins of a recognisable Scottish kingdom (albeit confined to the east and bounded by the Forth and the Spey), describe several significant royal events at Forteviot. As with all annalistic sources, these reveal almost nothing about royal domestic arrangements, or about the kingdom's ideological underpinning, and contain only opaque clues about the nature of kingship. However, the early prominence of Forteviot makes it plain that it was a significant royal centre, possibly the most important one in Pictland. By the time that texts start to become more plentiful (from the 12th century), Forteviot was no longer politically prominent and over time it became increasingly marginal and obscure. Antiquarians aware of this historical tradition recognised that Forteviot's remarkable sculpture and nearby field monuments held the key to understanding the origins of Pictish kingship, but they lacked the techniques for investigating them (Skene 1857). So, by the 19th century Forteviot had become a quaint footnote in the Scottish national narrative and that is how it remained until the discovery through aerial photography of the remarkable prehistoric ritual complex rekindled interest in the site and offered a means of exploring the nature of early Scottish kingship.

The recognition of the significance of St Joseph's discovery of the cropmarks in the 1970s by Alcock (1980; 1981) coincided with an increase in the study of early medieval kingship across Europe, particularly in the Insular world, where progress was beginning to be made in untangling the interplay between royal residences and provincial ceremonial sites, particularly in Ireland (eg Sawyer and Wood 1977; Wailes 1982; Alcock 1981; Driscoll and Nieke 1988). The Forteviot cropmarks forced scholars working in Scotland to think about the early kings and ancient religious monuments. Was there a real connection with the prehistoric sites? Did these early kings evolve from pagan sacral kings? When does Christianity become a political force?

In Ireland, a steady stream of scholarship during the 20th century has exposed deep interconnections between pagan ritual monuments, mythical traditions, the rites of kingship and the exercise of royal authority (discussed below in 2.6). While the precocious literary practices of the Irish learned orders document aspects of pagan Celtic kingship (Binchy 1958; 1970; Newman 2007; FitzPatrick 2004a; Schot *et al* 2011; Waddell 2014), in Britain these links to the distant prehistoric past are more ambiguous, particularly in areas where

connections with the past were broken by the Roman conquest and Anglo-Saxon settlement. While mystical associations do influence our understanding of early British kingship further north and west, the tendency has been to down-play these qualities in the absence of unambiguous evidence of a connection with the more distant past (Bradley 1987 is an exception, while the scepticism of Halliday 2006 is more typical). The importance of the Forteviot cropmarks in a British context is that they offer an unprecedented opportunity to investigate the connection between a documented royal site and its prehistoric monumental setting.

2.1.1 Historical themes

It is our proposition that Forteviot was central to the major social and political transformations that characterised northern Britain in the 1st millennium AD and in that sense served as the cradle of Scotland. The first and most momentous of these transformations was triggered by the arrival of the Romans in Strathearn. For most of the Roman period (broadly the late 1st to late 4th century), Forteviot was either on the edge of the frontier or beyond it within a military zone (Hanson and Maxwell 1986; Breeze 1996). The ebb and flow of large numbers of soldiers caused substantial changes, both directly through military encounters and obliquely through cultural encounters ranging from serving in the army to commercial exchanges. In the 1st century the Earn valley was on the front line of the Roman encounter with the native Iron Age peoples, the Caledonians. Running along the Gask Ridge on the north side of the Earn was a string of signal stations and fortifications linked by a road forming the first northern frontier in Britain in the 1st century (Keppie 1986, 150-3; Maxwell 1989, 121). Even after the frontier was relocated south to the Antonine Wall this road remained a major northsouth route leading to a bridge crossing the Tay, which retained its importance throughout the Middle Ages.

Substantial numbers of troops were garrisoned at the 26ha Temporary Camp immediately west of Forteviot at Broomhill, 1km west of Forteviot (Fig 2.1), and an even larger Temporary Camp at Kincladie Wood, Dunning (Jones 2013, 205–6, 191–2). Within the Forteviot excavations, Roman influence is lightly evidenced through ritual practices associated with the cemetery (see Chapter 3), but more widely the Caledonians were certainly transformed by their encounter with the Roman world. This can be seen in



Figure 2.1 Aerial photograph of Forteviot Roman Temporary Camp (at Broomhill) (DP280239; © HES)

the accumulation of high-value material culture in Lowland brochs such as Leckie (MacKie 2016), Fairyknowe (Main 1999), and one that SERF excavated at Castle Craig, Pairney (James and Poller 2011; James and Campbell 2012). One way of reading this new accumulation of wealth is that Iron Age society became more socially stratified as a consequence of the encounter with the Empire.

By the 3rd century the Caledonians had undergone a process of social and political reinvention (ethnogenesis) and became known as Picts (Fraser 2011; Forsyth 1998). Despite the change in name and the evident transformations in social organisation, there were fundamental and profound continuities between the Picts and their Iron Age ancestors. They continued to speak the same Celtic language, cognate with other British languages (Rhys 2015), and despite the rupture with the pre-Roman world, we should imagine powerful continuities of belief, spatial organisation and modes of subsistence.

All aspects relating to the coming of Christianity to northern Britain are shrouded in uncertainty – the route, speed and depth of belief are all debatable. What can be agreed is that the 6th century – the century of St Columba - was a watershed in the conversion process, after which Christianity prevailed. There are strong traditions of competing missionary processes, which if nothing else suggest that the process of conversion was complex and perhaps contested (Márkus 2017). If it has proved difficult to evaluate the competing accounts of early ecclesiastics through their later hagiography, as for instance, St Serf (Macquarrie 1993), whose 12th-century vita includes the quasi-mythological, dragon-slaying tradition, it is even more difficult to examine the interplay between Christianity and earlier beliefs. Clarke has argued that there is more evidence for religious interplay than is generally appreciated (Clarke 2007), and this point is particularly significant for Forteviot, since it was clearly a place of supreme sacred importance for centuries. One of our research questions was: what spiritual significance did Forteviot retain in the post-Roman era?

The historical evidence does not allow detailed reconstruction of the political landscape of these early Christians. With Christianity came Latin literacy, but the earliest texts reveal little more than the names of kingdoms, kings and battles. Sidestepping the complexities of this early history, the details of which can be pursued elsewhere (Fraser 2009; Woolf 2007; Márkus 2017), we can identify three processes of particular importance for our project. First is the ebb and flow of Northumbrian hegemony, a process described in some detail by the Venerable Bede. This period of overlordship extended from the rise of King Aethelfrith of Bernica from c AD 597 until it was decisively ended at the battle of Nechtansmere in AD 685. Although we are right to be sceptical of imagining this as a Pictish Bannockburn, it did precede a period of military success in southern Pictland. This military success is particularly associated with the career of Uurguist I (more commonly known by the Gaelic version of his name, Oengus I, AD 728-61), the most successful and celebrated Pictish king before Cináed son of Alpín.

The emergence of Forteviot in historical sources occurred at the height of the Viking Age wars when armies of Scandinavians were ravaging northern Britain and Ireland (Woolf 2007, 87–121). Most discussion of the impact of the Vikings in Scotland concerns the shattering of the previous political geography (eg Woolf 2007; Broun 2015b), but it seems equally likely that the political reorganisation also had a constructive influence on Scottish kingship. While the Vikings destabilised existing kingdoms, this led to the foundation of new ones. In northern Britain, the kindred of Cináed son of Alpín were arguably the greatest beneficiaries of this Viking-induced instability which provided a platform for the Clann Chinaeda dynasty to rule for over 200 years.

A second, related process concerns the rise of the kingdom of Fortriu, which until recently was located in southern Pictland in the Earn valley (Anderson 1973, 140; Driscoll 1987), but now appears to describe a district north of the Mounth (Woolf 2006). Following this line of thought, Evans has examined the annalistic evidence relating to the Pictish province of Circin, and argues that it describes a vast area running from the Ochils to the Mounth including the later mormaerdoms of Mearns, Angus, Gowrie and Strathearn (Evans 2013, 32-6). This identification of Circin as the great southern Pictish province fills a geographic blank, and helps to frame the expansion of the northern Pictish kingdom Fortriu southwards. This expansion of Fortriu is linked to the reign of Constantine son of Fircus (AD 789-820), who is commemorated on the great cross from Dupplin erected overlooking Forteviot, arguably as the principal monument marking the southward

expansion of the northern Pictish Verturian dynasty.

The third process, the expansion of Gaeldom, could be said to be the defining transformation of Scotland and yet remains contentious and difficult to pin down. In large part this is because the expansion of Gaelic language, culture and authority coincided with the Norse expansion and Viking disruption of the sources of historical evidence. The shortcomings of the traditional narrative of a union of crowns between Picts and Scotland forged by Cináed son of Alpín (c AD 839-58) have been readily exposed by Broun who has encouraged us to focus on the rise of the Kingdom of Alba (c AD 900) as a significant process and not be distracted by the later manipulations of the dynastic material (Broun 1999a; 1999b). The questions posed for Forteviot by the expansion of Gaeldom go beyond the siting of the royal palace and are embedded in the wider political geography. There is a compelling suggestion that the earliest scheme of provincial organisation embodies kindreds from Dál Riata: Gowrie (descended from Cenél nGabranáig), Angus (from Cenél nOengusa), and Strathearn (from Comgall) (Woolf 2007, 226-7; Broun 2015a; 2015b). Clearly there is a degree of propaganda fiction linking Dál Riatan genealogies to the regional lordships, yet this is thought to reflect actual political and cultural influences. Nevertheless, this political landscape is important because despite the Gaelic nomenclature (and attributions), these represent Pictish provinces led by mormaers (Broun 2015a; forthcoming). There are two points of relevance to us. Firstly, as far as can be seen the mormaerdoms were kin-based entities, which has implications for understanding the dynamics of their functioning as economic, judicial and military entities. Secondly, Broun argues that the origins of the system of paired mormaerdoms probably originated at the end of the 8th century during the transformative reign of Constantine son of Fircus. Broun speculates that this is the moment when the great southern province of Circin was divided into three, each with their own royal centre (manorium): Angus with Forfar, Gowrie with Scone and Strathearn with Forteviot. The siting of Forteviot at the boundary between Strathearn and Gowrie takes on a particular importance in the context of royal inauguration.

Time does not stop for Forteviot after the 10th century, but it ceases to be central to Scotland's narrative. The social transformations linked to the shifts from kin-based structures to territorial lordship are documented at Forteviot (Taylor 2016). This evidence is largely legal, so reveals society from a judicial perspective. Perhaps most revealing is an obtuse text, the *Leges inter Brettos et Scottos*, central to which was the concept of 'peaces' which indicates that 'anyone with the status of grandson or nephew of a thane (or *toiseach*) could in theory establish his own peace'. This concept meant that a strongman was able, in effect, 'to guarantee the peace over individuals who had placed themselves under his protection, and if that peace was broken, payment was due to him as well as the injured party's kin' (Hammond 2018, 133). This reveals a 12th-century social world which in many respects remained very like the early Middle Ages in terms of judicial practices and the importance of kin relations, even as the balance of power was shifting to

Forteviot lies on the south side of the lower reaches the River Earn, in the heart of what is now called Strathearn. In the Middle Ages Strathearn described a district that was focused on the upper reach of the river valley, with Crieff at its approximate centre, and extended south to Dunblane and into west Fife. We can only appreciate Forteviot's position with reference to the boundaries of later medieval earldoms and dioceses. The complex ecclesiastical geography of Forteviot reflects the pre-documentary secular organisation and this complexity indicates its importance: it was at the centre of things. Forteviot was a detached parish of the diocese of St Andrews, but it was largely surrounded by parishes in the dioceses of Dunblane and Dunkeld. These arrangements reveal that Forteviot occupied an ambiguous position between the Diocese of St Andrews (Deanery of Gowrie) and the Deanery of Strathearn. Its position in the secular geography is more revealing.

The earliest relevant political geography is a Gaelic verse identifying the provinces of Alba (the area north of the Forth and east of Druim Alban, the Highland spine) with the seven children of the eponymous Cruithne [Gaelic for Pict]. This is found as a preface to a version of the Pictish King List (Anderson 1973, 139–43; Watson 1926, 107–17) and is critical for understanding the emergence of the Kingdom of Alba c AD 900 (Broun 1994; 2015b; 2017). Some of these Pictish provincial names survive into the later Middle Ages, such as Fife, but the majority are replaced with Gaelic names by the time of the composition of the *De Situ Albanie* in the 12th century. There is a long tradition of attempting to correlate the two sets of names (Watson 1926, 108; Wainwright 1955, 46–8),

the control of property and towards the evolution of landed estates (*ibid*, 133–5). These insights are of particular relevance when considering the evidence for judicial activities – a crucial stage in forming a distinctive Scottish state.

To summarise, these large-scale historical processes present a series of research questions which influenced our discussion of the SERF project results:

- How was early kingship in Pictland linked to the prehistoric landscape?
- How were the forces of Christianity and paganism played out in the political context of Forteviot?
- How were early medieval social transformations revealed in the archaeological record?

2.2 The place

but for our purposes the key point is that this change in nomenclature seems to correspond to the re-imagining of the Pictish kingdom as the Gaelic kingdom of Alba which took place during the 9th century.

Several of the new Gaelic district names can be convincingly linked to dynastic kindreds from Dál Riata, such as Angus from Cenél nOengusa and Gowrie from Cenél nGabranáig (Watson 1926, 110-12). However, the name Strathearn is less straightforward. Watson noted that the district of Strathearn extended beyond the valley (strath) of the River Earn (1926, 117, 228) reaching south to the Forth at Culross, which hagiographical sources for St Serf associated with another royal kindred of Dál Riata, the descendants of Comgall (Woolf 2007, 226; Taylor et al 2017, 104; Broun in prep, n.72). We have to distance ourselves from Watson's suggestions that Strathearn corresponded with Fortriu and that the name Earn referred to Ireland. It seems much more likely that Earn is an ancient (perhaps pre-Celtic) river name (Nicolaisen 1976, 187; Clancy 2010). We will return later to why the name of the river might become the signifier of the wider political entity represented by Strathearn.

Having considered the wider geopolitical situation, we can approach an understanding of the setting of Forteviot by looking at its immediate topographical situation as indicated by historical documents and place-names. We have taken the parish of Forteviot as our starting place on the assumption that it approximates to a stable territorial unit, which over centuries sustained the secular and religious institutions based in Forteviot.

The earliest instance of the place-name Forteviot is

the death notice of Cináed I in AD 858, which has been transmitted in a bewildering range of spellings (Fothiurtabaicht, Fortevioth, Forteviet, Ferteuioth) although they all derive from a common source (Anderson 1973, 250, 273, 282). This variation has inspired an equal variety of interpretations (Aitchison 2006, 33-7), but the best guidance derives from Fife where there are several places with the same first element, Fetter+, the most important of which is the district name Fothrif (see Taylor with Márkus 2012, 376-8). Although there is agreement that Fetter derives from the Gaelic *foithir*, there is less consensus on its semantic value, which may signify dell, hollow, woods, or simply, land. Taylor (2012) notes that in eastern Scotland there are at least twenty instances of the place-name, including several high-status names, among them being the medieval parishes of Fetternear ABD; Dunottar and Fettercairn KCD; and Kinneddar MOR. Given the fact that all attested *foithir* names are in former Pictland, and that so many of them are of high-status places, Taylor raises the possibility that we are dealing with a Gaelic adaptation of a Pictish term for a *uotir - 'territory', which represents some early example of an administrative unit (see Taylor 2000a, 205; 2008, 277-8).

The second element of the name is more problematic. There is a line of discussion which suggests that the second element derives from the Gaelic for tribute, tobach, but this is not supported by the early forms and Taylor is inclined to think that it comes from a personal name (S Taylor pers comm, 9 Oct 2018). Incidentally, Aitchison's suggestion that the second element of the name derives from a pre-Celtic river name cognate with Teviot (2006, 36-7) is also not supported by the earliest forms of Forteviot and may be rejected. In summary, current understanding indicates that the first generic element of the name (Fetter) is likely to denote a high-status territorial unit, while the second may be a personal name element. Until a more intensive study of the *foithir* element is undertaken we are left with the (unsubstantiated) notion that Forteviot took its identity from being an important administrative entity.

If the meaning of the name Forteviot remains challenging, its topography is easier to grasp because of the intensity of cultivation and the scarcity of modern tree cover. The patterns of movement through this landscape were, until modern times, governed by the major landscape features of the River Earn, the Water of May and the post-glacial terraces. The May in some respects defines the immediate, lived landscape of Forteviot. Owing to its 14km length, the May has a large catchment area, making it one of the main tributaries of the Earn. For most of its length the May follows a narrow, steep-sided course through the hard lavas of the upper Ochils and the softer sandstone of the Invermay estate, until it debouches onto the gravels where its course become more meandering.

The name May is first attested as part of the settlement name Invermay, 'mouth of (the Water of) May', an earlier form of which, Innermeath, provided the title of a branch of the Stewarts who held the lands until the 17th century (McKellar 2011, 56; see below in 2.7). The earliest mention of Invermay is Inuirmed (1183, St A Lib 59), with later forms such as Innermeth (1452, RMS ii, no 573) and Innermeith (1465, RMS ii, no 826). Interpreting river-names can be intractable because they are often the oldest names in the landscape, with the more important ones probably pre-Celtic (Nicolaisen 1976, 173). Various suggestions have been made for the etymology of May (*Meth, *Meath), none of them especially convincing. W J Watson (1926, 514) compared it with Middle Irish (c AD 900-1200) méde, méide, 'neck, trunk, stump' (often used with animals and birds for names of fords in Meath in Ireland). Alternative suggestions have been given by Chalmers that it is a British river name, Mai or My-ai, meaning 'agitated, troubled' (because of its steep descent in the Ochils (Chalmers 1848 vol 1, 47, n.52). More recently, Breeze has suggested that it comes from OG meth meaning 'failure, ceasing, deficiency, falling short' (2000, 132-3). While this interpretation of *meth* cannot be correct, it may still be the element involved, be it of Gaelic or Pictish origin, but applied with the idea of a river bringing blight, decay, misfortune, etc. The fierceness of the river when in spate is well-attested - in the 18th century it threatened to destabilise the church (see Aitchison 2006, 43). The bridge of the Scottish Central Railway Company was washed out in 1852 when the May shifted 200 yards (183m) west (Meldrum 1926, 281). Prior to that the May is reported to have swept away what were once thought to be the remains of the royal palace on Haly Hill (Aitchison 2006, 43).

The pre-modern road network was structured around the shape of the valley and the river crossings (Fig 2.2). The main east–west route linking the Bridge of Earn and Dunning followed the terrace where the sandstones give way to the gravels, 1.5km to the south of modern Forteviot village. Until the great estate wall was built in early 18th century, this route ran through the heart of the Invermay Estate, presumably to take

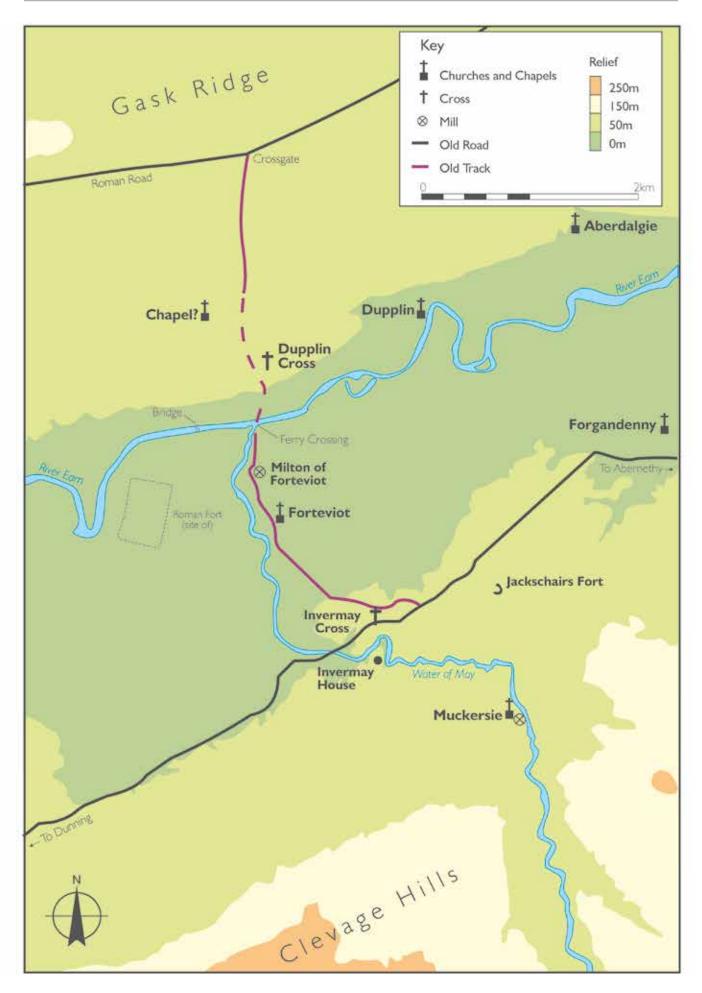


Figure 2.2 Map of Forteviot area showing medieval road network and river crossing places



Figure 2.3 Viaduct over railway, leading to Milton of Forteviot

advantage of a favourable configuration in the sandstone where the May can be forded and was subsequently bridged: the so-called 'Scott' bridge (see below in 2.4 and Chapter 9). The current bridge, at the entrance of the estate, is less than 1km downstream from the earlier bridging point. It is worth emphasising that in the early 18th century the bridge over the May at Forteviot was only a footbridge, but there was also a ford (Meldrum 1926, 143). Repairs to the footbridge were proposed in 1725, but nothing was done, and in 1739 floods destroyed the bridge 'bewest the kirk' (*ibid*, 144). There was no major east–west route through the village until the late 19th century.

Until modern times the primary axis of the Forteviot village road system was north-south, the remains of which are preserved in the lane running to the west of the church and related topographical features. Heading south from the village this lane ran past the manse where it angled slightly east, through the fields with Neolithic cropmarks, past Dronachy Wood, where it survives as a hollow-way, and up to the terrace where it passed into the Invermay lands. Here another hollow-way survives in an uncultivated plantation belt at North Hallbank before joining the Bridge of Earn to Dunning road (McKellar 2011, 22).

Heading north from the church, this road led towards Forteviot mill and ultimately the ancient ferry crossing at the mouth of the May. In the village the line of this road along the west boundary of the Haly Hill field has been lost (although it survives archaeologically: Alcock and Alcock 1993, 228–30), but this link to Milton of Forteviot was sufficiently important when the railway was built to warrant a stone viaduct (Fig 2.3). The existing level crossing for the railway line reveals a change in the approach to the bridge over the Earn. The line of the road north of this viaduct leading to Milton of Forteviot is of some antiquity, as



Figure 2.4 Ferry quay at mouth of the May



Figure 2.5 Forteviot Bridge from ferry crossing at mouth of the May

the mill pond and lade utilise the western embankment of the road. Stobie's map of 1783 shows a crossing of the May at Milton leading to the Earn at Bridge of Earn. The ferry may have remained active until the middle of the 18th century. Coble Haugh, an area close to Milton of Forteviot, refers to the ferry boatman's lands, while the *Statistical Account* recalls the ferry being 'a little to the eastward of a stone bridge of 6 arches, built about 30 years ago, very near the place where the ferry-boat or coble formerly was' (OSA 1799, 119).

Beyond Milton the track follows the course of the May until it meets the Earn, where the remains of a stone platform, rudely built of boulders, survives (Fig 2.4). The antiquity of this 'ferry quay' is uncertain, but it must predate the construction of the modern bridge in 1766 (Fig 2.5), and perhaps the first bridge of the 15th century. Although we know of a number of ferry crossings of the Earn, this appears to have been a highly significant one, as it links up with a road that ran up the slope to the Gask Ridge. The lane through the Dupplin Estate is marked by a hollow-way and

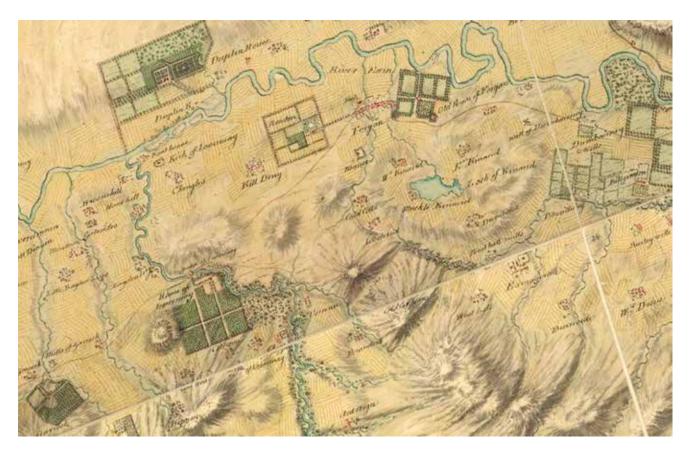


Figure 2.6 General William Roy's Military Survey of 1747–55 (Map C.9.b 17/4b; © British Library)

Figure 2.7 James Stobie 1783 map of the counties of Perth and Clackmannan (Reproduced with permission of the National Library of Scotland)

1 SS Bracho ast Gale Compartent Aberdatgie Saughie Castmains Burnside TI (-balta Dupp Up?" Cairnie Bankhead 1110 Broombarns Neth! Carnie Opposite Ytofsie 1 Newtown of ondi 4 Chingles Mans rotgander Millionn Gateride . P^H m Horse Graighall Mickle Skinnaird Farniel Kildinny Forteviot Park Bracheadth oomhal Coldcots Lockend C W. Dumbuils Timerdunning Kildinny Brageot M:11 Westhall nerdunning Gr m'ermav Lugafic Ba Bridaeua Tock enhen man Woodhill Marchenn lerrence Brander e Well hill Smiddyhill Cottencher the Chapel Castlehill -Banktonley Mill ab. 1 Vir Pichiste Ho itai.



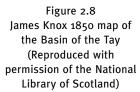
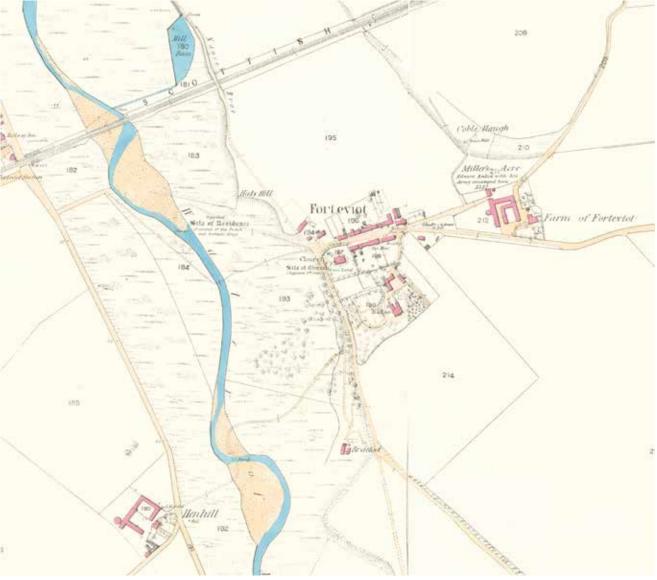


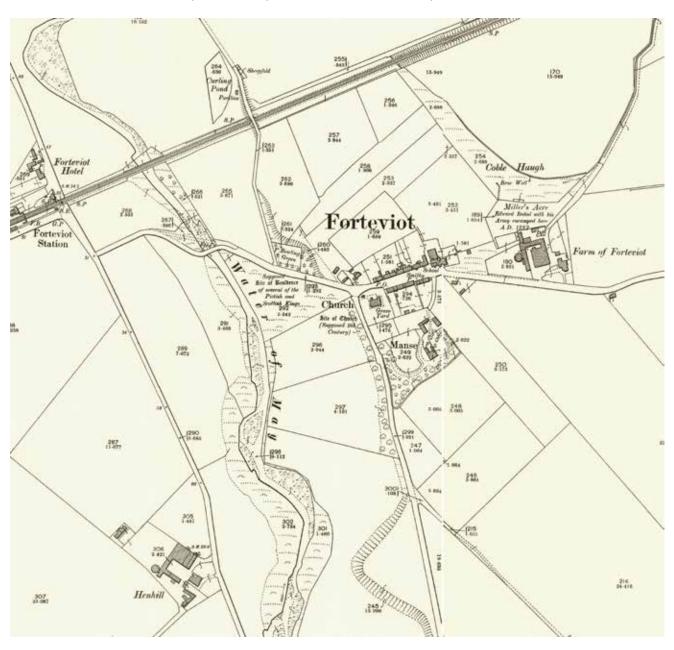
Figure 2.9 Ordnance Survey 1st edition 25" map of Perthshire sheet CIX, 1859 (Reproduced with permission of the National Library of Scotland)



passed close by the original site of the Dupplin Cross (aka Constantine's Cross) (Ewart *et al* 2008, 325–9).

Given the importance of the east-west route south of Forteviot, it is worth reviewing what the earliest maps reveal. While 17th-century maps do include significant locational evidence, for instance Adair's indication of the positions of crosses in the landscape (see Chapter 8.2 and Fig 8.23), it is not until the 18th century that we have detailed mapping of the road networks. General Roy's survey (1747–55; Fig 2.6) provides a valuable impression of the land use and settlement density, but is schematic and lacks details about roads and river crossings. Stobie's map of 1783 is the earliest reliable map of the local road network and settlement locations (Fig 2.7). Knox's map of 1850 is not quite as detailed, but does provide interesting historical annotation relating to the Pictish palace site (Fig 2.8). In the discussion which follows we presume that the main routes, which Adair maps clearly for the first time, reflect earlier, medieval, routes. Going eastward from the old crossing of the May at Scott's Bridge, this route passed north of Jackschairs hillfort and then headed north-east by the settlement of Kinnaird, about 0.5km south of Forgandenny, past another hillfort at Dumbuils to Exmagirdle. Here there was a fork, a northern route leading past Pitkeathly House to the assembly site of Kintillo and eventually the river crossing at Bridge of Earn. The

Figure 2.10 Ordnance Survey 2nd edition 25" map of Perth and Clackmanan sheet CIX.NW, 1899 (Reproduced with permission of the National Library of Scotland)



more southerly alternative ran closer to the Ochils, carrying on to Dron and Abernethy (Ross 2007, 12). This could indicate that Exmagirdle had been more of a hub of routeways than was later the case. The western section of this east–west route from Invermay follows the unclassified road that passes through a series of settlements – Clevage, Garvock and Pitcairns – before skirting south of Dunknock hillfort and arriving in Dunning.

The formation of Forteviot village was shaped by the north–south roads which connected to the principal east–west routes: north of the River Earn this follows the approximate line of the A9, while south of Forteviot the road ran through the Invermay Estate. In the 19th century, Forteviot Mains farm formed the eastern extent of the village, although a track extended to Kildinny. Prior to its 20th-century remodelling, the village extended to Haly Hill and on towards Milton (see 2.5, below). The earliest maps by Roy (1747–55), Stobie (1783) and the OS (1st edition surveyed 1859; Fig 2.9) show a number of small hamlets in the fields round about the village, but the core of the medieval and early modern village was approximately its current extent. By the end of the 19th century these hamlets are gone, as can be seen in the 2nd edition OS map (Fig 2.10).

There are two important points to draw out about these topographical observations. Firstly, Forteviot was most closely linked to the south side of the Earn, where the larger part of the parish lay, a point emphasised by Roy's map which labels Forteviot church as 'Chapel of Invermay'. The second, related point is that the connection between the core of the parish and the portion of the parish north of the Earn was weaker until the 19th century, which is emphasised by the provision of alternative ecclesiastical establishments at Aberdalgie, Dupplin and Mailer (see below). Meldrum has suggested that this area of Cairnie (and Dalquorrachie) had previously been owned by the thane of Forteviot (Meldrum 1926, 172–3).

2.3 Historical sources

Forteviot's royal status accounts for it being the best documented secular Pictish place, a point emphasised in its links to the major churches in southern Pictland: it is prominent in the St Andrews Foundation Legend and had strong links with Dunkeld from the time of *Custantin filus Fircus* (AD 789–820). Immediately to the west, Dunning, the seat of an important kindred within the *mormaerdom*/earldom of Strathearn, had one of the most significant parish churches within the Diocese of Dunblane. As a consequence of this

Table 2.1 Documented royal associations with Forteviot (see text for reliability of sources)

Date (AD)	King	Event	Source
820-30	Constantine I	Dupplin cross erected in his memory	Forsyth 1997
830s?	Onuist son of Uuirguist	'Erected a cross at Forteviot'	longer St Andrews Foundation Legend
848	Drust son of Ferat	Killed at Forteviot or Scone	shorter Pictish king lists
858	Cináed son of Alpín	'Died in his palacium at Forteviot'	Chronicle of the kings of Alba
862	Domnall son of Alpín	Enacted new laws at Forteviot	Chronicle of the kings of Alba
878	Giric son of Dungal	'Built a strong house on the banks of the Earn'	Prophecy of Berchan
10305	Duncan	Traditionally took refuge at Forteviot	Wyntoun
1031	Malcolm III	Traditionally born to the miller's daughter at Forteviot	Wyntoun
1162	Malcolm IV	Signed a royal charter at Forteviot	RRS I, 256
1164	Malcolm IV	Granted Forteviot church to his chaplain	RRS I, 257
1165	William I	Signed a royal charter at Forteviot	RRS ii, 17
11705	William I	Granted Forteviot church to Cambuskenneth	RRS ii, 161, 208
1306	Edward II, Prince of Wales	Wrote a letter at Forteviot	CDS ii,1809
1314	Robert I	Granted land in the royal thanage of Forteviot	RRS v, 39 RMS i, 464
1332	Edward Balliol	Camped at Forteviot before the battle of Dupplin Moor	Brown 2002
1382-83	Robert II	Granted land and the mill of Forteviot	RMS i, 730
2017	Prince William	Visits Forteviot, as Earl of Strathearn	

prominence, Forteviot has attracted scholarly attention since late medieval times, the scope of which has been helpfully surveyed by Nick Aitchison (2006, 37–45) and more recently as part of this project by Nicholas Evans (2008). The historical references to royal activity at Forteviot are summarised in Table 2.1.

The earliest contemporary references from 9th- and 10th-century annalistic sources provide an invaluable indication of the significance of the site, but being rare they present interpretative challenges. As texts become more common from the 12th century, Forteviot is recognisable as a royal site, but the quantity of documentation remains limited. During the course of the later Middle Ages, Forteviot retains a presence in national narratives despite being increasingly marginal politically. While Aitchison's survey is helpful (2006, 19–30), there is no substitute for the more detailed considerations by Broun (2015a) and Taylor (2016).

2.3.1 Pictish historical sources

The first contemporary reference to Forteviot is found in The Chronicle of the Kings of Alba (CKA), which states that 'He [Cináed son of Alpín, 842/3-58], died finally of a tumour, on the Tuesday before the Ides of February [13th Feb], in the palacium of Forteviot' (Anderson 1973, 250). This chronicle is a vital source, being the only contemporary 9th- to 10th-century record deriving from Scotland, but it has a complex textual history, having been included in a compilation made at some point during 1202–14 using earlier (now lost) contemporary sources (Broun 1999a, 170-5). Although there are relatively few early medieval mentions of Forteviot, this association with Cináed son of Alpín has ensured that historians recognised the site's royal status. The reference raises two significant questions: what is understood by a palace in the 9th century, and does the specific death date carry some cosmological significance for understanding kingship? (see Chapter 10.3).

The first modern historian to discuss Forteviot in detail, William F Skene, described it as 'the ancient capital of the kings of Scotland' (1857, 279). In addition to medieval texts, Skene built his account around the famous arch and the density of nearby hillforts, including the compact but impressive multi-vallate fort known as Jackschairs, *c* 2km to the south-east, which he described as a 'citadel' (*ibid*, 277). This was excavated by SERF in 2007 and it has been shown to date to the early Iron Age (radiocarbon dates span the 8th to 5th centuries BC) (Poller 2007). Skene's paper was

written in 1832, and his authoritative view that Forteviot was the Pictish capital has remained influential. For instance, the Forteviot arch frames the preface to the first attempt to provide a comprehensive corpus of early medieval sculpture: John Stuart's Sculptured Stones of Scotland (1856, i), and by 1890 it occupied a place of prominence in the museum of the Society of Antiquaries of Scotland; it remains prominent in the new Museum of Scotland (see Figs 8.5 and 8.6). Naturally, Skene's view has been qualified by subsequent scholarly advances, but Forteviot's importance as a royal residence and his approach of examining the texts, sculpture and field monuments together has been embraced by the SERF project. The key question of what was understood by 'palace' is not easily resolved. There is only one other citation, also in the CKA, which uses the word - Domnall son of Alpín is reported to have died in palacio Cinnbelathoir in AD 862 (Anderson 1973, 250). This site has been linked with Rathiveramon, an unidentified site presumed to be at the mouth of the Almond, possibly using the Roman fort of Bertha, a key crossing point of the River Tay (RCAHMS 1994, 90).

A second reference to Forteviot in The Chronicle of the Kings of Alba concerns Domnall (AD 858-62), the successor and brother of the Cináed son of Alpín who died in palacio Cinnbelathoír. 'In his time the rights and laws of the kingdom, of Áed son of Eochaid [possibly referring to the king of Dál Riata who died in AD 778], were made by the Gaels with their king at Forteviot' (Anderson 1973, 250; Woolf 2007, 103-6). This is more contentious, since there are elements in the description of this event which fit the later viewpoint that the dynasty of Cináed derived from the (Gaelic) kings of Dál Riata who, having destroyed the Picts, introduced Gaelic practices to replace incorrect (possibly heretical) Pictish religious observance (Wormald 1996; Broun 1999b). However, Woolf argues that this reference is likely to be contemporary and suggests it records an exchange of oaths between the Pictish king, Domnall, and an (unnamed) king of Dál Riata to preserve the peace, undertaken at a place of royal power. The significance of this passage is that Forteviot as a royal centre occupied a liminal (neutral) location, the sort of location used for royal parleys in early medieval Ireland (FitzPatrick 2004b). The importance of a royal peace may foreshadow the notion of peace recently elucidated by Taylor (2016), whose analysis of 12th- and 13th-century legal texts has drawn out the important role played by the lord in organising and administering justice. A critical aspect of this legal role was the lord's

ability to ensure the peace necessary for the legal process. This is not a trivial responsibility because significant legal events required public participation through popular assemblies.

A third early historical reference comes from the shorter versions of Pictish king lists (D and F) and presents different interpretative problems: it states that the last king in its list, Drust son of Ferat (AD 845-48), 'was killed at Forteviot, according to others at Scone' (Anderson 1973, 101). At face value it indicates that Forteviot was a place of high significance in the 840s, but the ambiguity over the location casts doubt on whether this is a contemporary notice and it seems to reflect the tradition of the 'Treachery of Scone', where the Gaels are said to have murdered the Picts at a feast. The confusion over the location and mythological echoes of this tale cast doubt on the facevalue of this reference, but the reference to another Pictish royal death at Forteviot is of interest in understanding the nature of kingship at this time (see below). These themes of a royal residence on the banks of the Earn, the notion of a royal stronghold, and the treachery of Scone all feature in the 12th-century poem The Prophecy of Berchán (Hudson 1996; Anderson 1922) which provides for some lyrical phrasing but is of limited use for understanding the 9th century as it is not contemporary.

Moving away from the annalistic tradition, Forteviot appears prominently in the longer, second version of the St Andrews Foundation Legend, written in the period 1140-53 (Taylor with Márkus 2009, 576-87; Ash and Broun 1994; Taylor 2000b). This potentially contains the earliest reference to Forteviot as a royal centre, but its dating is not precise. This text is an account of how, during the time of the Emperor Constantius (son of Constantine the Great, ruled AD 337-61), some of St Andrew's remains were brought by St Regulus from Greece to Scotland. Although chronologically shaky, there is clear effort to draw attention to the Byzantine pedigree of St Andrew, who was not only the 'first apostle', but also the first bishop of Constantinople, analogous to St Peter's role in Rome, but better. At this time St Andrew miraculously helped the (8th- or 9th-century) Pictish king Hungus obtain a victory against (the 10th-century) King Athelstan of the Saxons, analogous to Constantine's victory vision before the Battle of Milven Bridge. In return for St Andrew's help, St Regulus received from the Picts a number of property donations, most notably St Andrews, which became the resting place for the relics. The sons of the Pictish King 'Hungus' gave a

tenth part of the city (urbs) of Forteviot to St Andrew and they erected a cross at Forteviot (Taylor 2009, 576-8). In this account, Forteviot's importance is signalled by being the first place visited by St Regulus with the relics and by designation as urbs. King Hungus has been identified as either the 8th-century Pictish king Onuist son of Uuirguist (reign c AD 729-61) or his 9th-century namesake (reign AD 820-34). Based on internal evidence, the second Onuist seems to be indicated (Taylor 2009, 581), but as both of these kings were militarily successful the author of the Foundation Legend may have conflated them. Onuist son of Uuirguist achieved victories at Dunadd and Moncrieff Hill and was so exceptional that the Anglo-Saxon Chronicle conferred on him the title Bretwalda, used for British overkings (Charles-Edwards 2000a; Broun 2015b). Regardless of which Pictish king was intended, it is clear that in the 12th century Forteviot was considered a significant royal residence, which commanded economic resources that could be shared with St Andrews.

What emerges from these early sources (see Table 2.1 for summary) is that Forteviot was firmly connected to Pictish kingship and occupied a special position in the formation of the Gaelic kingdom of Alba. Although these texts cannot provide a convincing political narrative (Broun 1997; Dumville 2000), they do identify the key issues for exploring the institutional framework of the kingdom. Forteviot's designation as a *palacium* suggest it was emblematic of Pictish kingship, and that it combined residential and ceremonial functions.

The ecclesiastical importance to Forteviot's royal function is expressed in the St Andrews Foundation Legend. The use of the term *urbs* implies a special importance (although like *palacium* we do not know its precise semantic value). Clearly, Forteviot was not a city where great number of people dwelled permanently, but perhaps the word was intended to signify a place of governance and where periodically large numbers of people gathered temporarily.

The erection of a cross as a sign of royal devotion emphasises Forteviot's religious dimension, and in this sense the use of *urbs* as a label may be analogous to the way that *civitas* is used in Ireland to describe a major ecclesiastical settlement (Doherty 1985), ones which 'exhibited symptoms of urban status' (Charles-Edwards 2000b, 119). That the Foundation Legend uses *urbs* for St Andrews itself suggests the presence of an important religious establishment at Forteviot, a point reinforced by the concentration of Pictish sculpture. As well as providing a royal residence, Forteviot was also evidently a place for high-level meetings and legal pronouncements. Like *urbs*, *palacium* cannot be taken to refer to an Imperial palace as in Constantinople, Ravenna or Aachen, but if we focus on the function of a palace as a residence which provided a stage for high-level meetings, ceremonies and public occasions then it may be appropriate. We might also reflect on the idea that being unfortified conveyed a level of security suited to a king or emperor, and superior to a shabby warlord who sought refuge in a fortified hilltop.

Although we have no explicit mentions of popular assemblies in the medieval texts relating to Forteviot (unlike Scone), popular assemblies would be entirely appropriate for both a major ecclesiastical centre and the kingdom's principal royal residence. Tellingly, it appears that the area occupied by the prehistoric monuments was preserved as open pasture, presumably consciously left uncultivated.

2.3.2 Sources for medieval administration and statehood in Forteviot

The existence of a royal residence introduces a range questions about social and political development, which are bound up in technical issues of administration and legal practice that are fundamentally about the nature of statehood in medieval Scotland. The textual evidence which allows these practices to be investigated really begins in the 12th century but evidently builds upon deeper traditions.

In early medieval Scotland, as in the rest of the British Isles, the foundations of social organisation involved control over agricultural production, monopolising coercive force and an effective means of dispute resolution. Across Britain, it is clear that the most fundamental social relationships were governed by agricultural production and were defined by kinship (Charles-Edwards 2013). This is echoed in recent work by Dauvit Broun (2015a; 2015b; forthcoming) and Alice Taylor (2016) who, working with different source material, confirm the centrality of kin relations to early medieval social political relations in Scotland. The origin of these socio-economic practices is contested and how they relate to Forteviot is also not straightforward. For instance, while there can be little doubt that Forteviot was (and is) agriculturally valuable, how should we assess this economic value with respect to its importance as a sacred place and political centre?

The position outlined here reflects recent discussions surrounding the concepts of royal authority and statehood in Scotland as articulated by Broun (2015a; forthcoming) and Alice Taylor (2016), who readily acknowledge a deep lineage of scholarship, notably by Barrow (1973; 1980), Duncan (1975; 2002) and Grant (1993; 2000). The underpinning evidence is too technical to examine here and we will focus on the most sweeping and important question of relevance for Forteviot. As concerns the nature of royal administration in Scotland: should we think of it as a variation on a common European model where authority is centralised or is it more appropriate to think in terms of a dispersed regional, kin-based system?

Broun builds his view of the socio-economics of early Scotland on the earliest detailed source, the 11th-century Gaelic notes in Book of Deer (2007; 2015a), which reveals a hierarchical structure including the king, the mormaer ('great steward') and the toiseach ('leader'), whose authority derived from their leadership of a kin group. Critically, according to Broun, the authority of the toiseach did not flow from royal power or from an administrative role within the kingdom but derived from his leadership of his kindred. Broun argues that we should consider the toiseach as a noble client, with obligations to his superior, but whose status did not derive from his superior. Such relationships are well documented in the Gaelic world, with details about obligations and rights in Early Irish legal texts (Mac Niocaill 1972; Kelly 1988).

The starting place for imagining this sort of authority is to think about land economics. The earliest indication of royal administration are royal charters concerning the church of Forteviot and its appurtenances. In 1164, Malcom IV granted the church to his chaplain, Richard of Stirling (RRS i, 272, no 257). Subsequently, between 1165 and 1171, William I the Lion granted the church to Cambuskenneth Abbey in a charter produced at Forteviot (RRS i, 256; RRS ii, 17; Rogers 1997, 264-5). Apart from under-scoring the economic value of Forteviot, we know this second charter was issued from Forteviot, which indicates that the king had a residence suitable for the conduct of business. This suggests that in the 12th century Forteviot could be described as a manorium, an estate that contributed to the maintenance of the king.

How should we imagine this *manorium* was constituted? One possibility is that it followed the 'multiple estate', a model developed by historical geographer Glanville Jones using medieval Welsh evidence (1976; 1985a; 1985b; Barnwell and Roberts, 2011). More recently, insights gained from the detailed study of place-names and landholding in Fife (Taylor with Márkus 2012) suggest we might think of the manorium as analogous to a shire. But first let us consider the multiple estate. This concept has proved attractive to a range of scholars because it seems to describe accurately the organic, disaggregated, evidently randomly constituted territories combining different agricultural and ecological resources characteristic of the Celtic-speaking areas; a concept fluid enough to be widely applicable. It has also attracted considerable criticism, for being anachronistic in its over-reliance on later medieval Welsh law tracts, for being overly schematic, and for being static (Davies 2004; Seaman 2012; Comeau 2019). These criticisms notwithstanding, Charles-Edwards has reframed the multiple estate for his survey of early medieval Wales, showing its continuing value (2013, 291-2).

In a Scottish context, the multiple estate has not been adopted because the influential scholar of early landholding, Geoffrey Barrow, who was influenced by earlier scholarly traditions of English land organisation, proposed that the fundamental unit was the 'small shire' (Barrow 1973; 1980). He described this as 'a system of goods and services due from outlying dependencies to a royal centre, coupled ... with a regular pattern of free tenants' grazing rights with an obligation to grind their corn at the king's mill' (Barrow 1973, 13). The Gaelic notes in the Book of Deer appear to reflect just such a well-developed system for extracting and distributing the fruits of agricultural labour, and this superficially looks like the patterns of land management that Barrow (1973, 80) and others have argued were characteristic across early medieval Britain.

Barrow did not use the term multiple estate, but formulated a parallel concept of the 'small shire' (1973), which, being more loosely structured, has proved more enduring in Scottish historical scholarship and attractive to archaeologists. Both formulations remain helpful for conceptualising the relationships between components of the landscape, as for example in O'Brien's reconstitution of the hinterland of Northumbrian royal territories around Yeavering (2002). Archaeologists in Scotland, Ireland and Scandinavia have preferred to develop more strippeddown models, which focus on material evidence. These models share features of the 'small shire', but attention is focused on high-status residences, sites of manufacturing or trade, assembly places, churches and stone monuments (Driscoll 1991; 1998a; Brink 2003; Fabech 1999).

In practice, multiple estates (shires) are virtually

impossible to reconstruct in Scotland - the only places with good enough evidence are in Buchan (using the Book of Deer (Forsyth 2007a)) and in Fife, drawing on records from St Andrews and Dunfermline (Taylor with Márkus 2006; 2009; 2012). Prior to this detailed study of the Fife evidence there was a widespread presumption that the system of parishes, first recorded in the 12th century, was based on a pre-existing shire (multiple estate). In his study of the Formation of the Parish Unit and Community in Perthshire, Rogers (1992; 1997) argued that Forteviot parish reflected the existence a self-sufficient unit providing all the needs of the royal centre. Unfortunately, Taylor and Márkus' work on the place names of Fife (2012, 78) has shown that the connection between shire and parish is much messier (Broun 2015a, 40-7). The pre-modern parish of Forteviot is certainly messy but this geographic sprawl seems to epitomise the multiple estate, incorporating arable, a variety of pasture, hunting grounds and fishing places. However, thinking of Forteviot as a manorium structure like a 'small shire', consisting of a central settlement with subsidiary settlements (pendicles), is equally appropriate. This reinforces the key concept of the shire (and *manorium*) as something held together through a network of relationships, rather than defining a fixed block of territory.

The question of how Forteviot was administered, whether as a manorium, shire or multiple estate, is central to arguments about royal authority and the growth of the early Scottish state. One strand of discussion focuses on the significance of the terms toiseach and thane. As we have seen, the former is a Gaelic term for 'leader', which in Latin documentation of the 12th century is replaced by the English term 'thane', a person who had responsibility for lands described as a thanage. A line of argument developed by Grant (1993; 2000) maintains that thanages reflect the presence of administrators managing the lands of the king. In Grant's view, thanages are evidence for a precocious state-like administrative institution which allowed the king to receive taxation in kind and to extract services, particularly military service (Grant 1993; 2000). Crucially, this centralising narrative builds on the generic models of European governance and social evolution developed by historians such as Wickham (2005), whose interests are Continental rather than Insular. The broad distribution of thanages across the kingdom created a network of estates, allowing the king to move through his lands not just collecting tribute but also meeting his subjects and conducting his business. Significantly, thanages were

not only important for the king but were utilised by other great magnates (*mormaers*/earls) to administer their expansive domains (Neville 2005). This closely echoes Alcock's model of a peripatetic potentate who utilised a string of regional centres to rule their kingdom (1988; 2003). Note that Alcock does not discuss concepts such as statehood, preferring either contemporary terminology, eg king, or more abstract concepts such as 'potentate'.

Grant's position is comforting for those interested in tracing the origins of the Scottish state (cf Driscoll 1991; Ross 2016; 2019), but cannot be accepted as it stands. Broun has forcefully argued that the toiseach, the thane's predecessor terminologically, did not owe his position to royal prerogative, but had independent status as the leader of his kin-group (Broun 2015a). Taylor (2016, 81-3) has reinforced this from the later 12th- and 13th-century legal sources, which indicate that the proliferation of thanes and thanages during the reign of Robert I (1306-29) relates to the repurposing of traditional terminology. It signals the break-down of the kin-based system of governance and development of a more-centralised system based upon territorial lordship. In the SERF study area we appear to have examples of both the thane as toiseach, the leader of kindred associated with Dunning, and the thane as a royal official managing the thanage of Forteviot. The Thane of Dunning witnessed a grant to

From a historiographic perspective, the parish has been seen as a stable building block of Scottish history since the first comprehensive survey by Cosmo Innes and colleagues (Bannatyne Club 1851-55), but as the SERF project progressed, confidence in the stability of parishes was eroding. The first volume of The Place-Names of Fife (PNF) appeared as our project was starting (Taylor with Márkus 2006) and during SERF's life the five volumes have transformed our understanding of the medieval landscape of eastern Scotland, not least in revealing the dynamic complexity of parochial organisation (Taylor with Márkus 2008; 2009; 2010; 2012). While the implications of the Fife study were not available at the project's outset, we were, nevertheless, sufficiently aware of the methodological advances being made by Simon Taylor and colleagues that we designed the study to embrace not only the whole of Forteviot parish, but also the neighbouring modern parishes of Forgandenny to the east and Dunning to the west. The reason for bracketing

Inchaffray Abbey in AD 1200 (Neville 2005, no 12), presumably as the representative of an important kindred within the earldom (mormaerdom) of Strathearn. The first mention of the thanage of Forteviot was over a century later; in 1314 Robert I granted all his land of 'Cardny and Dalcorachy in the Thanage of Forteviot' to Inchaffray Abbey (RRS v, 39; Chartulary of Inchaffray, 24). Meldrum speculates that this had previously been owned by the thane of Forteviot (1926, 172-3). This charter of Robert the Bruce comes from a time when the crown was using their estates to reward followers. Taylor (2016) identifies this as the point at which the system of kin-based territorial authority was being replaced. It appears that at this point we can at last see clear evidence of royal administration; a point which also coincides with Forteviot's decline in political importance - the last royal charters signed there were by William the Lion in the 1160s. Rogers (1992, 265) states that Forteviot was retained close to the royal family throughout the medieval period, citing RMS i, no 730, and iii, no 570, although it eventually went to the Stewarts of Tiry and part to the Ruthven family.

If nothing else this historical review reveals that for all its political and economic significance, medieval Forteviot was not a static entity and that understanding this requires the sensitive reading of historical and archaeological evidence.

2.4 The parish of Forteviot

Forteviot in this way was intended to avoid the boundary effect (given that we did not know the medieval boundaries at the outset), but the modern parish boundaries (rationalised in the late 19th century) obscure the more complex medieval arrangements. Our efforts to reconstruct the medieval parish boundaries (see below) were inspired by Taylor's work in Fife and draw upon the pioneering work of Rogers on the parish boundaries of Perthshire (1992; 1997), but we are aware that our understanding of issues surrounding parish formation is provisional.

Although we may be confident that parishes represent the fundamental building blocks of medieval Scottish society, their relationship to earlier territorial units is not straightforward (Broun 2015a). Not only is there considerable uncertainty about the mechanisms leading to the formalisation of the parish boundaries, but the work on the PNF shows that they might be constructed from various pre-parochial elements. Until recently scholarly opinion held that

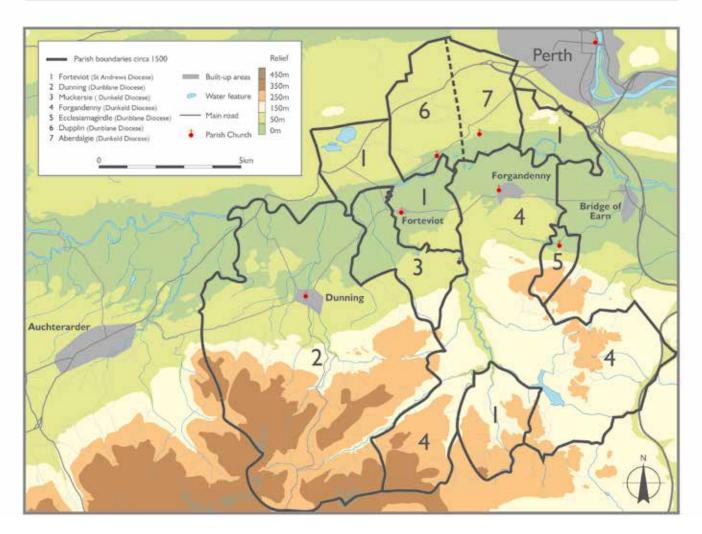


Figure 2.11 Reconstructed parish boundaries c AD 1500

parish boundaries, which first become visible in the 12th century through the earliest property records, reflected with accuracy earlier landholding and administrative arrangements (Bannatyne Club 1851-55; Cowan 1967; Rogers 1997; Barrow 1973, 7-68). Today there is less consensus on the question of how much older the parish unit might be or what the constituent parts might be. In the most detailed Scottish attempt to integrate textual evidence and archaeology, that in Aberdeenshire, it has been revealed that the subdivisions of the landscape were demarcated by a combination of natural features and monuments, including Pictish symbol stones and earlier structures (I Fraser 2007, 133-4, 142-5). In northern Pictland the parishes are believed to have been fashioned from territorial units known as dabhach (Dodgeson 1981; Ross 2006; 2016), although the antiquity of this system remains disputed (Woolf 2017). Whether or not such arrangements can be applied elsewhere, there is every reason to think that in southern Pictland the parishes contain ancient

components and one of the goals of this research was to identify them.

As we began to conduct more detailed historical research it became clear that the tidy trio of modern parishes – Forteviot flanked by its neighbours to the east (Forgandenny) and west (Dunning) – obscured a more complex and disjointed parochial history. The absence of early property records makes it impossible to establish the precise extent of all the medieval parishes, but by using the *Origines Parociales Scotia* (Bannatyne Club 1851–55), 1st edition Ordnance Survey maps and other early maps, it has been possible to indicate the approximate extent of Forteviot parish, including its detached portions, in the late Middle Ages (*c* AD 1500) (Fig 2.11).

The first observation to make is that by the late medieval period the lands of Forteviot parish were disaggregated. For this project Nicholas Evans, following Rogers (1992), has attempted to map the medieval boundaries of the parish of Forteviot and its neighbours using medieval charters and working backwards through later alterations to the boundaries. The core of Forteviot parish occupied the east side of the Water of May around the modern village of Forteviot, but it also included lands to the north of the River Earn, as well as two completely detached areas: one to the east, on the north side of the Earn around Mailer, and another deep in the uplands of the Ochils well to the south of Forteviot village. Such a disparate holding is not unusual, but in light of the Fife evidence we cannot be certain that these territories predate the formation of the parish.

Within the modern parish are three lost medieval parishes: Muckersie, Dupplin, and Aberdalgie. Muckersie corresponds roughly with the Invermay Estate to the south of Forteviot; Dupplin and Aberdalgie parishes stood on the north side of the Earn and have been united so long that it is impossible to say where the march between them ran. While Aberdalgie, with its fine 18th-century church, survives as a place of worship, ruined churches in small cemeteries mark the locations of the other two sites. The comparative coherence of the parishes of Dunning and Forgandenny begs questions which are not answerable from the available evidence. Did Forteviot originally include the lands of Muckersie, Dupplin and Aberdalgie? Was there an administrative logic behind the separate elements? Could the place-name Mailer (deriving from Scots word 'mail', for rent (Taylor with Márkus 2012, 435)) derive from the title of a fiscal functionary? As Muckersie parish was in the diocese of Dunkeld, was it granted to the Bishop of Dunkeld to provide an episcopal residence when the court met at Forteviot? It seems not unreasonable to suggest the existence of an earlier ecclesiastical unit (*paruchia*) consisting of Muckersie, Forteviot and Forgandenny, which was subsequently divided. The timing and reason for that are a matter for speculation, but it probably post-dates the 9th-century establishment of the diocese of Dunkeld.

These speculations aside, it is possible to identify the key features of Forteviot parish. The parish embraced most of the drainage area of the Water of May. In the later medieval period it powered a water mill at Milton of Forteviot and possibly Muckersie. For much of its length the May presents a significant obstacle to traffic. The easiest natural crossing place of the May was fordable and is where the earliest bridge (the Scott bridge) was built. This crossing probably explains the location of the nearby medieval fortification at the Green of Invermay (see Chapter 9). Crossing the Earn was more challenging, and the ferry at the mouth of the Water of May was a main crossing place between Bridge of

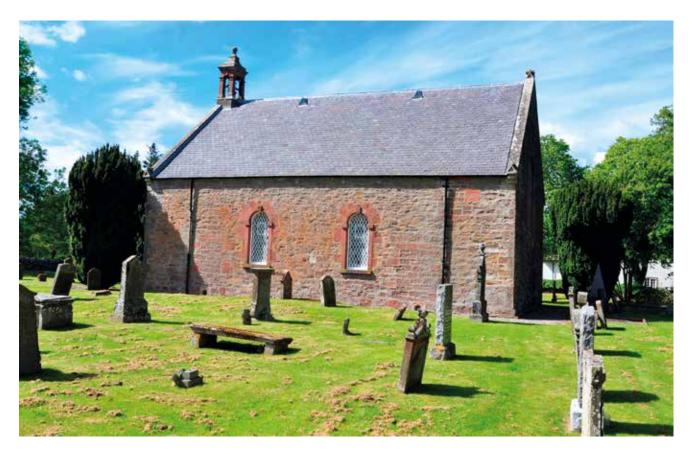


Figure 2.12 South elevation of Forteviot church showing blocked window and doorways of 1778 church

Earn to the east and Kinkell Bridge to the west. Whether or not controlling these routes influenced the original decision to make Forteviot into a public assembly place in prehistoric times, over time control of these routes became a significant consideration and periodically a matter of strategic importance (for example the Battle of Dupplin Moor in 1332 seems to have involved cavalry fording the river in this stretch).

The implications of this information for interpreting the church buildings at Forteviot are far from certain. The 12th-century grants provide a plausible context for a new phase of building, while the subsequent history might account for the stasis in building development. There is some evidence for priests at Forteviot in the 14th and 15th centuries (Meldrum 1926, 33-6) and although no obvious patterns of patronage have been observed, the priests of Forteviot sometimes had roles in the royal court (two in the early 15th century had links with the Duke of Albany), while others were candidates for the bishoprics of Dunkeld and Dunblane. This pattern of prominence shows the continued reputation of Forteviot long after direct royal involvement had evaporated. The relatively simple architectural tradition at the medieval Forteviot church can in part be attributed to loss of income. In 1472 the revenues of Forteviot began to be taken by St Andrews (when it was made an archiepiscopal and metropolitan see), and in 1495 Forteviot church became a prebend of St Salvator's College in St Andrews, so St Salvator's got the teind and the priest received the fruits of the parish (such as wool, cheese, revenues from oblations, funeral rites, mortuaries), the manse and the croft, apart from 4 shillings per annum (Cowan 1967, 69; Meldrum 1926, 38-40). After the Reformation, St Salvator's retained an important role in Forteviot church into the 19th century, and sometimes appointed the parish minister (Meldrum 1926, 115-37). However, especially after the merger of Forteviot and Muckersie, the Lords of Invermay claimed to be patrons of Forteviot (ibid, 65, 73-4, 133-70).

The history of Forteviot church in post-medieval times reveals periods of neglect punctuated by bursts of investment. The first documented condition report was made by the Perth Presbytery in 1699, which stated that the 'kirk and kirkyard were both in bad condition and there was no manse' (*ibid*, 68). According to Meldrum, its predecessor was the pre-Reformation kirk, which had been repaired in 1623 or 1624, 1688, and again in 1718 or 1719 (*ibid*, 74, 131–3, 279, 280).

It was not until 1778 that the present church was rebuilt on the existing site (ibid, 74) and a generation later the elegant, classical manse was built by William Stirling and Andrew Heiton Sr and Son in 1825-26 (Haynes 2000, 60). Stirling also refurbished the church in 1830, introducing new classically influenced windows and doors on the south elevation and apparently inserting a loft running the length of the north side of the nave (Meldrum 1926, 153). The church was modified again in 1867 by David Smart, who introduced gothic windows and detailing as well as a new north porch and vestry. He removed the loft and external stair and blocked the southern entrances (Fig 2.12). The implication of this change of approach and of the liturgical importance of the interior modifications are considered below (Chapter 7.1).

This extended consideration of the background to the excavations makes plain the limitations of the historical evidence. It also highlights the fundamental research theme: Forteviot represents a place of power which evolved in pre-Christian times, was heavily Christianised in the 8th/9th century and fell out of prominence before the impact of the Anglo-Norman political reorganisation in the 12th century, although it retained royal connections into the later medieval period (see Chapter 9.3). As a consequence, Forteviot emerges as the most important place, in a political context, to observe the interaction between deep native religious traditions and Christian traditions in Scotland.

2.5 Forteviot in antiquarian tradition

Notwithstanding its decreasing political significance during the later Middle Ages, Forteviot retained a strong royal identity which survived to be captured by antiquarians. One vehicle for the preservation of its royal reputation was the extraordinary story reported in John of Wyntoun's 15th-century *Orygynale Cronykil* of Scotland (Amours 1903–14). This history in verse states that King Duncan (1034–40) became separated from his companions while hunting and took refuge at the mill of Forteviot, presumably the Milton of Forteviot just north of Forteviot village (Book 6, chapter 16). There the miller took Duncan in, and as a result of his generous hospitality the miller's daughter became pregnant with the future king Malcolm III

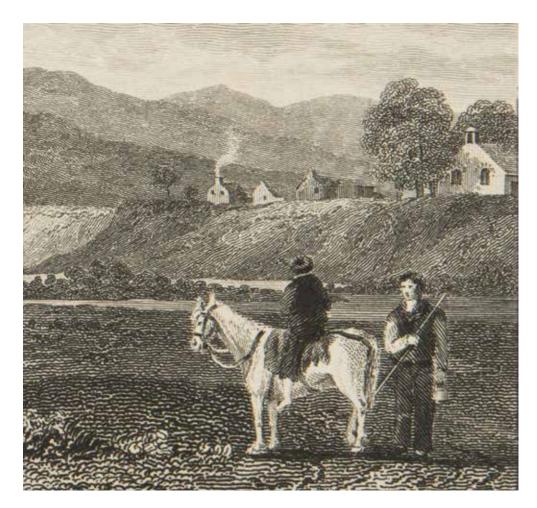


Figure 2.13 Detail of Brown and Jamieson's lithograph of Forteviot around 1830, showing buildings north of the church excavated in 2010–11 (Sites S and T) (Reproduced with permission of Glasgow University Library)

(1058–93). The story as related by Wyntoun is recognisable from folklore as the 'king in disguise' motif and the context of its introduction is understandable in terms of early 15th-century politics (Purdie 2015). Given the proximity of the mill to Forteviot (see Fig 2.9), it is impossible to take this story literally, but the symbolic link between bread, corn and fertility is widespread. So the story serves as a metaphor connecting royalty and agricultural productivity and provides a distinct echo of the fertility rituals associated with Celtic kingship.

The linkage of Malcolm Canmore with Forteviot, which is a feature of early modern antiquarian literature, presumably derives from Wyntoun. The earliest reference to ruins at Forteviot in Henry Adamson's *The Muses' Threnodie* ascribes the 'ruin'd castle' to 'Malcolme Kenmore' (1638, 82). A series of antiquarian travellers including Thomas Innes, Bishop Pococke and Thomas Pennant reinforce this royal identification without providing much detail (Aitchison 2006, 38). In 1772 a local informant, the schoolmaster, drew attention to 'an eminence, commonly called The Holy Hill', which was 'hard by the village' (*ibid*, 38). This identification was confirmed by the minister in the *Statistical Account*, where Haly Hill is described as 'a small eminence at the west end of Forteviot ... near the present church' (OSA 1799, 199). Thomas Pennant, probably the most eminent antiquarian to visit Forteviot, arrived in 1772 and was aware that Forteviot had been the site of a Pictish palace (1976 [1998], 451), but does not mention any Pictish ruins, although he does refer to the remains of Edward Balliol's camp from 1332. Indeed these vague and conflicting accounts do not provide any guidance about the nature of the site. By 1797 the minister reported that 'nothing now remains of these buildings' at the site of the royal residence (OSA 1799, 199); they had been swept away by the Water of May.

A generation later the antiquarians Brown and Jamieson, describing the site c 1780, state that Haly Hill stood 'a little to the north-west of the village, about two hundred yards from the place where the church now stands' (1830, 208). In their lithograph the west gable of the church (newly altered) can be seen in the middle distance and beyond the area known as Haly Hill, which is identifiable as an illuminated escarpment of the Water of May with a few cottages (Fig 2.13).

The loss of the palace site to erosion is supported by the discovery of the Forteviot arch 'a few years' before 1832 'lying in the bed of the May, immediately under Holy Hill' (Skene 1857, 278). However, we might pause to question the identification of the palace site given in the early reports. At the same time as Jamieson was writing his account and Brown was producing his lithograph, Knox produced a survey which placed Haly Hill in the field south-west of the church, approximately where the Neolithic and Bronze Age monuments are located (see Fig 2.8, above). The point is that the precise location of the palace site was drifting out of collective memory. The stretch of the May immediately up

2.6 Kingship and assembly

The remarkable coincidence at Forteviot of monuments deriving from ancient ritual practices and the presence of the pre-eminent Pictish royal centre demands explanation. Our understanding of the significance of the site must involve an engagement with the concepts and mechanics of kingship in the Celtic realms, which include issues of cosmology and the ideological value of connections to an ancestral past as well as consideration of the practicalities of organising political assemblies and the construction of imagined communities.

The notion of 'Celtic kingship' is a powerful but problematic idea which has invited much scholarly debate, particularly from Irish historians (Binchy 1958; 1970; Byrne 1973; Charles-Edwards 2000b). The archaeological contribution to the discussion was initially focused on so-called royal sites - regional prominent places such as Tara, Emain Macha, and Rathcrogan - with complex mythologies complemented by equally complex prehistories (Wailes 1982; Warner 1988). Although there is an infinite variety of specific detail, these sites share a range of features which allow them to be considered meaningfully as a group: all have prominent prehistoric monumental complexes associated with mythological attributions and all have credible historical evidence which links early medieval political authority to the monuments. In recent years the interpretative challenges presented by these sites, particularly those raised by the disparate strands of evidence, have been successfully addressed through a series of detailed studies, often involving geophysical prospection or excavation, some of which are surveyed in Landscapes of Cult and Kingship (Schot et al 2011). Intellectually, the most daunting challenge has been how to use the mythological texts, which are not contemporary with the prehistoric creation of the monuments and generally

conspicuous evidence for recent erosion, with braided meanders of the May clearly visible in aerial photographs. The 1st edition OS map (see Fig 2.9, above) shows a ford across the May and a croft named Braefoot; this is consistent with the concern over the safety of the churchyard and the church in the mid-18th century (Meldrum 1926, 281–3). The antiquarian accounts relating to the palace site are discussed in greater detail in Chapter 6, those relating to the church and arch in Chapter 7.

and downstream of the church shows the most

survive in forms that post-date the use of the sites in the early medieval era. John Waddell's (2011; 2014) critical summary of the problems of using mythology to interpret the archaeology provides sound guidance which underpins the readings we offer for Forteviot.

The major limitation to applying this Irish perspective is that Scotland is not Ireland and has a different historical and cultural development. In particular, Christianity follows a different path in Britain. One consequence of this is that the Scottish mythological tradition does not include as much pre-Christian material and is less firmly linked to the landscape. The strength of the Irish scholarship is that it reveals how early medieval political aspirations could draw upon ancient symbolic imagery to produce an effective political arena long after the original monuments were created. One particularly relevant sign of this strength is that it allows understanding of royal sites in general to guide the identification of 'lost' royal sites in places such as Donegal (Lacey 2011) where, like Scotland, the textual traditions are impoverished.

The concept of 'Celtic kingship' rests upon the recognition of features of a cosmology shared across Ireland, Scotland and Wales, which is constructed around the notion of the sacral role of the king. The central idea is that the king has a sacred responsibility to mediate between the human and supernatural worlds. It is argued that this cosmology has its roots in a pre-Christian, 'pagan' social system, but it is difficult to believe that there is a direct connection with the monument builders of the Neolithic or Bronze Age (Waddell 2014). This sacral royal function is manifest in the expectation that good rule is reflected in fertility and natural bounty (Charles-Edwards 1994); the places where kingship rituals are conducted are selected because they were propitious places, places where the

living could encounter the spiritual world, primarily through burial mounds which could serve as portals to the otherworld.

In the Irish tradition, royal inauguration places are slightly elevated places well-endowed with natural resources (Waddell 2011; FitzPatrick 2004a; 2004b), but what makes a specific place propitious or intrinsically special seems to be determined by the accretion of monuments. Conor Newman's reflections on the Hill of Tara (1997; 2007; 2011) make it clear that

2.7 Late medieval and post-medieval developments

The major change which can be seen from the later Middle Ages was the shift in the focus of power from Forteviot itself to surrounding aristocratic estates. Residences of the powerful and wealthy must have been a feature of Pictish Forteviot and although none is known, they are presumed to be lurking in policies and obscured by later castles and country houses. The most important of these neighbouring estates is Invermay, immediately to the south of the Forteviot complex. During the later Middle Ages it was the residence of significant noble families and exerted a strong influence on the development of the central part of the Earn valley, an influence which extended into post-medieval times.

As late as the end of the 14th century the crown still had an active interest in Forteviot and it would appear that the king still visited there, because in 1382–83 Robert II granted lands and the mill of tural interventions made to the hill, many of which were burial monuments. This is not say that Forteviot was directly analogous to Tara – apart from anything else the prominence of the church sets it apart from Irish royal centres – but the concept of Celtic kingship helps us understand the constellation of monuments at Forteviot and how they contributed to royal ceremonies and seasonal assemblies. •medieval developments Forteviot for a *reddendo* of a silver penny to James Stewart, an illegitimate child of his by Marion Cardny

Tara's significance stemmed not from a remarkable

geography but from the repeated and regular architec-

Stewart, an illegitimate child of his by Marion Cardny (NSA Index, 124/14). Presumably these were still occupied by the thane of Forteviot or his descendants. The scale and importance of the property transactions has left a trail of evidence revealing the aristocratic standing of the interested parties, particularly ones involved with Stewart interests. For instance, in 1476 Egidia Stewart, daughter of Sir Walter Stewart of Burleigh (near Milnathort) left the lands of Forteviot to her son Sir Walter Tyrie (later of Drumkilbo) (RMS, 3 Sept 1476). In 1514, a sasine gave half the lands and mill of Forteviot (presumbly the part not owned by the Tyrie family?) to a Walter Ruthven of Lunan (possibly the Walter Ruthven of Forteviot in a charter of 1482 (ERS Exchequer Roll, 14/566; RMS, 20 Sept 1482)). At some point from 1529 to 1553 (in 1529?) this part was sold to the 2nd Lord Ruthven (and from



Figure 2.14 Nineteenth-century cottage opposite the church in Forteviot

them to the Freeland family of the Ruthvens) (ERS, 15/678; RMS 1 Mar, 1535). In 1625, William Tyrie resigned part of Forteviot to the Earl of Morton. What this tells us is that Forteviot retained a social cachet sufficient to allow the creation and maintenance of large estates until the modern period. In the mid-17th century Forteviot, along with the mill and mill lands, became part of the Freeland estate in Forgandenny (fittingly, the SERF project used the former Freeland House, now Strathallan School, as a base for the Forteviot work). The current pattern of ownership of Forteviot took shape in 1868 when it was bought by the Earl of Kinnoull. In due course, it was acquired by Sir John Dewar in 1911 (Hall 2011), who also acquired Dupplin Castle and took the name Lord Forteviot. The large inscription to Cináed son of Alpín in the model village constructed by Dewar in 1925 maintains this conscious link with the ancient Pictish royal past.

The development of the Invermay estate is significant for several reasons. It illustrates the evolution of a noble stronghold which retained connections with the crown in the later Middle Ages and early modern period. The high social status is reflected in the architecture of the sites – Old Invermay House and the bridge over the May. Once the policies were enclosed in a massive stone wall the historic landscape was preserved from subsequent modernisation of the countryside. For instance, traces of broad rig cultivation abound in the grounds (McKellar 2011).

When Invermay was first recorded in 1362 it was known as Innermeath and was held by Sir Robert Stewart, cousin of King Robert II. This branch of the Stewarts was politically successful and successive Lords of Innermeath held high office in Scottish Government. These Stewarts held many estates, but Invermay became their principal seat and they seem to have retained the old form of the name, perhaps because of the importance of the title (see Chapter 9.3)

There are few visible traces of the earlier Forteviot village, following the radical remodelling undertaken by Lord Forteviot in 1925. The English Garden City appearance was designed by Glasgow architect James Miller (Haynes 2000, 59). A sole example of the single-storey cottages of the type which defined the village survives opposite the church (Fig 2.14) and the Old Schoolhouse was probably first constructed in the late 18th century. Excavations by Alcock (1981) and by the SERF project in 2011 at the western end of the village revealed the foundations of several of the earlier buildings, including a smithy. These appear to be the buildings glimpsed in Brown's lithograph of c 1830 (see Fig 2.13, above). The overall plan can only be recovered from the historic maps (see Figs 2.6–2.10, above), but it is worth drawing attention to the premodern road system which extended only as far as Forteviot Mains. Prior to the 19th century there was no direct road to Forgandenny from Forteviot. The main axis of the settlement was north to south and extended from the church towards the river via Milton of Forteviot. Although considerable earthworks relating to the water management system survive, the historical buildings of the mill have disappeared since Allen and Anderson (1903) noted the presence of Pictish sculpture incorporated into the fabric of the buildings (see Chapter 8.2.5).

The great rural transformation known as the Clearances came as a consequence of the economics of Improvement in the early modern period, and as Devine has shown, these Clearances began in the Lowlands, in areas like the Earn valley (2006). The Statistical Account states that 'the accumulation of small into large farms is generally ascribed as the chief cause of this depopulation [from 1755 to 1795]' (OSA 1799, 121). At this time the high lands of the parish were mostly unenclosed, but in the lower parts had been subject to 'considerable improvements' in agriculture (ibid, 435-6). The New Statistical Account (1834-45) provides population figures for Forteviot parish from the Improvement period through to the growth of rural manufacturing industry (NSA, 720) (Table 2.2).

Table 2.2 Population of Forteviot parish

Year	Population
1755 (Dr Webster)	1491
1797 (Sinclair)	1600
1801 (Government)	1504
1811	1723
1821	1876
1831	2045
1841	2125

There was a considerable reduction in the number of settlements in the parish during the period of 'Improvement' and this was only reversed as industrial work became more prevalent, particularly in nearby Dunning and Newton of Pitcairns where a spinning mill, handloom weaving, a distillery, and a brewery were in existence by 1842 (*NSA*, 722). The real story is the depopulation of the countryside: although missing the earliest stages of this depopulation process, comparing Stobie's map of 1783 to the 1st edition OS



Figure 2.15 Gravestone in Forteviot graveyard commemorating 'Willom Houton of Yougfie', departed 1719, displaying the moment of resurrection when an angel blowing a trumpet will summon the souls of the worthy to ascend to heaven

map (1859) shows half of the rural settlements had disappeared in the space of 70 years. This appears to coincide with more intensive cultivation in the previously preserved area of the ancient monuments. The numerous small fermtouns, which stood in what are now large open fields, are invisible. For instance, there is no trace of the one occupying a gravel ridge south of Forteviot and labelled Chingles in the Roy map (see Fig 2.6, above). These settlements have an ephemeral quality and were apparently much less sturdy than the classic deserted medieval village such as Wharram Percy in Yorkshire. The Forteviot fermtouns are not visible in the cropmark record, so in the richest part of the valley their existence is confined to maps, historical notices and artefacts that have entered the archaeological record. Even well-documented lost settlements protected within designed landscapes can be elusive, as was the case with Eugoffie within the Invermay estate. It is fortunately commemorated on one of the most remarkable burial monuments in Forteviot churchyard (Fig 2.15). This process of clearance was still going on in the early 19th century when David Smith, from Struie Mill in the Ochils at the head of the Water of May, was cleared off his land in 1819 or 1820. His legacy was a poem, *The Emigrant's Lament on Bidding Farewell to the May*, printed in 1835 (Meldrum 1926, 108–10, 288).

The SERF project excavations provided some indication of the agricultural history of the fields to the south of the village. In Bowling Green Field, substantial traces of ridge and furrow cultivation were found (see Fig 3.3, below). This cultivation cut across and destroyed the upstanding remains of the square enclosure and the Pictish barrows. The destruction is difficult to date, but post-dates 13th-/14th-century pottery found on Sites J and K. It may date to the 16th or 17th century as ridge and furrow was certainly in existence here by the early 18th century, since it is mentioned in a dispute. The ridges measured about 5m across, with narrower furrows between, which had been excavated through the natural silt subsoil. This type of ridge and furrow is characteristic of the Fife and Tayside region in the pre-Improvement landscape (Halliday 2001, 13). In contrast, in both the Dronachy

and Manse fields there was little sign of any agricultural activity until the upstanding monuments were obliterated and the standing stone on Site F was pushed over and buried. This activity probably relates to the imposition of enclosed fields on the ancient field pattern of open grassland and open ridge and furrow, and was taking place towards the end of the 18th century (Perth Archives B59/38/2/49). The modern enclosed field pattern was probably in place by the early 19th century, and appears on the 1859 1st edition OS map. Since the 1950s, agriculture has intensified with the introduction of new mechanised techniques of deep ploughing. Through processes of colluviation and deflation, this has led to considerable soil erosion. Test pitting and excavation has shown that at least 0.5m of soil has been lost over most of the Forteviot fields, with some accumulation at the base of the slope seen in Site L. A cross-section through the field boundary on Site K showed this change in level of the field surface, and there was a similar drop-off to the north of the gardens of the 1925 village. This degradation has had a severe impact on some features - for example on Site B, the eastern burial, which was visible on early aerial photographs, proved on excavation to be only a few centimetres deep and would doubtless have been removed in the next cycle of ploughing.

As regards material evidence of the large, invisible class of people who had tilled the fields for centuries, the most remarkable archaeological find is the Gladstone Medal made of white metal (Fig 2.16). This was struck to commemorate a demonstration in favour of electoral reform held in Dundee on 20 September 1884, which a Forteviot man must have attended and later worn to indicate his support for reform (Pentland et al 2012). The main pillar of the 1884 Reform Act was to extend the franchise to adult male householders in rural areas, those in towns having won the right to vote in 1867. A halfpenny of 1876 was also found close-by on the field bank, perhaps dropped at the same time, while the ploughman ate his lunch. The demonstration was the subject of a substantial poem, The Great Franchise Demonstration Dundee, 20th September 1884, by Dundee's famous William Topaz McGonagall, which includes the lines:

There were masons and ploughmen all in a row,

Also tailors, tenters, and blacksmiths, which made a grand show

The Gladstone Medal provides a striking indication of the transformation of political culture which took place during the millennium separating the Pictish king Cináed from this anonymous ploughman.



Figure 2.16 Gladstone medal (SF203) from Site K, commemorating the Great Franchise Demonstration in Dundee, 20 September 1884. Diameter 34mm

2.8 Conclusions

The available texts guide us to Forteviot and leave little doubt to its enduring importance, particularly as regards the formation of the Scottish nation, but they also leave unanswered significant questions relating to the origins and development of the Scottish state which the archaeology presented here has sought to answer.

While often the written sources do not provide good evidence for the early history of Forteviot, they show that it continued to be a significant place with royal associations into the late Middle Ages. The royal origins of Scotland, and the beginning of government, are intermeshed with a lineage of pagan ritual practice which is clarified through the archaeology. During the Middle Ages, the leading church centre of St Andrews played an important, if somewhat obscure, role in Forteviot. Scotland's deep ecclesiastical roots are evident in the historical sources and their changing manifestation is revealed by the burial practices, by monumental sculpture, and by church architecture.

The institutional growth of mechanisms of power are revealed in the organisation of the landscape, in the development of elite residences, and in the management of the landscape. The most conspicuous and enduring features are those which facilitated (or constrained) movement through the landscape and marked places of importance.

LATER PREHISTORIC ENCLOSURE AND ROMAN IRON AGE MATERIAL

What happened at Forteviot after the widespread early Bronze Age ceremonial activity (discussed in SERF1, chaps 5–7) is particularly unclear. The list of radiocarbon dates shows a *lacuna* in the period from around 1000 to 100 BC, and only a scatter of dates in the 2nd millennium BC, none of which is associated with any structural activity (see Fig 1.14). For convenience, these scattered dates are discussed below (see 3.1.1, below). There was certainly continuing occupation in the lower Earn valley, as shown by the dates from the hillfort excavations which spread over the whole 1st millennium BC, and by dates from SERF excavations in the Dunning area (SERF3), but this is not reflected in the monuments of the Forteviot complexes. Of the few dates which do fall in the centuries around the turn of the 1st millennium AD, only the two from Henge 2 are associated with clear signs of active use of the area. These dates will be discussed alongside a scatter of Roman-period finds from throughout the

fields, after consideration of the one major structure

which appears to belong to this period: a large, square,

3.1 The Square Enclosure (Site K)

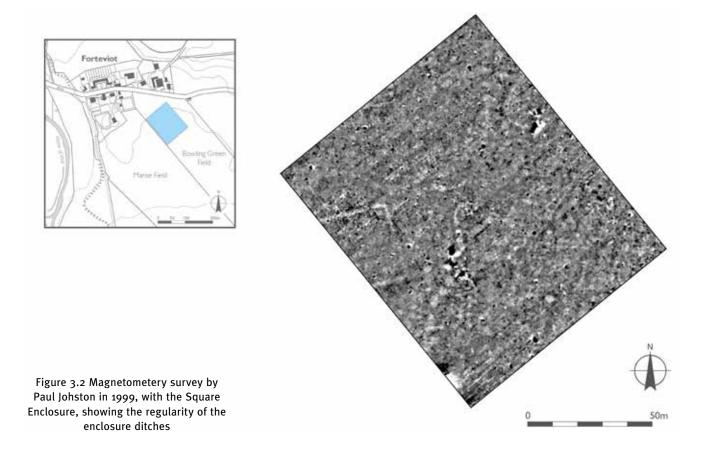
ditched enclosure.

The Square Enclosure is the most prominent feature of the Eastern Cropmark Complex, appearing on many aerial photographs in the Bowling Green Field (Fig 3.1). However, before the 2009 excavations it had been rarely discussed, perhaps because of its unusual form. The Alcocks suggested it might have enclosed a church (Alcock 1982a, fig 2; Alcock 1982b, fig 14.6; Alcock and Alcock 1993, 235, illus 11). Although the transcription suggested that the enclosure was slightly irregular, excavation confirmed that the ditches were indeed set at right angles to each other, and that the ditch cuts were exceptionally straight and regular in width. Some aerial photographs seem to show a break in the east side, but this is due to a masking band of silt here. An early geophysical survey seemed to confirm that the eastern side had no entrance, though it is difficult to be certain (Fig 3.2). However, excavation near the centre of this side showed no entrance, indicating any entrance must be on the west side. A small part of the enclosure ran into the Manse Field, but this western side is obscure on most aerial photographs due to a differing agricultural regime in this field. The northern half of the western ditch lay under the modern field bank, which itself seems to have moved around by a few metres over the years, further obscuring it. If there was an entrance, it must have been on the western side, and less than 3m wide.

On aerial photographs, the north-east corner appeared to have a curving feature within it, but there was no sign of a central structure or burial, nor were any other internal features visible. The enclosure was targeted for excavation in order to assess its date and function, and its relationship to the surrounding early medieval cemetery. A large excavation area was opened up, both to pick up any internal and external features, and to study the extent of burials in the cemetery. One immediate problem encountered was a thick layer of silty subsoil which in some areas lay between the base of the modern ploughsoil and the natural gravels and sands. The subsoil in this part of the field was noticeably less gravelly than in areas further south, with interleaved layers of sands and silts. The modern ploughsoil was removed by machine, with metaldetection both of the spoil and the sub-ploughsoil surface. The most significant find in the ploughsoil was a Gladstone commemorative medallion for the Great Franchise Demonstration in Dundee in 1884 (see Chapter 2.7 and Fig 2.16, SF203), which illustrates an interesting facet of local social history. The other aspect of the topsoil revealed by metal-detecting was the presence of an unusual quantity of musketballs, suggesting use of the field for target practice, as there is no known post-medieval conflict site here



Figure 3.1 Aerial photograph of the Eastern Complex showing boundary ditch, Square Enclosure, round and square barrows, and flat graves (B18522; © Crown Copyright: HES)



(Natasha Ferguson, pers comm). The surviving archaeology also revealed evidence of ridge and furrow cultivation which had been partially removed by modern deep ploughing. This late/post-medieval evidence is discussed in relation to the agricultural history of the village (see Chapter 2.7).

The silty deposit overlay the visible features cut into the natural gravel, but its depth prevented complete stripping of the area. Although the subsoil features were only visible on removal of the silt, occasionally in section it appeared that these features had been cut through the silt. As with all other excavations in Forteviot, some features only became evident at certain stages of drying out of the subsoil, and the silt had to be removed by hand before most features became visible. A series of smaller cuttings and trial trenches was opened to target specific features of the enclosure using the available resources (Fig 3.3). The western part of the interior of the enclosure was fully stripped of silt, and a set of features was discovered cut into the gravels. Before excavation these were seen as an arc of postholes, possibly forming a roundhouse. However, further stripping and excavation revealed this to be illusory, the features being of very varied character, and none was certainly a posthole. These features could be placed in into different morphological groups: stone-filled pits; charcoal-rich pits; large shallow pits; and a slot. However, radiocarbon dating showed that these apparent groups were also illusory, with one of the charcoal-rich pits producing a late Bronze Age date, and another a later medieval date.

3.1.1 Late Bronze Age features (Sites G, K and J) (see Fig 1.11)

It seems likely that the group of pits in the northern part of the square enclosure (Site K; Figs 3.3 and 3.4) were related to an episode of pre-enclosure activity, except for the one pit 830 with a later medieval date, which was shallower and set apart from the others. The function of these pits is unclear; only a few tiny scraps of burnt bone were present, along with charcoal and a fire-cracked pebble. Three of the pits (735, 785, 786) were packed solidly with pebbles and cobbles, and one (726) with charcoal (Fig 3.5). This was clearly a deliberate act. It may represent a closure activity, and it is possible that these were decommissioned postholes, but the careful nature of the packing suggests a meaning that we can only guess at. This type of stone packing was seen elsewhere in the area, at the Baldinnies site near Dunning, where they appeared to be associated with middle Iron Age activity (Wright and Brophy forthcoming). The charred botanical remains, with a mixture of oak, cherry, hazel, alder, and a few barley and oat grains, suggest hearth waste rather than *in situ* post burning. Radiocarbon dates were obtained from the stone-packed pit 785 (1120– 920 cal BC (2850 \pm 30 BP); SUERC-29205) and the charcoal-rich pit 726 (930–810 cal BC (2725 \pm 30 BP); SUERC-29206:), both dating to the late Bronze Age.

As already mentioned, the pits form a roughly linear spread, but they do not form a coherent structural pattern. It is possible that they represent late Bronze Age domestic activity, but equally it could be ceremonial. Features of a similar date were also found in Site J, 50m to the south, strengthening the idea of a late Bronze Age focus in this area. This is intriguing as there are almost no signs of activity of this date in the Western Complex of ceremonial monuments. One other feature may belong to this phase. In the eastern corner of the enclosure there was an irregular linear feature 789 which would have lain under the putative inner bank. The fill was sterile, and it appeared to continue on the northern side of the ditch. Almost certainly this is the feature noted on aerial photographs, but it does not have the curved form seen there. It may belong with the late Bronze Age activity, or be an unrelated or natural feature.

A small pit or posthole 069 in Site J, cut by the western ditch of Square Barrow 1, also produced a middle Bronze Age date (1270-1040 cal BC (2940 ± 30 BP); SUERC-22855), though the context may have been contaminated as it also produced an uncarbonised grape pip. Within the Western Complex, the upper fill of one of the Neolithic post-holes of the avenue associated with the large palisaded enclosure (Site G, context 126) had a charcoal-rich deposit (1500-1290 cal BC (3120 ± 40 BP); SUERC-21566) of middle Bronze Age date. This was clearly a depositional episode which implies that the avenue was visible as a feature in the landscape around 1500 years after it was disused, and attracted some kind of ritual deposition. Finally, there is scatter of early dates (SUERC-22836, -22835, -22839, -22845, -22850, -22855) representing residual material incorporated into the ditches and graves of the early medieval cemetery in Site J (discussed below in Chapter 4.1). This material would have been derived from features such as pit 069 which were cut by early medieval features. These five dates and the dug features show that there must have been a spread of later Bronze Age

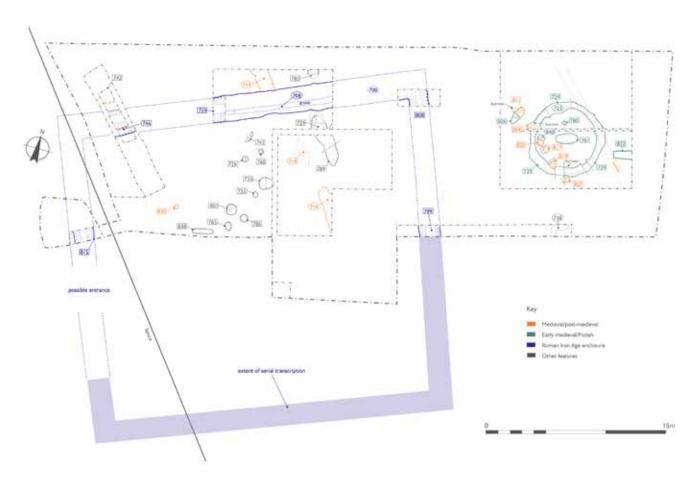


Figure 3.3 Plan of Site K



Figure 3.4 Vertical photo of Site K showing the straight edges to the ditch of the Square Enclosure (© Flying ScotsCam)



Figure 3.5 Bronze Age pit 785, showing stone packing

activity within the area of the Eastern Complex. Whether this was domestic or ceremonial is difficult to assess, but there were no signs of buildings, material culture or domestic refuse. The material in context 125 at Site G appears to be a deliberate reuse of an existing monument, and the pits within the square enclosure seem to have a non-functional aspect. Taken together, these scraps of evidence suggest that the area of the disused monuments of the early prehistoric period continued to attract attention at later periods, if only intermittently. No recognisable material culture of later Bronze Age date was found in any of these features, or as residual material in later contexts or in the ploughsoil.

3.1.2 The Square Enclosure ditch (Site K)

The enclosure was defined by remarkably regular ditches, the edges deviating from a straight line by no more than 0.1m (Figs 3.3 and 3.4), clearly indicating excavation along a set-out line. The ditch was approximately 2m wide, with steep sides and a flat bottom. The surviving depth was 0.6–0.9m, but originally would have been at least 1.6m, taking into account the estimated loss of topsoil due to modern ploughing. The east–west external length was 30.5m, and from the aerial photographs the north–south dimension

would have been the same. The enclosure was thus a perfect square. There was other evidence of careful construction. The sides of the ditch were very steep, but there was no evidence of slumping of the unstable natural gravels and sands (Fig 3.6). Observation of open sections exposed during our excavations suggested that slumping would be expected after only a few weeks' exposure to rainfall, so the sides of the enclosure ditch may have been protected by lining with silt or turfs, signs of which were observed in one place (797). The bases of the ditches had also been carefully levelled along their length, though the eastern ditch base was 0.5m above the northern and western ones. This presumably accounts for its slightly narrower width. Five sections were cut through the ditches. One section, 799, was placed in the middle of the eastern ditch, but showed no sign of the supposed entrance here. Another, 815, was situated in the Manse Field as near to the centre as possible, but again showed no signs of a ditch terminal. If there was an original entrance causeway on the western side, this means it must have been less than 3m wide.

The initial silty fills of the ditch were remarkably clean – there were no artefacts or ecofacts, and extensive sieving produced almost no carbonised material. This seemed to indicate that the enclosure was not a domestic settlement, as some signs of occupation

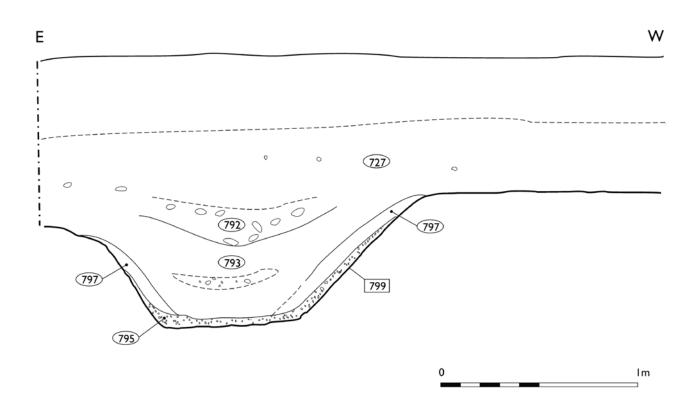


Figure 3.6 Section of south enclosure ditch, note flat bottom and lined side

would have been expected. Unfortunately, the lack of organic material precluded any reliable radiocarbon dates being obtained. The only sample dated produced a clearly residual early Neolithic date. The upper fills of the ditches showed an episode of gravel influx (Fig 3.7, 748), visible in the northern ditch as a lens of gravel thinning from the south side of the ditch towards the centre. This lens of material was interpreted as a deliberate slighting of a bank, possibly in the medieval period. This was the only certain indication that there would have been an internal bank which was otherwise completely destroyed by later

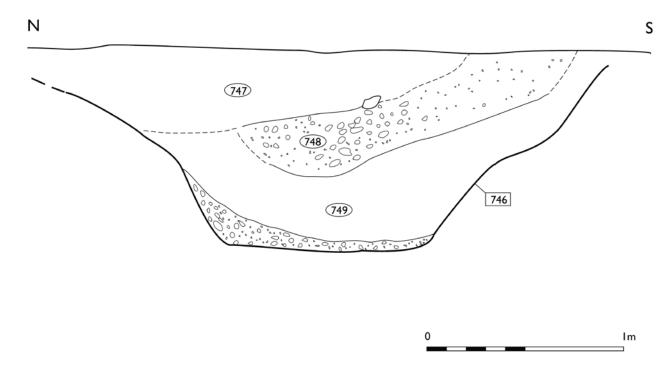


Figure 3.7 Section of north enclosure ditch showing gravel influx from interior

plough action. Towards the western end of the northern ditch there were signs of a recut (743), and in the fill of this recut there was a rim sherd of Scottish White Gritty ware of 13th-/14th-century date which provides a *terminus ante quem* for the construction of the enclosure, and shows at least partial reuse of the monument in the medieval period.

3.1.3 The date and function of the enclosure

There is no direct dating evidence for the square enclosure. The only radiocarbon date which could be obtained from the primary ditch fill produced an Early Neolithic date of 3650-3520 cal BC (4800 ± 30 BP; SUERC-29204) from a tiny scrap of charcoal which was certainly residual. The form of the enclosure means it cannot be dated before the mid-1st millennium BC, and the medieval pottery in the later ditch recut gives an upper boundary for its construction. This broad timespan can only be narrowed by looking for parallels to the form, and by considering its relationship to other dated features in the Eastern Complex.

The square enclosure has features that make it difficult to find parallels in Scottish archaeology. There are many rectilinear enclosures of Iron Age date which are roughly square, but these tend to have features such as ditches of irregular width or linearity, rounded corners, or trapezoidal form, which separate them from the Forteviot enclosure. These rectilinear enclosures have been dated to the later Iron Age, and some have been excavated. One example of this type, at Knowes, Midlothian, was excavated as part of the Traprain Law Environs project (Haselgrove 2009, fig 5.3), and others were excavated at Brixwold, Midlothian (Crone and O'Sullivan 1998) and Fishers Road West, East Lothian (Haselgrove and McCullagh 2000). These excavations clearly show that rectilinear, sub-square enclosures were being adopted as one of a range of possible settlement forms by the middle centuries of the 1st millennium BC, and flourished around the turn of the millennium (Cowley 2009). How long these settlements continued to be occupied is unclear, but some, such as Fishers Road West, seem to have continued into the period of Roman occupation (Cowley 2009; Haselgrove and McCullagh 2000), before the later 1st millennium retreat from enclosed settlements. A few of these enclosures have fairly regular linear ditches, and some are relatively square, such as West Mains (Haselgrove 2009, fig 2.3), Overhailes (ibid, fig A1.3) and Standingstone (ibid, fig A1.5), all in Midlothian, but none of these has the regularity of layout and construction seen at Forteviot. Where large areas of an enclosure have been stripped, as at Carronbridge (Johnston 1995, 241, illus 4), the ditches are seen to be irregular in width and linearity, and seem to have been dug in sections.

While commentators have counselled against overreliance on morphological characteristics to classify these enclosures purely from aerial photographic evidence (Cowley 2009), there are features of the Forteviot enclosure which suggest it was laid out and excavated by people with technical skills normally associated at this period with Roman surveyors. The ditches were carefully laid out at right angles, and measured to be identical lengths, suggesting the use of the groma and decampeda (ten foot rod). If a groma was not used, the builders must have been aware of Pythagorean triangles for laying out right angles. The ditches were excavated to a standard width and depth, apparently with careful lining of the sides. It may be significant that the overall size of the enclosure closely approximates to 100 Roman feet (30.5m = 102 pM Roman feet). Whether the Roman army used standardsized modules in construction has been a matter of debate (Crummy 1982; 1985; Evans 1994), and there is no consensus on this issue. One problem is that there were two different Roman feet, the pes monetalis and pes Drusianus, but more critical for all such metric studies is to decide where such measurements are taken from. In the Forteviot case this could be the outside, middle or inside of the ditch, or the centre, middle or inside of the bank. All of these figures, except for the middle of the ditch, are approximate given the loss of subsoil and the bank, and thus the figures can be manipulated to the 'best fit'. Given that there seems to be no agreement that the Roman army used standard modules (Evans 1994, 162), the metrics of the Forteviot enclosure are probably due to coincidence. What cannot be coincidence, however, are the perfect square proportions of the site, and it is this that makes parallels for the site difficult to find.

The type of site that immediately springs to mind is the *temenos* sanctuary enclosures of Romano-Celtic temples, which are found widely in southern England and north-western continental Europe (Lewis 1965, fig 38). These are pre-dated by much smaller, square, late Iron Age shrines (Woodward and Leach 1993, fig 211). Classic British examples of square *temenos* enclosures include Hayling Island, Hampshire (Downey *et al* 1980) and Gosbecks, Colchester (Crummy 1982, fig 11.13). It has to be admitted, however, that these examples, as with many others, are double enclosures, though single enclosures do occur, for example at Woodeaton, Oxfordshire (Smith 2001, 210) and the Iron Age phase at Hayling Island. One with a single enclosure of similar size to Forteviot has been excavated recently at Rutland Water (Symonds 2013), where it surrounded an earlier circular shrine with evidence of animal sacrifices and other ritual features. Another difference is that most Romano-Celtic temples have an entrance to the east (Lewis 1965, 32-3), though it is not certain that the Forteviot enclosure had a western entrance. Further afield, single-ditched enclosures of this size and shape are found in Germany (Viereckschanzen), the Netherlands and northern France (enclose cultuels) associated with important later Iron Age sites (Collis 2003; Gerritsen 2002, 162-73). Batavian auxiliaries would have been familiar with these sites from their homeland. These appear to be sanctuary sites for ritual assemblies, possibly associated with the commemoration of ancestors. Several of those which have been excavated in the Netherlands date to the 1st century AD (Gerritsen 2002, 162). Some form the focus of later funerary sites (Oss), and one at least is located around a Bronze Age barrow (Ursel-Rozestraat). The dimensions and shapes of these enclosures closely resemble the Forteviot enclosure, and two of them are surrounded by later square burial monuments, much as at Forteviot, though these burials date to the 1st century AD. The continental examples often have votive deposits in the ditches, but there are no surviving structures within the Forteviot enclosure or signs of domestic activity. This may be due to the severe plough erosion of the interior, though the survival of the bases of pits of Bronze Age and medieval date might argue against there ever having been interior features contemporary with the enclosure.

In Scotland (or indeed northern England), these types of ritual enclosure have not previously been

Forteviot

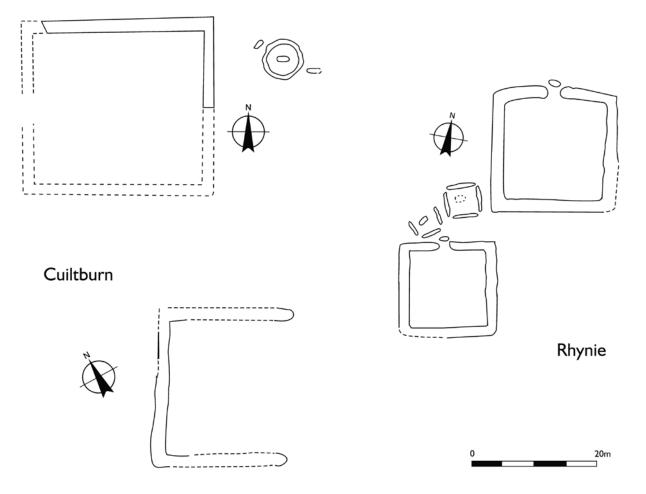


Figure 3.8 Comparative plans of square enclosures in Scotland

recognised, but there are a few monuments which are similar in form to Forteviot. One which has been excavated is Cuiltburn, 16km to the east of Forteviot (Wooliscroft and Hoffman 2002) (Fig 3.8). This enclosure is situated beside the Roman road which runs from Braco to Strageath and along the Gask Ridge, and was interpreted by the excavators as a Romanperiod enclosure of enigmatic function. The shape and size of the enclosure were very similar to Forteviot, as were the flat-bottomed, steep-sided ditch profiles, which differ from the standard Roman military V-shape. It differed from Forteviot in having a series of internal beam slots in a pattern which defied interpretation as any known form of building. Dating was provided by a sherd of Samian pottery of 1st-century date and a few Roman coarseware sherds. Two other square enclosures, identified from aerial photographs, sit on the southern slope of the Gask Ridge at Cairniemoor, 2km north of Forteviot. One of these has an interior palisade and measures around 100m square.

The other type of square ditched enclosure found in this broad period is the square barrow, in this area traditionally attributed to a Pictish milieu, but also found more widely both in space, for example in Wales (Longley 2009; James 1992) and Anglo-Saxon England (Blair 1995), and in time, for example the La Tène burials in Yorkshire (Stead 1991). Most of these are much smaller than the Forteviot enclosure, and though there are some which approach its size, few have been excavated. Although 'Pictish' barrows often have causewayed corners, some do not have this feature (see Chapter 4). There are several enclosures seen on aerial photographs which resemble Forteviot. Two such square enclosures with north entrances protected by blocking ditches are found at Barflat, just outside the village of Rhynie, Aberdeenshire (Gondek and Noble 2011, fig 8.7); these measure 20m and 16m square (Fig 3.8). These have been excavated but unfortunately are not securely dated (Noble et al 2019, 18). The upper fill of one ditch produced a 7th-century date, but they seem to be respected by external square barrows, one of which has been dated to the 5th/6th century (ibid). There are several more examples of large square enclosures associated with barrow cemeteries in north-east Scotland, but only those at Tarradale seem similar to Forteviot (Mitchell and Noble 2017, fig 9). The Rhynie examples are intriguing due to their proximity to the newly discovered palisaded enclosure and building of 5th/6th-century date, which may be an undocumented royal cult centre (Noble et al 2019, 33). Other large

enclosures of comparable size to Forteviot which seem to have been barrows are found at Hallhole, Perth and Kinross, and Kettlebridge, Fife (Winlow 2011, 341, fig 10.4). The Kettlebridge enclosure has causewayed corners and central burials, unlike Forteviot.

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The Forteviot enclosure appears to have a spatial relationship to the barrows and graves of the early medieval cemetery to the east. These graves and barrows cluster round the east and southern sides of the square enclosure and none is found within it (see Fig 1.7 and Chapter 4.2), suggesting it was the preexisting focus of the funerary activity. As the nearby graves produced dates of the 5th century AD, this would suggest that the square enclosure can be dated sometime between the 1st and 4th century AD, and may have had a ceremonial or funerary function. This date receives some support from the presence of unstratified Roman finds nearby (see below). Although there were no finds in the excavated sections of the ditch, these represented only five percent of the total ditch length. Whatever the ultimate origins of the enclosure, a ceremonial or assembly function is the likeliest explanation given the complete lack of domestic debris and burials, its position peripheral to the Eastern Complex of prehistoric monuments, and its apparent focus for early medieval burial.

3.1.4 Medieval and later features (Site K)

There were several aspects of pit 830 which suggested it was unusual, even before the radiocarbon dates which showed that it was of 14th- or early 15th-century date (cal AD 1310-1440 (540 ± 30 BP); SUERC-29208). The fill was packed with charcoal and burnt grain, which analysis showed to be mainly wheat, with much oak and ash charcoal. It was also the only feature on the site to produce metal artefacts: a series of iron nails and fittings (SF300, 301, 311-313). Nearby was a small knife blade SF215, which had probably been displaced from the feature by ploughing. On excavation, the assemblage in the pit was interpreted as the remains of a small burnt box. This interpretation is supported by the presence of ash wood, traditionally used for boxes (Gale and Cutler 2000) and very rarely found in other contexts anywhere at Forteviot. Before the date was obtained, this was interpreted as a possible ritual deposit of a cremated box containing wheat, possibly of Roman date. Given the 14th-century date of the pit, a ritual explanation for this deposit might seem unsustainable, but it is difficult to understand why

anyone would bury a burned box of grain for purely practical reasons. The evidence for the recutting of part of the ditch sometime around this period shows continuing interest in the monument at this time, perhaps associated with the documented military occupation of Forteviot before the Battle of Dupplin Moor in 1332.

3.2 Iron Age/Roman period

The only certain Iron Age/Roman-period activity at Forteviot was found in Site H, cut into the partially infilled ditch of Henge 2 (Fig 3.9). Here, a late episode of burning and paving has been dated to cal AD 20–140 (1915 \pm 30 BP; SUERC-37787). The sequence starts with a small pit 6141 cut into the edge of the partly silted-up ditch of the proposed Bronze Age cairn, which itself modified the earlier henge monument. Burning took place *in situ* within this pit 6143, followed by silting 6142. On top of this a patch of irregular paving 6121 was laid. Further burnt material 6088 covered the paving, and this produced the two radiocarbon dates, along with some animal bone. These features were isolated and did not seem to represent any domestic structure as there were no associated postholes. However, they were cut by the large late pit in the centre of the henge. They seem best interpreted as some kind of votive activity associated with the (at that period) still upstanding cairn. The deposition of Roman period artefacts and secondary burials around and within early prehistoric monuments is well attested: in Ireland, for example, at Tara and Newgrange (Freeman 1995, 70; Bradley 1993, 120, fig 62); in England at Stonehenge (Gardiner 1995) and other sites (Dark 1993); and in later prehistoric ritual sites in Scotland such as Mine Howe (Hunter 2007, 56). Given the 1st-century AD date, an alternative

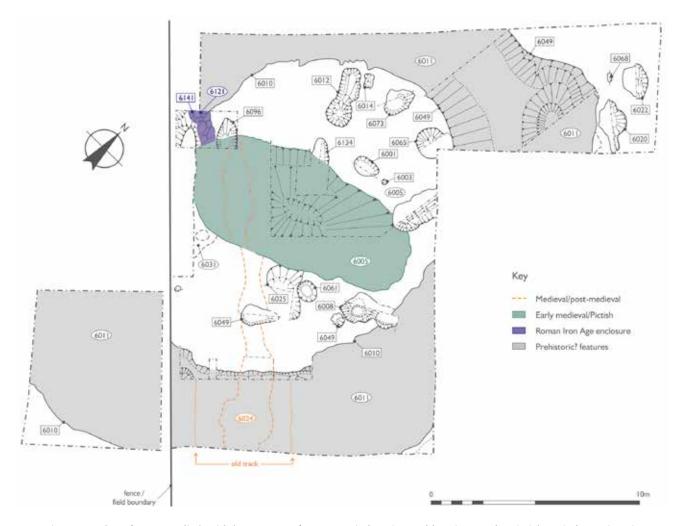


Figure 3.9 Plan of Henge 2 ditch with late Iron Age/Roman-period paving and burning, cut by Pictish period massive pit



Figure 3.10 Lead object (SF5005) from Site F, length 36mm

explanation might be as temporary occupation, perhaps associated with the construction of the square enclosure by Roman soldiers engaged in the Flavian period construction of the Gask Ridge fortifications.

There is also a scatter of Roman-period finds across the excavated areas, and a number of stray finds have been recorded nearby. From Sites D, J, K and P there are a few sherds of Roman pottery from the topsoil. In addition, two Roman coins were found by metaldetecting in fields to the north and north-east of the village. One of these was of later 1st-century date, and the other of the later 3rd century. Metalwork includes a Roman trumpet brooch (see Chapter 9.4.4) from the Green of Invermay medieval site, again in a topsoil context. Such brooches are one of the commonest Roman types found in Scotland (Hunter 2007). A lead object of indeterminate function SF5005 was found in the upper ditch fill of the ring-ditch in Site F, and may be of Roman date and again a ritual deposit (Fig 3.10). A possible pinhead SF251 from topsoil around the area of Round Barrow 1 in Site K may be a Roman bobbinand-reel type, but too little survives to be sure and it is also unstratified. A small fragment of a shale bangle SF013 found in the upper fill of Henge 1 ditch could be either Iron Age or early medieval (F Hunter, pers comm), while a glass droplet from the same general unsealed context could be of any date, but is more likely to be modern.

3.2.1 Catalogue of Roman period artefacts

Trumpet brooch Copper alloy. Site A, context 901, topsoil. GR09 001.

Pinhead Copper alloy. Bobbin-and-reel type? (cf Crummy 1983, fig 27), corroded. SF251, context 750, cleaning of base of topsoil over Round Barrow 1, Site K.

Lead object Unidentified cast rectangular object. SF5005, Site F, context 5008, upper fill of inner ditch of ring-ditch.

Small **body sherd** of black polished colour-coated vessel, possibly a small beaker. SF0029, Site J, context 019.

Body sherd of abraded colour-coated soft white ware with traces of a footring. SF252, Site K, context 750.

Coin 1 Contemporary copy of *dupondius* of Claudius (AD 41–54). Corroded. Forteviot School field NGR NO 052177 (Bateson and Holmes 2007, 164).

Coin 2 Radiate copy of Claudius II (AD 268–70). Worn and corroded. Forteviot Railwayside field NGR NO 05651790 (Bateson and Holmes 2007, 164).

Quern Upper stone of a rotary quern. A small bun-shaped quern, which is of the Fintry type with a projecting handle lobe, and possibly dating to the 1st/2nd century AD (MacKie 2002). This variant of the normal bun-shaped Iron Age quern has a distribution in the Central Valley and Argyll. Presently in the Manse garden, original findspot unknown.

Shale bangle Small segment of a polished shale bangle of D-shaped cross-section. Estimated diameter 70mm, size 24 \times 8 \times 6mm. SF013, Site D, context 541.

Glass droplet. A teardrop-shaped droplet of transparent bubbly blue glass. Size $9 \times 4 \times 4$ mm. Site D, SF110, context 301.

The Manse garden quern is the only certain artefact of native Iron Age origin from Forteviot, and although its findspot is unknown, it possibly comes from the village area as all the other stone objects currently collected together there seem to be local (see Chapter 8.1). It is interesting in being the sole indicator of possible domestic activity in this area of ceremonial and funerary monuments. However, querns were widely used in secondary contexts where they clearly had a votive symbolism (Campbell 1991, 133; Hunter and McLaren 2009, 118; McLaren 2013).

3.3 Discussion

Taken together, the evidence presented above shows that there was a range of ceremonial activities taking place in the later Iron Age in Forteviot, both within the existing prehistoric monuments of the Western Complex and in a newly created enclosure which formed the focus of the Eastern Complex. Reuse of prehistoric monuments in the Roman period is well known, and is usually interpreted as votive activity concerned with offerings to supposed ancestors (Bradley 1993, 120). The scatter of Roman material extends over the whole area of the site. Although much of the material was found in the topsoil, most was probably originally deposited in shallow pits such as the one excavated in Henge 2, or placed in existing silted-up ditches and postholes. Roman material turns up quite widely in non-Roman sites in Scotland (Hunter 2007; Campbell 2012a; 2012b) but this is usually in domestic or burial contexts rather than in prehistoric ceremonial contexts. In fact, at present Forteviot is unusual in Scotland in the presence of Roman material on early prehistoric funerary monuments, despite the fact that such occurrences are well-known on important centres of ritual activity in England and Ireland (Bradley 1993; Dark 1993; Gardiner 1995). Only two other examples are known from Scotland: a Roman brooch and a coarseware sherd from a Bronze Age Clava cairn at Stoneyfield, Inverness (Simpson 1973); and a set of glass gaming pieces inserted in an exposed secondary cist in another Clava-type cairn at Cairnhill, Aberdeenshire (Stevenson 1967).

How can we explain this revival of interest in the relic monuments of the prehistoric past, after a long period when there seems to have been no activity on the sites (see Fig 1.14)? The key seems to lie with the square enclosure, which we suggest dates to the Roman Iron Age, and which is a completely new type of monument in this area. We have suggested that the constructional features point to a Roman military or Romano-Celtic background as the milieu for its construction. The parallels to the nearby site at Cuiltburn (Wooliscroft and Hoffman 2002), which lies immediately adjacent to the Roman road of the Gask system, are striking, even if it has none of the unique internal features of that site. Whether these sites were constructed by Roman soldiers familiar with continental or southern British Romano-Celtic sanctuaries, or by locals under their instructions, or by locals retired from the Roman army, is a matter for debate. However, as Forteviot lies within sight of the Gask Ridge, the prehistoric monuments would be well known to the Roman soldiers and auxiliaries stationed there, and they may have wished to engage with the local deities who might be imagined to be celebrated there, as it would clearly have been an important locus for local people. We can imagine the enclosure as a sanctuary where both locals and Roman soldiers could meet and express their own versions of votive rituals to the ancestors. This enclosure thereby became fixed in local psyche as a sacred place after the Roman army departed, and could have become a focus for early medieval burial from the 4th or 5th century. Blair (1995) has argued that Anglo-Saxon pagan shrines and grave enclosures derived from the Romano-Celtic prototypes discussed above, and it is not unreasonable to suggest a similar derivation for Pictish square barrows and enclosures.

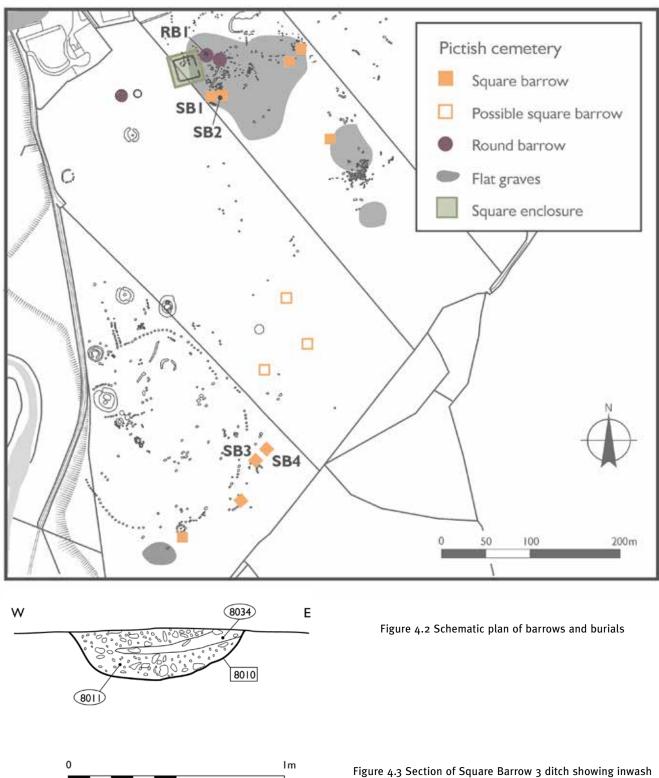
THE PICTISH CEMETERIES

with Adrián Maldonado

From the start of the SERF project, one of the main objectives was to excavate the putative Pictish barrow cemetery which had initially been identified on aerial photographs by Leslie Alcock (1980) in the Bowling Green Field. Further potential Pictish-period barrows had later been identified from further aerial photographs by the RCAHMS and others (Fig 4.1). The programme of work investigated burial sites in the Bowling Green Field in 2007 (Site J), 2009 (Site K), and 2010 (Site M); in the Dronachy Field in 2010 (Site B); and in the parish churchyard in 2011 (Site Q). The results of this work successfully confirmed the Pictish date of the features seen on the aerial photographs, and enabled a refined interpretation of the cropmark evidence (Fig 4.2). This new plan of the cemetery shows that burial activity was scattered over an exceptionally large area, but always peripheral to the large Neolithic palisaded enclosure. However, an unexpected result of the excavations within the palisaded enclosure was the discovery of features of Pictish date, mainly in the form of massive pits dug into prehistoric burial monuments. These were excavated in 2008/9 (Site D); 2007 (Site G); and 2010 (Sites F, H) and are described in Chapter 5. While all the burials in the cemeteries described below were inhumations, the only evidence for cremations was found within the prehistoric monument complex (discussed in Chapter 5.5). In the following discussion of numbered features, UGr



Figure 4.1 Aerial photograph of 2013 cropmarks in the Manse Field, showing newly discovered Henge 4 and new round barrows, as well as Henges 2 and 3, and the south-west corner of the Square Enclosure (DP167115; © Crown copyright: HES)



denotes an unenclosed dug grave, BGr a grave within a barrow, SB a square barrow, and RB a round barrow.

One of the main aims for the early medieval period was to investigate the nature and chronology of the burial evidence as revealed in the cropmarks. These mainly took the form of square and round ditched monuments, some associated with rows of unenclosed graves. The burial monuments excavated consist of

Figure 4.3 Section of Square Barrow 3 ditch showing inwash from central mound

four square barrows (SB1–4) and one round barrow (RB1). All of the barrows contained central graves, which are discussed separately below, along with the unenclosed graves (see 4.5). All of the barrows share the same construction, being outlined by the shallow narrow ditches which had enabled their identification on aerial photographs. The ditches of SB4 only survived to a depth of 0.15m, and all of the barrows were being

actively eroded by ploughing. It is likely that SB4 will be totally destroyed in the near future as the central burial was already almost totally ploughed out. Obviously all trace of the barrow mounds had been removed by this ploughing, but their former presence could still be traced in some cases. For example, a silty layer (8034) seen in the inner edge of the ditch of SB3 was interpreted as initial inwash from the burial mound before it was stabilised by grass cover (Fig 4.3). A line of pebbles (080) in the west ditch of SB1 could also represent material rolling off the mound into the ditch. In addition, the central grave of SB3 hardly cut into the gravel subsoil, so the burial would have been just below the ground surface in the Pictish period. Using these indicators, it is possible to reconstruct the profile of the burial mounds, showing that the small barrow SB3 could not have been more than 1m high, similar to surviving mounds in cemeteries which have not been ploughed (Stevenson 1984). The larger barrows SB1 and SB2 potentially could have been a little higher. The ditches were so slight that they could not have provided enough material for the central mounds, suggesting that soil or turf was brought from elsewhere to build the mounds. The ditches were sectioned both transversely and longitudinally to look for evidence of posts or palisades, but no features were seen, and the ditches seem only to have demarcated the extent of the mounds.

4.1 The layout of the cemeteries

The aerial photographic evidence shows that there were at least ten square barrows, three to four round barrows and at least 40 dug graves within the wider Forteviot cropmark complex, spread over an area of 500m by 300m (Fig 4.2). A further seven dug graves were found near the churchyard (Site Q; 4.4, below). Compared to other cemeteries of the period this is a large and extensive, if dispersed, area of burial (cf Alexander 2006, illus 32). A number of different foci can be identified within this spread. In the south of the Western Complex, SB3 and SB4 are part of a group of four square barrows, one round barrow and a number of dug graves in a row, which appear to follow the southern boundary of the Neolithic palisaded enclosure. All of these appear to be orientated southwest/north-east, presumably because they respect a boundary that would still have been visible. However, the main focus of burial activity lies in the Eastern

The four square barrows formed two conjoined pairs, SB1 with SB2 (Site J) (Fig 4.4); and SB3 with SB4 (Site B) (Fig 4.5). Both pairs were aligned roughly east-west but each pair differed in details of orientation, size, construction and internal features. SB1 and SB2 were aligned exactly east-west (at 90° from north), while SB3 and SB4 were more north-east-south-west (55° from north). In both sites the more eastern barrow could be seen to have been added at a later date, indicating a recurring ritual or cosmological importance to creating a row of graves by expanding eastwards.

The ditches of SB1 and SB2 were laid out fairly square and SB1 measured internally 8.4m by 8.2m,

Complex around and to the east of the large square enclosure of Site K (Chapter 3). Here there appear to be five square barrows, two or three round barrows, and many dug graves in rows. Further to the south of this group is a single large square barrow with possible north–south burials. The final focus lies within the parish cemetery and contains rows of dug graves. Additionally, on older vertical aerial photographs there are hints of other square barrows in the south of the Manse Field and in the Moor Field, which lies to the south of the Bowling Green Field, suggesting an even greater spread of burials.

The poor preservation conditions meant that only a few features of the cemetery could be dated. The radiocarbon dates are discussed below (see 4.7). Several of the contexts, particularly the barrow ditches, produced clearly residual material, generally of Bronze Age date, but a number of others fell into the early medieval period.

4.2 The square barrow excavations (Sites B and J)

while SB2 was 7.4m by 7.7m. SB1 and SB2 share constructional features which link them to the typical Pictish barrows of excavated cemeteries such as those at Redcastle, Angus (Alexander 2005) and Bankhead of Kinloch, near Meigle, Perthshire (Cook 2013). As all of the monuments at Forteviot had been truncated by ploughing, there is no evidence for how tall these barrows would have stood, but upstanding square barrows elsewhere in Scotland indicate these would have been low platforms of up to 0.5m height (Ashmore 1980). The key feature of these barrows is that the ditches are interrupted at the corners, distinguishing them from possible Iron Age predecessors which never

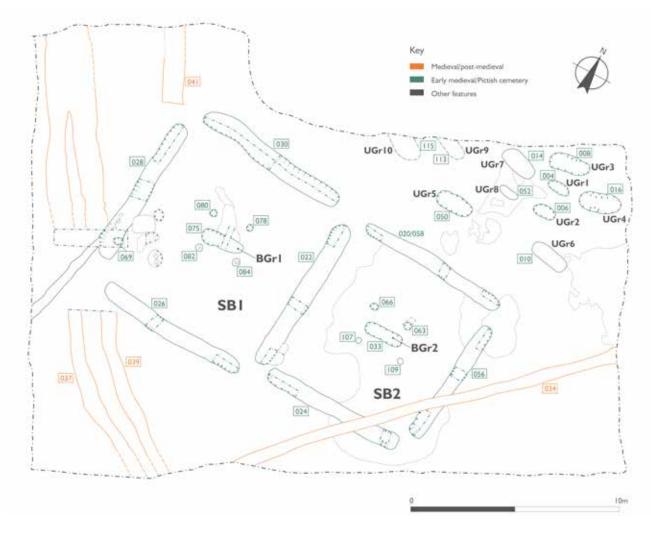


Figure 4.4 Plan of Area J conjoined Square Barrows 1 and 2



Figure 4.5 Plan of Site B conjoined Square Barrows 3 and 4

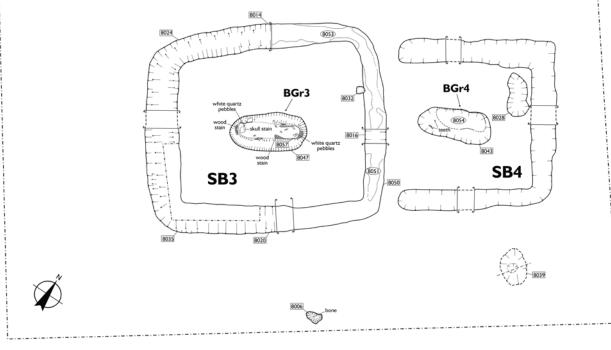




Figure 4.6 Aerial view of Site B square barrows under excavation (© Flying ScotsCam)

have this feature. The reason for the interruption is unknown, though the location is paralleled by upright stones at several square cairns of the same period such as at Kilpheder, South Uist (Parker Pearson et al 2004, 117-21, fig 67) or Ackergill, Caithness (Edwards 1926), though only a single excavated ditched square cairn, at Garbeg, near Drumnadrochit, has produced evidence for corner posts (Wedderburn and Grime 1984). It has been suggested that the ditches of Pictish barrows may have held posts or fences to enclose the graves as at Thornybank Grave 62 (Rees 2003, 335, illus 34). Stakeholes for fences are sometimes found within the ditches of Kentish ring-ditches (O'Brien 1999, 138-9), and rectilinear enclosures in these sites tend to be used as kerb-slots, with upright stones sometimes found in situ (ibid, 135). Both transverse and longitudinal sections were dug in the barrow ditches specifically to search for such structures, but no sign of any structure was identified.

In contrast to these typically Pictish square barrows, at Site B, SB3 did not have interrupted corners and

had a more haphazard trapezoidal shape with rounded corners. The adjoining SB4 had an interruption where its enclosing ditch met SB3 and was more carefully laid out as a square with right-angled corners (Fig 4.6). Both these barrows were much smaller than SB1 and SB2: SB3 was 5.6m by 4.8m, and SB4 was only 3.8m by 4m. There were no unenclosed dug graves associated with the Site B barrows, though there was an adjacent pit filled with burnt grain and charcoal (8039) which was dated to the 7th or 8th century (see 4.7, below). Unfortunately, no suitable dating material was available from SB3 or SB4 for direct dating, but an Iron Age date can be posited by analogy (see 4.6).

All the barrows had central graves, oriented parallel to the ditches and running west to east. The clearest internal features were seen in SB1 and SB2, each of which had four small postholes around the central grave. These might have served either to mark out the grave, form a fenced enclosure, or may have carried a roof forming a mortuary structure. Two further postholes in the south-west corner of SB1 may also be contemporary with this activity, and like the postholes around BGr1, one of these used quartz pebbles as packing material. Interestingly, BGr1 in SB1 was placed eccentrically within its four-post setting, making it possible that the structure post-dates the initial burial. The fact that the adjoining BGr2 in SB2 is placed centrally within its four-post setting could indicate that these 'mortuary houses' were in fact part of the commemorative activities surrounding the conjoining square barrow to the east, only retrospectively commemorating the earlier BGr1. The postholes surrounding BGr2 did not use quartz cobbles as packing material.

4.3 The round barrow (Site K)

On Site K there was a single round barrow, RB1, whose internal diameter was 5m (Fig 4.7). As with many other round barrows of the period there was no interruption of the annular ditch. There were two possible postholes within the barrow, which may have held marker posts or stones: 780 was placed centrally north of the central grave (BGr5), while 840 was directly to its west (or head end). The barrow itself and one of these postholes (840) were cut by a later line of six postholes, probably belonging to a post-medieval structure, interpreted as a target for shooting practice due to the quantity of lead shot found in the topsoil of this trench. One of these later postholes (825) had a fragment of a worked large slab of red sandstone (SF322) used as packing, which may have derived from a grave marker in one of these two earlier postholes, or one of the nearby unenclosed graves.

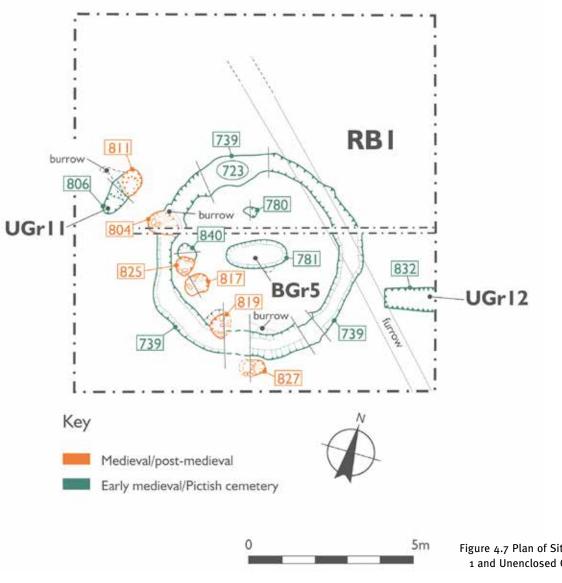


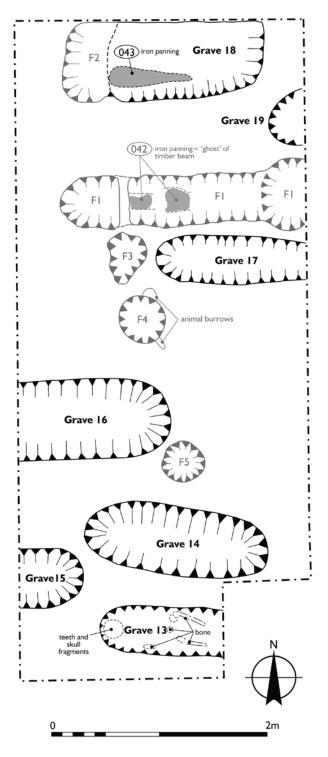
Figure 4.7 Plan of Site K Round Barrow 1 and Unenclosed Graves 11 and 12

4.4 The churchyard extension excavations (Site Q)

Excavations in the modern graveyard extension to Forteviot parish church revealed seven dug graves (UGr13-19) (Fig 4.8). Each of these was aligned westeast, and the sizes of the grave cuts varied enough to say that adults and children were buried here. Highly degraded teeth, leg bones and body stains in UGr13 and 14 were the only indication that the head was placed to the west in these instances. Some of the graves were aligned shoulder to shoulder and there was no intercutting, but there was also no coherent overall layout. The only indication of coffin burial was found in UGr18, where iron panning on the base of the grave was likely due to wooden planks, as in the adjacent timber slot (020) (see Fig 7.18). Despite the lack of surviving organic remains, other graves showed some interesting variations on the simple dug grave type.

The largest grave, UGr16, appeared to be marked with a single round posthole (022) outside its southeast corner; this may represent a four-post structure such as those in SB1 and SB2, or may have held a simple grave-marker. However, there were other pits and postholes found in this trench which this may relate to, and these features are discussed further in Chapter 7.2. UGr15 and 19 had what appeared to be rough stone cappings, the former with a partially dressed fragment of sandstone, but both of these were only partially revealed in the trench. Unfortunately, no dating evidence was obtained for any of these features, and these graves can only be dated by analogy. Their proximity to the church, which is likely to originate in the Pictish period (see below), makes it likely these graves post-date the burial activity in the fields south of the village, and perhaps date to the 9th century or later.

Figure 4.8 Plan of graves on Site Q



4.5 Analysis of the graves

Adrián Maldonado

A total of 24 graves were excavated over five years, five being the central graves of the barrows (BGr1–5), and nineteen being unenclosed graves (UGr1–19). Most of the graves are of similar form – simple ovoid dug pits

with vertical sides and rounded ends (Fig 4.9). The grave-cuts only became visible after removal of the ploughsoil, and it is estimated that at least a further 0.5m of topsoil has been lost due to recent agricultural

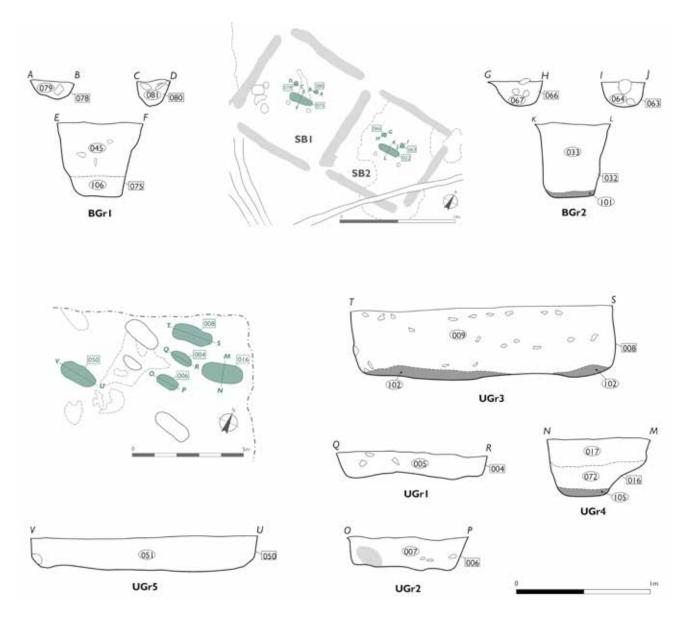


Figure 4.9 Plan and sections of Site J graves

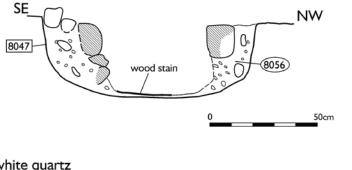
practices, meaning that most of the graves would originally have been more than 1m below the contemporary ground surface. None of the graves is cut more than 0.75m into the sandy subsoil, and it seems that once the more intractable bands of iron-panned gravel were encountered, digging stopped. The dimensions and features of the graves are presented in Table 4.1. There are no long cists, pillow-stone or stone-lined burials, but several graves had coffin stains, and at least two of these could be seen from their U-shaped section to be from log coffins.

A few graves stood out in terms of their construction. BGr3 not only had a log coffin, but this coffin had been supported by lines of large cobbles which formed rough walling along its sides (Fig 4.10). BGr1 had more ephemeral traces of cobbling incorporating quartz pebbles around the south-east edge of the grave cut. UGrs15, 16 and 19 (Site Q) seem to have been marked at surface level with posts or partial stone cappings. UGr12 (Site K) differed from all the other grave cuts in its neat rectangular shape and its exceptional depth. The log coffin within it was apparently charred on the interior, a feature almost unparalleled in Britain (see below). This and the adjacent BGr5 (RB1) returned similar 5th- to 6th-century dates.

The unenclosed graves were laid out in rough rows, and no burial intersected another, suggesting that the positions of the graves were visible through mounds or markers, and that there was reverence for the physical remains of the people buried. The lack of bone preservation prevents any sexing or sizing of the individuals buried. The variety of sizes of the graves shows that

Grave	Site	length (m)	depth (m)	Age	coffin type	grave inclusions	other	orientation °N
UGr4	J	1.90	0.40	Adult				110 ⁰
UGr3	J	2.00	0.50	Adult				103°
UGr6	J	1.75	unexc	Adult				103°
UGr8	J	0.96	0.40	Juvenile				102 ⁰
UGr14	Q	1.60	0.23	Adult?				100 ⁰
UGr17	Q	>1.37	0.36	Juvenile?				93°
UGr13	Q	>1.12	0.45	Adult?				93°
UGr1	J	1.10	0.20	Juvenile				92°
UGr2	J	1.05	0.25	Juvenile				92°
UGr15	Q	>0.60	0.40	?	plank?		stone capping?	91 [°]
UGr5	J	1.75	0.80	Adult		flint arrowhead SFoo9		90°
BGr2	J	1.95	0.55	Adult		flint knife SF022	mortuary posts	90°
UGr18	Q	>1.35	0.22	Adult	plank?			90°
BGr1	J	2.25	0.55	Adult		quartz pebbles, flint flake SF021	mortuary posts	87°
UGr16	Q	>1.62	0.31	Adult			post?	87°
BGr5	К	1.78	0.40	Adult		charred branches	marker post?	80°
UGr12	К	>1.40	0.75	Adult	charred log			78°
UGr7	J	1.90	unexc	Adult				75°
BGr4	В	2.20	0.20	Adult	?log			68°
UGr9	J	>0.60	unexc	Adult?				67°
BGr3	В	2.05	0.40	Adult	log	quartz pebbles	lining stones	65°
UGr10	J	>0.50	unexc	Adult?				60°
UGr11	К	1.50	0.35	Juvenile				32°
UGr19	Q	>0.35	0.16	?			stone capping?	?

Table 4.1 Early medieval burials: grave orientation, size, and other features



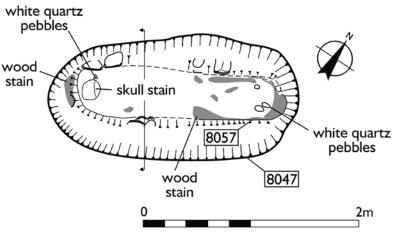


Figure 4.10 Detailed plan of grave in Square Barrow 3 on Site B showing cobble walling supports for log coffin

both adults and children were being buried in the same cemeteries, although without osteological data and a larger sample size, it would be misleading to draw any conclusions regarding demographics.

All of the graves are orientated roughly west–east except the undated UGr11 which is north–south, and most of them cluster in a group around 80–100° from north (Table 4.1). All the graves with surviving skeletal

4.6 Artefacts

Pieces of worked flint were found in three graves, all on Site J. A fine Bronze Age barbed and tanged arrowhead (SF009) of Sutton Type B (Green 1980) was found in the backfill of UGr5 (Fig 4.11). Both of the central square barrow graves also had worked flint in their backfill: a flake (SF021) in BGr1 and a knife (SF022) in BGr2. While it could be argued that these may have been residual material incorporated by accident, this seems unlikely given the very low number of worked lithics discovered from this trench and



Figure 4.11 Bronze Age barbed and tanged flint arrowhead (SFoo9) from Unenclosed Grave 5 on Site J, length 29mm (photo by Pablo Llopis)

others throughout the Eastern Complex. If these were deliberate inclusions it suggests an interest in the material culture of the past during the early medieval period, as also revealed by the digging of large pits into the henges and other prehistoric features (discussed further below).

material had the head at the west and were extended

supine inhumations. The graves on Site B, however,

are orientated south-west-north-east. It is worth noting

in this respect that across Scotland, a north-easterly

rather than true west-east orientation is often charac-

teristic of the earliest graves in a given cemetery

(Maldonado 2011, 156-8).

Other finds are more difficult to interpret. Two groups of white quartz pebbles were found at the base of BGr3, one at the head and one at the foot. Although we cannot be certain that these were deliberately placed, they appeared to be unusual compared to the composition of the local gravel subsoil. It should also be noted that intact charred branches were encountered in the upper fill of BGr5, the central grave of RB1, in two discrete places towards the head and foot of the grave. These two examples are not 'grave goods', but rather relate to the preparation and closure of the grave. In this light, the worked lithics from Site J, all from upper grave fills, may also relate to evidence of funerary rites surrounding the closure of the grave.

There were no finds from the primary fills of the monument ditches. In the upper fill of the south ditch of SB1 there was a sherd of 13th/14th-century Scottish White Gritty ware (SF012) which suggests the barrow ditches were still visible and not ploughed out at that time. It seems likely that the barrows persisted as features in the landscape until the imposition of postmedieval rig and furrow cultivation.

4.7 Chronology

Due to poor preservation of bone, only other organic material from the graves and barrow ditch fills could be radiocarbon dated (see Chapter 1.8). Barrow Grave 1 gave a date of cal AD 660–860 (1265 \pm 30 BP; SUERC-22837), and a similar date was obtained from the fill of a quartz pebble pit 104 within Square Barrow 1: cal AD 680–890 (1220 \pm 30 BP; SUERC-22857). Similarly, one of the four post settings around BGr2 gave a date of cal AD 670–890 (1240 \pm 30 BP; SUERC-22848). The

coincidence of these dates suggests a period of burial in square barrows centred on the 8th or 9th century, which is a very late date for this type of monument. Material from the shallow ditches around the SB1 gave four dates, all from residual material which merely gave a *terminus post quem* date for the construction of the barrow (see Chapter 1.8). A post-medieval date from one of the postholes around BGr1 was presumably due to contamination (SUERC-22838).

The only unenclosed grave dated from Site J, UGr2, gave a similar date of cal AD 670-890 (1210 ± 30 BP; SUERC-22856). These dates are compatible with a chronological sequence of construction for these three burials, separated by fairly short periods of time, centred around the 8th century. Two dates were secured from Site K burials: one of the pieces of charred branch deliberately deposited in the backfill of BGr5 in RB1 gave a date of cal AD 410-560 (1580 ± 30 BP; SUERC-29209), and charcoal from the adjacent log coffin burial UGr12 returned a date of cal AD 340-540 (1635 ± 30 BP; SUERC-29214). This suggests that the round barrow (and its associated graves) was considerably earlier than the square barrow, and that the round barrow formed the focus for the associated flat grave burials.

In Site B, no dating material was obtained relating to the square barrows, but the uninterrupted ditches, the trapezoidal form of SB3 and its cobbled stone lining, and lack of surrounding unenclosed graves makes it likely these are earlier monuments, perhaps dating to the Iron Age. A good parallel comes from the single square barrow with uninterrupted ditch of similar size to SB3 at Boysack Mills, Angus which was dated to the middle Iron Age by means of a ringheaded pin in the left-shoulder position of the burial (Murray and Ralston 1998). The central grave there was also in a log coffin, although in this case the body was laid facing west and apparently clothed. The grave was covered with a massive stone setting which may have held an upright grave marker (ibid, 366-8). A second square barrow from Boysack Mills contained a charcoal-rich pit in place of a grave, which was also dated to the middle Iron Age and supports the case for uninterrupted square ditched monuments being an earlier form than the causewayed 'Pictish' barrows. Another barrow with uninterrupted ditches, at Pityoulish, near Aviemore (Rae and Rae 1953), remains undated, but parallels with Boysack Mills include light furnishing (with a single iron knife), evidence of

burning and the use of an upright stone marker, making it likely it is also Iron Age.

It is thus possible by analogy to suggest that SB3 is part of this earlier tradition. However, the conjoined SB4, with its distinctly squared corners, was shown to post-date SB3. There is no direct dating evidence for it, but it may well be contemporary with the 7th/8thcentury pit 8039 containing burnt grains a few metres directly south of it (Fig 4.5, 8039) which was securely dated to the late 7th or 8th century (SUERC-37772). If this is the case, it would be another example of early medieval burial activity at Forteviot referring to the remains of the ancient past.

Despite the lack of dating evidence from Site Q (Forteviot churchyard), it is tempting to suppose that these simple dug graves form part of the general trend towards the abandonment of ancestral burial grounds and movement into consecrated churchyards, a process which begins around the 8th century (O'Brien 2009). However, this evolutionary model has been roundly criticised in recent years as radiocarbon dates reveal unenclosed cemeteries not associated with a church continuing to be used or founded anew down to the 12th century (Buckberry 2010; Ó Carragáin 2010a; Zadora-Rio 2003). Other evidence must be used to hazard a date for the graves from Site Q. The highly decayed skeletons contrasted with dated 11th/12thcentury intact skeletons found a few metres to the north on Site R (see Chapter 7.1), and were in a similar state of decomposition as the other early medieval burials at Forteviot, suggesting they too were early medieval in date. The fragment of partially dressed masonry capping UGr15 could relate to architectural or sculptural tooling, and the worked stone monuments at Forteviot date broadly from the 9th century onwards. Parallels for stone cappings for graves come from the 9th- to 12th-century phases at the Isle of May monastic cemetery (James and Yeoman 2008, 25-7) and on balance, a date in this range for the Site Q graves would fit the evidence best.

4.8 Discussion

The excavations at Forteviot add crucial new data to the archaeological record for burial practices in 'Pictish' areas of Scotland. There is still only a handful of square barrow sites which have been excavated and published, and the Forteviot barrows have the rare benefit of being placed within a well-defined landscape and chronological context spanning the entire early medieval period and beyond. Forteviot is not unique either in the number of burials or in having a combination of square and round barrows, along with rows of dug graves (Winlow 2011, 337–44, fig 10.7; Mitchell and Noble 2017). What does set it apart is the spread of monuments over such a wide area, and their focus around a prehistoric ceremonial complex of monuments.

Although no human bone from the graves could be dated, organic material from the round barrow and

associated grave on Site K returned 4th- to 6th-century dates, while the two square barrows and an associated grave on Site J were dated to the later 7th to 9th century. It is unfortunate that the barrows on Site B could not be dated, although it has been suggested above that SB3 dates to the later Iron Age and SB4 may be associated with burning activity there in the 7th/8th century. As such, monumental burial at Forteviot spans the 1st millennium AD in a way that is only paralleled on Irish 'royal' ceremonial centres founded on the remains of prehistoric monuments such as the passage grave of Knowth, Co Meath (Eogan 2012).

Square and round barrows were part of the development of new grave types which began as isolated examples in the later Iron Age and flourished into large cemeteries across Britain and Ireland from the 5th century onwards. In Scotland, the majority of barrows which have been dated cluster in the 5th to 7th centuries (Maldonado 2013, 6), making the longer span of dates from Forteviot even more significant. While barrows of square and round type have occasionally been dated to the Iron Age in Scotland (Murray and Ralston 1998; Winlow and Cook 2010), the only example which may post-date the 7th century is from Redcastle, Angus, where square barrow 3 was dated to the 7th to 8th century (Alexander 2005). This site forms the best Scottish parallel so far to the cemetery at Forteviot, with the earliest barrow dated to the 2nd or 3rd century and the latest unenclosed graves dated from the 9th to the 12th century. As at Forteviot, the dates of associated unenclosed graves suggest that the barrows formed foci for the surrounding burials. However, these were all localised on the headland above Lunan Bay, whereas at Forteviot burial activity was found scattered across a wider area. The alternating use of square and round barrows at both sites shows there is no chronological significance to the shape of the mound (Alexander 2006, table 17). Another recent parallel comes from Rhynie, Aberdeenshire, where two square barrows outside a large square enclosure were discovered in 2013 (Noble et al 2019, 18, fig 6); these features are also on the periphery of a major royal centre of the early medieval period.

The evidence for commemorative practices before, during and after burial is possibly the most important result of these investigations. Some graves bear signs of ritual preparation of the grave before interment; some include offerings made during or soon after the closure of the burial; and some were set apart with above-ground markers which focused attention on the grave after the funeral. Discrete deposits of quartz pebbles at head or foot end of the grave pit were discerned in BGr1 and BGr3, and the interior of the log coffin of UGr12 was charred. Quartz pebbles have a long association with burials in Britain. They appear in both ecclesiastical and unenclosed cemeteries, and sporadic use in funerary contexts continues into the later medieval period at many sites, including Iona, Whithorn and the Isle of May (Hill 1997; James and Yeoman 2008, 176; O'Sullivan 1995). A quartz pebble was found in the cache of objects in Cist 54 at Hallow Hill, St Andrews (Proudfoot 1997 418), and spreads of quartz pebbles marked early medieval graves in log coffins at Whithorn Priory (Hill 1997, 73, 143). The use of white stones in mortuary contexts bears no clear pattern in early medieval Scotland, but in sites like the cobble platform on the Isle of May it is clear they were brought in deliberately for use in graves (James and Yeoman 2008, 33) and may be considered a form of 'grave furnishing' (cf Maldonado 2013). While it may not tell us about the religious beliefs of the deceased, as part of the structured deposition of the grave it could have served an amuletic or transformative role in the funerary ritual. The same may be said for the charring of the log coffin interior in UGr12. It is possible the charring relates to the expansion of a split log, or perhaps use of a partially burned, already decayed tree trunk, but no other log coffin has thus far been found prepared in this way. The closest parallel is a charred wooden coffin at the 6th- to 7th-century Anglo-Saxon cemetery of Snape, Suffolk, where the remarkable organic preservation revealed abundant evidence of the care given to the preparation of the graves (Filmer-Sankey and Pestell 2001). Burning to purify or render the grave safe for burial has been noted across many early medieval contexts, and the related Christian rite of charcoal burial in the late Anglo-Saxon period is well-studied (Holloway 2010; Thompson 2002). Ritual burning of the grave should not be interpreted in a Christian penitentiary context before the 7th century, but it is one of the complex commemorative strategies which we can glimpse at Forteviot. The significance of burning is discussed further below (see Chapter 5.5).

The preparation of a grave at Forteviot did not include the construction of long cists as found within the barrows at Redcastle or Rhynie; these were simple dug graves like the square and round barrows of Bankhead of Kinloch, Meigle (Cook 2013). The use of a log coffin in at least two instances adds to the growing list of Scottish sites using this type of grave architecture, including Thornybank (45), Whithorn (30+), Redcastle (1) and Boysack Mills (1), the latter two within square barrows (Maldonado 2019). It is worth noting that almost half of all the graves at Thornybank were in log coffins, including the 'special' four-post and two square-enclosed graves. Very little is known about the reasons for using a log coffin as comparatively few have been excavated, but it has been noted that they often appear at high-status sites, if not always in the most 'high-status' graves at those sites (Maldonado 2011, 103-5). Given the effort required to source, lift and deposit a log large enough to carry a human cadaver, this can certainly be seen as a highly performative, even ostentatious, choice of grave furnishing. A surviving log coffin from Landévennec, Brittany was dated to the late 7th century (Bardel and Perrenec 2004, 129-30), showing the practice was not limited to Britain.

The funerary ritual continued during the backfilling of the grave, as numerous graves produced evidence for objects in the upper fill. The central grave of RB1 contained burnt sticks, another rarity in a Scottish context but known from better-preserved sites in Anglo-Saxon England (Lucy 2000, 97). Struck flints were found in the fills of the central graves of SB1 and SB2, and a fine barbed and tanged arrowhead came from the adjacent UGr5. The fact that these are all from a single cluster of 7th- to 9th-century graves, and the lack of flints from other surrounding contexts, makes it highly unlikely these are accidental or residual finds. It speaks again to the eclectic use of the past, as these finds were likely to have come either from early medieval pitdigging activity in the Western Complex (see Chapter 5.2), or the disturbance of prehistoric features in this area (see Chapter 3). Parallels for these deposits, presumably thrown in by the mourners during the closure of the grave, can be found from a variety of Roman and later funerary contexts. The 4th-century inhumation cemetery of Lankhills, Winchester had frequent evidence for such 'surface offerings', especially within the squareenclosed graves there (Clarke 1978, 183-5). The early Anglo-Saxon cemetery of Snape, Suffolk included complex arrangements for mourners to add objects to the grave and backfill, including specially built 'ledges' and canopies around the grave pit (Filmer-Sankey and Pestell 2001). It serves to remind us that the funeral act was not limited to the preparation of the body and the grave (Williams 2006, 123-34).

The commemoration of the dead included postfuneral visitation. The best examples of this at Forteviot are the four-post settings around the graves of SB1 and SB2. The only parallel for this in Scotland is Grave 16 at Thornybank, Midlothian. The excavators compared the four-post grave to an example from Munich, Germany (Rees 2003, 337-9), but post-built structures around individual graves are known from across Britain, particularly in Kent (Hogarth 1973; O'Brien 1999, 139-41). Early examples of small four-post structures can be found around cremation and inhumation burials at Apple Down, Sussex (Down and Welch 1990) and Castledyke South, Barton-on-Humber, North Lincolnshire (Drinkall and Foreman 1998). These belong to a wider practice of marking graves with posts, ditches and kerbs in the early Anglo-Saxon period, as at Finglesham, Kent (Hawkes and Grainger 2006). However, these are not limited to the furnished burials of southern and eastern England, as ditched and post-built enclosures also occur amongst the unfurnished graves of western Britain. A particularly good parallel is the 7th-century burial at Stoneage Barton Farm, Bishop's Lydeard, Somerset (Webster and Brunning 2004), where a west-east grave had postholes at three corners and was enclosed by a rectangular ditch with entrance gap to the east. Interestingly, two of these postholes slightly cut into the grave cut, indicating that the presumed mortuary structure post-dated the grave itself. The grave in SB1 at Forteviot is also poorly aligned with its four-post setting, and it was posited above that these also postdate the grave.

The difficulty in interpreting these settings at Forteviot is that they coincide with barrows, whereas the above examples all relate to flat graves. The presence of post-packing, including quartz pebbles in the case of SB1, indicates these were structural, but we cannot tell how deep they would have been originally, and so it is difficult to know whether the structure was erected over the grave before or after the barrow was built. However, the eccentric layout of BGr1 with its four-post setting indicates a post-funeral context for this one at least. Rather than mortuary houses to allow access to the remains of the dead, the examples from Forteviot may have been highly visible 'shrines' to differentiate these barrows from others nearby, and may relate to ongoing commemorative activities, probably associated with the conjoining of SB2 to the east, rather than a single funerary act.

Other posthole-like features at the edges of SB1, SB3 and RB5 may have also helped mark the grave in some way, although none of these can certainly be associated with the barrows. The exception is RB5, which has a post just outside the east or foot end of the grave; ring-ditched and square-enclosed graves in Kent and Wales are also marked by single posts, pits or other deposits in this position (Murphy 1992; O'Brien 1999, 138), but these are often at the entrance to the monument, a feature which the annular enclosure at Forteviot lacks.

The continued visitation and commemoration of graves is attested by the practice of conjoining barrows. 'Pictish' barrows often occur in close groups and linear arrangements. Numerous examples of conjoined barrows are known from aerial photographs, as at Hills of Boyndie, Aberdeenshire; Sherrifton, near Scone, Perthshire; and Invergighty Cottage, Angus. However, only a few conjoined barrows sharing a ditch have been excavated thus far, including another pair from Bankhead of Kinloch, near Meigle, which are of similar size to SB1 and SB2. The spacing of graves adjacent to square barrows at both Garbeg, Highland and Redcastle, Angus suggests these may have been conjoined monuments, but in neither case is there good skeletal evidence to say more about the deceased and their relationships. A close parallel comes from Lundin Links, Fife, where two conjoined square cairns contained one female grave each, one aged 20 and one 30 (Greig et al 2001, 593-4); another conjoined 'cairn complex' from this site contained at least seven adult females and is not a family lair but 'commemorated the female genealogy of a particular social group' (Williams 2007, 157).

An intriguing discovery relates to the direction of successive graves: in both of the Forteviot pairs, the second barrow was placed to the east of the first. A parallel for this can be seen in the 'string-graves' of Yeavering, Northumberland, where the furnished grave AX was marked with a post at its foot end, and a subsequent 'string' of graves laid out head to foot conjoined it to the east (Hope-Taylor 1977, 67–78). Another 'string' of graves occurs at Parkburn, Lasswade, Midlothian, where the 'head' (west) grave of one string was also furnished and graves were subsequently added to the east (Henshall 1956, 258; 1965). These scattered examples indicate a wider cosmological significance to commemorating the relationships between individuals in which successive graves were placed to the east. Commenting on the conjoined cairns at Lundin Links, Fife, Williams (2007, 159) observes that 'this evidence suggests not that early medieval monuments commemorated an anonymous collective of ancestors (see Shanks and Tilley 1982) but that the dead were remembered in relation to each other.' Seeing conjoined barrows as monuments to relationships between people helps us understand the clustered and scattered nature of barrow burials at Forteviot.

This dispersed layout is in fact characteristic of many barrow sites discovered through aerial photography in Scotland (Maldonado 2011, 167; Winlow 2011, 343; Mitchell and Noble 2017). For instance, the square and round barrows of Hills of Boyndie, near Banff are scattered across a 300m-wide area with no clear prehistoric focus (NRHE nos: NJ66SE 101, NJ66SE 89, NJ66SE 68). In a rather different way, a large cluster of barrows at Invergighty Cottage, Angus (NO64NW 42) is faced by another cluster across the Lunan Water at Boysack (NO64NW 41); in this case, the two discrete clusters of barrows seem to be marking the medieval parish boundary on either side of the river (Pollock 1986, 380-1, illus 22). The majority of barrow sites are singles or pairs, and indeed this characterises the evidence at Forteviot. What we are seeing here is more of a burial landscape than a single cemetery, respecting the Western Complex of prehistoric monuments. A further advance has been identifying the extraordinary time-depth of this landscape, one which was never meant to be the final resting place for an entire community, but rather was punctuated by discrete burial events at numerous times across the 1st millennium AD. In order to contextualise this funerary topography fully, we must turn to the landscape context.

LATER REUSE OF THE PREHISTORIC MONUMENTS

with contributions from Alice Blackwell and Adrián Maldonado

One of the surprises of the excavations on the prehistoric monuments in the Western Complex was the discovery of extensive early medieval activity. A summary of the evidence is presented in Table 5.1. What is immediately clear is that every excavated prehistoric monument has evidence of early medieval activity in the form of pits, often filled with charcoal and burnt material. The date, character and material differed from pit to pit, but some interesting patterns emerge. The size of the pits varies from massive excavations 12m across to small posthole-like pits 0.4m in diameter. In addition to this specifically early medieval reuse, there are some interventions of indeterminate date in the historic period, and late- to post-medieval activity within the Eastern Complex which are considered here.

The prehistoric and early medieval monuments seem to have survived as upstanding earthworks into the post-medieval period. The fact that even large postholes were visible as late as the late 1st millennium AD is shown by their reuse on sites G and H (Brophy and Noble 2020). The ditches of the square barrows

Site	Feature	Size (m)	Depth (m)	14C Dates cal AD (2	Charcoal	Grain	Other finds	Context
В	small pit	1.5 × 0.7	0.1	660–780	ash, hazel	barley, oats		8039
C	small pit	0.4 × 0.2	0.3	400-550	hazel			7033
D Henge 1	massive pit	10.5 × 10.7	1.5	680-890	heather, willow, ash; oak, hazel		rubble, pottery	531
F	large pit	3.1 × 1.9	0.6	420-580	alder, hazel	barley, oats	burnt soil; burnt bone	5034
F	stone cist	1.0 × 0.4	0.7	390-540	oak, hazel	oats, barley	burnt human bone (2.7g)	5057
F	large pit	2.5 × 1.9	0.6	670-870	alder, hazel		cup-marked stone SF5520, SF5519; burnt human bone (33g)	5512
F	large pit	3.5 × 2.4	0.6	890–1020	oak, heather, birch, hazel	barley	burnt human bone (3.4g)	5514
G	pit	1.7 × 0.8	0.4	640–780	alder, hazel	barley, ?wheat	burnt soil	5
H Henge 2	massive pit	12.0 × 5.0	2.2		oak		rubble	6005
H Henge 2	pit and paving	0.8 × >0.3	0.3	20–140	hazel, willow, alder			6141, 6121
к	small pit	0.4 × 0.4	0.2	1310–1420	ash, oak	wheat	iron fittings SF300, 301, 311, 312, 313	830
Henge 3	massive pit	10.0 × 5.0	unex					
Henge 4	large pit	4 × 2	unex					

Table 5.1 Early medieval interventions in prehistoric monuments, with nature of burnt material and other finds

on Site J and square enclosure on Site K contained medieval pottery, showing they were still visible at least as late as the 13th or 14th century. The square enclosure was possibly reoccupied during the documented encampment of Edward Balliol's army from the Battle of Dupplin Moor in 1332 (see Chapter 3.1.4; Aitchison 2006, 39), and may have been used later when the area appears to have been a site for musket practice. This suggests that the area containing the monuments was kept as uncultivated grassland throughout the post-prehistoric period, since they would otherwise have disappeared in a forest environment by being infilled with leaf mould and destroyed by tree-root action. This in turn suggests this prime agricultural land was seen as special or sacred even during the period from the end of the Bronze Age,

when there was no visible activity within the prehistoric complex. The monuments were finally removed from the landscape as part of the agricultural improvements of the 18th century. The Bowling Green Field was turned over to ridge and furrow cultivation, which cut through and removed all trace of the Pictishperiod cemeteries. The casting down and burying of the standing stone on Site F, and the infilling of the henge ditches, probably took place as part of the same process. That an area with such prime agricultural potential was left uncultivated reflects both the longterm power of the monuments to affect later inhabitants, and their reluctance to interfere with ancestral sites; a remembrance perhaps of assembly practices associated with festivals such as Beltane and Samhain (Campbell et al 2019).

5.1 Massive pits within henges (Sites D and H)

Two massive pits, 531 and 6005, were dug in the centres of Henges 1 and 2 respectively (Figs 5.1 and 5.2); these contained large, randomly arranged rubble blocks towards their bases. The unexcavated Henges 3 and 4 almost certainly had similar features, visible as large anomalies in the geophysical survey and on aerial

photographs. There were few clues as to the purpose of these pits. Pit 531 in Henge 1 had a basal layer of charcoal including heather and willow, suggesting general hearth waste or a fire within the pit, and dates to the 7th to 8th century. In contrast, Pit 6005 in Henge 2 did not have much charcoal, but large



Figure 5.1 The large central pit in Henge 1



Figure 5.2 The massive central pit in Henge 2

boulders seem to have been thrown into the pit. Both pits appeared to have been backfilled rapidly as there were no silting layers visible. These enigmatic features would have been dug when the henge ditches, and the putative later mounds within them (Brophy and Noble 2012), were still visible in the landscape.

The question is whether these pits were attempts to bury something, or to dig something up. Given the position near the Water of May, it is unlikely they were dug as wells. Apart from the charcoal and rubble, there was no sign of anything being buried in them, so it is more likely that these were robber pits, perhaps targeting megalithic constructions such as the daggerburial cist in Henge 1 (SERF1, Chapter 5), which was just missed by the pit dug there. It is possible that this was just a form of stone robbing, trying to locate stones for buildings or monuments such as the sculptured crosses. However, although it is possible that any large stones found would be reused, it seems unlikely that this was the primary purpose. In fact, the Bronze Age cist on Site F was retained and reused in situ (see below). The large pit in Henge 2 had an irregular shape reminiscent of an opportunistic search. In this respect, it is intriguing that several of the early medieval graves on Site J have prehistoric flint artefacts in their backfill, a characteristic thus far unique to Forteviot in Scotland (see Chapter 4.6); could these pits have been a search for ancient artefacts? It is unlikely the massive pits were dug solely to find lithics, but their appearance in 7th- to 8th-century barrow graves attests to a strong 'antiquarian' impulse around this time (see Chapter 4.8).

5.2 Pits on Site F

The pits outside the henges add an unexpected dimension to these activities. Three pits on Site F, the ring-ditch, share a number of characteristics (Fig 5.3): they are large, oval and of similar depth; bear evidence for the deposition of large amounts of burnt material (not burning *in situ*); and contain a variety of materials including cremated human bone (Fig 5.4). These pits span the early medieval period, dated to the 5th/6th, 7th/8th, and 9th–11th centuries.

Pit 5512 had large fragments of carbonised wood up

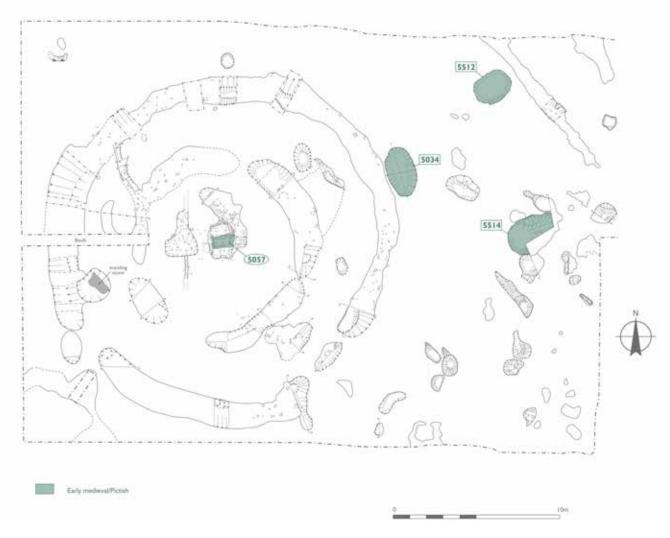


Figure 5.3 Plan of Site F showing pits of Pictish period

to 100mm long in the upper fill and a fairly large assemblage of cremated human bone throughout (Fig 5.5). Hazel charcoal gave a date of cal AD 670-890 (1350 ± 30 BP; SUERC-37762). Osteological analysis suggests that the bone was not residual, but 'the bone taphonomy of this assemblage would indicate a primary deposit of some sort; clearance from a pyre site and deposition with pyre debris into this feature would indeed equate with the characteristics present' (Leach 2012, 86). In light of the possibility of such a surprisingly late cremation deposit, radiocarbon dates were obtained for two fragments of cremated human bone from the same context, and these produced very similar dates of cal AD 665-770 and 690-880 (1287 ± 29 BP; SUERC-45558; 1233 ± 29 BP, SUERC-45559), supporting the case for this as a primary cremation deposit. These late 7th- to 9th-century dates are unusually late for human cremations.

Pit 5514 had charred wood of various species, along

with smaller quantities of barley. Dates from hazel and barley gave a date of cal AD 890–1020 (1145 \pm 30 BP, SUERC-37753; 1085 \pm 30 BP, SUERC-37757). Although the pit also contained cremated human bone, its abraded character suggested this bone material was residual, unlike that of Pit 5512 (Leach 2012, 88).

Pit 5034 did not contain human bone, but did have large quantities of charred barley and oats dated to cal AD 420–580 (1555 \pm 29 BP, SUERC-37888). Although identified initially as a corn-drying kiln because of the quantities of grain, it does not have any of the physical characteristics of corn-drying kilns of the early medieval period, which are usually of stone construction (Monk 1981; Monk and Kelleher 2005; Sharples 2005, 188). Indeed, the botanical report notes that the charred assemblage in this pit is very similar to that found within the central chamber of the triple cist discussed below.

Figure 5.4 Cremated human bone dated to 7th-9th century AD, from pyre pit on Site F



Figure 5.5 Pyre pit 5512, Site F



The base of the central chamber of the triple cist within the prehistoric ring-ditch (Fig 5.6) contained a charcoal-rich deposit 5057 of charred oats and barley, which gave a radiocarbon date of cal AD 390–540 (1595 \pm 35 BP, SUERC-37895). Here again there were a few scraps of cremated human bone, but these were abraded and residual. The southern chamber of the cist also produced scraps of residual human bone which were dated to the early Bronze Age (3600 \pm 29 BP, SUERC-45557).

The initial assumption on excavation was that this was a Bronze Age short cist, as it lay in the centre of the double-ditched enclosure. The early medieval dates cannot derive from intrusive material, as the basal layer fills the cist. Either the cist (or the central part of it) is of early medieval date, or an existing prehistoric cist was emptied and reused in the early medieval period, or a later cist was inserted into an earlier one. There are arguments in favour of each of these explanations. The building of a triple cist, or the insertion of a central chamber, in the early medieval period seems unlikely, as no other examples of short cists or triple cists are known from this period. However, while it was also clear that the north and south cists were incomplete and truncated, unlike the central cist, the rectangular cut for the cists did not exhibit signs of recutting. On the other hand, phosphate analysis appeared to support the excavator's opinion that there



Figure 5.6 Bronze Age triple cist, the central part filled with early medieval material

was a body stain of a crouched burial in the central cist in layer 5057, about 250mm above the base of the cist. A small flint knife (SF5073) of Bronze Age type from the northern cist was the only artefact found in any of the cists, and supports the idea that the construction of the cists occurred in the prehistoric period. One explanation for this conflicting evidence is that the original triple cist, with a Bronze Age inhumation, was robbed or exposed in the early medieval period, and the emptied cist filled with material in an episode associated with the creation of Pit 5034. This would accord well with the dates of the digging of large pits at the centre of the henges.

5.3 Smaller pits and features

The final heterogeneous group of later activity amongst the prehistoric monuments includes five smaller pits, widely scattered across the area on Sites B, C, G, H and K. All these pits contained substantial amounts of carbonised material, with charred grain in most instances. Pit 8039 on Site B was a shallow scoop; Pit 7033 on Site C was cut into the upper fill of one of the palisaded enclosure postholes of the Western Complex; Pit 005 on Site G was a shallow scoop within the entrance avenue to the Palisaded Enclosure; Pit 6141 was a small pit with stone capping at the edge of the Henge 2 ditch; and Pit 830 on Site K was a posthole-like feature within the large square enclosure. All of these features were isolated, and it is important to note that none would have been recognised as early medieval without the project's extensive radiocarbon dating programme.

Perhaps the most surprising of these was Pit 830. This feature was filled with carbonised fragments of ash wood along with iron fittings, giving the appearance of a burnt box, as well as charred wheat. A 14th/15th-century radiocarbon date of cal AD 1310–1420 (540 \pm 30 BP, SUERC-29208) from the wheat and ash wood was completely unexpected as it had initially been supposed to be a ritual deposit of Roman/ Iron Age date. This pit was one of a number identified within the large square enclosure (see Chapter 3.1.4). Another nearby pit (726), initially thought to be related to Pit 830, was dated from alder charcoal, but it returned a late Bronze Age date (2725 \pm 30 BP;

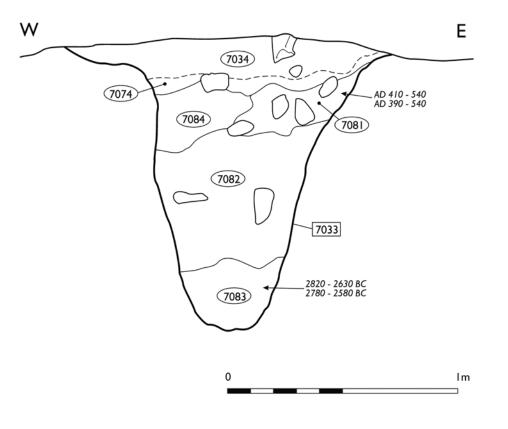


Figure 5.7 Section of posthole 7033 showing reuse of Neolithic posthole of the Palisaded Enclosure in the early medieval period

SUERC- 29206), so it appears that Pit 830 represented an isolated event. There is some evidence that part of the north ditch of the square enclosure was recut in the 13th/14th century, so the pit activity may be related to this. The one major event which affected Forteviot at this period was the encampment of Edward Balliol's army here before the Battle of Dupplin in August 1332. The army is recorded as having occupied Miller's Acre, the field to the north of the square enclosure (Meldrum 1926, 22), but this is not large enough to hold a force of even a few thousand men, so the old enclosure may have been reused at this period. Part of the northern ditch was indeed recut at this time (Chapter 3.1.2). However, it is difficult to see any reason why charred grain and other burnt material would be buried by an invading army, unless as a process of general rubbish disposal.

Some of the remaining pits were clearly located in reference to Neolithic features, which must have been visible as hollows in the landscape. These survivals serve as an important reminder of the extent of the damage that medieval and later ploughing has done to features which would previously have been visible for thousands of years. On Site C, one of the massive postholes of the large palisaded enclosure (7033) had an upper fill which unexpectedly produced 5th/6thcentury dates (1615 ± 30 BP; SUERC-37772, 1590 ± 30 BP; SUERC-37773) from both hazel and barley, despite the lower fill having the expected late Neolithic date (4120 ± 30 BP; SUERC-37777, 4165 ± 30 BP; SUERC-37778) (Fig 5.7).

On Site G, a shallow scoop 004 filled with burnt material was inserted into the entrance avenue of the palisaded enclosure; this gave a date of cal AD 640–780 (1315 \pm 40 BP; SUERC-21563) from hazel charcoal.

Finally, on Site B an irregular pit (see Fig 4.5) filled with burnt grain and lying just south of the Square Barrow 4 again produced 7th/8th-century dates from barley grains (1285 ± 30 BP; SUERC-37751, 1370 ± 30 BP; SUERC-37752).

One other group of features was a shallow pit with in situ burning, overlain by irregular paving and charcoal deposits dating to the 1st/2nd century AD (see Chapter 3.2). These deposits overlay part of the interior and ditch of Henge 2 (Site H) and were cut by the large central pit. As no grain or burnt clay was found in the charcoal layers, this was unlikely to be a corndrying kiln or bread oven. It is possible that it was another pyre pit, similar to those found on Site F, or it may represent some temporary occupation, perhaps during the construction of the square enclosure. In Henge 1 (Site D), a date in the early Iron Age was obtained from a context around the capstone of the dagger-burial cist (2355 ± 30 BP; SUERC-23242). As this was clearly not the date of the cist burial, it may represent some early attempt to rob the cist.

5.4 Artefacts

with Alice Blackwell

Only two certain early medieval artefacts are known from the Forteviot cropmark complexes: one from the SERF excavations (Bead 1), and one from fieldwalking by the Dunning Historical Society (Bead 2). Perhaps coincidentally, both came from the northern part of the Dronachy Field. A further bead (Bead 3) was discovered on Site H in the Henge 2 ditch along with other artefacts described below, but this is not certainly early medieval. The fragment of shale bangle found in the infill of the Henge 1 ditch (see Chapter 3.2.1) is also potentially of early medieval date.

Bead 1 Blue segmented bead. Two segments of drawn bead of dark blue translucent glass, horizontal striations. Both ends broken off but worn smooth, showing the bead was worn on a necklace. Length 11mm, diameter 6mm. SF5010, Site F, Unstratified.

Bead 1 was a blue segmented bead, unfortunately unstratified, from the topsoil on Site F (Fig 5.8). While segmented beads were produced during much of the 1st millennium AD, the method of manufacture varies. Bead 1 is of the drawn variety of segmented bead which are characteristic of the Norse period and are found in a variety of colours, most commonly blue or yellow. Blue beads are the commonest at Ribe, Denmark in 8th-century deposits (Sode 2003). Beads of two segments were the commonest in the wellknown necklace from the female Viking burial at Cnip, Lewis (Welander *et al* 1988, 155, 163), so Bead 1 is probably not broken after manufacture. The wear pattern at one of the ends supports this interpretation. These beads have a general 8th- to 10th-century date and are usually found in Norse contexts, particularly burials. As a Norse female burial seems a remote possibility at Forteviot, a more likely explanation for its presence is either as a casual loss by someone who acquired the bead by trade, or through marriage. The presence of this bead does, however, support the radiocarbon dating evidence of late activity within the Western Cropmark Complex.

Bead 2 Small annular glass bead with translucent mid-blue body (some bubbles visible) and irregular cable decoration. The cable is composed of the same translucent blue glass twisted with opaque white. It does not stand proud of the bead body. This decoration extends around two-thirds of the bead's circumference and is restricted to one hemisphere. Such cable decoration would usually be produced by the application of a glass rod composed of the two colours twisted together, which may or may not then be marvered flat to the bead's surface after application. However, this appears not to be the case here as further cabling is visible within the body of the bead itself; this cable also appears to be flat rather than circular in section. This indicates that the cabling is part of the bead body, suggesting the bead is made from reused glass which originally featured a marvered cable trail. Further irregular white trail remnants are visible around the perforation edge



Figure 5.8 Segmented bead (Bead 1; SF5010) from Site F, length 11mm (photo by Pablo Llopis)



Figure 5.9 Cable Bead 2, found in fieldwalking, diameter 9mm

nearest to the trail. These remnants suggest a spiral structure to the bead which would indicate manufacture by winding glass around a rod. Rust on the inside of the hole indicates an iron rod was used to wind the bead. Diameter 11.5mm, length 6.2mm, diameter of perforation 4.5-5mm. Stray find, Dronachy Field, *c* NO 0524 1708.

Bead 2, a fieldwalking find (Fig 5.9), came from the north part of the Dronachy Field, about 70m north of Sites F and G, but unfortunately cannot now be located. The following discussion is based on observations on the bead made in the National Museum of Scotland in 2008. Blue and white cable-decorated beads are known in early medieval Irish, Scottish and Viking contexts (Briggs et al 1985, 101-2; Mannion 2015). There is considerable variation in the extent and layout of cabling on these beads but examples with a single cable appear to be rare. One Scandinavian example is illustrated by Brugmann (2004, fig 131, left). More common are several lines of cabling, or cabling that completely covers the surface of the bead, often arranged to form a herringbone pattern. Guido regards these beads as originating in Ireland around the 7th century and continuing into the 9th century AD (Briggs et al 1985, 101-2). Irish 'string beads' also feature cabling but this is unmarvered and is used to form collars on tripartite beads (ibid; Mannion 2015, Type 5), unlike the example here. Anglo-Saxon 'annular twist' beads (Guido 1999, 76-7, 338-9) feature looping twisted cables (sometimes incorporating the bead body glass and one other opaque colour as on this one) that are marvered flat, but the beads are large and annular in shape, have far more

regular and complicated cabling, and no examples in blue are known. Blue and white twisted glass rods are known from Armagh, where they date to the 6th to 9th century, although they may be imports (Youngs 1989, 204). Several Anglo-Saxon blue glass pendants with reticella trails are also known (Evison 2008, 25).

The observation of additional cabling inside the body of the bead helps explain the irregularity and unusualness of the single trail on the Forteviot bead. It seems likely that the bead is made from reused glass that originally featured a marvered cable trail. Glass vessels decorated with twisted cables are known from north-western Europe during the 8th and 9th centuries (Evison 2000, 85) and several sherds have been identified from Scotland (Campbell 2007, 63), although they do not appear to occur in blue. Given this, and that blue is the most common cable bead colour, it seems more likely that the bead is formed from recycled glass, perhaps waste, originally relating to the manufacture of other blue cabled beads or glass bracelets. Beads of mixed glass are also known from Ireland (Mannion 2015, Class 14), and elsewhere in Scotland (Christie 2014). A 7th- to 9th-century date may be suggested.

A group of artefacts was found close together in the middle fills of the ditch of Henge 2. These were a small iron spearhead (Fig 5.10), a blue glass bead (Fig 5.11), and a short length of copper alloy wire. The spearhead (SF6080) is a simple leaf-shaped type of nondescript shape which is not readily datable. It was lying horizontally in the ditch fill, and though it is possible that it had belonged to a burial, there was no sign of a



Figure 5.10 Spearhead (SF6080) found in Henge 2 ditch, length 127mm (photo by Pablo Llopis)



Figure 5.11 Annular Bead 3 (SF6008), from Henge 2 ditch, diameter 11.5mm (photo by Pablo Llopis)

grave-cut, and the objects seem to have been placed in the bottom of the partially silted-up ditch, which would have been about one metre below ground level at this time. Furnished burials are very rare in Scotland at this period, and the mixture of 'male' and 'female' gendered objects would also be extremely unusual, although there is a bead and spear from an unpublished Iron Age warrior burial from Marshill, Alloa. If the items did not belong to a furnished burial, an alternative explanation is that these items were the result of ceremonial deposition in the ditch, as seen in other Scottish and Irish prehistoric sites such as Newgrange and Tara. It also recalls the two 6th/7thcentury spears deposited in the ditch of a Bronze Age barrow at Four Crosses, Llandysilio (Powys) (Barford et al 1986). The blue-green bead (SF6008) is probably a native product which seems to be made from recycled Roman glass; it therefore dates to the 1st/2nd century AD or later. As the artefacts were found in close proximity, they possibly represent a single episode of deposition, though none can be certainly dated. Given that there are radiocarbon dates of the 1st to 2nd century from late activity on the west side of Henge 2 (see Chapters 3.2 and 5.3), this is a possible context for the deposition of these artefacts.

Spearhead (Fig 5.10) Intact iron spearhead (one edge damaged recently) with a closed, slightly conical socket and an unusual, almost spatulate blade. The socket extends onto the blade in a pronounced, raised, flat mid-rib which runs to the tip, tapering and diffusing beyond about half the blade length. This gives a very strong junction between

socket and blade. The blade expands to its broadest point near the tip, at about 70% of its length, and then curves in to a slightly rounded tip. A single transverse rivet held the shaft in the socket; traces of wood in the corrosion imply at least part of the shaft was still attached when the head was deposited. L 127mm; blade L 68mm, W 25mm (originally c 29mm), T 7mm; socket L 59mm (internal L 54, D 13mm). SF6080, Site H, context 6011, upper fill of Henge 2 ditch.

Complete spearheads are rare finds in Scotland, so it is difficult to find good parallels for this example, which is very small. The simple leaf-shaped form is long-lived, having developed in the Iron Age, but the details of the blade shape cannot be matched in the extensive corpus of Germanic spears. It is closest to Swanton's Type C1 (Swanton 1973, 46-51, fig 9), common in Anglo-Saxon graves and derived from late Iron Age types such as those seen at Nydam. Some of these are as small as this example, but they do not have the spatulate form or the mid-rib and have cleft sockets. There are few Iron Age examples and these tend not to have a mid-rib (Stead 1991, 75, fig 57 type B1). Only a few early medieval spearheads are known from Scotland. There is an Anglo-Saxon type from Scalloway, Shetland (Campbell 1998, 159) but the only others are a number from Dunadd fort (Craw 1930, fig 5), Castle Hill, Dalry (Smith 1919, 129) and one from Buiston crannog (Crone 2000, fig 119, 233), so we know little of native types of spear. All of these examples are more elongated shapes, except perhaps one of the Dunadd examples, which is fragmentary but of similar size to the Forteviot one (Craw 1930, fig 5, 37). In Ireland there are two examples from Garryduff ringfort which share the simple leaf-shape (O'Kelly 1962, fig 5, nos 492, 136), and one of these is from a 7th-century context (Period I). It seems likely that the Forteviot spearhead is a locally made Iron Age or early medieval spear, and could well be of a similar date to Bead 3 found close by.

Bead 3 (Fig 5.11) Irregular annular bead, pierced. The lower surface is flat and ridged, the upper convex. Bluegreen glass, bubbly, good quality and condition. Size $10 \times$ 9mm, Thickness 3mm, hole diameter 2mm. SF6008, Site H, context 6019, upper fill of Henge 2 ditch.

Bent length of round wire of copper alloy. Length 25mm, diameter 2mm. Corroded. Possibly from a bracelet (cf Crummy 1983, fig 41, 1601). SF6010, Site H, context 6019, upper fill of Henge 2 ditch.

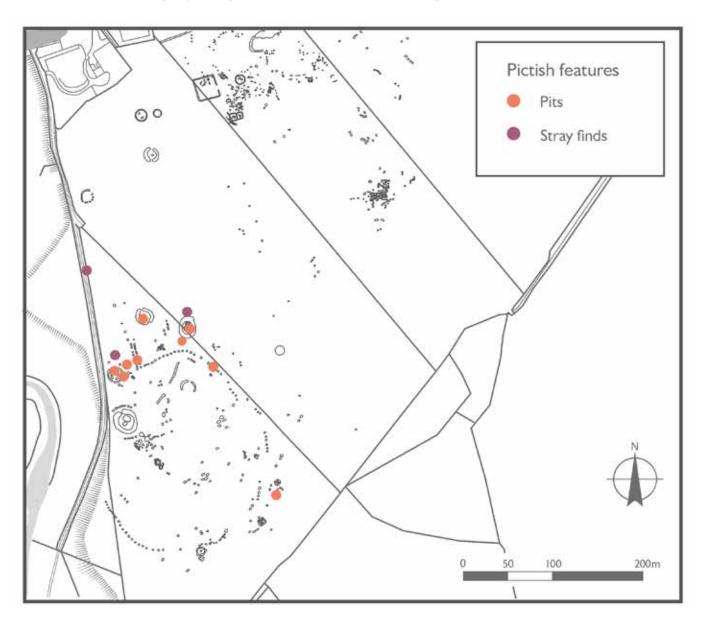
5.5 Discussion

with Adrián Maldonado

The frequency and extent of 1st millennium AD activity within the Western Complex is unprecedented in Scotland (Fig 5.12). The interventions into the henges, the ring-ditch and the palisaded enclosure are contemporary with the burial evidence summarised in the previous section and must be treated as equally important for our understanding of the long-term creation and recreation of Forteviot as a royal site from at least the late 8th century. These excavations give us a glimpse into the practices, both ostentatious and small-scale, out of which a notion of sacred topography was constructed using the reconfigured material remnants of past ceremonial activity.

The evidence consists of both conspicuous statements of engagement with existing monuments in the form of the massive pits into the centre of Henges 1 and 2 (and likely 3 and 4), as well as more intimate acknowledgment of earlier activity in the reuse of the hollows left by the postholes of the palisaded enclosure. The degree of survival of these features down to the early medieval period shows that this field was not subjected to intensive agricultural use but nor was it abandoned and overgrown; perhaps it was limited to pasture in the intervening years. It may speak to a long-standing alienation of land for ritual gatherings, as known from early Irish law tracts (Kelly 1997, 403).

Figure 5.12 Early medieval interventions and finds in the prehistoric monuments



This would have aided the appearance of the Western Complex as being frozen in time and afforded the monuments of Forteviot an air of immemorial antiquity.

The main evidence for the nature of these activities is in the deposition of burnt material, especially burnt grains, into pits possibly dug specifically to receive these deposits (Table 5.1). The mixed nature of these assemblages of charred organic material is not reminiscent of feasting as there is a notable absence of unburnt animal bone and other 'domestic' debris that has become characteristic of royal settlement sites in Ireland such as Knowth (McCormick and Murray 2007; Stout and Stout 2008). The lack of other settlement evidence such as hearths and postholes makes it still less likely that these are the remains of corndrying kilns, which have been found in direct association with burial at monastic sites like Whithorn (McComish and Petts 2008, section 6.3.3). Portmahomack, Ross (Carver 2008, 76-7) and various 'settlement cemeteries' in Ireland (Clarke 2010; Seaver 2010). Rather, these smaller pits within prehistoric monuments are more reminiscent of fire rituals, seemingly involving the 'sacrifice' of large amounts of cereals.

There are cross-cultural associations between burning grain and burial in the literature and archaeology of the early medieval period. O'Brien (1999, 55) pointed out the 7th-century prohibition of the Anglo-Saxon practice of burning grain in one's home to purify it after a death. Research on the evidence for funeral feasting in Anglo-Saxon England cites evidence for the deposition of burnt grain and other foodrelated offerings in funerary contexts (Lee 2007), and Effros highlights evidence for graveside fire rituals not related to feasting in Merovingian Gaul (2003, 165-7). In Ireland, new excavations on later prehistoric fertae, ditched graves generally dating from the Iron Age which were revered as ancestral monuments, has frequently found deposition of burnt bone and cereals. At Collierstown 1, Co Meath, near the major royal centre of Tara, a remarkable sequence starts with a 5th- or 6th-century female burial accompanied with a deposit of burnt charcoal and animal bone, then covered by a mound and enclosed with a penannular ditch. This mound then received further burials, and the ditch was periodically recut and new ditches added around it to contain more burials down to the 8th or 9th century. Over the years, the enclosure ditches were variously infilled or recut, and at each event they received new deposits of bone, exotic imported ceramics and burnt grain. That burial continued in this ancestral cemetery through to the 9th century attests to its importance; the finds of imported ceramics from Gaul and the eastern Mediterranean, along with its proximity to Tara, suggests a possible royal status (O'Hara 2010).

Very few parallels for this kind of activity have yet been found in Scotland. There is a large area of burning at the early long cist cemetery of Parkburn, Lasswade, although this site also had a number of querns which may attest to feasting (Henshall 1956). A recent excavation at Hawkhill, Angus, across Lunan Water from the barrow cemetery at Redcastle, found an unusual burial of three women in a pit along with the burnt remains of a hearth, all dated to the 8th/9th century (Rees 2009). The difference between these sites and those at Forteviot is that the burial evidence and the charcoal pits are distinctly separate, although contemporary. At all the above examples, feasting or other domestic activity can be posited, whereas at Forteviot there is little evidence for such activity in proximity to the graves.

The biggest surprise was the evidence for burnt human bone dating to the early medieval period from Site F. Many of the sites excavated turned-up flecks of burnt bone in residual contexts, most often interpreted as residual material from the disturbance of prehistoric activity (see Chapter 3). However, at least one pit, 5512, contained cremated human bone itself dated to the 7th to 9th century, contemporary with the rest of the burnt material in this and adjacent pits. What is most odd about this is how rare cremation was in early medieval Scotland. The two clearest examples are from Orkney: at Hermisgarth, Sanday, pyres containing burnt human bone were found adjacent to cairns and inhumations in long cists dated to the 5th to 7th century. Although none of the cremated bone could be dated, one long cist contained a mixture of burnt and unburnt bone (Downes and Morris 1998). The second example is the surprising discovery that Bronze Age steatite urns from near Stromness were reused for cremations in the Iron Age and early medieval periods, with one radiocarbon dated to the 5th/6th century (Sheridan et al 2005).

There are further examples from the mainland, but they are less certain. Charcoal from deposits containing burnt human bone has been dated to the early medieval period at one of the Bronze Age Clava Cairns at Balnauran, near Inverness (Bradley 2000, 57–8), and from a hut circle at Rhiconich, Sutherland (Driscoll 1998b, 148). The nearest example to Forteviot is in Fife, where the long cist cemetery of Hallow Hill, St Andrews was seemingly focused on a special twotiered grave containing burnt human and animal bone in the top tier and an inhumation furnished with numerous items, including curated Roman material, below. Unfortunately, this grave could not be dated, but the surrounding graves, including others furnished with Roman objects, were dated to the 5th to 7th centuries (Proudfoot 1997). The common threads throughout most of these examples are: first, they are all north of the Forth in what are traditionally called 'Pictish' areas of Scotland, and second, most of them are associated with prehistoric monuments or incorporate older materials.

The incorporation of specially deposited human remains in association with grain storage pits has been highlighted in Anglo-Saxon England, but burnt human bone is rarely used, despite the more widespread practice of cremation there (Hamerow 2006). The association with burnt grain is drawn out most clearly by the examples of corn-drying kilns on cemetery sites cited previously; at Raystown, Co Meath, the kilns and graves were strictly separate except in one instance where a north–south flexed inhumation was placed inside a kiln, both kiln and burial being dated to the 5th or 6th century (Seaver 2010). Evidence of early medieval cremation is increasingly recognised in Ireland, with six sites producing dates mostly falling in the 7th/8th centuries (Gleeson and McLaughlin in prep). The link between death and the regeneration of life is a well-documented cross-cultural phenomenon (Parker Pearson 2003). The mingling of cremated bone with burnt cereals makes the point even more explicitly.

Apart from the pit-digging, burning and cremation activities, and the deposition of items in ditches and postholes, the only archaeological indication of assembly associated with the Western Complex is a scatter of small finds. These include the material described above (5.4), as well as the Roman period material (Chapter 3.2). Most of these are items of personal adornment, which may represent the sort of casual losses frequently found in areas of large gatherings of people. If the types of fire rituals practised at Forteviot are related to ceremonial gatherings, we might posit a link with well-known 'Celtic' festivals such as Beltane (1 May) or Samhain (1 November), which marked the turning of the seasons and ensured the fertility of the community, and which also took place at ancestral burial grounds (Campbell et al 2019). Although such festivals were often carried out under royal control or sponsorship, it remains to be seen whether and to what extent these activities were linked with rituals of kingship at Forteviot, which brings us to the question of Cináed's palace.

The search for the Pictish palace

The historical evidence discussed in Chapter 2 makes it certain that there was an important royal centre at Forteviot from the mid-9th century, and that it survived as late as the 12th century. One of the major aims of the SERF project was the search for physical remains of the *palacium*, whatever form it might have taken. The early medieval evidence discussed above shows there was a highly specialised ritual and funerary landscape around Forteviot from at least the 5th/6th century, and perhaps earlier, which helps us understand the context of Cinead mac Alpín's palacium. The dating evidence presented in Chapter 4 indicates that this funerary activity carries on up to and possibly including the 9th century, but not after, when it was presumably confined to the churchyard. The question of where this *palacium* was remains to be answered, and new questions which arise from this study are whether there was an earlier power centre at Forteviot of which the *palacium* was the successor, or whether royal interest in the site disrupted the 'traditional' ritual and funerary practices in favour of a more European model of kingship where expenditure shifted toward stone-built palaces and monasteries.

The search for archaeological remains relating to any of these putative centres was a four-stage process. Initial examination and re-evaluation of the antiquarian accounts and historical maps helped to provide a background for understanding the various and complex traditions relating to Forteviot. Included in this was a full review of the aerial photographic evidence to identify any large post-built structures or earthwork enclosures. In 2006/7, a programme of geophysical survey around and within the village attempted to locate any surviving archaeological features. Following this, in 2007/8, a series of test pits of standard 1m² were excavated within the village, where access allowed, in order to assess the survival of archaeological deposits and the spread of medieval occupation. Finally, in 2011 a number of excavations were undertaken in and around the village: around the bowling green (Site L) and in the north end of the Bowling Green Field at the east end of the village (Site M); outside the parish church (Site R); in the extension to the parish graveyard (Site Q); in the paddock field of the manse (Site P); in the garden of the manse (Site N); and at the north-west end of the village (Sites S, T and V) around the site of Alcock's 1981 trenches (Site W). All of these procedures were constrained by access issues to some areas of the village and by later destruction of archaeological deposits. A balance had to be struck between what was possible and what was seen as archaeologically necessary.

6.1 Antiquarian accounts

The earliest antiquarian accounts of a possible palace, alternatively referred to as a royal castle, which had been washed away by the Water of May floodwaters are usefully summarised by Nick Aitchison (2006, 37–48). It has been generally assumed by Aitchison and others that any remains of Cináed's early medieval *palacium* were destroyed by these floods in the 18th century. These early accounts raise two main issues: the precise location of the 'Haly Hill'; and the nature of the buildings washed away in the post-medieval period. Haly (or Holy) Hill has been associated with ruins since at least the 1770s when a local schoolmaster reported that these should be attributed either

to a palace of the 11th-century king Malcolm III (Malcolm Canmore); a castle of David, a 14th-century Earl of Strathearn; or an abbey (Anon 1772, 332). By the late 18th century, this reliable local witness stated that any buildings had been 'razed to the foundation', and other accounts of buildings standing to a great height must be viewed with suspicion. There is no doubt that some very substantial erosion has taken place at Forteviot: church session records make it clear that the Water of May was actively eroding the scarp close to the church in the 18th century, leading to attempts to canalise it. Reliable eyewitness accounts speak of the west end of the village being very reduced (Meldrum 1926, 282–4). Aerial photographs and surface study show that the pre-canalisation channel of the May was cutting the scarp below the church and just north-west of it (see Figs 1.1 and 7.1).

Most early accounts place Haly Hill about 200 yards (180m) to the north-west of the parish church, close to Site X (see Fig 1.12), though one early map by Knox in 1850 places it to the south-west, approximately on the location of Henge 1 (see Fig 2.8). If this latter is not merely a mistake, it may mean that the place-name has migrated and may not originally have been associated with the ruins north-west of the church. Some further confusion has been caused by the name itself, which has been taken by Aitchison and others to be a 'mound'. This is a misunderstanding: study of the place-names of the River Earn floodplain and terraces area show that 'Hill' is used here in the sense of Scots '*brae*', a bank or steep slope, rather than an upstanding hill. In this case it clearly

refers to the scarp slope of the May, as at Henhill farm on the opposite bank of the May, and several other place-names in the area. Rather more crucial is the nature of the remains which were undoubtedly washed away in the 18th century. One account talks of 'an acre of ground covered with the ruins ... part of the walls, to the height of fifteen to twenty feet, was then standing' (Jamieson 1830, 208). Whatever this refers to, it seems highly unlikely to have been either an early medieval structure or a structure dating to the reign of Malcolm Canmore, as almost no stone buildings of this period survive in Scotland. A more likely explanation is that these were late-medieval/post-medieval buildings which were later assumed to have been a 'royal castle' on the basis of the historical sources. What all this means is that these old accounts give us no reliable information on the precise location of an early medieval royal palace site.

6.2 Remote sensing

Given the concentration of cropmarks in the area, aerial photographs would normally be the best method of finding evidence of archaeological settlements. No potential early medieval structures can be seen in the Western or Eastern complexes or in the Manse Field between them. However, there is one photograph taken in 1988 (RCAHMS SC1119069; A 56864-8) from the Forteviot area which shows a possible early medieval site. This shows a circular palisaded enclosure about 65m in diameter, with an internal post-built rectangular structure at least 12m wide (Fig 6.1). The postholes seem to be at intervals of about 1.5-2m. Unfortunately, the location of this site cannot be identified as the given grid reference (NO 0535 1735) is incorrect. Extensive research in conjunction with RCAHMS staff has failed to reveal the precise location of the photograph, which shows no distinctive landscape features which would help to identify its location within the Forteviot fields. However, it does seem likely that it lies in the Manse Field, which rarely shows cropmarks, or the southern end of the Bowling Green Field. While a palisaded enclosure like this could be of prehistoric date, the site shows striking similarities to the recently excavated palisaded Pictish site at Rhynie, Aberdeenshire, which has been securely dated to the 5th/6th century (Noble and Gondek 2011; Noble et al 2019). However, a word of caution must be sounded as the similar-looking site of Monboddo, Aberdeenshire (NO77NW 43) was

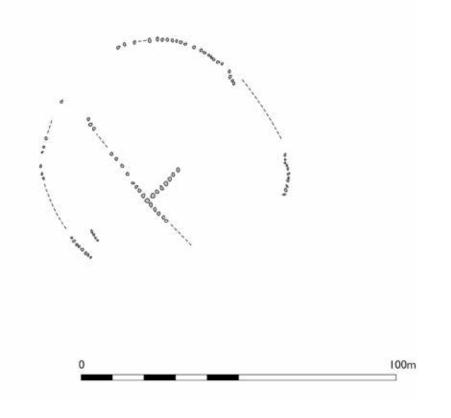
recently found to be post-medieval (G Noble, pers comm). It is possible that this structure might have been a very early medieval predecessor of Cináed's *palacium*, but at present it is unfortunately impossible to locate the site.

One very obvious feature seen on the Forteviot aerial photographs is a linear east-west ditch at the north end of the Bowling Green Field (see Fig 4.1). This ditch appears to form a northern boundary to the Eastern Complex of cropmarks. The ditch is visible running for 130m and at its eastern end it appears to be turning north. This northern spur coincides with the end of the village and the boundary of the Farm of Forteviot, so this may reflect an ancient land division. To the west, the linear feature may have continued north of Site L and across the manse gardens. A trial trench was located to investigate this linear feature in 2010 (Site M).

Within the village, cropmark evidence would not be visible, so a programme of geophysical survey was undertaken (see Fig 1.13) (Malcolm 2006; 2007). Although the results pointed to a number of potential archaeological features, these were difficult to interpret and none could be specifically associated with any early medieval structures. Notably, in the area immediately adjacent to the traditional site of Haly Hill, there appeared to be no archaeological features at all. The survey did provide pointers to possible structures in the manse grounds, which were used to position the excavation trenches of 2011 (Site N).



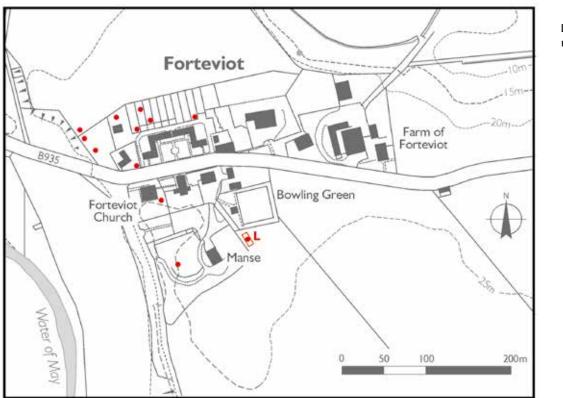
Figure 6.1 Aerial photograph and transcription of the unlocated palisaded enclosure, possibly of early medieval date (SC1119069; © Crown Copyright: HES)

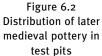


6.3 Test pitting

The programme of test-pitting (Campbell and Gondek 2008) was designed to assess the depth and nature of archaeological deposits around the village, and the extent of the medieval and later village buildings (see Fig 1.12). There was seemingly no visible

archaeological activity outside the area of the village as shown on 19th-century maps, but the extension of the village gardens northwards as part of the 1920s' reorganisation of the village had preserved the older ploughsoil intact under modern garden soil. This older





soil contained sparse medieval pottery whose distribution gives some indication of the extent of midden disposal from the medieval village (Fig 6.2). Outside the modern village boundaries this soil has been almost completely removed by modern deep ploughing, except in the triangle of ground south of the Bowling Green (Site L). Other areas within the village had been stripped of earlier deposits during terracing to build the village hall and further structures south of the road in the 1920s. It was clear from this work that any surviving early medieval deposits had to lie within the extent of the 19th-century village. No large-scale excavation was possible in the central part of the village, leading to the choice of Sites L–V for further investigation (Sites L–Q discussed below, Q–R in Chapter 7 and S–V in Chapter 2, above).

6.4 Excavations (Sites L, M, N, P, Q) (see Fig 1.12)

6.4.1 Site L

In 2008, a large trench was opened just south of the Bowling Green (Site L) but found no features. There was a build-up of almost 1m of soil here due to colluvial hillwash from the modern ploughing of the field, which slopes down northwards. This hillwash preserves the pre-Improvement silty subsoil, which is elsewhere almost entirely eroded away by modern plough action. This depth of soil masks any geophysical or cropmark signatures, and explains why the cropmark of the boundary ditch appears to stop at the western boundary of the Bowling Green Field. No archaeological features were found in this trench, suggesting that the boundary ditch ran to the north of the excavated area more or less under the boundary of the bowling green.

6.4.2 Site M

In 2010, a trial trench across the prominent linear cropmark running east of the village (Site M) showed that it was a substantial ditch and gave a date of cal AD 670–880 (1245 ± 30 BP; SUERC-37749) from a charcoal lens at the base of the upper fill (Fig 6.3). If this ditch did indeed form an enclosure around the village, this boundary would have the effect of cutting off the spur of land bounded by the Water of May and the Earn floodplain (Fig 6.4). The resulting rectilinear or D-shaped enclosure would match those of other important early medieval monastic sites such as Fortingall, Portmahomack and Iona (Campbell 2019b; Campbell and Maldonado 2020).

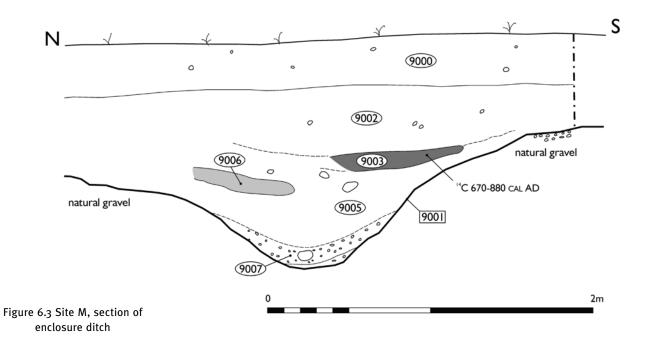
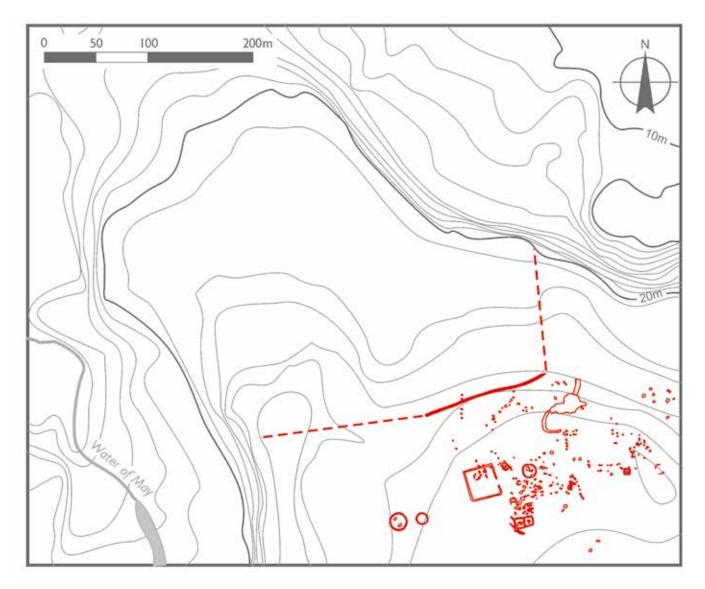


Figure 6.4 Proposed extent of the ditch separating church and palace complex from the cemetery sites



6.4.3 Site N

Small-scale geophysical survey in 2008 in the grounds of Greylag House, the former manse of the parish church, revealed several features including a linear east-west anomaly. During excavations in 2011, the linear anomaly proved to belong to a substantial stonebuilt revetment wall 203, with an associated area of rough paving 211 on its south side (Fig 6.5). The only significant archaeological feature was a pit 214 which was sealed by the wall. This pit was filled with mixed burnt debris, including large pieces of charred objects SF3203 and SF3204, cindery material, burnt soil, and an oval iron buckle SF3202. The carbonised organic material included oats and six-row barley, mixed wood types, hazelnut shells, burnt bone and burnt dung. The mixed nature of this material suggests dumping of domestic and other waste rather than any in situ activity, perhaps clearance of the site before the construction of the wall. An iron barrel padlock key SF3209 was sealed beneath another part of the wall. Although this type of key was used in the early medieval period, and is paralleled in a 7th-century context at Dunadd (Lane and Campbell 2000, illus 4.77, no 1422), the diagnostic end is broken and the general

type continues into the later medieval period (Donaghy 1997; Goodall 2011, 237–9, Type 4/5).

Radiocarbon dates were obtained from barley and willow charcoal within the pit (912 ± 29 BP; SUERC-43255, 1108 ± 29 BP; SUERC-43256) and from trampled willow and hazel charcoal on the surface of the paving slabs (922 ± 29 BP; SUERC-43260, 944 ± 28 BP; SUERC-43261), both showing use in the 11th/12th centuries, though the pit also contained some residual 9th/10th-century material. The wall certainly post-dates the pit and probably cuts the paving, suggesting it may belong to a later medieval phase of activity on the site. This would be consistent with the sparse medieval pottery (including Yorkshiretype ware) found in the soil built up behind the revetment and over the paving. This in turn suggests some sort of spatial reorganisation of the area, perhaps associated with the rebuilding of the medieval church in the 13th century. It is interesting that the line of the wall runs roughly parallel to, and towards, the 7th- to 9th-century boundary ditch seen in the Bowling Green Field (Site M). This wall may, therefore, be a more recent expression of an older property boundary. What is clear, however, is that this area lay outside the cemetery around the church in both the



Figure 6.5 Revetment wall 203, paving 211 and underlying pit 214, Site N

early medieval and later medieval periods, and was the site of domestic/agricultural activity. The nearest early medieval burials in the churchyard lie about 45m to the north, showing that the boundary of the early church burial ground lay somewhere between Sites N and Q. There are traces of a feature here in some aerial photographs, but this area could not be excavated. Test pitting 40m to the south of Site N, in the southern part of the manse garden, did not show any archaeological deposits.

6.4.4 Site P

A large trench was opened in the paddock of the manse in 2011. However, the depth of overburden (almost 1m) made it impossible to excavate more than a trial trench as machinery could not be used here. As with Site Q, the only feature encountered was cut into the natural gravel and consisted of a posthole 105 with a possible ramp on its east side. No dating material or finds came from the feature.

6.4.5 Site Q

The graves from this site in the churchyard extension have already been described (see Chapter 4.4), but there were other structural features which are probably of early medieval date. This trench also established that early medieval deposits do survive within the village, albeit heavily truncated. The enlargement of the parish graveyard to the south in the 1980s extended into the kitchen garden of the former manse. A deep build-up of garden soil full of modern pottery and glass lay directly on natural gravels, and it seems any early subsoils have been reworked by this cultivation. The early features in this trench only survived as cuts into the natural gravel.

The most significant of these features was a rectilinear slot 020, at least 2.4m long, with vertical sides

and a flat bottom. The slot had a band of iron panning in its base, flanked by concentrations of charcoal, indicating the presence of a squared sill-beam. The slot had a posthole 027 at its eastern end. This must have been part of a substantial wooden structure, though unfortunately the overall size and plan could not be recovered. The slot was on the same east-west alignment as the surrounding graves, and appeared to be respected by them, suggesting they were in use at the same time. Possibly associated with the slot was a line of postholes (017, 030, 033, 022) running roughly north-south, but at an angle to the slot. It is difficult to see these postholes as part of a coherent building with the sill-beam, and the northern one appeared to be cut by UGr18, indicating it might be part of an earlier structure. Although there is no direct dating for any of the features in this trench, the close association of the structural elements and the graves suggest they are all early medieval.

Examples of early medieval post and sill-beam construction are rare in Scotland, although recent work at Rhynie has found one example (Noble and Gondek 2011). A purely funerary structure, like those proposed for the square enclosures at Thornybank, Midlothian (Rees 2003, 335-6), seems unlikely. A timber hall is also ruled out by the proximity to the burials, as well as the lack of domestic finds and the relatively small postholes. A small timber chapel is a possibility, similar to those at Ardwall, Kirkcudbright (Thomas 1966; 1967), Church Island, Kerry (O'Kelly 1958) or Hallow Hill, St Andrews (Proudfoot 1997, illus 5). This might explain the proximity of the graves to the structure, with the grave-free area in the southeast being the interior. Alternatively, it might have been a subsidiary monastic or other building, later subsumed within an expanding early medieval cemetery. Whatever the nature of the structure, it is our first concrete evidence of the early medieval complex at Forteviot.

6.5 Discussion

Overall, the excavations in the village of Forteviot have been restricted due to the nature of the modern settlement and the project's lack of access to many areas, but they did provide certain evidence for early medieval activity. The identification of grave cuts, pits, postholes and structural beam slots in the churchyard extension and the adjacent manse garden shows that archaeological features survive, if in a truncated state, beneath the deep garden soils, and the opportunity to investigate these areas in future should not be missed. No clear evidence for a high-status building which could be deemed a *palacium* was encountered, but as discussed previously (see Chapter 4.4), the possibility that the graves in the churchyard extension (Site Q) are 9th century or later would mean that there is a strong possibility that the site of St Andrew's church lies on the site of an earlier monastic settlement or royal church. The structural features excavated in the churchyard extension (Site Q) indicate that there were early medieval structures in this area, although whether they were ecclesiastical or secular is unknown. The possibility is made more intriguing by the dating of the linear enclosure ditch in Site M to the 7th to 9th centuries. This, of course, only tells about the material with which the ditch was filled, but the size, morphology and location of the feature are reminiscent of a large monastic enclosure similar in form to other monastic sites such as Iona and Portmahomack (Campbell 2019a; Campbell and Maldonado 2020). The continuation of this boundary line into the manse garden (Site N) provides a good indication of the southern boundary of this enclosure,

and a target for future work would be to define the shape and extent of this enclosure to the north and east of the village. Whatever the exact nature of the *palacium*, we can now be more confident of its general features (see Chapter 10.5). Within a sub-rectangular ditch-defined enclosure, at its core was an early church, probably stone-built and incorporating the Forteviot arch, surrounded by a burial ground and timber buildings. A number of imposing stone crosses lay within the enclosure, perhaps at its boundaries marking the threshold of the royal sacred space (cf Airlie 2014), while outside lay a ritual landscape covered with the banks and ditches of prehistoric earthworks.

THE CHURCH ARCHAEOLOGY

with contributions from Meggen Gondek and Adrián Maldonado

This chapter discusses the fabric of the medieval church uncovered in the excavations around the present parish church (Site R). An early medieval hand-bell, which is still kept within the parish church, is described in detail for the first time. A series of early medieval burials and structures within the area of the present graveyard extension (Site Q) is also reported on here, with details of the burials discussed in Chapter 4.4, and the structures in Chapter 6.4.5. An early medieval linear boundary ditch which encloses the church and graveyard was excavated in 2010 (Site M) and is described in Chapter 6.4.2.

7.1 Excavations at Forteviot parish church

Meggen Gondek

One of the main aims of the SERF project was to identify possible locations for the historically noted Pictish-period 'palace' and to search for any remaining traces. A church would have almost certainly been part of such a palace complex, and the Forteviot arch strongly indicates that this would have been a stonebuilt structure. The arch was reputedly found around 1800, as John Jamieson writing in 1830 says 'About thirty years ago a stone was found near the site of the palace, having two lambs carved on it. This is now in the possession of Lord Ruthven' (Brown and Jamieson 1830, 207). This must refer to the arch as it was the only stone kept by Lord Ruthven at Freedland House (its location before its donation to the National Museum of Scotland), and it has one certain lamb as well as another beast which might be interpreted as a lamb carved on it. No other carved stones from Forteviot fit this description, so Jamieson's account would appear to be reliable. On the authority of Skene, lecturing in 1832, the arch was found 'in the bed of the May, immediately underneath Holy Hill' (Skene 1857, 278). There has been some confusion as to the date and location of the arch's discovery as the importance of Jamieson's account has previously been overlooked (eg Aitchison 2006, 144; Alcock 1982a, 217). Taking these accounts of the finding of the arch together, the likely findspot would have been about 100m north-west of the parish church (c NO 0505

1754). A former track led down the scarp slope from the church towards the old fording place of the Water of May. This area was, by the time of the 1900 Ordnance Survey map, the site of a bowling green, the predecessor of the present bowling green, and lay within an abandoned meander of the May. A likely explanation for the arch's presence here is that this was a convenient place to bury or use the stone, as it could easily have been dragged down the track to this site from the church, and deposited in the former channel of the May.

Test pitting around the village indicated that the later medieval settlement was located within the area of the present village (see Chapter 6.3), and the boundary ditch of an early medieval enclosure was identified and excavated at the southern boundary of the village (Site M, see Chapter 6.4), all suggesting that the area of the present village was the continuing focus of activity throughout the later 1st and 2nd millennium AD.

The present parish church of St Andrew's, which stands at the west end of the village, is an 18th-century building, dating from 1778 but extensively remodelled in 1867 (Meldrum 1926, 279; Aitchison 2006, 40). However, the church at Forteviot undoubtedly has early medieval origins as it has associated sculpture and houses an early medieval type of hand-bell. Before excavation it was unclear, due to continued rebuilding of the church, whether the site of the modern building reflected the location of an earlier church. SERF first examined the churchyard with topographic survey, visual inspection and elevation drawings of the current building. At the east end of the church, two short rubble projections and large ashlar masonry blocks identified at the south-east corner were thought to reflect an earlier phase.

These strands of evidence built the case for a small excavation within the churchyard itself to determine the potential for, and identify traces of, possibly earlier foundations of the church building (Site R). As St Andrew's is an active church and burial ground, the intervention was kept to a minimum to avoid disruption to daily activities and no modern articulated burials were excavated. This means that not all aspects of the church could be fully explored. However, evidence for an earlier *in situ* medieval church was confirmed. At the same time, a small unused area of the present graveyard extension was available for excavation, and was investigated, producing early medieval burials (Site Q).

7.1.1 Location and historical accounts

The churchyard lies on a fluvio-glacial gravel terrace at the western edge of the current Forteviot village and south-east from the area known as Haly Hill. To the west, the ground drops steeply to the alluvial floodplain of the Water of May. The present churchyard is raised in relation to the area outside the 19th-century churchyard wall (Fig 7.1). The May has eroded away the land to the west of the church considerably, but in

1852 it shifted some 200 yards (c 185m) westwards, away from the church (Meldrum 1926, 281), to near its present, canalised, course. In 1768-69, the old church itself was thought to be in imminent danger of being washed away (ibid, 281-2). Topographic survey shows the presence of a low mound immediately south of the church and along the inner, eastern wall of the churchyard (Fig 7.2). These features are probably the result of dumping of leftover debris from the dismantling of the medieval church, as molehills here produce much mortar and plaster. Medieval building stone which was not reused would have been carted away for other buildings; for example, there is documentary evidence for stone being taken to the site of Forteviot Mill, where some fragments of sculpture were found (see Chapter 8.2). There is a concentration of in situ 17th-century gravestones around the southeast corner of the church.

Documentary evidence for an early medieval church is sparse and based on the second version of the St Andrews Foundation Legend (written in the period 1140–53; Chapter 2.3). This relates an elaborate tale of how St Andrew's relics were brought to Forteviot in the 8th or 9th century. In the account, St Regulus received a tenth part of Forteviot by the Pictish king living there, possibly Onuist son of Uuirguist (AD 732–61) or his later namesake (AD 820–34), and erected a cross. The king himself was also said to have built a 'basilica' thanking St Andrew for help in battle. The Foundation Legend is a difficult historical document and may reflect more the political context of St Andrews in the early 12th century when it was written, rather than the early medieval period. However, the

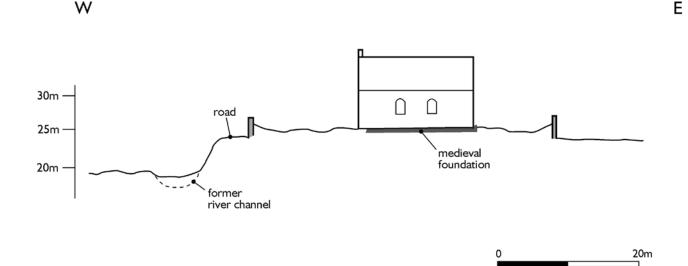


Figure 7.1 Section through churchyard showing the raised graveyard and scarp slope created by the Water of May

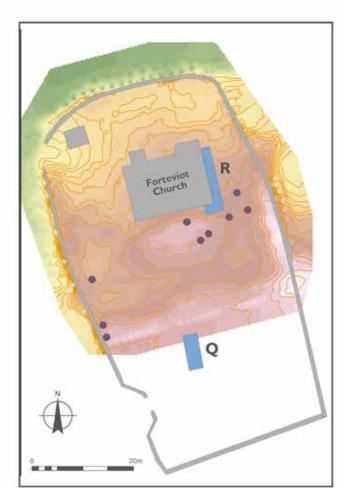
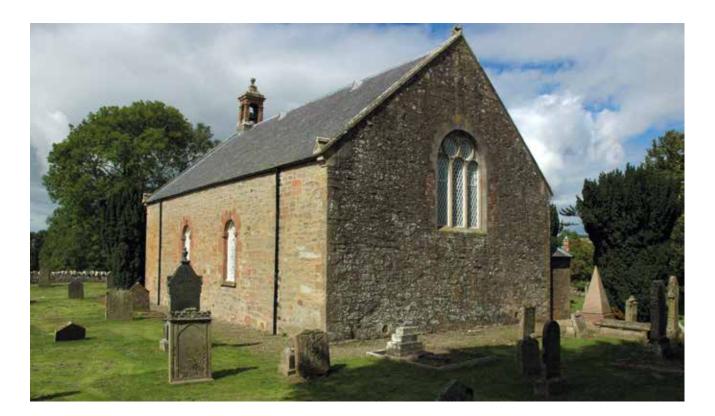


Figure 7.2 Topographic survey of the old part of the churchyard, with position of 16th/17th-century gravestones marked, 2011 excavation trenches (Sites R and Q) in blue. Note raised area just south of the church

documentary tradition of an 8th/9th-century royal church, alongside the sculptural evidence, suggests that some major ecclesiastic establishment existed at that time. That both a cross and a 'basilica' are noted in this 12th-century document suggests a carved stone cross was still standing at Forteviot at that time (presumably either Forteviot 2, or the ringed High Cross, Forteviot 3 – see Chapter 8) and hints that a substantial, perhaps stone-built, church was known at Forteviot from at least the mid-12th century, even if that church was not necessarily 8th/9th century in date.

Around 1164 Malcolm IV granted the church at Forteviot to Richard of Stirling, his chaplain. A series of later 12th-century royal charters show that after Richard's death the church was given to Cambuskenneth Abbey, an association that seems to have lasted until the early 14th century (Meldrum 1926, 33). The documentary history of the early church building itself is sparse. Meldrum notes that Forteviot may have been one of the churches to benefit from a boom of rebuilding and reconstruction in the mid-13th century, as in 1241 David, Bishop of St Andrews, consecrates a church at Forteviot (*ibid*, 32). By 1478 the church and parish of Forteviot were again closely associated

Figure 7.3 Forteviot parish church from south-east. Note the diagonal scar of Laird's Staircase on east wall, and protruding medieval stonework at base of south-east corner



with St Andrews. After the Reformation the church passed into the patronage of the Lords of Invermay and was known as the church of Invermay (see Chapter 2.4). Extensive repairs to the church building are noted in 1624 and in 1688 (Meldrum 1926, 279). In 1699, a report of the Presbytery of Perth noted that the church and churchyard were in poor condition and that there was no manse (ibid, 68). It appears there followed a series of 'patching' exercises of varying severity until 1778, when the old church was demolished and the present church was built (ibid, 74, 83). It is this 1778 building that makes up most of what currently stands at Forteviot (Fig 7.3). There is a suggestion by Meldrum that the interior of the church was dug out or the location of the building altered at this time so that the 'ministers' families do not require

to worship in church with the remains of previous ministers beneath their feet' (Meldrum 1926, 83). In 1830, modifications were made including the reorientation of the church interior, with doors and windows flanked by dressed red sandstone inset into the southern side of the church, and the insertion of an external stair and laird's loft at the east end (*ibid*, 279). In 1867, the then-minister James Anderson asked for renovations to the church building, claiming the church was damp and drafty. The current door and porch were added on the north side, replacing the previous entrances (consisting of two doors) in the south wall. The Invermay loft was removed during these later renovations.

Maps of Forteviot village show the evolution of the church and churchyard from the mid-19th century.

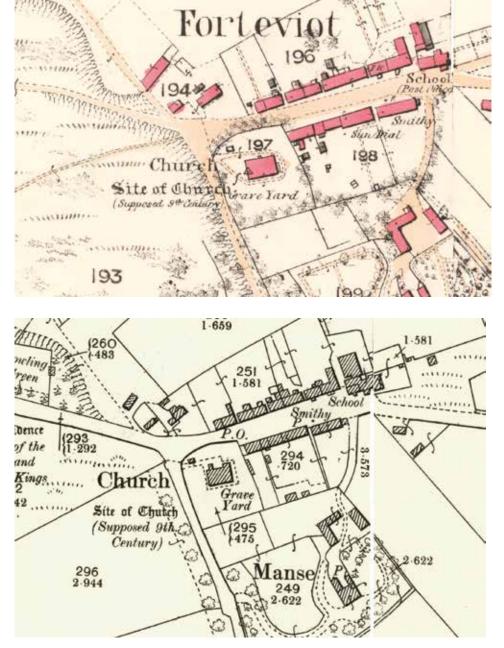


Figure 7.4 Detail of Forteviot village from Ordnance Survey 1st edition 25" map of Perthshire sheet CIX, 1859 showing stairs to laird's loft (Reproduced with permission of the National Library of Scotland)

Figure 7.5 Detail of Ordnance Survey 2nd edition 25" map of Perth and Clackmannan sheet CIX.NW, 1900, with annotation indicating site of church (Reproduced with permission of the National Library of Scotland) The 1st edition OS (surveyed 1859, published 1866; Fig 7.4) clearly shows the external stairs on the eastern end of the church and a path around, with a focus on the southern entrance to the building. By the time of the 1900 survey, the stairs have gone and porches have been added to the northern side of the church (Fig 7.5). The churchyard itself is presently sub-rectangular, with a curvilinear northern border. It is flanked on the west by the old trackway leading from the Dunning to Bridge of Earn road to the ford (later bridge) over the Earn north of Forteviot. The graveyard was extended into the southern enclosure after WWII (the area that was formerly the manse kitchen garden). The line of the demolished wall is visible on the topographic survey (Fig 7.2). The church sits just north of the highest point of the terrace in this area.

7.1.2 Excavations at the church (Site R)

A small area contained within the modern gravel pathway around the east end of the church (Site R) was excavated in 2011 (Fig 7.2). The church excavation revealed a series of structures and building phases relating to the church including the foundations of the post-medieval external stairs, the foundations of the 1778 church building, and at least two phases of medieval building. These phases include what is interpreted as a stone medieval foundation wall and part of a structure added onto the east end later in the medieval or post-medieval period. Finds of painted window glass and glazed floor tile suggest that the medieval church was a substantial and impressive structure.

Excavations were hampered by the narrow area available, which reduced in width downwards with the necessity to avoid articulated burials and the wide foundations. The stratigraphy and structural elements uncovered proved to be complex and difficult to disentangle in this narrow space, but the main sequence seems clear. The foundations of the east wall revealed in the excavation include five courses of masonry (Fig 7.6). Courses 562, 565 and 563 are interpreted as an in situ medieval foundation up to the chamfered plinth course. Below that, a boulder foundation 564 of different character is tentatively interpreted as foundations for either this or an earlier building. Above the in situ medieval fabric was 528, a course of finely dressed ashlar stonework, which was not in situ and appears to represent post-medieval recycling of earlier fabric in a repair to the medieval church. Some time after this, an eastern extension was built of clay-bonded rubble 502 and 529. The main fabric of

Table 7.1 Summary of phasing for Forteviot parish church

Phase	Date	Main features
Phase 1	Early church	?Boulder foundation wall 564
	11/12th century?	Early burials (11–12th century)
Phase 2	Medieval church	Mortared masonry foundation 570, 563
	13th century	Levelling course 565
		Chamfered plinth course 562 Burials (14th century)
Phase 3	Late/post-medieval modifications	
3A	16/17th century	Rebuild of east wall reusing medieval ashlar 528
3B	17/18th century	Eastern Extension walls 502, 529
		Knocking through of door 525 to extension
		Rebuild of north wall or north-east corner of church
3C	18th century	Blocking of door 525
		East extension goes out of use
Phase 4	Modern church	
4A	1778	Boulder foundation 523 at north end Complete reconstruction, main church fabric 568
4B	1830	Building of stairs to Invermay loft 504 Reorientation of church interior to south including insertion of doors and windows (use of red sandstone)
4C	1867	Blocking of 1830 doors and windows, new windows porches on north side built, external stair removed, reorientation of interior to east

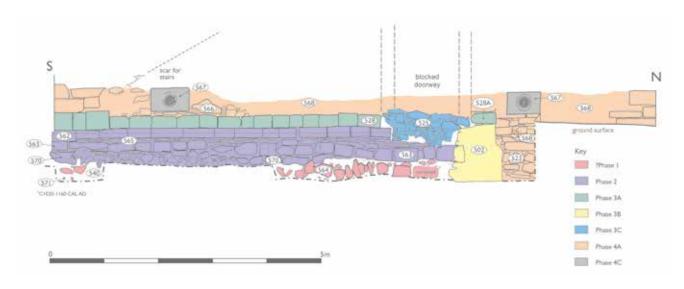


Figure 7.6 Phased section of east wall of church

the existing building is 568, a now heavily cemented coursed rubble sandstone fabric from the 1778 construction of the new church. Inserted into this in 1867 were two air vents 567. A faint diagonal scar on the east wall, relating to the external stair to the laird's loft, is visible in some lights. A summary of the phasing is given in Table 7.1.



Figure 7.7 Excavations in progress on Site R, Forteviot churchyard in 2011

Phase 1: Possible early church and burials

As a prime consideration was to avoid disturbing articulated burials, the area excavated down to deposits that pre-date the construction of the present church building was very small (Fig 7.7). Only a very narrow sondage was possible to investigate the earliest deposits associated with construction or pre-dating the structural building remains. Identifying the stratigraphy in this confined space was further hindered by the similarity of soil deposits and the lack of clearly visible cuts for burials.

A small sondage at the south-east corner of the building was excavated to what has been interpreted as the natural here (549), a sterile compact fine grey silt. The lowest deposit reached, which was not fully excavated, occurred in the centre of the trench (545), but did not appear above the natural in the south-east corner sondage. It was distinguished from 540 above it by the presence of flecks of white lime mortar and a lack of yellow sandy mortar. Context 545 was possibly cut by a foundation cut 548 for the boulder foundation 564, which was the earliest evidence for a stone-built eastern church wall. The relationship of these three features - 545, 548 and 564 - is unsure, but there is still the possibility that the lime mortar deposits in 545 signify the presence of an earlier structure built using this material.

The boulder foundation 564 of the medieval church building comprised rounded river stones, mostly sandstone, ranging from cobble size (0.1m) to boulders (0.4m) (Figs 7.6 and 7.8). These were not bonded and where it appeared there might be two courses towards the south-east corner of the building this was roughly

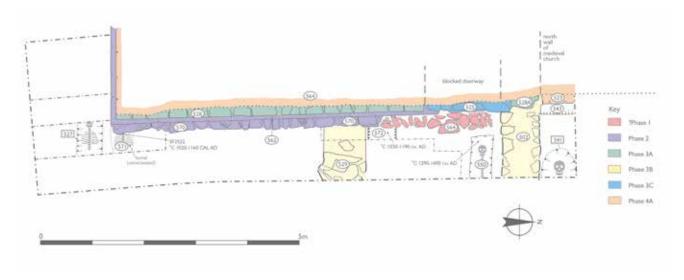


Figure 7.8 Plan of excavations on Site R, with boulder foundation of Phase 1 church showing divergence from overlying walling

coursed. Not all of 564 was revealed due to time constraints and the presence of burials. This foundation ran north to south, and at about 5m in from the south-east corner of the building, deviated slightly from the later building as the alignment veered slightly north-north-east (Fig 7.8). The foundation ended c 0.2m to the south of the later eastern extension wall 502, and may have been cut by its construction. At the south-east corner of the church, two small boulders were noted. Although in the same line as foundation 564, it is not certain they were the same as there was more soil surrounding them and they were not as tightly compacted. This suggests that 564 may represent the shorter foundations of a narrower earlier building which was about 5m wide. However, it is perhaps equally likely that it is merely the lowest course of foundation material of the Phase 2 church, inserted because this area was particularly soft ground. This boulder foundation was not present under the south wall of the church.

Context 540 was above 545 in some places in the centre of the trench, and present above the natural in the south-east sondage. This was a fairly extensive deposit, but it did not run the full length of the trench, petering out in much of the northern area. It was characterised by inclusions of yellow sandy mortar, similar to that used in the Phase 2 medieval building. There was no medieval pottery from 540, but three sherds (SF2517, SF2518 and SF2619) of medieval painted window glass were found at the interface between wall 529 and this context. Despite the presence of these sherds, which are probably intrusive, 540 is perhaps best interpreted as a deposit associated with the construction of the Phase 2 medieval building,

perhaps even the fill of the foundation cut.

Two articulated burials were found in these lower deposits. One of these (527) lay south of the church wall, and another (571) was unexcavated but lay just to the north, with the head running under the corner of the Phase 2 church. The vertebrae from 571 produced a radiocarbon date of early 11th to mid-12th century (cal AD 1020-1160 (971 ± 29 BP: SUERC-43232)), offering a terminus post quem for the building of the Phase 2 church. A third, possibly articulated, burial lay to the north. All these burials were attributed to the yellow mortary layer 540, as no grave cuts were apparent in the space available for excavation, and while no stratigraphic sequence could be determined for the burials, all were aligned with 571. This suggests that all the burials pre-date the deposit 540, if it is associated with the building of the Phase 2 yellowmortared church. The third burial 572 is less securely identified as an articulated burial since only one femur (from a juvenile) was recovered. Oriented east-west, it is unclear if the burial was cut by the building of the Phase 2 foundation or if it ran underneath it (this area was not fully excavated due to time constraints). This sample also produced an identical radiocarbon date in the 11th/12th century (cal AD 1030-1190 (918 ± 29 BP; SUERC-43230)). Whilst both of these burials provide a secure terminus post quem of the 11th century for the building of the Phase 2 church, neither can be securely associated stratigraphically with the possible Phase 1 building represented by the boulder foundation 564. However, the presence of 11th/12th-century burials in this area does suggest an earlier church structure existed at this location. The fact that one burial ran under the south wall of the medieval church would strengthen the suggestion that the putative early church was narrower than the later one. Other early burials were found in Site Q to the south, described in Chapter 4.4.

Phase 2: Medieval church

The in situ medieval foundations consisted of three courses (Fig 7.6) including a well-dressed chamfered plinth course. Set on top of the Phase 1 boulders (564), but not bonded to them, was a course of rough sandstone slabs (570) bonded with yellow sandy mortar, which formed an irregular plinth projecting 0.15-0.2m beyond the line of the east wall. This yellow sandy mortar was a hallmark of the medieval building material and could be found in 540, as discussed above, which may be a deposit associated the Phase 2 construction. Above this plinth, and directly under the line of the east wall, the next course (563) consisted of roughly squared blocks. At the south-east corner there was a neat ashlar block. At the north end of 563, the course appears to be truncated by the building of wall 502, but it may have terminated here (Fig 7.8). It is just possible that the large stone here indicates the north-east corner of the medieval church. The squared blocks of this course that are flush with those above it appear to be the lowest level of the building visible above ground in the medieval period. Above 563 was a visible levelling course of thin sandstone slabs of varying sizes (565). This level was

roughly coursed with no bonding material. The depth of the levelling course varied, from 0.08m to 0.20m as the builders attempted to create a level surface for the chamfered plinth course.

Above the levelling course was 562, a finely chamfered plinth course. These greyish yellow sandstone blocks were very regular, with the plinth projecting a consistent 0.07m. The plinth stones varied in length from 0.29-0.60m. No bonding material was apparent, probably due to weathering. The northern end of these medieval courses was disturbed by later activity when a late door was cut into the east end of the church (Figs 7.6 and 7.9). A series of small shovel test pits along the south wall of the church showed that the plinth course (and thus the medieval building) runs for 15.6m, 1m short of the length of the 1778 building. The chamfered plinth on the south wall appears to rest on large, squared sandstone blocks similar to 563 in the east wall, but with no levelling course 565 or boulder foundation 564 apparent, though the base of the wall was not exposed. The church was apparently a single chamber. In the middle of the south wall, one side of an upright chamfered block was exposed lying above the chamfered plinth, but there was no sign of a threshold, so this may be another instance of late reuse, like the voussoir seen in the east wall, rather than the jamb of a south doorway. At some point a burial (550) had been interred just outside the east end of the church; this was not fully excavated, but a sample for dating



Figure 7.9 The walling around the blocked doorway



Figure 7.10 Painted window glass (SF2517), size 28 by 35mm (photo by Pablo Llopis)

purposes returned a radiocarbon date of cal AD 1290–1400 (629 ± 29 BP; SUERC-43231).

The sherds of window glass associated with the medieval building are small fragments (Fig 7.10). The glass fragments are a weathered blackish colour with applied red paint. Two patterns are identifiable: two fragments are from border panels showing a zig-zag pattern with interspersed dots; the other is a more complicated design, too fragmented to reconstruct completely. It shows grisaille decoration with bits of delicate leaf or curling patterns with fine hatching. Both designs find parallels in glass fragments from other medieval churches within the diocese of St Andrews, including St Andrews Cathedral (the zig-zag border) and Cambuskenneth Abbey (the grisaille); these have been dated to the 13th or early 14th century (Graves 1994, 127–8).

The window glass fragments came from a range of deposits post-dating the destruction of the medieval Phase 2 building and related to later building events. Although fragments SF2517, SF2518, and SF2519 were assigned to 540, it is thought these are intrusive and come from the interface with the foundation and building events for wall 529 in Phase 3B. Another fragment, SF2512, was found at the base of this wall and it is likely these were incorporated into a foundation cut 535 and fill 536, or the material of the wall itself. The foundation cut and fill for this wall were very difficult to distinguish from surrounding deposits.

Three other fragments (SF2504, SF2505 and SF2526) came from a late deposit (507) associated with the Phase 4 construction of the 'Laird's Stairs'. Two more fragments came from a layer of reddish sandy silt 516=517, which spread throughout most of the area available for excavation in the trench. This level appears to be one associated with a destruction event of the Phase 2 or 3A medieval building; it also contained fragments of medieval pottery including sherds of White Gritty Ware and Scottish Medieval Redware, suggesting a likely date of the 13th or 14th century.

Fragments of green- and yellow-glazed floor tiles were found in a range of rubble deposits that postdated the medieval church, but any decoration on the surface was worn away. Parallels suggest that these are large imported tiles from the Low Countries dating from the mid-14th to the 16th century (di Folco 1986; di Folco and Hall 2012, 75). Such tiles in Scotland are otherwise almost always confined to the richer monastic houses, castles, urban houses and palaces. The only other known parish church with tiles, St Fillan's, Forgan (Fife), also had close ties with St Andrews. These tiles and the stained glass show that the medieval church was an unusually richly appointed parish church.

Phase 3: Late/Post-medieval church

Phase 3 is divided into three major events. Phase 3A saw a significant rebuild of at least the east end of the medieval church. It appears that the east end was stripped down to the layer of the chamfered plinth course and then rebuilt using some of the ashlar from the previous building. The 14th-century burial mentioned above gives a terminus post quem for Phase 3B, which sealed the burial deposits. Phase 3B involved another significant rebuild of probably the north wall, or at least the north-east corner of the church. A small extension was built on to the north-east side of the church, with a door knocked through the east wall to allow access. The final event, Phase 3C, blocks off this door into the extension. There is a series of destruction deposits associated with the Phase 3B extension. None of these building events can be closely dated, but they may reflect some of the significant rebuilding events noted in documentary sources throughout the 17th century.

In Phase 3A it is clear that the medieval building was largely demolished, at least on its eastern, southern, and possibly northern sides, and that the medieval foundations were partially reused. The only stone



Figure 7.11 Reused medieval ashlar blocks of Phase 3A, including a voussoir



course to survive from this Phase 3A building is 528. Running 5m from the south-east corner of the building and including the first quoin block at that corner, this course consists of finely dressed yellow-grey sandstone ashlar blocks. Many of the stones show diagonal dressing marks with some zig-zag-type dressing as well (Fig 7.11). The largest stones are found at the southeast corner, with the quoin stones up to 0.4m long and 0.34m high. Most of the stones are a consistent 0.22m high but vary in length and are clearly repositioned as they do not form a level course. This course projects 0.10-0.14m from the line of the 1778 wall above, and lies flush with the medieval courses below. The quality of the stone matches that of the finely cut plinth course, which suggests it is from the medieval church. The presence of a keystone or voussoir within the course shows that this stone at least is not in its original medieval location. There is no evidence of this course of reused medieval ashlar on any other face of the church, although this may simply be a result of removal by the 1778 works. A single stone (528a) which survives to the north of the later blocked

Figure 7.12 Walls of the Phase 3B eastern extension, from the north



Figure 7.13 Plaster facing of eastern extension of Phase 3B

doorway (Fig 7.8), although not of ashlar, occupies the same line and is securely mortared. This is probably the north-east corner of the medieval church, giving it an external width of 8m.

Phase 3B comprises the next significant alteration to the building and involved knocking a doorway through the medieval plinth course and overlying courses, and the construction of a small extension onto the north-east end of the eastern church wall. The surviving remains of this extension consist of two claybonded walls, 502 and 529, aligned east-west (Fig 7.12). The interior of the extension measured 3.8m externally from north to south, but the eastern extent is unknown. The construction of the extension cut through a layer rich with the yellow sandy mortar 538 that appeared to be indicative of the original medieval building. The fill of the foundation trench for wall 502 included at least two broken disarticulated human skulls jammed between the cut and the stones of wall 502. This wall can also be seen to be butted against and keyed into the foundation course 563 of the Phase 2 church, and it disturbed the lower boulder foundation 564 (Fig 7.6). After removing a section of the wall, the clay-bonded material could be seen running west under the later Phase 4A wall, suggesting that the north wall of the church, or at least the north-east corner, may also have been rebuilt at this time in claybonded fashion.

The trench revealed 1.5m of the northern wall of the extension 502; it was 0.70-0.75m wide (the lower courses of the wall splayed slightly with projecting slabs) and 0.95m in height. The wall was roughly faced, with a clay and rubble core. The faces were coursed rubble sandstone slabs and cut stones with some rounded cobbles on the north face. The largest slab on the south face was $0.50m \times 0.25m$ thick, but most were 0.15-0.25m in length. This large slab represents the level of the old floor surface at the doorway into the main church building. Above this level, traces of lime mortar or plaster adhered to the wall surface showing that the interior of the extension was plastered (Fig 7.13).

The southern wall of the extension 529 was heavily truncated by the foundation trench 533 for the later laird's stairs (Fig 7.14) and by another cut 569, possibly a grave cut. Only a few disturbed stones and large slabs remained of wall 529, alongside traces of compact yellow clay bonding material. The wall measured 1.00m \times 0.95m wide, suggesting the material had spread during its destruction; in section it survived to a height of 0.49m.



Figure 7.14 Foundations of Phase 4B Laird's Stairs

Underneath the large slabs of wall 529 was found a sherd of medieval window glass SF2512 and a sherd of Scottish Medieval Redware SF2513, which typically dates to the 13th to 15th centuries. Other pieces of window glass were found in 540, a deposit that lay under the wall, including painted pieces. Also sealed by the extension was a coffin burial 550, radiocarbondated to the 13th/14th century (cal AD 1290-1400 (629 \pm 29 BP; SUERC-43231). This suggests that the east extension is a late medieval, or more likely early post-medieval, feature of the church. Contained within the extension, and cut both by the later laird's stairs 533 and the foundation cut 530 for the 1778 building, was a series of deposits very similar in composition to the wall material itself. Above 538 was a more mortary layer 534, which contained a sherd of White Gritty Ware. Above this was 524 and then 511, both very similar clayey rubble deposits, which contained five fragments of very abraded green- and yellow-glazed floor tile, presumably derived from the medieval church. These deposits all seemed to be wall material slumped or pushed into the extension to level-up the ground surface.

The extension is a perplexing aspect of the church building as it is not symmetrically placed. It is unusual to find non-symmetrical additions to the east end of churches, particularly in the medieval period. Fawcett (2002, 6-88) notes that porches are most common on northern or southern walls and there are no parallels for this eastern extension in other known Scottish medieval churches. However, if the extension is post-Reformation, which seems most likely given the reuse of the medieval tiles, then a desacralisation of the east end offers a more likely context. It is even possible that the extension represents accommodation for the minister, as the 17th-century accounts show there was no manse associated with the parish church at this time. The clay-bonded walls suggest an establishment not able to rebuild or build completely in dressed stone and in financial difficulties (Meldrum 1926, 130). The doorway cut into the east end to access the extension is narrow; inside the jambs, now removed, the door would have been 1.2m wide. It is a tantalising coincidence that this measurement fits the inner span of the Forteviot arch; although we do not know the full biography of the arch, it may have been reused at some point as a useful doorhead lintel before its eventual loss or burial when the doorway was blocked.

In Phase 3C, access from the interior to the extension was no longer needed and the doorway is blocked by 525, which is an uncoursed mix of field and cut stones, mostly greyish sandstone (see Figs 7.6 and 7.9). The door jambs were removed prior to blocking. There does not appear to be any bonding material apart from clay, but there is mortar adhering to some of the stones on the top surface, which may have dropped down from other building events. The blocking is 2.2m wide, but changes in nature at 1.2m where it approaches and then cuts into wall 502. It is mostly likely the entire extension may have been removed at this stage.

Phase 4: Early Modern church

Phase 4 includes the major rebuild in 1778 which created most of the current church building at Forteviot, and subsequent alterations. The archaeological remains for these phases were substantial, but also very difficult to pick apart given the limited size of the trench and the nature of complicated building and rebuilding programmes often found at church sites. The key elements include the substantial 1778 rebuild of the entire church, reusing some earlier foundations (Phase 4A); the 1830 remodelling of the church on the south side, with the addition of external stairs (the 'Laird's Stairs') (Phase 4B); and finally the 1867 remodelling of the 1830 renovations, removal of the laird's stairs and the construction of porches on the north side of the building (Phase 4C). The most substantial archaeological remains, apart from the standing building, are those relating to the construction of the laird's stairs.

Most of the activity relating to the construction of the 1778 building (Phase 4A) was obscured by the foundations of the laird's stairs and only survived to the north of them. A foundation cut 520 was identified, which had an undulating shape, reflecting shovel cuts perhaps. The east end largely reused the existing medieval foundations. North of the clay-bonded extension, the evidence for the 1778 build was much clearer as this was virgin ground lying to the north of the footprint of the medieval building. Here, the lowest deposit reached was 543, a brown silty clay with no evidence of building material. This was cut by an east-west burial 541 which was recorded but left unexcavated. The burial appeared to be sealed by deposits above including: 539, a dark brown silty clay with no mortar; 521, which had several thin bands of mortar and a sherd of White Gritty Ware; 510, which also contained White Gritty Ware and mortar flecks. All

of these were cut by the foundation trench 520. The building here had an un-bonded rubble foundation 523, one course deep (Fig 7.6). The fabric of the 1778 building was made up of regular coursed greyish sandstone blocks, which was largely obscured by cement repointing.

The Phase 4B 'Laird's Stairs' – external stairs which led to the Invermay loft on the east end of the church – were removed in the 1867 renovations. On stratigraphic grounds it is clear that they were built sometime after the 1778 rebuilding, rather than with it. The stairs survived as substantial stone foundations within a trench. The stone foundations were 5.9m north to south and 1.1m east to west, and abutted the church building. A slight diagonal scar can be seen in the fabric of the church building where they ran up to a door (see Fig 7.3), which is now replaced by a much larger tripartite window.

The foundations appear to have been made within a rectangular cut 533 lined with large, non-bonded boulders to provide a foundation, which was then overlain by large flagstones. The rubble foundation was one course deep at the southern end and two courses deep at the northern, presumably to bear the weight of the top of the stairs. Included in this rubble was



Figure 7.15 Reused medieval stonework found in rubble foundations 513 for Laird's Stairs

SF2503, a piece of fine medieval architectural stonework showing a broad chamfer for a repetitive moulding, probably from a door (Fig 7.15). Above the rubble foundation, tightly overlapping flagstones 504, many with mortar adhering, formed a foundation about 0.8m wide. Within the area defined by the foundations was a series of deposits of rubble and building debris, 507, 506, 512, probably from the construction and destruction of the stairs and the creation of the east window in 1867.

Deposits around the stairs seem to link to levelling or dumping of deposits associated with the 1778 rebuild of the church, when, as Meldrum (1926, 83) notes, a large part of the church was excavated. Primarily this was 509, which was an extensive and deep deposit of reddish silty sand. Finds from here were very mixed and included post-medieval metal and wood, and also some medieval material, including a tile fragment and a sherd of medieval redware. Between the foundation cut 533 and the edge of the trench (a width of about 0.15m) was 551, which was also a mixed deposit containing post-medieval pottery and two tile fragments. It was difficult to tell if this was a fill of 533, or if the finds came largely from grave cuts, which could only be distinguished in section once the stairs were removed. Disarticulated human bone was very frequent in 509, particularly around the south-east corner of the church. Remains included complete long bones and large fragments and complete skulls of up to five adults and two children. It is likely that 509 represents the dump of material excavated out of the main church during the post-medieval building events. The disarticulated human remains were reburied in a ceremony held at the end of the 2011 excavation. A purpose-built stone cist was crafted specifically for this purpose and the bones were reburied in the area where they had come from.

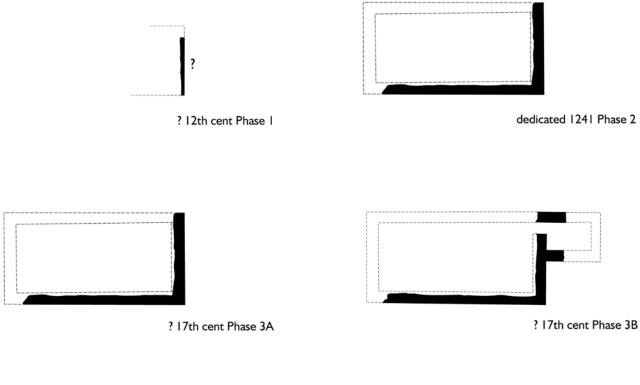
The other changes made during Phase 4B of 1830 and 4C of 1867 are generally not visible on the east end of the church apart from the insertion of the tripartite east window in 1867. The 1830 modifications largely affected the southern wall of the church building and the interior. Doors and windows were inserted and the focus inside the church changed to the south side. The current door in the northern porch was added in the 1867 renovations, as was a second northern porch for a vestry. The only evidence of later renovations visible on the east end of the church is the two air vents inserted into the fabric to help control damp.

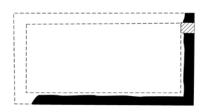
7.1.3 Discussion

The early medieval Forteviot arch presumably came from an early stone church, with the arch forming the top of an interior doorway or chancel arch. As the arch can be dated stylistically to the 8th or 9th century, this implies a very early, and for Scotland rare, stonebuilt church at Forteviot. However, none of the evidence from the excavation can be tied conclusively to this putative early medieval building. The excavation of the church did, however, clearly identify that the medieval church of Forteviot was built in the same location as the current building. Like most parish churches, St Andrew's has seen a good deal of rebuilding and renovations, many of which are difficult to date. However, the small-scale excavation targeting the church not only confirmed a medieval precedent, but also helped to characterise the medieval building and the overall development of the church.

The church's footprint has not been static (Fig 7.16). The putative Phase 1 building is on a slightly different alignment, which is 7-8° off from later eastern walls. Only c 5m of this boulder foundation 564 was exposed in the trench (see Figs 7.6 and 7.8). The north corner was at the point where later wall 502 joined the building, as no activity earlier than the 1778 construction was detected to the north of the extension. A maximum estimate for the length of the Phase 1 wall is 6.5m running up to the south corner of the present church. However, the material here has a different character and does not appear to part of the same boulder foundation wall 564, so it could measure only 5.5m. If this boulder foundation represents an early medieval church, the external width would be similar to other early medieval churches (Ó Carragáin 2010a). The east end of the nave of the 8th-century church at Escomb, Co Durham was about 6m wide externally (and only 4.42m internally). St Peter's church (Phase 1, AD 674-75) at Wearmouth had a nave 6.86m wide (external measurement). Anglo-Saxon stone churches tend to have east to west nave walls about three times the length of the north to south walls. At that ratio, the length of the Phase 1 building would be c 16.5 m, which is approximately the length of the medieval building. The only comparable known early medieval stone structures of these dimensions are the large naves in churches at Wearmouth (6.86m × 19.35-19.51m) and Jarrow (5.64m × 19.5m) (Alcock 2003, 277; Cramp 2005).

The Phase 1 wall is difficult to date and the building is difficult to characterise given the limited

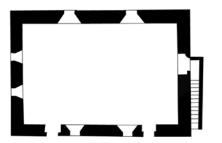




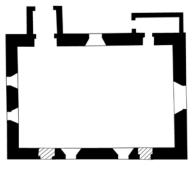
? 18th cent Phase 3C



1778 Phase 4A

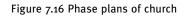


1830 Phase 4B



1867 Phase 4C





amount excavated. Boulder foundations were discovered at Govan Old Parish Church, Glasgow, where the substantial non-mortared foundation boulders had small stones tightly packed on top of them to create an even surface for what is interpreted as a timber structure. The excavators suggested a pre-12th-century date for the building (Driscoll and Cullen 1994). At Iona, the early medieval St Columba's Shrine had a foundation of rounded boulders (Redknap 1977, fig 6, pl 15c). This building has been claimed to be the earliest stone church in Scotland, possibly 8th century in date (Ó Carragáin 2010a, 78) and this early date has been corroborated by new radiocarbon dates (Campbell and Maldonado 2020). More locally, the 12th-century church at Dunning had a boulder foundation very similar to Forteviot's (Campbell 2013), suggesting that it could be as late as this in date. Early medieval churches were usually built out of wood and are thus difficult to identify archaeologically. Rectangular timber buildings of the early medieval period are better known from excavations in Anglo-Saxon areas, including those areas of southern Scotland associated with the kingdom of Northumbria. A building width of about 6m would create a substantial, although not overly large, timber hall based on early medieval buildings excavated at Hoddom, Dumfries and Galloway (Lowe 2006, 182). The presence of white lime mortar in associated deposits suggest this putative building at Forteviot was of stone, rather than a stone foundation for a timber building. The 11th/12thcentury burials at the south-eastern corner are likely to be associated with this building. There is no way of assessing whether this was the church associated with the Forteviot arch, or whether there was an even earlier building on the site.

The Phase 2 medieval building is likely to have had a relatively simple layout, probably a single compartment rectangular plan, but the range of possible plans for medieval churches is considerable (Fawcett 2002, 25–6) and not enough of the Phase 2 church was revealed to determine its interior layout in any way. The medieval church appears to have been narrower than the current building. The 1778 building is 11.1m × 16.1m on the exterior. The projected medieval eastern wall of the Phase 2 medieval church is 8m in width. Investigations along the south wall of the building to locate the chamfered plinth course suggest that the medieval building was approximately 16m long, giving a 2:1 ratio for its dimensions.

The finely dressed masonry of the lowest courses,

the simple chamfered plinth course, and the moulding of the stone found reused in the foundation for the laird's stairs all support a medieval date. Early parallels for the chamfered plinth course can be found at Glasgow Cathedral, where the base course of the early 12th-century church had a simple chamfer (Driscoll 2002a, 24-5). Whilst aesthetically not elaborate, even simple mouldings greatly affect the overall impression of a building (Fawcett 2002, 47). The consecration of a church at Forteviot in 1241 (Meldrum 1926, 32) may provide a reasonable construction date for this phase, as such simple architectural features have a long span of use. The 11th/12th-century burials underlying the Phase 2 building also support a construction date in the 13th century. The painted window glass finds ready parallels from medieval churches at St Andrews and Cambuskenneth Abbey, Stirling, and also suggests a major phase of construction sometime in the 13th century. That the window glass shows parallels with other churches from the diocese of St Andrews is significant. Both St Andrews and Cambuskenneth were powerful royal establishments, and, as with Forteviot, received considerable royal patronage in the 12th century (Barrow 2003, 31). In the late 12th century, the church at Forteviot was given to Cambuskenneth Abbey after the death of Richard of Stirling who had previously been granted the church by Malcolm IV. Although there is a dearth of documentation about what, if any, direct involvement Cambuskenneth Abbey had at Forteviot during the 13th century, the period seems to be one of considerable investment. Fragments of imported floor tile from Forteviot re-emphasise the high standing of the medieval church and the power of its association with St Andrews in the later medieval period, although their slightly later date suggests a remodelling of the Phase 2 structure. Both floor tiles and painted window glass are very uncommon in rural medieval parish churches.

There appear to be few if any parallels for the Phase 3B eastern extension created by walls 502 and 529. Eastern extensions on medieval churches are normally centrally placed (ie a chancel) in the eastern wall. Porches, aisles and side chapels are common additions on the sides of church buildings in the medieval and later periods, but never at the east end. The extension post-dates the 13th/14th-century burial underneath and it appears to be a post-Reformation addition. Its non-central placement may perhaps be related to the repairs seemingly conducted to the north wall of the

church throughout the 17th century, and it is suggested that it may have been used for accommodation of the minister, or a passage to such a building, as records show there was no manse in 1699, though there had been one in the medieval period. The new manse of 1707 was replaced by the present building in 1825–26.

The remodelling of the church in 1778 resulted in a standard post-Reformation single chamber church with a western door, and paired windows in the north and south walls. There could have been an eastern window, but all traces have been obliterated by later alterations. The western door was not centrally placed, and its lintel was reused for the sill of the 1830 northern window in the west wall. Meldrum (1926, 87) says there was a vestry added at the west end before the final remodelling but there is no sign of this. The church was first remodelled in 1830 by William Stirling and Andrew Heiton Senior and Son (Haynes 2000, 60). The western door was blocked and replaced by two doors in the south wall, while a pair of round-headed windows with projecting keystones and imposts were inserted in the west wall, as can be seen in Brown's engraving of 1830 (see Fig 2.13). The original southern wall windows were shortened in the same style. A small upper window was inserted in the south-east wall for illumination of the laird's loft. The two windows in the north wall were either inserted now, or replaced. At the east end there are signs of a door and/or window at the top of the laird's stairs. All these alterations are obvious from the use of red sandstone for window and door surrounds. The roofline also appears to have raised by about 1m, and the neo-classical belfry added. In 1867 there was another major remodelling, by David Smart, in Gothic Revival style after complaints about the old building being damp and cold. The internal layout was altered, with the communion table moved to the east end, and the loft removed. A large tracery window was inserted in the east wall, and a small one in the north wall, flanked by two roundel windows. The old southern doors were blocked and a new northern door added, with a porch. There was also a new northern vestry, and a small session house by the churchyard entrance. These are all easily identifiable by the use of a light grey sandstone.

7.2 Excavations in the churchyard (Site Q)

Adrián Maldonado

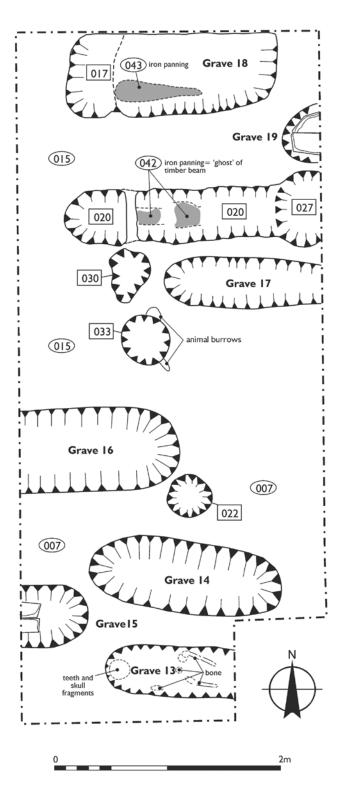
Site Q was located in the modern extension to the present graveyard of Forteviot parish church, about 25m to the south of the church (see Figs 1.12 and 7.2). The $7m \times 3m$ trench was positioned in the only unused plot within the extension, which originally had been part of the manse kitchen garden. The position ensured that no post-medieval burials would be encountered. Deep deposits of garden soil were found containing modern ceramics and glass down to a depth of 0.7m. The only notable find was a piece of slate SF2003 with a graffito of a post-medieval fishing vessel under sail (Fig 7.17), which came from a high level. These deposits covered a sandy layer full of pebbles (006) about 0.2m thick. Some of the cut features appeared to cut this layer, and it may represent the remnants of the medieval soil horizon. Beneath this were natural gravels and sands similar to those seen elsewhere in Forteviot. The only archaeological features encountered were graves and other features cut into the subsoil. There were no artefacts from the premodern period deposits, and no dateable organic material.



Figure 7.17 Slate with graffito of sailing vessel (SF2003), maximum dimension 51mm (photo by Pablo Llopis)

7.2.1 Pre-cemetery features

The only indications of prehistoric activity in the area were small flakes of cremated bone found in the upper layers of features, particularly in the south of the trench. Presumably these were residual and derived from prehistoric cremations somewhere in the vicinity, as happened in other areas of the Pictish cemetery on Site K. Possible early features in the trench were three small pits (017, 030, 033) in a line running north– south in the northern part of the trench. One of these, a small pit 017, appeared to be cut by UGr18, suggesting that these structures at least partly pre-dated the burials. This series of three pits was also in line with posthole 022 at the south-east corner of UGr16, so it may be that this was not a grave marker but part of this earlier structure.



7.2.2 Burials

Seven dug graves (UGr13–19) were exposed, but only one of them, UGr14, could be fully excavated within the confines of the trench (Figs 7.18 and 7.19). All the graves were orientated west–east, and none intercut, suggesting they belonged to one phase of burial activity. All were shallow features, cut no more than 0.2–0.4m into the subsoil. Presumably the grave-cuts at a higher level had been destroyed by post-medieval



Figure 7.19 Site Q after excavation, looking south

Figure 7.18 Plan of graves and structural features on Site Q



Figure 7.20 Possible stone capping in Unenclosed Grave 15

garden activity. The very acid conditions had destroyed most of the skeletal material: in UGr13 there were traces of leg bones and teeth enamel, and in UGr14 tooth enamel fragments, but the material was totally decayed and could not be sampled for dating. The only indication of coffin burial was found in UGr18, where iron panning on the base of the grave was likely due to wooden planks, as in the adjacent timber slot (020). Despite the lack of surviving organic remains, the graves showed some interesting variations on the simple dug grave type.

Only a small part of the east end of UGr15 was exposed, but this had two large stones in its fill (Fig 7.20). One of these (SF2005) was dressed roughly on two faces. This did not appear to be a building stone but was of similar rock-type to the early medieval sculptured stones from Forteviot. It may have been a grave-marker, or part of a disturbed stone capping. The adjacent UGr16 had a small posthole, 022, at its southeast corner. This may represent a four-post structure such as those in SB1 and SB2, or may have held a simple grave-marker; it is argued here that these are early medieval graves, possibly later than the Pictish burials in the Eastern Complex, but earlier than the better-preserved 11th/12th-century burials of Site R

Figure 7.21 Possible stone capping in Unenclosed Grave 19



described above. However, it is noticeable that the posthole is not at the head of the grave but continues the line of small oval pits described below, and it may be part of that structure. Another grave, which only had a small portion of the west end excavated (UGr19), like UGr15 had two large flat stones in the upper fill (Fig 7.21), again suggesting a possible stone capping.

7.2.3 Structures

The north end of the trench had a series of features interspersed among the graves which have already been discussed (see Chapter 6.4). These consisted of a series of small postholes (017, 030, 033, 022) running from north to south, and a rectilinear slot 020 with an associated pit (027), probably a posthole, at the east end (Fig 7.22).

7.2.4 Discussion

The lack of direct dating material for any of the features is unfortunate, but despite this it is fairly certain that they are all of early medieval date. Firstly, the character of the graves, their layout, and the very degraded state of preservation of the skeletons, is similar to those from the other early medieval graves on Sites J and K. In contrast, the bones of the skeletons dated to the 11th and 12th centuries from the nearby church excavations (see above, 7.1.2) were much better preserved. Secondly, their location outside the curvilinear churchyard enclosure shows that the burials must pre-date the establishment of the medieval churchyard which presumably dates back at least to the 13th century, when the medieval church was rebuilt. The location of the Site Q graves must indicate that the early medieval churchyard was more extensive than the medieval one or, less likely, that there was a subsidiary burial ground outside of it.

The lack of intercutting of the graves shows that the graves must have been visible, and that burial was organised, with rough rows of graves. Either burial



Figure 7.22 Sill-beam trench for structure, Site Q

mounds or markers must have been present, though the one possible post marker is uncertain. The lack of dates mean that it is impossible to say if burial within this cemetery was contemporary with, or succeeded, the field burials to the south which can be dated as late as the 9th century.

Perhaps the most exciting feature of the trench is the evidence for a timber structure or structures. The posthole/pits and beam-slot are not necessarily related, but the fact that the beam-slot ends at the line of pits does suggest they belong to one structure. What this structure was is another matter.

7.3 The Early Christian hand-bell

One of the outstanding early medieval objects from Forteviot is its Early Christian hand-bell, preserved in the parish church. Hand-bells are iconic objects in early medieval Britain and Ireland and many have associations with early saints and became relics, often later encased in highly decorated medieval bell shrines, as with the surviving 12th-century Kilmichael Glassary and Guthrie bell-shrines in Scotland (Glenn 2002; Caldwell *et al* 2013). There are two main types of hand-bell, one made from folded and riveted iron sheets, often coated in copper alloy, and the other of cast copper alloy. Unlike later church tower bells, which have a round section, these hand-bells are of quadrangular section. The cast bells, of which Forteviot is one, is the later and rarer type, dated by Bourke (1980; 1984; 2008) to the 9th to 10th century. Only six others of this type survive in Scotland (though there are many more in Ireland), compared to at least fourteen surviving iron bells and numerous others known from documentary records (Caldwell et al 2013). The Scottish cast bronze bells are those from Little Dunkeld and Strathfillan (Perthshire), Banchory Ternan (Kincardineshire), Insh (Invernessshire), Dumbarton, and Eilean Fhianain, Loch Shiel (Argyll). It is usually not possible to tell if bells known only from documentary sources were of iron or cast copper alloy, but the original St Mungo's bell from Glasgow is represented on ancient seals as having a horizontal handle and so is also likely to have been cast. There is also a bell handle from Strowan (Perthshire) attached to a post-medieval bell which has been claimed to be of early medieval date (Hall et al 2000, 177), but its composition and form suggest a post-medieval date is more likely (C Bourke, pers comm). A further bronze bell associated with St Kessog used to exist on Tom nan Clag, Inchtavannach, Loch Lomond, but no details of it are known (Lacaille 1928, 86). It is a remarkable fact that all of the surviving cast bells except the Strathfillan one (which is now in the National Museum of Scotland), remain in their original locations.

The Forteviot bell is an additional indication of the importance of the site in the later 1st millennium. Like other iconic objects of the period, the bell has been little studied, so with the support of the Forteviot parish Session, a detailed study of the bell was carried out, including non-invasive metallurgical analysis by NMS, laser scanning to produce a 3D model, and a musicological study of the sounds produced by the bell by students at Glasgow University. There are features of the bell, particularly the letter M or W on one face, which are unusual and therefore difficult to explain and date. Several different possibilities for the life history of the bell are discussed below. Whichever is correct, a fascinating history of use was recovered by this study, revealing changes in how it has been viewed by the local community over possibly a millennium of use.

7.3.1 Description

The bell is a large, cast copper alloy quadrangular hand-bell, of tall sub-rectangular cross-section with rounded angles (Figs 7.23 and 7.25). It has a flaring lip with a flattened lower edge. The shape is not

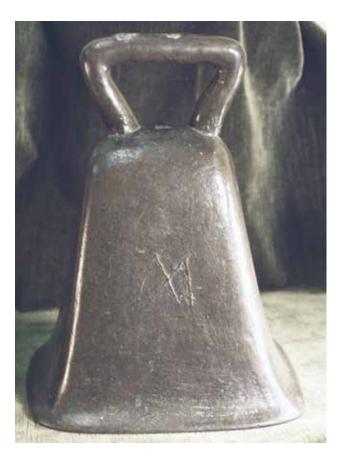


Figure 7.23 Forteviot hand-bell, height 280mm



Figure 7.24 Close-up of surface of bell, showing wipe-marks

entirely symmetrical, being slightly lopsided in all directions. Most faces, both exterior and interior, have rough-textured cast surfaces, but there is a finely smoothed band around all sides of the interior of the lip, about 20mm wide. This smooth area is widest at the centre of the faces, strongly suggesting that it is wear caused by the action of a metal clapper over a prolonged period. Both the interior and exterior surfaces have cast-in vertical wipe marks similar to those found on some pottery vessels (Fig 7.24). On the

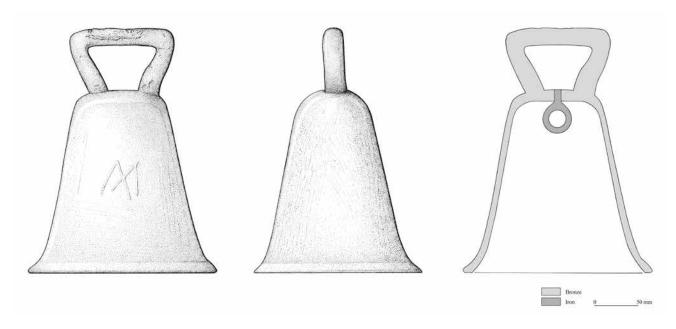


Figure 7.25 Measured drawing of Forteviot hand-bell by Marion O'Neil

exterior, around the lip, the surface has a more granular texture.

The handle is roughly circular in section, with a horizontal cross-piece and acute angles to the support arms. It is not carefully moulded or finished, being irregular and lumpy in section, with casting flaws. It is heavily worn and smoothed where it would have been held to ring the bell, but there is no extra wear on the underside of the crosspiece, which would suggest it was never suspended from a fitting (as is the case with the Insh bell at present). The upper surface of the handle has a substantial casting flaw, which has been infilled with grey material, probably decayed lead. The edges of the flaw are rounded and irregular. X-rays show that this flaw extends halfway through the handle. The handle gives the appearance of being brazed to the bell and to be secondary (Fig 7.26), unlike most handles which are cast-in.

There is an iron clapper suspension loop in the interior, attached by a drilled hole through the crown of the bell. The suspension ring is circular and heavily worn (going from 10mm thick at the top to 6mm at the bottom), suggesting very prolonged use, as does the wear around the inner edge of the lip (Fig 7.27).

There is a small casting flaw on the interior surface near the lip on one shorter side. The top of the bell shows regular struck marks as if from a chisel, around the clapper attachment hole (Fig 7.26). The front face of the bell has, in slight relief (0.7mm in height), a letter M or W with crossed inner arms. The letter is cast in, but poorly executed and irregular, with further





Figure 7.26 Handle of the bell, showing the flaw filled with lead, and attachment method

Figure 7.27 Wear marks from clapper around the lip of the bell



Figure 7.28 Detailed view of letter cast on the bell surface

scratches around the right-hand arm of the letter, suggesting several attempts at inscription (Fig 7.28). There is a thick, deep, olive-green patina over all surfaces and the bell is in excellent condition except for the lead infill of the handle which is decaying.

Dimensions: max width 220mm, max depth 195mm, max height 280mm, height of body 215mm. Handle max width 120mm, height 65mm, section 23×17 mm. Clapper suspension loop hole 8mm diameter; diameter of suspension ring 35mm. Thickness of the body of the bell *c* 7mm. Weight 5kg.

7.3.2 Metal analysis (Table 7.2)

Table 7.2 XRF analyses of Forteviot hand-bell

	Cu	Sn	Zn	Pb	Sb	Fe	Ni	As	Ag
Body Average	66.4	25.84	1.04	5.01	0.48	1.09	0	0	0.15
Handle	77.19	18.34	1.47	2.12	0.35	0.22	0	0.23	0.08

As it has been claimed that the bell may have been recast in the post-medieval period (Bourke 2008, 25), the metal used may have been the original melteddown bell, or new metal, or a combination. Metal

analysis was carried out by NMS to try to resolve this issue, as metal compositions and proportions of trace elements have changed over time. The metal analysis shows that the bell was a leaded high-tin bronze, with trace quantities of iron, zinc, silver and antimony, but no detectable nickel or arsenic. The handle has a generally similar composition to the bell, although with substantially less tin and lead, but it did have small traces of arsenic. As all the measurements had to be done on uncleaned surfaces, they only give a general indication of the underlying metal composition, making it difficult to compare to other objects. However, the lack of nickel and arsenic suggest that the copper ores used were not the Central European fahlerz ores common in the later medieval and postmedieval periods for large cast objects. The slightly different composition of the handle might support the idea that it has a different history to that of the bell, but might also reflect the less-patinated surface here due to continual handling. The high tin composition is unusual for everyday artefacts and would have resulted in a silvery surface appearance; this may have been deliberate but is typical of bell-metals of the medieval period. There is an analysis of a metal droplet from the 7th-century metalworking site at Dunadd, which has a similar high-tin composition (Lane and Campbell 2000, table 5.8, no 148), so we know metalworkers were making such alloys in the later first millennium as well as later in the medieval period. There are no analyses of other hand-bells to compare with (or indeed many artefacts of this date), though there are some of tower bells, including a 10th-century example (Bryant et al 1993, table 4). These medieval tower bells have a similar high tin content to the Forteviot bell, which reputedly makes them more resonant (ibid, 234, n11). The metal analyses would therefore tend to support the idea that the original metal was used if the bell was recast.

7.3.3 Manufacture

Many details of the manufacture of the bell were revealed through detailed study. As with other bells of this type, the body of the bell appears to have been cast by the lost-wax (*cire perdue*) process as there is no sign of a seam from two-piece mould casting. At a weight of 5kg, this bell would have been one of the largest castings undertaking by an early medieval Insular metalworker (Bourke 1980, 62), and would have required a high degree of skill in manufacture. It can be calculated that about 600ml of molten copper alloy would be required to be brought to melting temperature to cast the bell. The largest known crucibles from this period, from the metalworking area at Dunadd, only hold around 90ml (Duncan 1982, fig 41, GP226; Craddock 1989, 171). Unless larger crucibles were used, this would imply the co-ordination of many metalworkers heating and pouring simultaneously. However, as no moulds from cast bronze bells from this period have been recognised, it follows that no bell-producing workshop has been found, so the possibility of larger crucibles being made for this particular purpose cannot be discounted.

There are many intriguing features of the Forteviot bell, showing it has a complex history after the initial casting. The iron clapper suspension ring has been inserted after the body was cast, by drilling a hole through the top of the bell, as was common (Bourke 1980, 54), and this may have been replaced, as many were when they wore through. The handle, which is crudely formed compared to the body of the bell, has a lumpy irregular surface. There is a major casting flaw which has been infilled with lead. It gives the appearance of having been brazed on rather than cast in, as was more usual, but this may be a feature of the original model. Other cast bells also have flaws in the handle (eg St Patrick's Bell from Donaghmore, Tyrone (Bourke 1993, 44), and the Little Dunkeld bell), and this was obviously a difficult area to ensure complete casting as it was the last area to be filled by the molten metal.

7.3.4 The inscription

The most unusual feature of the bell is the inscribed letter on one face. As this is in relief, it must have been cast in, and therefore would have to have been scratched on the inner surface of the clay mould (cope) which would have encased either the wax model (if on the primary casting) or the bell itself (if on the recasting). This would have been awkward to accomplish in the restricted space, perhaps accounting for the botched nature of the lettering, and the irregular form of the lines, caused by scratching the hardened clay surface (Fig 7.28). An alternative explanation would be that the bell is an artefact of the 17th century, created by someone who had seen a similar early medieval bell. This seems very unlikely, partly because it would have been difficult to make such a good copy of a complex form like this so closely, and partly because there was no tradition of antiquarian copying of ancient artefacts at this period (unlike in the 19th century). Another, less plausible scenario might be that the inscription was original (despite there being no parallels), and was produced by adding the letter to the surface of the original wax model. However, the letter is clearly scratched, rather than created from applied rounded strips of wax (as in 17th-century lettering on cast objects). There are difficulties with all of these possibilities, however, and there can be no certainty about the sequence of production.

The form of the letter M is not matched in early medieval epigraphy (G Charles-Edwards, pers comm) and is uncommon later. However, the letter W with crossed arms is commonly found in medieval and postmedieval epigraphy (including several gravestone inscriptions in Forteviot churchyard), so it is possible that the letter should be viewed upside down (ie to be read by the bell ringer). It is also possible that the restricted access to the inside of the cope mould led to a botched letter M. As for the function of the inscription, it seems to be a simple maker's mark, similar to those found on tower bells such as the medieval Dundonald bell (NMS H.KA 27). However, there is a 17th-century bell from Fintry (Stirlingshire) which has the initials of the minister 'scratched on the mould, rather than stamped as was usual' (Clouston 1950, 78, pl. VI.3), so the initial could refer to the minister rather than the maker. Although these marks were usually pairs of letters, there is a medieval handbell from Falkirk Old Church which has a simple letter X, again crudely formed by scratching the mould (ibid, pl VII.1). These examples reinforce the view that the bell was recast in the late or post-medieval period, a time when some bells were being made locally rather than imported from the major foundries on the Continent or in urban centres.

A possible life history can be reconstructed from the details discussed above. The original casting in the 9th or 10th century would have had an integral handle, and the clapper suspension ring would have been added immediately after casting. It is probable that at some point the bell has suffered damage or cracking and was recast, at which point the letter was added (Bourke 2008, 25). The original bell must have been used as a die for an intermediate model, as the shape corresponds to other early medieval bells of the Scottish group. Bourke suggests this occurred in the 17th century by analogy with the form of lettering seen on bells and other bronze objects of this period (ibid, figs 6, 7). It is interesting that the Forteviot parish church tower bell is dated 1657, though it was later recast in the mid-19th century (Clouston 1993, 482). Either of these episodes could give a context for the recasting of handle and lip would suggest the earlier period is most likely. Recasting of bells retaining the original shape was common in the medieval and post-medieval periods, usually when the bell was cracked (for example, the Forteviot parish tower bell recast in the 19th century retains the 17th-century date and inscription). The wipe marks on the surface of the bell are found on some Irish bells (eg Ballymagrorty, Co Donegal and Derrynoyd, Co Derry (C Bourke, pers comm)), though most have the smooth surface of the original wax model. The smooth surface could only be retained by dipping the wax model in layers of slip before adding the outer layers of coarser clay, and this may not have been carried out in all cases. The wipe marks suggest the model for the Forteviot bell was coated with a coarser clay than normal, perhaps because it was a robust metal bell rather than a wax model. This feature alone might support the idea of recasting. The handle seems to be added on to the recast bell and although rather botched, with a poorly filled flaw and irregular cross-section, it may even be the original handle. Experimental use of the bell shows that the horizontal cross-piece (rather than the C-shape of that on most iron bells) reflects the need to support the substantial weight of the bell while ringing it, which may have caused failure of the handle at some point. The chisel marks around the crown of the bell are not recent, but may relate to work on the broken handle, or to remove the clapper suspension ring before recasting, and so represent signs of use of the original bell left as ghost-marks on the recast bell. In fact, it would have been impossible to make a onepiece cope mould using the original bell with the handle in place because of the undercuts required, so this may account for its detachment and later addition. If this was the process of recasting the Forteviot bell, it would imply a two-stage process, with cope and core moulds taken separately, then luted together to make a one-piece mould, and the handle added as a further piece. The join between the two pieces would have been around the lip, so could easily have been cleaned off, leaving the appearance of the bell being cast in a one-piece mould. This seems to be the only way in which a mark could have been scratched on the inner surface of the mould.

7.3.5 Function

The clapper wear marks around the inner lip show that the bell was rung by swinging to and fro, rather than being held and struck with an object, as has been suggested by some writers. Indeed, the Insh bell seems to retain its original clapper and has similar wear marks. As with other early hand-bells, the function would have moved from a purely religious one such as ringing the monastic hours (Caldwell et al 2013) to a more secular one after the Reformation. These bells came to be known as 'deid' or 'skellat' bells which were used to announce funerals by processing around the parish. Several of these bells passed into the possession of burgh authorities, for example at Dumbarton (Clouston 1948, 175) and at Glasgow. At Glasgow, St Mungo's Bell, which was of an early medieval quadrangular form, as seen on the Glasgow cathedral seal (Renwick and Lindsay 1921, 25, pls opp 116, 148, 384), passed to the town council, where town records show it was repaired in 1578 but replaced in 1640 by a new hand-bell of typical post-medieval shape (MacGeorge 1880, pl p.25). The Strowan (Perthshire) bell, associated with St Ronan, although at present of 17th-century shape, has a decorated handle which has been suggested to be of early medieval date (Hall et al 2000, 177, illus 120), though it is more likely to be post-medieval (C Bourke, pers comm). However, this bell probably replaced an early medieval one as there are medieval accounts of a dewar (keeper of relics) holding land in the parish (Watson 1926, 265). There is therefore a spectrum of practices relating to these ancient relics: at Dumbarton the original bell remains intact; at Glasgow and Strowan the bell was replaced by a modern one; and at Forteviot the bell may have been recast in the early medieval shape. After the Reformation some bells passed to secular authorities, some remained with hereditary secular keepers (dewars), while others languished in parish churches before being rescued for museums or being sold for scrap (Anderson 1889, 120-1). Many bells disappear from the historical record in the post-medieval period, and particularly in the 19th century many were discarded, sold, or stolen (Caldwell et al 2013, 235-41). Uniquely, the Forteviot bell continued in use by the local minister for solemnising weddings until recent years. There is no record of any association with a saint (this is more common with the earlier iron bells), and in fact no mention of it at all in antiquarian accounts until that published by Joseph Anderson in 1892. Thus neither of the ministers who provided the accounts for the Old and New Statistical Accounts, nor any of the many antiquaries who visited Forteviot, thought it worth mentioning the bell, although the ministers at least must have been aware of it. Perhaps the possible

association with saints and relics made it disapproved of in a Presbyterian environment. Why it was decided to retain the original shape when the Forteviot bell was recast is an interesting question, since other parishes in Scotland were replacing their old bells with ones of a new shape, but it suggests some appreciation of the antiquity and special nature of the bell.

The Scottish cast bronze bells differ typologically from the Irish ones in having flaring lips, representing a distinct 10th-century regional group (Bourke 1997, 164 n2). The original form of the Forteviot bell is similar to the other five surviving Scottish examples (Anon 1911, pl 1098; Bourke 1984), and is particularly close in form to the Little Dunkeld bell (Anderson 1889), which also has a horizontal cross-piece on the handle (as well as another casting flaw), and the Dumbarton bell, which is of similar size (Clouston 1948, 184, pl XXXIV, 1). It is surely more than a coincidence that three of these bells (Forteviot, Dumbarton, and Dunkeld) have royal associations of some kind. Although the Forteviot bell has no known traditions attached to it, detailed study of the bell reveals a fascinating and changing history of use over a thousand-year span.

EARLY MEDIEVAL SCULPTURE OF THE FORTEVIOT AREA

Mark Hall, Ian Scott and Katherine Forsyth

8.1 Introduction

The most visible and striking legacy of early medieval Forteviot is its assemblage of sculptured monuments, which although now fragmented, is significantly large. These free-standing crosses, cross-slabs, and unique monolithic arch are a direct reflection of the wealth and power of the kings of Fortriu, and were used as expressions of faith, identity and control in the early medieval landscape. The evidence for these monuments was noted by Stuart, who used the arch to ornament the first page of Sculptured Stones of Scotland (1856). The various fragments were first assembled in the Early Christian Monuments of Scotland (Allen and Anderson 1903), although they were not treated as a group. The Alcocks, as part of their investigation at Forteviot, reflected on the totality of the assemblage in their discussion of the Pictish royal site (Alcock and Alcock 1993). Nick Aitchison's book-length study of Forteviot in 2006 considered the significance of the whole assemblage, with a particular focus on the Forteviot arch. Recently, Hall has led a programme to record the Forteviot stones that are not in state care (Hall 2011), which included a programme of analytical drawing by Ian G Scott (then of the RCAHMS). This documentation effort provides the core of this chapter. Significant advances have been contributed by Isabel Henderson on the cultural significance of Constantine's Cross (1999), and by Katherine Forsyth on reading its inscription (1995), as well as more general discussion on the geopolitical setting of the assemblage (Driscoll and Forsyth 2009; Hall 2011). The catalogue below expands on this previous work and broadens the discussion to include the nearby monuments from Dupplin, Invermay, Gask, Gleneagles and Dunning, including newly discovered fragments. It thereby

documents all the known early medieval sculpture from the lower valley of the Earn and will serve as a corpus until a more detailed study of the group can be produced. The key landscape monuments, Constantine's Cross (the name we are proposing as a replacement for the Dupplin Cross, see below) and the Invermay Cross, are believed to define the precinct of the royal estate of Forteviot, while the Gask Cross may have similarly defined the approach to Forteviot from the north-west. The Forteviot stones were a central part of the Cradle of Scotland exhibition in the Hunterian Museum and Art Gallery (2015) and Perth Museum and Art Gallery (2016), which promoted the results of the SERF project (Fig 8.1). Before this, the sculptures had been kept loosely in the porch of St Andrew's church, with poor access (Fig 8.2). Following the exhibition the specially created mounts were used for a permanent display in Forteviot church (Fig 8.3). This catalogue complements the publication of other major collections in the region, at St Vigeans, Angus (Geddes 2017), Meigle, Perthshire (RCAHMS 1994; Ritchie 1997; Hall 2014), and Abernethy (Proudfoot 1997).

The monuments discussed here include: an architectural arch; three or four free-standing crosses, one of which is a ringed cross; at least two upright cross-slabs; a possible recumbent cross-slab; a Pictish Class 1 symbol stone; and fragments of other indeterminate decorated monuments. As a whole this is not a large number compared to major ecclesiastical sites such as Iona or St Andrews, but the quality and scale of the monuments is exceptional, especially as all the Forteviot fragments represent large-scale monuments, with no certain grave-markers. The presence of a





Figure 8.1 Forteviot sculpture on display in the *Cradle of Scotland* exhibition, Perth Museum and Art Gallery, with life-size models of complete crosses (photo by Paul Adair; © Perth Museum & Art Gallery)

Figure 8.2 The Forteviot sculpture informally curated in the church porch prior to its redisplay

ringed cross is unusual in Pictland; they are more of a western Scottish and Irish phenomenon. The arch is unique in Scotland and provides rare evidence for an ambitious pre-Romanesque stone-built church. In contrast to most comparable assemblages, few if any of the monuments appear to be burial monuments, and the significance of this is discussed below. The fragmentary nature of many of the examples can be directly related to deliberate destruction, and we can assume that the surviving material is a fraction of the original assemblage. Some of this destruction could be linked to the iconoclastic movement of the early Reformation period (Henderson and Henderson 2004, 215–18), but more intensive land use was another





Figure 8.3 The Forteviot sculpture redisplayed within Forteviot church. Above: photograph from the *Dundee Courier* report on the rededication service (16 November 2016). Stephen Driscoll is joined by the minister, Rev James Aitchison, the session clerk, Mrs Pat Robb, an elder, Mrs Catriona Harrison, and Perth and Kinross Heritage Trust archaeologist Sophie Nicol (© *Dundee Courier*). Left: view of the sculpture displayed in the armature which was fabricated as part of the Tayside Landscape Partnership (photo by Mark Hall; © Perth Museum & Art Gallery)

threat. As late as the 1760s the Invermay Cross was 'wantonly destroyed' (Allen and Anderson 1903, 327), apparently in the course of agricultural improvements. The burial of the prehistoric standing stone on Forteviot Site F and the infilling of the henge ditches may have been part of the same programme of Improvement which swept away the old open-field system and

reorganised the landscape in large enclosed fields (see Chapter 2.7). Two of the crosses, from Dupplin and Invermay, retain their original massive bases, but the bases of the others are lost. Until 1998, Constantine's Cross stood in what appears to have been its original location in the policies of the Dupplin Estate (Fig 8.4), but the base of the Invermay Cross appears to have



Figure 8.4 Constantine's Cross in its original location on Bankhead Farm, Dupplin Estate, looking over the white buildings of Forteviot and the Earn valley

been moved a short distance southwards, after the destruction of the cross, as part of the 18th-century landscaping of the Invermay Estate when a new obelisk was erected in the base (see Chapter 9.3). The original locations of the stones now in Forteviot church were not recorded. They do not necessarily come from the churchyard, as monuments were often transferred from the landscape into nearby churchyards, but given the royal significance of the medieval church, its seems likely that most were originally located in the vicinity of the church. The fragments recorded from Milton of Forteviot may be explained by the reuse there of stones taken from the medieval church, which was demolished and replaced in 1778 (Meldrum 1926, 83). The Gask Cross was moved in the 19th century from Trinity Gask to Moncreiff House and has lost its base. At Dunning, the sculpture was found in or around St Serf's church where it is presumed to have originated. The Blackford stone remains in situ, conspicuously marking the south-west entrance to the Earn Valley. Although several of the more impressive

monuments have received considerable scholarly attention, this has tended to concentrate on art historical issues. This chapter attempts to view the collection from a more archaeological viewpoint. As well as providing a definitive catalogue of the stones and resolving some concordance and numbering issues, this chapter will discuss their chronology and parallels, their landscape setting, their biography, and their wider significance in the political world of the late first millennium kingdom of Alba. The three major crosses from Dupplin, Invermay, and Gask are unusual in that all stood in open landscape locations, apparently unassociated with any church building, where they may have served as boundary markers in a politicised landscape. All the stones are of sandstone derived from local Old Red Sandstone outcrops and it is not impossible that the Forteviot monuments were quarried from the same Water of May outcrops as the prehistoric slabs used as the capstone in the massive cist with dagger burial within Henge 1 (Chapter 5 in Brophy and Noble 2020).

8.2 Catalogue of the sculptured monuments

The format of the catalogue here is based on the reporting practice of the British Academy Corpus of Anglo-Saxon Stone Sculpture, as developed by the Corpus of Welsh stone monuments (Edwards 2007, 123-5). However, there is no discussion of 'Stone Type' because all the pieces are of Old Red Sandstone lithology and no detailed source investigation has been undertaken. The opportunity has been taken to standardise the nomenclature of the fragments, with different fragments of the same monument labelled 1.1, 1.2, etc, rather than 1a, 1b etc, to avoid confusion with the accepted practice of labelling the four faces of monuments as A (front), B (right side), C (back), D (left side). A significant change has been to reorder the Forteviot monuments, with the arch now being Forteviot 1, because it is the most distinctive of the sculptured stones. Many of the

fragments were collected into Forteviot parish church at various times, including pieces of the Invermay Cross. These had previously been discussed as Forteviot nos 8-10 (Aitchison 2006; Hall 2011), but are here designated as Invermay. Two of the Forteviot fragments (nos 3 and 4) were first recorded in the manse garden, where a variety of interesting carved stones had been collected by one of the ministers, possibly Dr Anderson, who had antiquarian interests (Allen and Anderson 1903, 327) during the 19th century. The pieces included a sundial dated 1767 which had originally stood in the village, an architectural datestone of 1682, a medieval basin, and an Iron Age quern. The sculpture fragments were later reunited with other pieces in the porch of St Andrew's church, before finally being displayed inside the church in 2018.

Table 8.1 Summary of sculptured monuments from the Forteviot area							
Name	Short Description	ECMS number	Current location				
Forteviot 1	Architectural arch, carved on one face	Forteviot 2	National Museum of Scotland				
Forteviot 2	Basal part of free-standing cross, carved on all four faces	Forteviot 1	t Andrew's church Forteviot				
Forteviot 3	Arm fragment of free-standing ringed cross	Forteviot 3	St Andrew's church Forteviot				
Forteviot 4	Fragment with relief equestrian decoration, possibly part of Forteviot 2	Forteviot 4	St Andrew's church Forteviot				
Forteviot 5	Fragment of interlace panel possibly part of Forteviot 2	Forteviot 5	Milton of Forteviot (lost)				
Forteviot 6	Undescribed fragment	Forteviot 6	Milton of Forteviot (lost)				
Invermay	Four fragments of the shaft of a free-standing cross decorated on four faces	Invermay 1, 2a, 2b, 3	St Andrew's church Forteviot				
	Massive base	Invermay 4	Base in a field at Invermay				
Constantine's	Complete free-standing cross, decorated on four faces	Dupplin	St Serf's church Dunning				
(Dupplin)	Massive base						
Gask	Complete free-standing cross-slab, decorated on two faces	Gask	Moncrieffe House (lawn), Bridge of Earn				
Dunning 1	Part of a cut-down recumbent cross-slab, decorated on three faces	Dunning	St Serf's church Dunning				
Dunning 2	Small fragment of interlace-decorated free-standing cross, excavated in 2012		Pending Treasure Trove Allocation				
Dunning 3	Small decorated fragment, discovered in 2012		St Serf's church Dunning				
Blackford	Complete Pictish 'Class I' symbol stone		Peterhead farm, Blackford				

Table 8.1 Summary of sculptured monuments from the Forteviot area

8.2.1 Forteviot 1 ('The Forteviot Arch')

LOCATION: Current location: National Museum of Scotland, Edinburgh (Reg No I.36) (Fig 8.5).

DISCOVERY: Initially rediscovered *c* 1800 buried in an abandoned meander of the Water of May, just below Haly Hill, about 100m north-west of St Andrew's church (Brown and Jamieson 1830, 207; see

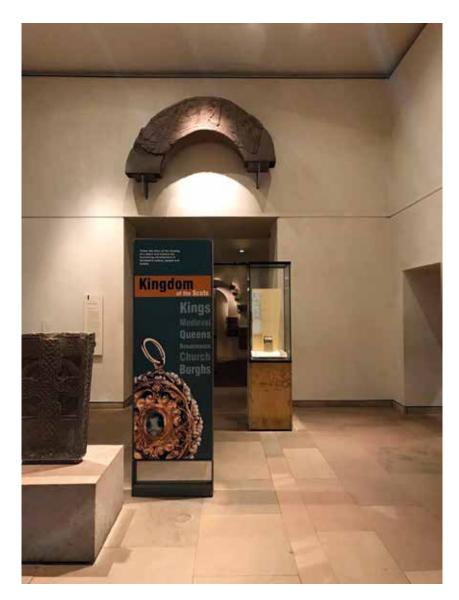


Figure 8.5 The Forteviot 1 Arch as currently displayed in the National Museum of Scotland, Edinburgh high on the wall with misdirected spotlighting (photo by Frances Driscoll)

Chapter 7.1), on what was the site of the original village bowling green. NGR: NO 0504 1754. For most of the 19th century it was kept in Freedland House, Forgandenny by Lord Ruthven (owner of the Forteviot estate) until 1874, when it was donated to the Society of Antiquaries of Scotland museum (Aitchison 2006, 145) (Fig 8.6).

DIMENSIONS: The arch spans 1.20m (internally) and 2.1m (externally), with a thickness of 0.35m but originally is estimated to have measured c 2.1 × 1.2 × 0.35m. It weighs 0.87 tonnes, but would originally have weighed over 1 tonne.

CONDITION: The decoration is generally wellpreserved and unweathered, except for the deliberate defacement of the central cross. There is no sign of mortar on the rear or upper surface, though this may have been cleaned off (there are no surviving records of any conservation work on the arch). DESCRIPTION: The arch is carved from a monolithic block of sandstone and is broken at both abutment ends (Fig 8.7). Only the front face is carved, in low relief. The arch would most likely have formed a semicircular lintel for an entranceway in a masonry wall (Alcock and Alcock 1993, 226; Aitchison 2006, 148) and that is how it is shown in Ian Scott's drawing (Fig 8.8). The curvature of interior and exterior faces is slightly irregular. The underside (intrados) is dressed as smooth ashlar, and clearly intended to be seen, but the upper side (extrados) is coarsely tooled by pecking, especially towards the rear, and is not intended to be visible. The rear face is not tooled, but has sheared along bedding planes where it has been prised from the outcrop.

The decorated face has been described in detail elsewhere (Aitchison 2006, 150–1). The carvings are framed by a square moulding with a groove on its inner edge, wider on the lower edge than the upper, which is damaged. A central, badly defaced



Figure 8.6 Forteviot 1 Arch on display in the old Museum of Antiquities, Edinburgh. In the foreground, Joseph Anderson stands with a cast of the Kildalton Cross (© National Museums of Scotland)

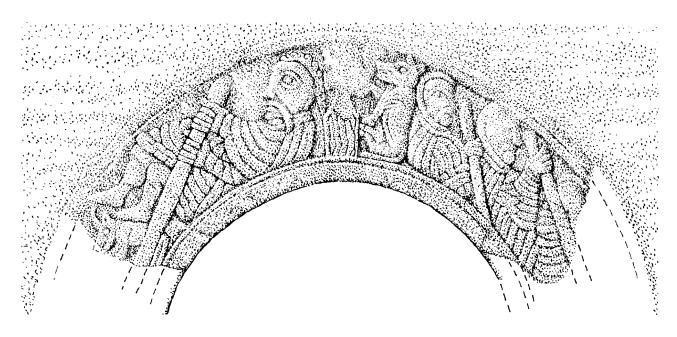
short-armed cross standing on a pedestal or shaft decorated with vertical incised wavy lines is flanked to the right by a vertical quadruped, generally interpreted as a lamb. A male figure on the left side fills most of the remaining half. The figure leans back, holding a staff in both hands. His legs are bent and his feet rest above a small quadruped which has a single curved horn in profile. His head has stylised curled hair and the face has a 'square block' nose (Henderson 1999) and a large drooping moustache. His garments are depicted with strong folds, and a step-pattern at the hem indicating a woven or embroidered panel. On the right side there are three smaller figures. The two complete figures and the remains of a third figure wear a similar style of dress, but with hoods. The complete ones have similar noses, drooping moustaches and are holding staffs, though in one hand.

The form and tooling of the block show that it was intended to be built into a stone structure, with masonry above and behind the arch. DISCUSSION: The unique nature of this monument makes it difficult to date and interpret. Two major explanations of its iconography have been put forward, one religious, the other secular. Although this binary formulation obscures the theological complexity underpinning political patronage at a royal inaugural site, it remains convenient for framing the discussion. The religious interpretation sees the left-hand figure as Christ, the Good Shepherd, with a staff and a sheep at his feet, the figures on the opposite side represent Apostles or disciples, while the cross and lamb are symbols of Christ's death and resurrection (Henderson and Henderson 2004, 144-5). The secular, politically oriented interpretation sees the left-hand figure as a king holding a staff, with the lower beast as a bull, and the right-hand figures as clerics holding staves (Aitchison 2006, 163-88). Alcock and Alcock interpreted the staves as swords or sheathed swords, but this seems unjustified (1993, 225). Aitchison's reading blends the secular and ecclesiastical in seeing the



Figure 8.7 Forteviot 1 Arch from Richardson 1964, plate 12

Figure 8.8 Forteviot 1 Arch (internal span 1.20m), measured drawing by Ian Scott



figures as images of grant-giving, with the staves being driven into the ground to mark out an ecclesiastical boundary (Aitchison 2006, 198). This reading is inspired by a panel on the Cross of the Scriptures at Clonmacnoise, probably erected c AD 908. This cross was erected by Flann Sinna, High King of Ireland, who was married to Cináed mac Alpín's daughter, which provides a plausible link between Forteviot and Clonmacnoise (see Chapter 10.6.2). The chronology of the arch has been widely debated, with most modern commentators suggesting a 9th- or 10th-century date. On the basis of parallels to some elements of Constantine's Cross, which is now more securely dated thanks to the inscription (discussed below), Aitchison dated the arch to the early 9th century and the reign of Onuist son of Uurguist. Based on the comparisons that Isabel Henderson identifies with Constantine's Cross (1997, 172, 177), a 9th-century date would seem reasonable. The affinities of the sculpture have also been debated, but the details of the figures, and their parallels on Constantine's Cross and other Pictish monuments (loosely described as the 'Benvie-Dupplin school'), support a Pictish milieu, though there are some parallels with figures in Insular manuscripts such as the St Gall Gospel or the Southampton Psalter (Henderson and Henderson 2004, 145; Aitchison 2006, 154).

The function of the arch has also been much debated in terms of architecture of the period (Alcock and Alcock 1993; Aitchison 2006; Hall 2011). The details of the back and sides strongly suggest that it almost certainly was built into a substantial masonry building, rather than being part of a free-standing feature such as an altar surround, tomb canopy or ciborium. For churches of this period, a function as a chancel arch or a doorway is most likely. The sharpness of the carving might suggest an interior position, but if protected by a porch it could have framed the main door of a church. The damage to the upper border does not appear to be the result of weathering, including the partially removed central cross. The size of the arch suggests an opening of about 1.2m in width. This is comparable to some Anglo-Saxon chancel arches such Barton-upon-Humber and Bradford-on-Avon as (Taylor and Taylor 1978), but the scale would be equally appropriate for the main door of a pre-Romanesque church. The further implications of this are discussed below in section 8.3, but the arch provides unequivocal evidence for the presence of a substantial stone church on the site by the 9th century.

DATE: 9th century

REFERENCES: *ECMS* Forteviot no 2 (Allen and Anderson 1903, fig 336); Alcock and Alcock 1993, 223–7 as Forteviot no 2; Aitchison 2006, 143–242 gives the fullest discussion.

8.2.2 Forteviot 2 Cross-shaft fragment (Figs 8.9 and 8.10)

LOCATION: Current location: St Andrew's church, Forteviot; first recorded in the churchyard, no other known location. It is likely that the cross originally stood somewhere close to the medieval church, within the enclosure defined by the ditch excavated at Site M.

CONDITION: The stone is in good condition, with carving in sharp relief, though Face A shows some

weathering suggesting that it stood outside in its early life, perhaps facing W to the prevailing weather.

DIMENSIONS: The basal part of the shaft with tenon measures $0.60 \times 0.45 \times 0.25-0.30$ m. The tenon is complete, of rounded section, and is rather short at *c* 150mm in depth.

DESCRIPTION: Basal section of an upright sandstone cross, relief carved on all four faces (Figs 8.9 & 8.10). Forteviot 4 is similar in lithology to No 2, and it is suggested here (through the analysis of Hall and Scott) that it formed part of the same monument. The size, shape and iconographic repertoire are consistent with the smaller forms of cross-slab (for example, Menmuir no 1 (Allen and Anderson 1903, 263)), but close consideration of this fragment suggests it is just as likely to be part of a free-standing cross. Hall and Scott therefore propose that Forteviot 4 and Forteviot 2 are fragments of the same cross, which can be reconstructed as one with cusped armpits, similar in size to Constantine's Cross, that is, c 2.6m high. Main face (A) has a panel of four types of interlace in a concentric pattern (Allen and Anderson 1903, 324-5). Side face B has the upper torso and head of a bearded man with three plaited tails ascending the slab, the tips all touching the man's head, within a plain frame.

The centre of face C contains a right-facing hybrid horned beast carved in low relief, with prominent joint scrolls, which has elements of bull, wolf and bird (Henderson and Henderson 2004, 81). The humped shoulders, rear hooves and swinging tail recall the Burghead bulls, but the front legs have claws, and the head is wolf-like with prominent teeth and a single horn on the forehead. The beast is gripping in toothed jaws the head of a snake-like beast with prominent eyes and ears, which in turn is biting the beast's horn. The whole panel is framed by the hindquarters of two quadrupeds. The tail on the left-hand beast is short but terminates in a bird head with prominent raptor beak. The tail of the right-hand creature forms a loose knot, which terminates in a serpentine head with prominent ears and eyes. A pair of testicles and a penis are clearly depicted on the right creature, while the left creature clearly lacks them, indicating that they are intended as a male and female pair. It is highly unusual for the sex of fantastical monsters to be indicated so unambiguously on Pictish sculpture. The form of the framing animals suggests that the scale of the original panel was probably originally twice its



Figure 8.9 Forteviot 2 lower part of cross shaft. Side A shows four types of interlace in a concentric pattern (DP245612; © HES), side B shows upper torso and head of a bearded man, side C shows hybrid horned beast with elements of bull, wolf and bird (photos by Paul Adair; © Perth Museum & Art Gallery), side D shows single panel of interlace with key pattern termination (DP245617; © HES)

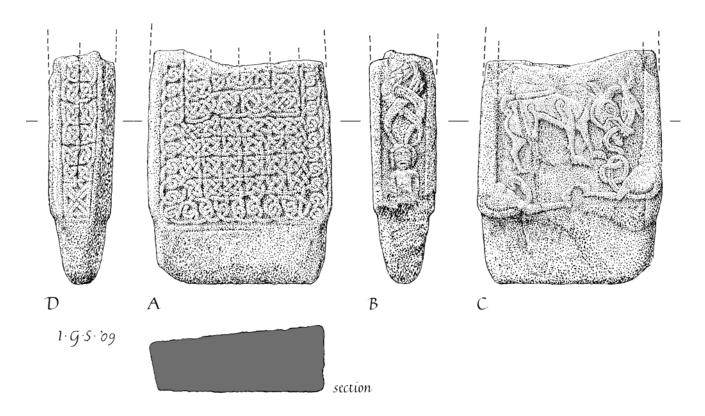


Figure 8.10 Forteviot 2 (maximum dimension o.6om), measured drawing by Ian Scott

present size, presumably with other figures in the missing portion.

Side face D bears a single panel of interlace terminating in triangular interlace. The slab terminates in a slightly narrower, short tenon for insertion into a base, which has a roughly pecked surface.

DISCUSSION: Alcock suggests an 8th- or 9th-century date. The comparison with Constantine's Cross might also suggest a 9th-century date. The form of the beasts, and the 'snake versus beast' motif on face C of 2 is paralleled in many other Pictish monuments of this general date, as well as in illustrated manuscripts (Henderson and Henderson 2004, 78-83). The interlaced panel is difficult to parallel, however, as most other panels have a single coherent pattern of interlace, even if these merge into different patterns, rather than the Forteviot scheme of rectangular concentric frames of different patterns which do not interconnect. The outer pattern shows inter-penetration of key pattern and interlace motifs, a Pictish phenomenon (Thickpenny 2019). The complexity of the design and the clarity of the execution reveal this to be a sophisticated sculpture.

DATE: 9th century, perhaps first half.

REFERENCES: Forteviot no 1 (Allen and Anderson 1903, figs 335a–d, 338); Alcock and Alcock 1993, 222 as Forteviot no 1; Aitchison 2006, 104–9.

8.2.3 Forteviot 3 Arm-fragment of ringheaded cross (Figs 8.11 and 8.12)

LOCATION: Current location: within St Andrew's church, Forteviot; originally seen in the stone collection in the adjoining manse garden in 1903.

CONDITION: The fragment is battered on all edges, and the rear face is broken off, but the decoration on Face A is relatively crisp and unweathered.

DIMENSIONS: The fragment measures $0.30 \times 0.25 \times 0.15$ m.

DESCRIPTION: A sandstone arm-fragment from a free-standing ring-headed cross (with one of the quadrants of the connecting ring preserved as a broken stump) (Figs 8.11 & 8.12). Although this is a very small fragment, it is clearly from an impressive freestanding ring-headed cross, probably decorated in low relief on all faces. The fragment consists of one end of





Figure 8.11 Forteviot 3, arm-fragment of ring-headed cross photographed in new church display. Side A shows angular interlace of Stafford knots with round pellets, Side B shows interlace with double-beaded strands (DP245625 & DP245623; © HES); view of the stump of the connecting ring shows side mouldings and step pattern on the outer face (photo by Paul Adair; © Perth Museum & Art Gallery)



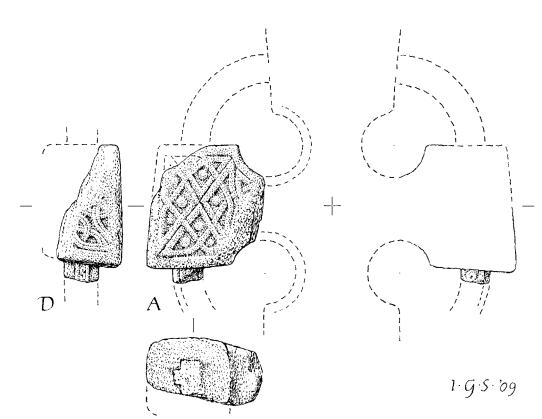


Figure 8.12 Forteviot 3 (maximum dimension 0.30m), measured drawing by Ian Scott an arm of the cross with slightly expanding arms, showing cusped armpits on two inner sides. Face A is decorated within a moulded frame with angular interlace of Stafford knots with each field containing round pellets. The outer face (D) also has interlace of a different pattern with double-beaded strands. Face B is broken off. The stump of a connecting ring survives on one side; this has a beaded border to the front, and a central raised rib decorated with side mouldings and step pattern on the outer face. The cross-head is estimated to have been about 0.8m in width.

DISCUSSION: Free-standing ring-headed crosses are rare in Pictland, being more common in western Scotland and Ireland, though there is a fragment of one at St Vigeans (Geddes 2017, VIG009). However, there are unusual features of the Forteviot cross, especially the raised external rib on the ring which is difficult to parallel, and the use of pellets within the interlace. Pellets do occur on Pictish sculpture, for example on Fowlis Wester 2 (Borland 2015, fig 9), and at Applecross and Rosemarkie (Thickpenny 2019), but only in the Forteviot and Rosemarkie examples do they seem to be part of the formal design rather than used as random space fillers (Borland 2015, 7).

DATE: 9th/10th century.

REFERENCES: *ECMS* Forteviot no 3 (Allen and Anderson 1903, fig 337 a and b); Alcock and Alcock 1993, 223, illus 5; Henderson and Henderson 2004, 193; Aitchison 2006, 109–10.

8.2.4 Forteviot 4 Cross-shaft fragment (Figs 8.13 and 8.14)

LOCATION: In St Andrew's church, Forteviot, originally seen (1903) in the stone collection in adjoining manse garden.

Dimensions: $0.36 \times 0.40 \times 0.18$ m.

CONDITION: A very worn fragment. Only the front face survives, the others broken off. The carved face is weathered.

DESCRIPTION: Original decoration survives only on one face (A) of this battered fragment. It is carved with the figure of a horseman (possibly bearded), facing to the left, holding a spear downwards. The figure possibly held a circular shield (Aitchison 2006, 113). There are



Figure 8.13 Forteviot 4 cross-shaft fragment photographed in new church display. Side A shows figure of a horseman holding a spear downwards, with doubly scalloped cusped arms around and above the panel, side D shows traces of two panels, one with interlace (DP245619 & DP245621; © HES)

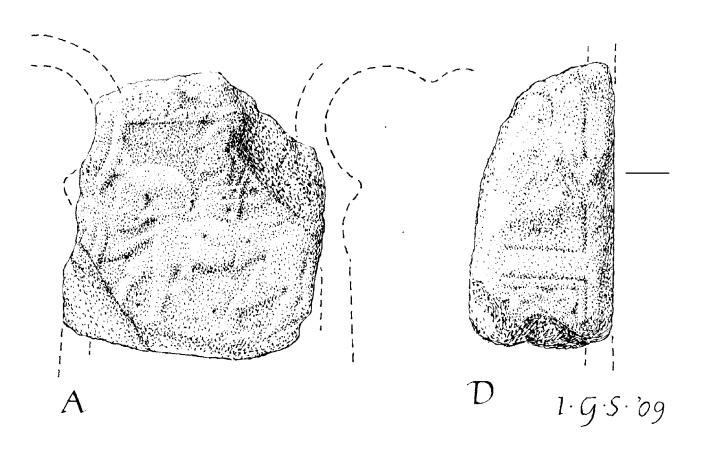


Figure 8.14 Forteviot 4 (maximum dimension o.4om), measured drawing by Ian Scott

traces of a framed border at the top and left-hand side where it is doubly scalloped, suggesting there were cusped arms around and above the panel, as on Constantine's Cross. The scalloping may be a unique example in Pictish sculpture, and expresses further links to Northumbrian sculpture where it can be seen on the Ruthwell Cross for example.

DISCUSSION: The style and placement of the horseman is, allowing for the weathering, identical to that on Constantine's Cross Face C (see Fig 8.25). It is suggested here that this fragment is associated with Forteviot 2, forming parts of a free-standing cross similar in size to Constantine's Cross (see Fig 8.43) as discussed above.

DATE: 9th century

REFERENCES: ECMS, 326; Alcock and Alcock 1993, 223; Aitchison 2006, 110–14.

8.2.5 Forteviot 5 Fragment (Figs 8.15 and 8.16)

LOCATION: Now lost. Originally recorded built into a wall of the mill at Milton of Forteviot in 1903 (Fig 8.15). Drawn here from a photograph taken in 1964 (Fig 8.16).

CONDITION: broken on all sides.

Dimensions: 0.30×0.15 m.

DESCRIPTION: One face has part of a complex interlace design.

DISCUSSION: Not much can be said about this small fragment, though the interlace design resembles that on Face A of **Forteviot 2** in having a cross formed within the interlace; it is possibly part of the same monument.

DATE: ?9th century.

Figure 8.15 Forteviot 5 embedded in wall at Milton of Forteviot in 1964 (© Perth Museum & Art Gallery)

References: Allen and Anderson 1903, 327, fig 339; Alcock and Alcock 1992, 223; Aitchison 2006, 114-15.

8.2.6 Forteviot 6

LOCATION: Undescribed lost stone. Noted in 1903 as 'built into the walls of one of the outhouses of the Mill of Forteviot and when the outhouse was pulled down was used in the construction of a retaining wall along the east side of the Water of May, being now invisible.' (Anderson and Anderson 1903, 324).

8.2.7 Invermay Free-standing cross fragments (Figs 8.17-8.23)

LOCATION: The fragments of the shaft are now displayed in St Andrew's church, Forteviot and the base sits in a field at Invermay.

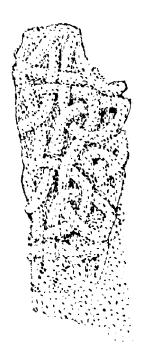
DISCOVERY: Some of the fragments (here 1.2 and 1.3) were first recorded in 1891 in a field at Dronachy, 1km south-east of Forteviot, and were originally referred to as the Dronachy cross (Allen and Anderson 1903, 327). The site was next to the 'Long Plantation', where the pieces had been thrown after the 'wanton destruction' of the cross in the 1760s (ibid). The other fragment (1.4) has never previously been described, but it may be the piece described by Allen as being in the flood wall, which subsequently made its way to the church. These pieces of the cross shaft (1.2 and 1.3) were later taken into the porch and session house of

Figure 8.16 Forteviot 5 (approximately o.30m long), shown in what is believed to be the original orientation in this drawing by lan Scott

St Andrew's church. The broken base was later repaired with iron staples and around 1840 was used to erect a plain obelisk in a field called North Hallbank Park. Were this its original location, the base was sited eastwest, thus facing east as with the Cross of Constantine, but as it stands in a slight valley it is visually screened from Forteviot. The location of the original site was possibly nearer NGR: NO 0590 1670 (see Fig 2.2). As far as can be determined the cross stood at the junction of the road leading down to Forteviot with the old Dunning to Bridge of Earn road. From this prominent position at the top of a terrace, the cross overlooked the Earn valley and Forteviot. Further fragments (1.3 and 1.1) were rediscovered in the churchyard and initially labelled Forteviot 7 and 8 (Simpson 1997; Aitchison 2006, 119; Hall 2011), before their provenance was recognised by Hall and Scott (see Fig 8.18).

CONDITION: Four fragments of cross shaft (Invermay 1.1-1.4), two of which join, and a massive monolithic base of three joining fragments (Invermay 1.5). All are considerably worn and battered.

DIMENSIONS: As reconstructed in Ian Scott's drawing, the cross would have had a width of 0.60m and a thickness of 0.45m, which fits the socket on the base. Fragment 1.1 measures $0.50 \times 0.60 \times 0.18$ m. Fragment 1.2 measures $0.30 \times 0.24 \times 0.12$ m. Fragment 1.3 measures 0.64 × 0.42 × 0.20m. Fragment 1.4 measures $0.73 \times 0.52 \times 0.16$ m. The base (1.5) measures 1.22 × 1.33 × 0.60m.



DESCRIPTION: 1.1 is from the basal part of the crossshaft, retaining part of the tenon (Fig 8.17). All edges are broken, and the rear face is missing. Face A has a lower border of simple eight-cord interlace with triple strands. Above this is a blank panel with moulded border. Face D has a more complex four-cord interlace with central beading, set within a double-beaded frame. The interlace is constructed to leave a small, sunken, equal-armed cross in the centre.

1.2 retains decoration only on one face (D). This is the same interlace pattern as on 1.1, with a central sunken cross, and the fragment is reconstructed as lying immediately above 1.1.



Figure 8.17 Invermay fragments of cross-shaft. Side A (fragment 1.1) border of triple strand interlace (photo by Paul Adair; © Perth Museum & Art Gallery), side B (fragments 1.3 and 1.4) with diagonal key pattern (© Perth Museum & Art Gallery), side C (fragment 1.3) panel of human figure possibly attacking a beast (photo by Tom Gray; © HES), side D (fragment 1.1) four-cord interlace with sunken, equal-armed cross (photo by Mark Hall; © Perth Museum & Art Gallery), side D fragment (1.2) same interlace pattern with sunken cross seen on 1.1 (© Perth Museum & Art Gallery)

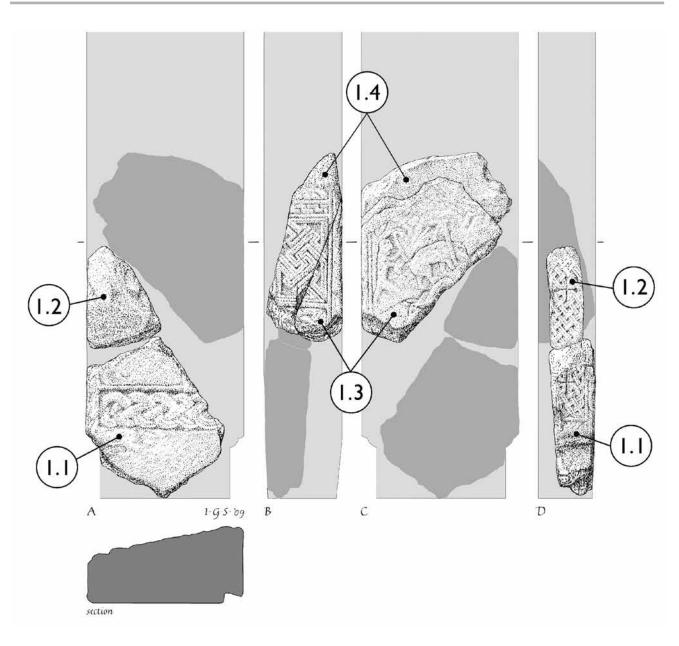


Figure 8.18 Invermay Cross tentative reconstruction by Ian Scott based on four fragments. Greatest dimension of lowest fragment (1.1) is 0.60m

1.3 is a part of the main shaft and is split diagonally from 1.4, which made reconstruction of the relationship between the two parts difficult. The large size of the fragments made it difficult to refit and the fragments are not the same colour due to differential weathering. Face C has part of a large figural panel within a moulded frame. This face is very worn and prior to Tom Gray's skilful photography, the figures had escaped notice. To the left is a human figure walking to the right, with a raised curved object in both hands, possibly an axe. He appears to be attacking the rear of a beast, possibly a bear or boar whose head is trapped by a stake or thicket. The beast has open jaws, a prominent eye, and two ears. There are traces of other figures above, and a possible tree to the left, but they are too worn to decipher. Face D of this fragment has a panel with key pattern, and traces of a different panel below, also with diagonal key pattern. It is framed on the upper border with a step pattern.

1.4 retains decoration on only one face. This face (D) has more of the panel with key pattern seen on 1.3. Above it is a border of step pattern, with traces of a further panel above. The front face (A) has been broken off.

1.5 The base has been formed from a single massive block of sandstone (Fig 8.19). It has been broken into three major pieces, and these have been repaired with

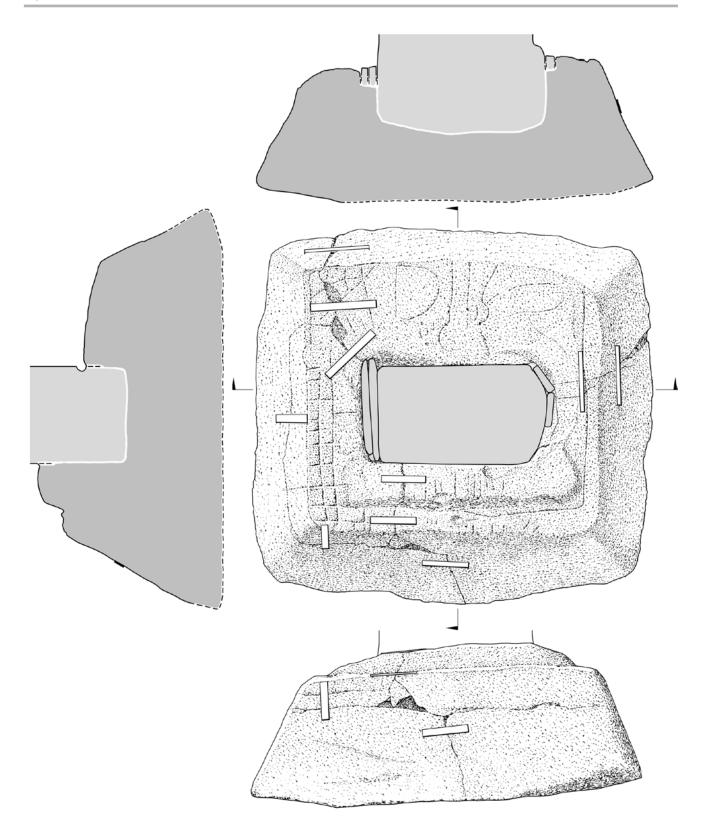


Figure 8.19 Invermay cross-base (maximum dimension 1.33m), measured drawing by John Borland

iron staples, most likely when the new obelisk was erected in the socket in the early 19th century, which is probably when the inscription, the initials 'D H S', was also added to the broadest part of the upper surface (Fig 8.20). It is pyramidal in shape, with steeply sloping sides. A stepped lip around the socket survives to the rear and one side; this presumably originally continued all round but is now broken off at the front. There are traces of chequered decoration in places on top of the lip. The socket is not set centrally, leaving a broader flat top at the front, which now bears traces of initials on the broken surface; these must have been engraved after the breaking of the base, presumably in the modern period.

DISCUSSION: The reconstructed cross proposed by Hall and Scott is substantial, even larger than Constantine's Cross, and decorated on all four faces. Only one fragmentary figural scene survives, but this shows close similarities to the scene on the lowest panel of Face A of the Cross of Constantine. Another parallel is suggested by the key pattern on Face B, which is so similar to that on the top panel of Face C of Constantine's Cross that it suggests a deliberate copying (C Thickpenny, pers comm). The stepped border of this panel is also mirrored on the Cross of Constantine. The plaited interlace at the base of the cross is triple-stranded and similar to that on **Dunning 1**.

Like Constantine's Cross from Dupplin, the setting of the Invermay Cross was recorded at the end of the 18th century in the *Statistical Account* for Forteviot parish, which itself relies on a newspaper account published 25 years earlier by the then schoolmaster in Forteviot (*OSA*, 198–200). From this we learn that by the 1760s the cross had already been demolished or collapsed as it is recorded 'lying broken over at the pedestal, on which are many emblematic figures'. According to the OS Namebook, sometime c 1840 a replacement, plain obelisk had been erected in the original, repaired base (Fig 8.21). Did this creation of a folly on the estate perhaps reflect regret at the loss of the cross or guilt over its demolition? Allen (1892, 251) describes the destruction as 'wanton destruction', in response to Stuart's account of it being 'broken in pieces not many years before 1772' (1867, 59). Certainly, considerable effort was put into restoring a vestige of the cross, not only by the erection of the obelisk, but also in reassembling the shattered base now held together by ten, leaded-in iron staples. By 1891, Allen reports three of the fragments of the cross to be lying in the woods (Long Plantation) a quarter of a mile from the cross site (Allen 1892) (Fig 8.22). At some point the replacement obelisk itself was broken in two and cemented back together.

The parallels between the location at Invermay and Dupplin are several. Both are sited within the policies of estates which had been significantly landscaped in the 18th century, including the construction of a massive estate wall at Invermay. This was all the intent of the laird, Sir John Belshes, but it proved too great a strain on his purse: he failed to pay his taxes and was summoned for debt in 1802 (Murray 2003). It may be the somewhat rapacious Belshes who is at the



Figure 8.20 Invermay cross-base, detailed view from the north-west



Figure 8.21 Invermay cross-base with modern obelisk, looking west towards Ben Effrey (photo by Mark Hall; © Perth Museum & Art Gallery)

Figure 8.22 View north from approximate original setting of Invermay Cross. Excavations of Neolithic ritual complex visible on left in middle distance, Forteviot itself is largely obscured by trees in middle distance. The nearest stand of trees is the Long Plantation where the fragments of the Invermay Cross were first recognised



cosishang

Figure 8.23 Detail from John Adair's map of Perthshire surveyed c 1683, which was engraved and printed posthumously by Richard Cooper the elder, in the 1730s. The map appears to indicate with a cross-and-ball symbol the positions of Constantine's Cross (west of the Dupline estate) and the Invermay Cross (east of the Invermey estate). See Figure 2.2 for position on a modern map (Reproduced with permission of the National Library of Scotland)

root of the differential preservation of Dupplin and Invermay, in being responsible for the 'wanton destruction' of Invermay. Belshes may have decided an ancient cross (obelisk) would be a suitable ornament for the new designed landscape around Invermay House. If so, this would provide a potential date (1722) for its destruction, shortly after the completion of the house. This is in marked contrast to the considered preservation of Dupplin, again noted by Allen (1892, 251–2), who commented: 'It is protected by a wooden railing and there is a notice board close by requesting that the cross may not be injured by anyone. This is the only thing of its kind I saw throughout the whole of Scotland.'

John Adair's 1683 map of Strathearn bears a crossand-ball symbol for both Dupplin and Invermay (Fig 8.23). This symbol usually indicates a chapel but as there is no known chapel at Invermay, it may well represent the cross (Hall 2011), although if so it is poorly sited, lacking the accuracy of location that the other sites on the map are depicted with (see Fig 2.2).

DATE: ?9th-century

REFERENCES: Allen and Anderson 1903, 328, figs 340–1; Aitchison 2006, 125–9; figs 38–41.

8.2.8 Constantine's Cross (the Dupplin Cross) (Figs 8.24–8.33)

LOCATION: Since 2002 housed in St Serf's church, Dunning NGR: NO 01905 14490. Previously situated in an open field on Bankhead farm on the Dupplin estate at NGR: NO 05631 19460, it was formerly referred to as the Bankhead Cross and later the Dupplin Cross. Excavations on the site (Ewart et al 2008) were inconclusive as to whether this was the original location, but as a symbol on Adair's map suggests it was sited there by the 1690s (see Fig 8.23), it is unlikely to have been moved. The site is located on the hillside beside a trackway which led down from the Gask Ridge routeway to the lowest fording point of the River Earn, just below the present bridge of 1770. The cross-base in its original location was orientated east-west, so that Face A, which bears the inscription, faced west towards the trackway (Fig 8.24). The site overlooks the Earn valley, Forteviot lying 1.5km to the south.

The cross was removed in 1999 and taken to Edinburgh for conservation treatment by Historic Scotland (Figs 8.25 and 8.26). One of their predecessor bodies, the Office of Works, had previously

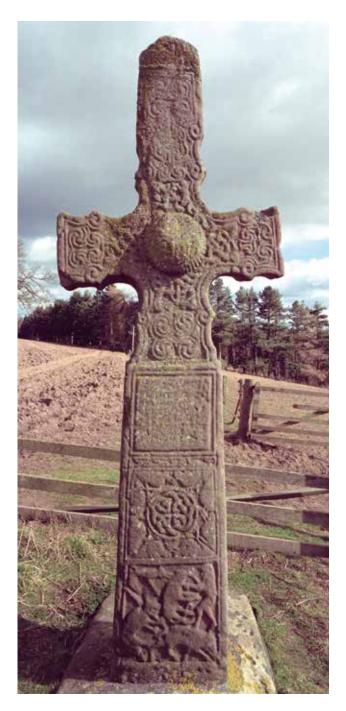


Figure 8.24 Constantine's Cross in its earliest known setting on the Dupplin Estate, looking at the west side (A) prior to conservation and relocation (SC449887; © Crown Copyright: HES)

intervened on the cross's behalf in 1925, seeking to stabilise the tilting cross by filling the socket with concrete and inserting a metal pole into the shaft and through the base (Fig 8.27). Following conservation it was displayed briefly in the National Museum of Scotland before returning to Strathearn in 2002 as a Monument in the Care of the Secretary of State for Scotland, sited in St Serf's church in Dunning (Fig 8.32). CONDITION: Some weathering, particularly pronounced at the top of the shaft, but the carving is generally clear.

DIMENSIONS: Height 2.62m (including tenon 2.92m), span of arms 0.94m, thickness 0.38m. Base measures $1.40 \times 1.15m$, height 0.60m.

DESCRIPTION: The free-standing cross (1.1) and base (1.2) are complete, and both of Old Red Sandstone but of different lithologies, suggesting separate quarries for each. If the cross was recorded in its original position, Face A is the west face, Face C the east.

1.1 The overall form of the cross is unusual (see Figs 8.26 & 8.31). The lower shaft tapers in both profiles, and is sharply separated from the cross-head, which is slightly lop-sided in execution. The cross-head consists of a near equal-armed cross with an elongated upper arm and a heavily worn integral cap. The proportions of the cross suggest Northumbrian influences, while the tegulated cap resembles some seen on Irish crosses. The arms have shallow cusped armpits and scalloped edges emphasised by scrolls, a characteristic of Iona sculpture. There is a large central boss on faces A and C, projecting by around 70mm. The lower left-hand corner of Face C is missing; the decorated border shows that this was the case when the cross was carved. It may have resulted from a minor breakage which was accommodated by the mason to avoid creating a whole new cross, but it is more likely deliberate as missing corners are seen on a small number of other crosses such as the Maiden Stone, Aberdeenshire and Meigle 1, Angus. It may have been left to facilitate erecting the cross in the base or have had some unknown symbolic significance (Goldberg 2012, 172-4; Hall 2014, 39). The cross is lavishly decorated on every face, probably including the weathered but crown-like top. The decoration on all four faces of the cross-head comprises contrasting interlace, scrollwork and key patterns, with the exception of an animal within a beaded border in each of the panels of the underside of the scalloped facets of the cross-arm (the upper faces of the arms are blank). The four faces of the shaft are predominantly decorated with figurative imagery.

Face A: Upper arm is capped with a tegulated area, a pelta pattern fills the scalloped panel of the upper cross arm. The boss at the centre of the cross-head is ribbed and decorated with worn angular key pattern surrounding a cross, represented crisply on Allen's drawing (Allen and Anderson 1903, fig 334a) and



Figure 8.25 Constantine's Cross after conservation and relocation to St Serf's Dunning. Side A the shaft has the inscription above a panel of eight doves above a David scene, side C shaft has a mounted figure above a panel of four soldiers (DP245568 & DP245565; © HES)

similar to that on the boss of the free-standing cross fragment at St Vigeans (Geddes 2017, 189, VIG009). The boss protrudes substantially and is surrounded by interlace whose strands end in opposed animal heads on all four cross arms. Outside this interlace are double pelta patterns, and the upper one appears to continue into more peltas in the uppermost panel. The cross carries three panels on the lower shaft: the upper panel carries an inscription (see below), the central panel bears four pairs of opposed doves with interlinked beaks arranged around an interlace roundel with a central cross, and the lower panel shows a possible boar hunt and King David rending the jaws of a lion or bear. The left-hand beast in the basal panel is very similar to the beast seen in **Invermay 1.3** (see Fig 8.18), sharing the oddly positioned stave or spear and the diagonal position. Strangely, Allen and Anderson (1903, 322–3) left this decoration blank (Fig 8.33), but they show a cross formed of angular interlace on the central boss which is now too worn to decipher.

Face B: One row of tegulation survives below the



Figure 8.26 Constantine's Cross after conservation. The shaft of Side B has three panels: a pair of horses, above two soldiers above a triangular knot. On side D the shaft also has three panels: a biting beast above a harpist above an interlace panel. The ends of the cross arms are decorated with key pattern ornament. The undersides of the cross arms are decorated with beasts, this crouching beast is visible when facing the B side (DP245571, DP245573, DP245576 & DP245577; © HES)

worn top. The second panel of the upper arm has an interlace panel. There are small panels of key pattern above and below the cross-arms, as also the end face of the cross-arm. The panel below the cross-arm has interpenetration of key-pattern and spiral ornament. The lower shaft has a single narrow panel divided into two zones by a short run of key-pattern. The upper zone carries two opposed horses, each with one of their front hooves in their opposite's mouth and otherwise touching bellies and rear hooves. The lower zone shows two moustachioed warriors, looking upwards, wearing long tunics (with key-pattern hems) and helmets and carrying shield and spear. Below this is a triangular panel with a single loop of interlace, cut to fit the triangular shaping of the shaft to create a niche at this point.

Face C: Very faint traces of tegulation may survive on the top above a panel of key pattern, closely paralleled on **Invermay**. The cross-head has a prominent central boss, with a smoothly finished dome surrounded by a ribbed collar. The cross-head is filled with vinescroll ornament springing from two flat bases, with berry-less leaves forming spirals on the side and upper arms. Flat mounding separates the cross-head from the shaft which is divided by step patterns into three panels. The top panel carries a mounted warrior wearing a short tunic (or carrying a shield) and rod over his right shoulder (similar to **Forteviot 4**); the middle panel contains four helmeted warriors wearing long tunics, each carrying shield and spear and again, like the pair on Face B, looking upwards, but without moustaches; the lower panel shows a pair of leaping hunting dogs. The left edge of this panel is obliquely angled so as to fit the triangular niche already described.

Face D: Traces of tegulation survive on the heavily eroded top above a panel of interlace. Small panels of interlace are found above and below the cross-head and there is a panel of key pattern on the end of the crossarm identical to that on Face C. The lower shaft is divided into three panels. The upper one contains a quadruped with a prominent muzzle biting its interlaced tail. The central panel depicts a harpist, who sits on a small wooden chair with short legs and a back with a decorated terminal. The musician, who plays a large, triangular-framed harp of nine strings held in place by decorated terminals, is commonly interpreted as the Old Testament King David in his guise as psalmist. The lower panel comprises double-stranded interlace.

Inscription: An inscription was first noticed on a worn panel on Face A in the early 1990s. Stuart (1856,

pls LVII-LVIII) rendered the panel as interlace; Allen left it blank (Allen and Anderson 1903, fig 334A). The production of a high-quality cast prepared by National Museums Scotland for the Work of Angels exhibition facilitated analysis of the inscription (Forsyth 1995, 237). The inscribed panel is on Face A (west) at the top of the lower shaft, in prime viewing position (Fig 8.28). It is extremely worn, but this appears to be the result of natural weathering rather than deliberate defacement. The inscription is written in the Roman alphabet in miniscule and majuscule letters, in seven registers of continuous text. Only the upper part of the inscription deciphered; it appears to be in Latin. The first part of the inscription was interpreted as Custantin filius Fircus, referring to king Custantin (Constantine) son of Uurguist (Fergus), who ruled Pictland from AD 789 to 820 and Dál Riata from AD 811 to 820 (Anderson 1973, 192-3). If this is the Constantine who set up the cross or was commemorated by it, then the cross can be confidently dated to the early 9th century. Unfortunately the rest of the inscription is too poorly preserved to be legible.

There are no rule lines between the registers, nor do there appear to be any medial points or crosses dividing

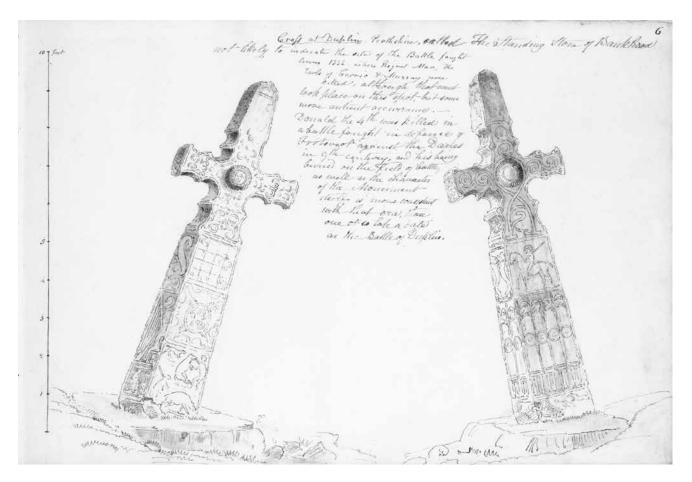


Figure 8.27 Field sketch by antiquarian James Skene from 1832, showing precarious tilt of the cross before stabilisation in 1925 (© Society of Antiquaries of Scotland)

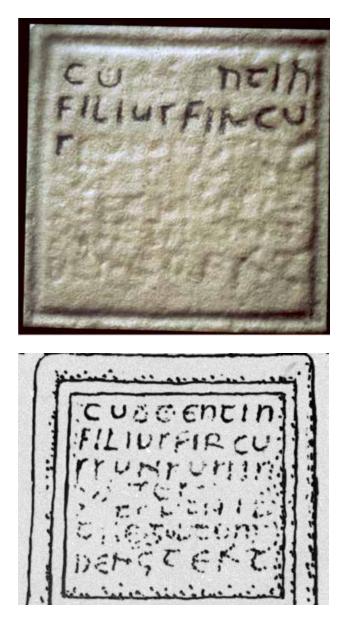


Figure 8.28 The cast of Constantine's Cross in National Museum of Scotland stores with the inscription chalked in by Dr Katherine Forsyth. Detailed view (right) shows only most legible letters picked out with charcoal (© Trustees of National Museums Scotland)

Figure 8.29 Constantine's Cross, interpretive drawing of the inscription panel by Ian Scott

sections of text. The number of letters per line is approximately eight or nine, which gives a total of just over 60 characters. The separate letters, however, are not always distinct, and some of the characters may be ligatures. Nonetheless, this makes Dupplin the longest Roman alphabet inscription from early medieval Scotland.

The clearest section of the inscription is at the beginning of the second line. The first six letters comprise the only completely unambiguous word in the whole inscription: *filius* (Fig 8.29). This indicates not only that the language of the text is Latin, but also alerts us that we should expect the preceding and succeeding words to be personal names. The name immediately following it can, in fact, be made out with comparative ease: *Fircus*, with the 's' the first letter of the third line. This is a reflex of the Celtic



male personal name **Uor-gustus*, 'chosen one', which is attested in the P-Recension of the King List in more Pictish guise as *Uurguist* (Anderson 1973, 263; Jackson 1955, 142; 1980, 161, 163). This spelling shows it to be closer to the Gaelic orthography as seen on the Drosten stone at St Vigeans, Arbroath (Okasha 1985, 59–61; Clancy 2017, 107–18, VIG001).

Returning to the top line we would expect it to be taken up with the name of the son of *Fircus*. The first and last letters are the clearest, Cu[--]ntin, the illegible portion comprising three or four characters. There may be -st- in the middle but the rest is rather confused; nevertheless sufficient remains to justify the reading *Custantin* or *Custentin*, a version of Constantinus, the male personal name borrowed from Latin into all the Celtic vernaculars (Jackson 1953, 86, 595). Custantin is an Irish form, attested

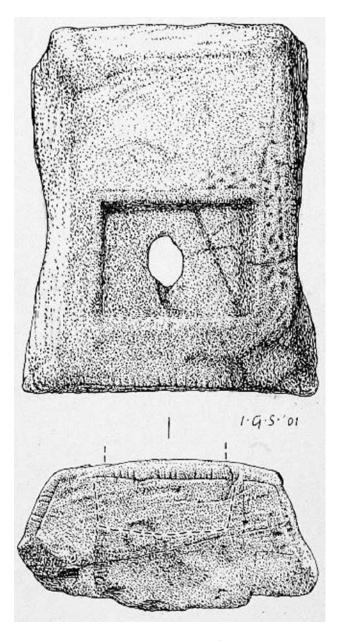


Figure 8.30 Base of Constantine's Cross (maximum dimension 1.40m), measured drawing by Ian Scott made while under conservation. It shows detail of the ornamentation initially interpreted as ogham, and the hole in the base made to insert an iron support

in the Annals of Ulster (Mac Airt and Mac Niocaill 1983) in the AD 820 death notice of *Custantin filius Fircus*.

In the rest of the inscription, there are approximately 42 more characters, some of which can be tentatively identified, but insufficient survives to recognise any titles, phrases or words.

1.2 The base (Fig 8.30) is formed from a monolithic block of sandstone and is exceptionally massive. The form is pyramidal with steeply sloping sides. The square-cut socket is situated to the rear of the block, leaving a platform in front of it which is heavily worn by the footfall of those approaching the cross and

standing or kneeling in front of it. There are faint remains of decoration consisting of a grooved moulding with diagonal hatching (possibly cable-moulding) which survives on the rear of the stone on all the angles, which on its first discovery was mistaken for an ogham inscription (Forsyth 1995, 237), an interpretation which has now been ruled out. There is also a band of very worn interlace around the rectangular socket. The socket is about 0.25m deep and is outlined by a groove. An irregular hole in the centre of the socket hole, piercing through the stone, was cut in 1925 as part of a stabilisation process (Ewart et al 2008, 329). Excavation in 1998 revealed an area of paving approximately 6m in diameter on the north side of the base (Fig 8.34). It was suggested that this was contemporary with the erection of the cross, and may have enabled audiences to gather or worship (ibid, 334).

DISCUSSION: The most sustained and detailed consideration of the decoration of the cross is by Isabel Henderson who makes a compelling case for considering this a fundamentally Pictish piece of art (Henderson 1983; 1986; 1999; Henderson and Henderson 2004). The cross has also been discussed by the Alcocks (Alcock and Alcock 1993; 1997) and the excavations around it are reported in Ewart et al 2008. The published drawing of Allen in The Early Christian Monuments of Scotland (Allen and Anderson 1903, fig 334A-D) (see Fig 8.33), has a number of omissions and inaccuracies which have been corrected in Ian Scott's drawing undertaken when the stone was being conserved in Edinburgh (see Fig 8.31). The slab which was used to carve the cross must have measured about $3.0 \times 1.0 \times 0.4$ m, and would have weighed around three tonnes. A massive investment of time and resources would have been required to cut out the shape of the cross, even before it was decorated. The evidence of recent replica work suggests it would have taken several years for one sculptor to complete the task (cf Gondek 2006).

Henderson notes that at 2.6m tall the cross is 'unremarkable in scale', yet what is remarkable is the longest inscription from early medieval Scotland which appears to include the name *Custantin filius Fircus*, allowing the cross to be confidently dated to the early 9th century (Forsyth 1995).

The inscription allows the single rider, a 'thoroughly Pictish convention' (Henderson 1999, 172), to be identified as the Pictish king *Custantin*. Given the imperial name (cum title) it seems likely that the equestrian

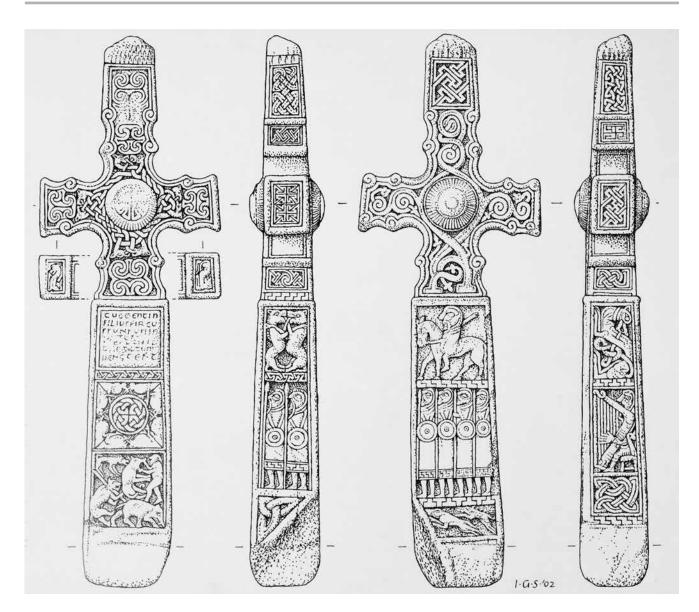


Figure 8.31 Constantine's Cross (height 2.62m), measured drawing by Ian Scott while under conservation

image was modelled on a Roman example. The only large-scale Roman imperial equestrian statue to survive from antiquity is that of Marcus Aurelius (Stewart 2012), which appears to owe its survival to having been mistakenly identified as Constantine the Great. In the 8th century AD the statue was located in the Lateran Basilica, the Cathedral of the Holy Saviour and of Saints John the Baptist and the Evangelist, where pilgrims are likely to have encountered the 4.2m high statue. While the rider does not closely resemble the Marcus Aurelius statue, there are details which suggest that *Custantin filius Fircus* was being portrayed as an emperor.

Henderson also focuses on the details of the prominent moustaches used to distinguish status (1999, 172; Alcock and Alcock 1993, 240) and the formulaic, stylised facial representations with block-like noses, which she argues support the idea that the arch carvings (**Forteviot 1**) are contemporary (Henderson 1999, 177). She makes a more general observation concerning the balance between the images of strength, power and authority and those emphasising spiritual themes such as the vine scroll, the doves and the David motifs (*ibid*, 174–5). The Davidic qualities are necessary for a royal warrior who can protect and save his people physically and spiritually (*ibid*, 175).

Free-standing crosses are rare in eastern Scotland and the distinctive shape of Constantine's Cross is unique in Insular art. Henderson (1997, 166) argues that the distinctive scrolling on the cross-arms is derived from metalwork exemplars (as are the bosses), and that the double curved form comes from Iona where St John's Cross has the same feature. The form of its cross-head and the distinction between cross and shaft is essentially Anglo-Saxon (Kelly 1993, 223), but the elongated top arm and tegulated 'cap-stone' effect recall certain crosses of the Irish Midlands. Further Anglo-Saxon influence is displayed in the use of vinescroll ornament all over the cross-head, with close parallels to the contemporary Lastingham 3 cross (Henderson 1997, 167). However, despite the variety of Insular traditions used in Dupplin, Henderson argues that the cross retains a 'high proportion of specifically Pictish traits' (*ibid*, 175). The decoration on the base is unusual in a Scottish context, but similar decoration is seen around the socket on an unusual stone from St Vigeans (Geddes 2017, VIG014), and there is also decoration around the **Invermay** socket stone.

The figurative panels incorporate Paschal and David iconography (Henderson 1986) and appear to make statements about kingship and its divine and material sanctions (Alcock and Alcock 1993, 238–41). There are abundant indications that the cross was used to symbolise royal power and it has been described as 'patently triumphalist' (Henderson and Henderson 2004, 190). These features include the prominent image of the mounted warrior supported by an army

Figure 8.33 Dupplin Cross from Allen and Anderson's *Early Christian Monuments of Scotland* (1903, fig 334)

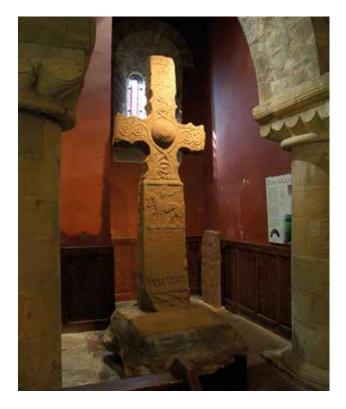
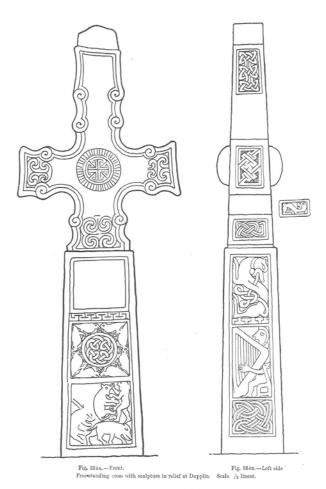


Figure 8.32 Constantine's Cross in its present setting in St Serf's church, Dunning. The Dunning 1 cross-slab can be seen set against the wall to the rear



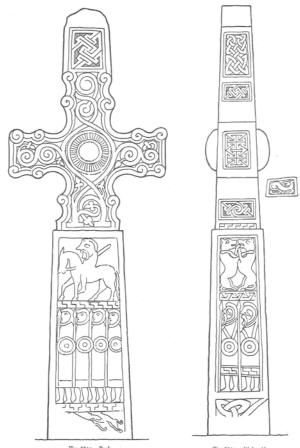


Fig. 334c.-Back, Fig. 334b.-kight side. Free-standing cross with sculpture in relief at Dupplin. Scale, ₁ linear.

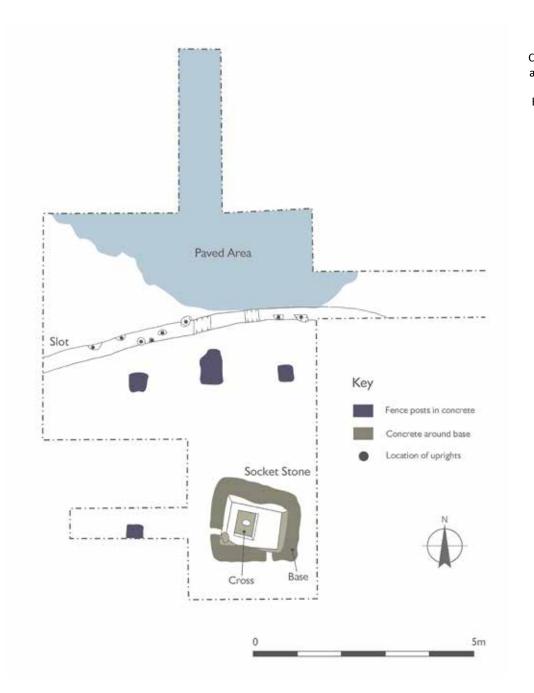


Figure 8.34 Original setting of Constantine's Cross showing paved area and position of protective structure (redrawn from Ewart *et al* 2008, illus 8)

of soldiers on Face C; the religious images relating to the David cycle; and the inscription itself. If the mounted warrior was intended to represent King Constantine, it would be the earliest known representation of a Scottish king, as coinage showing a king's head was not produced in Scotland before the 12th century. The landscape significance of the stone is discussed further below. It is noticeable that there are a number of parallels in the iconographic scheme to the **Forteviot 1** arch, and to the **Forteviot 2** and **Invermay** crosses.

DATE: early 9th century

REFERENCES: Henderson 1997; Henderson and Henderson 2004, esp 189–94; Forsyth 1995; Alcock and Alcock 1993; 1997; Aitchison 2006, esp 121–5; MacLagan 1898, 56–8.

8.2.9 Gask Cross-slab (Figs 8.35 and 8.36)

LOCATION: Current location: grounds of Moncrieffe House, near Bridge of Earn. NGR: NO 1366 1933.

DISCOVERY: Since the mid-19th century the Gask Stone has stood in at least two locations beside Moncrieffe House, Bridge of Earn, but prior to that it stood in Trinity Gask parish where it was first recorded c 1832. It was located in a similar situation to Constantine's Cross, about 7.6km west of it. It stood on an open hillside just below the crest of the Gask Ridge, at around 90m OD, about 1km south of the Roman road and overlooking the Earn valley (NGR: NN 9730 1813). Known as the 'Borestone of Gask' (NSA 1844, 337–8), the name suggests it was at some point a boundary marker, as 'bore stane' is a Scots term for a boundary stone (DSL http://www.dsl.ac.uk/ entry/snd/borestane). It can also mean a stone where a standard is set, which would be appropriate as this stone spent much of the medieval period prone. More recently (Stuart 1856, 32), the name has been misinterpreted as the 'Boar stone of Gask', because of the boar carvings.

CONDITION: The top part is broken off and missing. Heavily weathered and now covered in lichen and moss.

DIMENSIONS: Height 1.88m+, width 1.08m, depth 0.23m

DESCRIPTION: The tapering rectangular cross-slab has a cross in relief on both main faces (Fig 8.36). The crosses are almost identical in form, being originally



equal-armed and ring-headed and outlined by roll mouldings. The upper and right-hand cross arms are missing and the slab was in this condition when first illustrated by Stuart (1856, 32). The slab is transitional in form because it is neither a fully solid cross-slab nor an entirely free-standing cross. The four cross arm-pits are fully pierced through the slab. The crosses each have a square panel in the centre of the head, and the terminals are rectangular with scrolls hanging from the undersides on both sides of Face A, and one side of Face C. The ring may have had step patterns if Stuart's drawing can be relied on (Stuart 1856, pls CIII, CIV) and the square central panel may have had an equal-armed cross formed from angular interlace as on Forteviot 2. There are traces of four square panels on each cross-shaft with worn interlace and keypattern designs.

Face A: There are at least four panels of interlace pattern in the cross-shaft, including a middle panel where the interlace forms a cross. To the right of the shaft there are six registers of ornament, from the top: a quadruped facing left, a boar with exaggerated bristles facing left above a similar boar, a serpent and



Figure 8.35 Gask cross-slab showing detail on both sides obscured by heavy growth of lichen (DP245557 & DP245559; © HES)

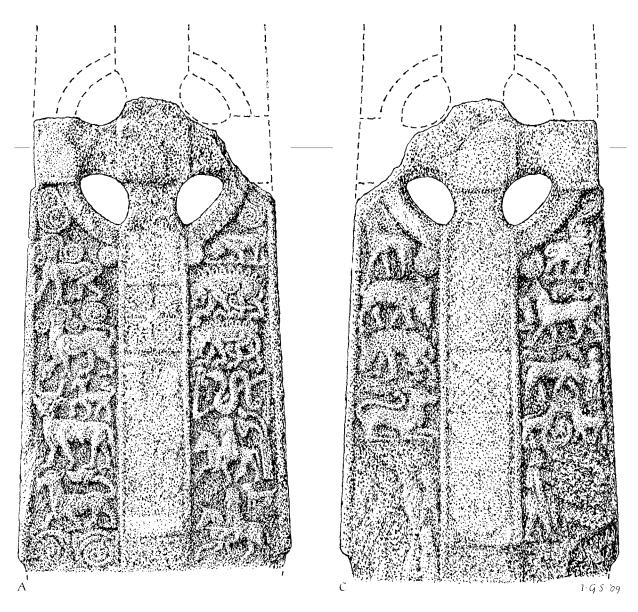


Figure 8.36 Gask cross-slab (height 1.88m), measured drawing by Ian Scott

Z-rod symbol above a horse-rider facing left and a double-headed flower symbol, and at the bottom a horse-rider facing left and a hound. To the left of the shaft there are five registers, from the top: two centaurs one on top of the other facing left with spiral hair and tail, above a horned animal and a small animal facing left, a quadruped whose tail ends in a serpent's head, and finally two large spirals.

Face C: The ornament is arranged in five registers either side of the cross-shaft: on the right, from the top, a quadruped facing right, a wolf with an enmeshed tail and a smaller animal in its jaws facing left, a quadruped facing right towards a human figure with a spear, two confronted quadrupeds, a human figure in a tunic facing right towards a defaced area; on the left, from the top, a long-legged quadruped facing left, a boar facing right, a boar facing left, a seated quadruped with a long tail, and a scene with at least one human figure.

Faces B and D are undecorated.

DISCUSSION: The form of this cross-slab is very unusual and is transitional between a cross-slab and a free-standing ringed-cross, as it has pierced armpits. It shows that there was familiarity with the form of the free-standing cross in the east of Scotland which could be expressed in other ways, as with the form exemplified by Gask but also with ring-headed crosses depicted on cross-slabs, as at Crieff. The only similar forms of transitional monument are found at Carpow, Fife (Proudfoot 1997, 53–5, illus 10), which lies about 20km east of Gask and 2km north-east of the important royal monastery at Abernethy; and at Fordoun, Kincardineshire (Geddes 2017, fig 6.8). Carpow has the same square panel in the centre of the cross, and similar beasts flanking the shaft of the cross. Proudfoot (1997, 61) suggested that the Carpow stone is that referred to (ad lapidem iuxta Cairfuill) in an early boundary charter for Abernethy, and dated it to the 7th/8th century. However, this charter entry was inserted between the 9th and 11th century (Campbell 2003, 57) and so cannot be used to support such an early date for the stone. If the Carpow stone was a boundary marker, the similarity in function to the Gask stone is evident. A more distant sculptural parallel is the Applecross cross-slab, which has a rather different method of combining the forms of cross-slab and ringed-cross (Fisher 2001, 88-9).

Allen remarked of the Gask cross-slab that 'the collection of animals represented is one of the most remarkable on any early Christian monument in Great Britain' (Allen and Anderson 1903, 292). One of the unusual features is that two of the figures, a boar and a centaur, are repeated twice, opposite each other on Face A.

In the *New Statistical Account* the minister, Rev Gray, suggests that the Gask Stone once bore an inscription (*NSA* 1844, 338), but no trace of it is evident to the naked eye. If it did indeed carry an inscription it would presumably have occupied one of the panels on the cross shaft (based on comparison with the panel on the Crieff Burgh cross and Constantine's Cross). Given the geographical association of demarcating the sacred royal landscape an inscription would not be unexpected.

DATE: 8/9th century.

REFERENCES: Trench-Jellicoe 1997, fig 4; Allen and Anderson 1903, 290–1, fig 307; Henderson 1997.

8.2.10 Dunning 1 (Figs 8.37 and 8.38)

LOCATION: St Serf's church, Dunning. NGR: NO 01905 14490.

DISCOVERY: The slab was discovered beneath the floor of the church during the early 19th-century renovations. It was possibly incorporated in the paving of the Romanesque church at some point, as the upper surface is heavily worn. It was reported to have formed the base for a recumbent grave-slab when it was found (Allen and Anderson 1903, 327, footnote).



Figure 8.37 Dunning 1 cross-slab (length 1.2m). Two ringheaded crosses flank a plain equal-armed cross (DP245581; © HES)

DIMENSIONS: Length 1.20m, width 0.50m, thickness 0.15m.

CONDITION: Upper surface heavily worn, sides unweathered, back tooled flat.

DESCRIPTION: The rectangular slab has been cut down carefully at one end, and the thickness has been reduced, presumably to fit in some architectural space (Fig 8.38). The original length would have been c1.50m if the decoration was a double cross, and the thickness c 0.20m.

Face A: This has an outline design in low relief of two conjoined ringed crosses separated by a wide band, each with tiny circular armpits, framed by a



Figure 8.38 Dunning 1 cross-slab, the partially cropped side shows how much of the rear surface has been removed (DP245583; © HES)

groove. The surface is very worn, and there is no trace of any decoration.

Faces B and D: These have identical decoration of two-ply interlace, double-beaded, running along their length. The design is enclosed in a frame formed by a deep groove. Face B is well preserved, but Face D is damaged.

Face C: This has been chiselled-off flat, but would possibly have been decorated if this was originally an upright cross-slab.

DISCUSSION: The original form of this slab is problematic. A stone of this shape would normally be considered to be a recumbent grave-slab, but these are not usually decorated on the sides, so it could have been an upright cross-slab. The cut-down slab could possibly have been reused as a tomb-cover or altar stone, before being incorporated in paving at a later stage, as the wear pattern is similar to other slabs used as paving.

REFERENCES: Allen and Anderson 1903, 319, fig 333.

8.2.11 Dunning 2 (Figs 8.39 and 8.40)

LOCATION: Pending Treasure Trove allocation

DISCOVERY: Found in 2012 during excavations just outside the north boundary wall of the churchyard in Kirk Wynd (Maldonado and Gondek 2012, 10). NGR: NO 0187 1457. The fragment was in a modern levelling deposit. SS12_SF 4023.



Figure 8.39 Dunning 2, fragment of a cross-arm, recovered from 2012 excavations at St Serf's

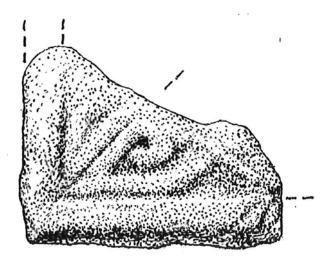


Figure 8.40 Dunning 2 (maximum dimension 0.12m), measured drawing by Ian Scott

DIMENSIONS: A small fragment measuring $0.12 \times 0.10 \times 0.05$ m.

CONDITION: The fragment is broken at the sides and back, with perhaps original edges at one corner. The relief decoration is relatively sharp and unweathered.

DESCRIPTION: The fragment appears to be the corner of a cross-arm (Fig 8.39). The decoration consists of angular interlace within a moulded frame.

DISCUSSION: The high-quality decoration is similar to **Forteviot 3**, and possibly came from a similar cross.

REFERENCES: Maldonado and Gondek 2012, 10, fig 8.

8.2.12 Dunning 3 (Fig 8.41)

LOCATION: St Serf's church, Dunning. NGR: NO 01905 14490.

DISCOVERY: Noted during SERF project excavation around St Serf's tower in 2013.

Dimensions: $0.35 \times 0.40 \times 0.10$ m.

CONDITION: Very battered and worn.

DESCRIPTION: A rectangular fragment decorated in low relief. There is part of a frame of a panel surrounding an undecipherable figural scene on one face.

DISCUSSION: The size suggests this could have been part of a substantial cross or cross-slab.

REFERENCES: Campbell 2013, fig 4.

8.2.13 Blackford (Fig 8.42)

LOCATION: In a flat, open situation close to the main A9 Stirling to Perth road, on Peterhead Farm at Blackford, near Gleneagles. NGR: NN 9243 0980. Recently surrounded by new slip roads. The location is on the watershed between Strathearn and Strathallan and commands views over the route into lower Strathearn from the south.



Figure 8.41 Dunning 3 in St Serf's graveyard



Figure 8.42 View of the Blackford Symbol Stone looking south towards Gleneagles. The upper symbol (a goose) is difficult to read, the lower rectangular symbol is plain

DISCOVERY: Always known at this location. Symbols first recorded by Calder (1947). Geophysical survey and an exploratory excavation in the vicinity of the stone were carried out as part of the SERF project in 2008 (Gondek 2008). Results of the survey highlighted known features such as a nearby circular enclosure visible on aerial photographs, and previously unknown features including a potential Pictish-type square burial cairn around the symbol stone as well as a small circular feature, possibly a building. A small ground-truthing test trench across the wall of the circular building confirmed its existence, but the feature was heavily truncated and provided no secure dating evidence. The stone fell in 1990 and was re-erected without archaeological investigation.

DIMENSIONS: Height 1.5m, width 0.9×0.8 m

CONDITION: Heavily weathered, especially in the upper part.

DESCRIPTION: An undressed tapering pillar of sandstone, probably a glacial erratic, with faint incised symbols on the north-north-east face. The stone may be a reused prehistoric standing stone; another similar, undecorated standing stone stands 360m to the west. The upper symbol is a goose walking left to right, looking backwards over its shoulder. The lower symbol is a rectangle with two horizontal lines dividing it into three parts.

DISCUSSION: The stone is a classic Class 1 Pictish symbol stone. The goose is a rare symbol and the only similar one occurs on a stone at Easterton of Roseisle, Moray, which is also one of a pair, with a salmon symbol below it (Fraser 2007, 108, fig 155). The stone lies at the extreme south-western edge of the distribution of Class 1 stones (Gondek 2006, fig 5), which south of the Mounth are otherwise restricted to Fife and Angus. There is no other Class I stone in the Earn valley, apart from the one currently fixed to the Abernethy round tower.

DATE: 5th–7th century.

REFERENCES: Calder 1947, 1–7; Mack 2007, 23, fig 26.

8.3 Discussion of the sculpture assemblage

8.3.1 Chronology

Apart from the early **Blackford** symbol stone, all the sculpture described here can be assigned to the later part of the first millennium, broadly the 8th to 10th centuries. Only Constantine's Cross can be independently dated, to the early 9th century, and by extension the Forteviot arch and Invermay cross are likely to be of similar date as they share decorative characteristics. Following the publication of the inscription (Forsyth 1995), scholarly opinion has converged on a date early in the 9th century for Constantine's Cross. Close consideration of the Iona and Northumbrian sculpture has led Henderson (1999) to support a date in the first half of the 9th century. Although the Alcocks originally argued, on historical and other grounds, in favour of a mid-9th century date for Constantine's Cross, and the involvement of Cináed mac Alpín, they reconsidered this in light of the inscription and accepted the reading Custantin filius Fircus and its chronological implications (1993; 1997). Unless more of the text can be read, the simplest conclusion is that either Constantine was the living patron of the cross, or it was erected at his death: in other words the cross dates to the beginning of the 9th century.

The other monuments could also be of 9th-century date and probably no later than the early 10th century (for **Forteviot 3**). This period coincides with the *floruit* of Forteviot as a royal centre, with its associations with Pictish kings from Custantin son of Uurguist, to Cináed mac Alpín, and Domnall mac Alpín (see Chapter 2.3), prior to the emergence of Scone as the royal power centre and inauguration site in the 10th century (Clancy 2003; Driscoll 2004; O'Grady 2018).

8.3.2 Style and affinities

One of the notable features of the collection is the variety of form, decoration and figural scenes found on these monuments. While many of these features can be found within the wider Pictish corpus, particularly in southern Pictland, there are clear signs of influence from the Anglo-Saxon and Gaelic worlds in the form of Constantine's Cross and some of its imagery. Apart from the Class 1 stone from **Blackford**, the only other clear Pictish symbols are the 'serpent-and-Z-rod' and the 'flower' on the **Gask** stone, though

whether this has any chronological significance is doubtful. In terms of the figural scenes, these are superficially secular in nature, either military (Constantine's Cross, Forteviot 4), musical (Constantine's Cross), mythical (Gask, Forteviot 2), or hunting (Constantine's Cross, Gask), but of course the images carry entangled religious meaning too. By the same token, the most unambiguously religious elements, such as the vine-scroll ornament and the David scene, convey political messages.

8.3.3 Scale

We have mentioned that this is a significant collection of sculpture, not so much in terms of numbers compared to the major sites such as St Andrews or Iona, but because the form, size and quality of the monuments is outstanding. Such a group of highquality sculpture cannot be paralleled outside a major monastic centre (Fig 8.43). The presence of at least four major crosses can only be seen at other key monastic sites in northern Britain and Ireland, notably Iona, Clonmacnoise, Portmahomack (including the Tarbat Peninsula) and St Andrews, where there were two to four (Fisher 2001; Harbison 1992; Henderson and Henderson 2004, 192). Constantine's Cross is equal in the scale of its conception and execution to the major crosses of Iona and Ireland, and to the Northumbrian crosses from Ruthwell and Bewcastle. It is the only surviving complete free-standing cross in Pictland, though it seems others similar in scale were present at St Vigeans, Abernethy, and St Andrews (Henderson and Henderson 2004, 191-5; Geddes 2017, 62), all in southern Pictland. In terms of numbers of monuments, the Forteviot area assemblage is smaller than the collections at Meigle, St Vigeans, Abernethy and St Andrews in southern Pictland, or those at Rosemarkie, Tarbat and Kinnedar, north of the Mounth. While this may be an indication of a relatively brief period of investment in monuments at Forteviot, alternatively the variety and quality of the sculpture could argue for a longer period of creative activity. One of the other notable features of the assemblage is the lack of any certain burial monuments, with the possible exception of **Dunning 1**, which contrasts with the other major sites mentioned above. This may be the result of survival issues or a preference for burial in the traditional burial grounds

with square and round barrows. This absence points to the use of the monuments as public expressions of power, rather than for private commemoration. This is particularly apparent with respect to the Forteviot arch. The Forteviot group as whole is perhaps best paralleled by the Tarbat peninsula, where major crossslabs were dispersed across the landscape (see Chapter 10.6) (Carver 2008; Carver *et al* 2016).

8.3.4 Biography

The fragmentary nature of many of the monuments from Forteviot and Dunning is indicative of a variety of processes. Some of the fragmentation may be the result of natural forces. The **Gask** slab was recorded as being blown down in the 19th century, as were several at Iona at various times, and this could lead to breakage and subsequent loss of smaller fragments such as the crest of the Gask stone. **Constantine's Cross** was leaning and had to be reset in 1925 (Figs 8.27 & 8.24). Other damage may have taken place during the initial phase of iconoclasm at the Reformation in 1560. The deliberate defacement of the cross on the centre of the Forteviot arch could be seen in this light. However, it is noticeable that there is no other example of deliberate defacement of crosses in any of the monuments, and indeed such small-scale defacement of crosses (rather than crucifixes) is rare anywhere in Scotland. This suggests that the defacement relates to the arch itself, possibly because of its location within a church. It has been argued above (Chapter 7) that the arch was incorporated into the fabric of the later medieval church when it was rebuilt in the 13th century. The casting down and breakup of similar monuments also took place in the 17th century, following the passing of the Act anent the Demolishing of Idolatrous Monuments by the General Assembly of the Church of Scotland in 1640. This may account for the destruction of Forteviot 2 and 3, and Dunning 2 and 3 which would have been major visible monuments. An alternative explanation for the damage is given by Aitchison who argues that the cross was defaced by pagan Norse armies in the late 9th century as a deliberate act of domination (Aitchison 2006,

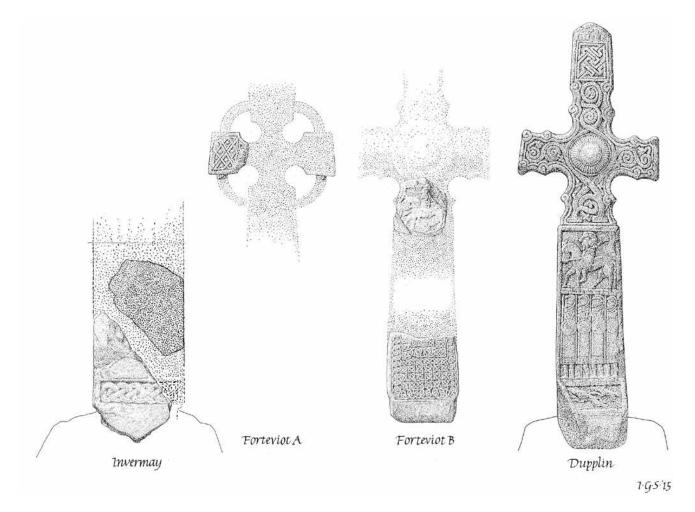


Figure 8.43 Composite drawing of Forteviot crosses by Ian Scott. Full height of Constantine's Cross (Dupplin) including tenon is 2.92m

243–50), although when compared to the destruction at Portmahomack (Carver *et al* 2016) this hardly seems credible. In the absence of clear evidence we should be cautious to presume that the observed damage was iconoclastic or politically motivated; for instance at Whithorn, the destruction of sculpture was much earlier and not necessarily iconoclastic (Forsyth 2005).

The monuments in the open countryside at Dupplin, Invermay and Gask may well have survived both because they stood within the estates of powerful lords, and because they were not seen as specifically religious monuments. Invermay, however, seems to have been the victim of some other destructive motive, possibly as part of the agricultural Improvements, before antiquarian interests led to a revaluation of these monuments. Other monuments may have succumbed to medieval rebuilding campaigns, which often led to the incorporation of earlier monuments into church fabrics, as notably occurred at St Andrews, St Vigeans and Whithorn, or reuse as later burial monuments, as happened widely, for example at Govan. The deliberate cutting down of **Dunning 1** and Forteviot 5 and 6 fall into this category.

The biography of these monuments in modern times has been discussed in relation to Constantine's Cross (Hall 2011, 156-7). This monument became the focus of a Public Local Inquiry into where the cross should reside. Ultimately it was taken into State Care and following a short stay in the National Museum of Scotland, it was installed in St Serf's, Dunning, a Property in Care of the State. Prior to that it is probable that it stood in its original location, where it was cared for. The other stones have fared less well. The corresponding Invermay cross suffered the indignity of being broken up and having the base moved in the early 19th century. The history of the other crosses Forteviot 2 and 3 is even more opaque: it is presumed that they originated at Forteviot church and that once broken, they were then utilised as building stone. The find spots of Forteviot 5 and 6 suggest a pragmatic approach to convenient stone in post-Reformation times. It seems entirely likely that other fragments remain built into local buildings and walls.

8.3.5 Buildings (arch)

In the Discussion on **Forteviot 1** we gave evidence that the arch was originally part of a substantial mortared stone building, presumably a church, erected in the 9th century (Fig 8.44). This is of great significance in terms of our understanding of early Scottish churches as there has been considerable debate on whether there were any stone-built churches in Scotland before the late 11th century (Fernie 1987; Foster 2019 for summary of the evidence). Until recently, any conclusive evidence of surviving stone buildings has been lacking, but radiocarbon dates from Iona obtained in 2019 have shown that the small stone chapel with Irish-style *antae*, known as St Columba's shrine, was in existence by the 9th century (Campbell and Maldonado 2020).

Further debate has centred on whether the arch might have graced a secular palace building (the *pala*cium of Cináed mac Alpín) rather than a church (see Chapter 10.6 and Aitchison 2006, 209-11). In the only extended discussion of the possible architectural setting of the arch, Aitchison develops a point first raised by the Alcocks (1993) for its use as a chancel arch based on Anglo-Saxon parallels (Aitchison 2006, 212-28). While this explanation is possible, it has to be admitted that the arch differs from all known Anglo-Saxon arches in being monolithic rather than being formed from voussoirs and a keystone, and in the fact that its iconography cannot be closely paralleled in Insular sculpture. We also do not have any examples of early bicameral churches in Scotland (Foster 2019), though the evidence for early stone churches is fugitive. The structural problem of a monolithic arch is that it is susceptible to stress fracturing in the centre, as this is where the load from the overlying wall is concentrated. In a keystone arch, the forces are displaced towards the jambs. This suggests that there was not a substantial load above the Forteviot arch, perhaps implying a situation in a porch or a high chancel arch.

Monolithic arches are a feature of some Roman buildings which may well have still been standing in the early medieval period and which could have acted as exemplars; Arthur's O'on from Stenhousemuir is perhaps the best-known local example (Steer 1958; Brown and Vasey 1990). Skene's suggestion that the arch derived from a gate to the royal palace may have been inspired by the Roman triumphal arch tradition (1857). More prosaically, there are several window, door and bath-house niche arches recorded from forts on Hadrian's Wall. Most noteworthy perhaps for comparison here is the 3rd-century possible shrine arch (for a cult statue or altar to Mars Thincsus) from Housesteads (Coulston and Philips 1988, 65 no 161, pl 65) and on display in the museum at Chesters Fort. It is also possible that the inspiration for the arch came

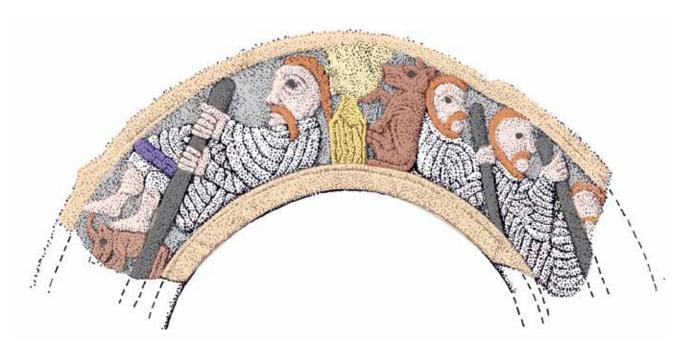


Figure 8.44 Forteviot 1 Arch with speculative colour rendering applied to Ian Scott's drawing. While no paint has been identified on the sculpture itself, this palette is inspired by available pigments, which have been used to highlight the decorative features

from Continental sources, either through direct witnessing by pilgrims, or through depictions in portable media such as ivories, silver plate or textiles (Hall forthcoming). Whatever the source, the creation of a stone building enhanced with sculptural representations of the royal founder of the church based on imperial models was an important statement of intent by the kings who were investing in Forteviot as an important power centre.

From the time of Constantine the Great, both in Rome and Constantinople, palace complexes included significant church buildings which served as stages for the public presentation of the emperor (and other rulers) (Rollason 2016). From the 4th century onwards the most sophisticated representations of the emperor, other rulers and saints were framed in a stylised architectural setting. These survive best in elite decorative arts such as the great silver gilt platter known as the Missorium of Theodosius I made in AD 387-88, which shows the emperor seated under an arch supported by columns (Bayet 2009, 64-5), or the Throne of Bishop Maximianus of Ravenna, AD 546-54, which incorporates a series of saints standing framed within round-headed arches (ibid, 58). These two well-known examples stand for a large number of Byzantine examples in various media - ivory, manuscripts, silver plate and mosaic - which reflect the widespread convention of framing special subjects in an arch and columns.

Whatever the source of the idea, the creation of a

stone building in Forteviot reflects an ambitious statement of intent by the Pictish kings around AD 800. From this perspective, it can be argued that the Forteviot arch, with its unique representations of royal predecessors (Fig 8.44), was used as a device for framing the king and thereby projecting an image of rulership as perfected and disseminated from Constantinople. If framing the ruler appropriately is the principal reason for the arch then its use as an exterior, publicly visible doorway is perhaps more likely than an interior setting.

The idea of an doorway providing a suitable stage for the display of a ruler has been suggested for various early medieval towers in Britain and Ireland, such as Earls Barton church (Taylor and Taylor 1978, 223-6), which has been argued to have been a free-standing secular tower originally serving as a gatehouse or residence (Audouy, Dix and Parson 1995). O'Keefe (2004) has made an analogous argument with respect to the elevated round-tower doorway in Cashel at a slightly later date. Nearer to hand, and again later, are the elevated round-arched doorways of the Abernethy and Dunblane towers (Semple 2009). The postulated existence of a tower at Forteviot, which is only evidenced by the arch, could have served as a model for later church towers and their reliquary roles at St Andrews, Dunblane, Muthill, and Dunning.

The wider implication of the arch is that an awareness of the visual importance of a stone architectural setting did not come with the expertise to build such an arch with a keystone. Given the outward-facing figures, it is perhaps at least as likely that the arch formed the main entrance to the church or palace, where the king was presented to his subjects *en masse*. If, on the other hand, it was a chancel arch, then it seems possible that the toga-clad figures were at the head of an ecclesiastical procession, as seen in the mosaics at the Basilica of Sant' Apollinare Nuovo, Ravenna. In that case, the arch again provides the appropriate frame for the king, but to a much more select audience.

We have also suggested that when the early medieval church was replaced by the 13th-century building revealed in the 2011 excavations (Chapter 7.1.3), the arch was incorporated into the new structure, and possibly used to frame the strange doorway into the post-medieval east extension. It may have been at this point that the cross on the arch was defaced. In previous chapters we have discussed how the arch may have been deliberately buried, perhaps in the 17th century, just as the Ruthwell cross was (Orton *et al* 2007, 32–9), rather than being washed away by the Water of May.

8.3.6 Landscape

At least three of the major monuments stood in an open landscape setting. While many Pictish cross-slabs are known to have stood in similar locations, **Constantine's Cross** and the **Invermay** cross are amongst very few free-standing crosses known to have such a siting in Scotland. It is notable that one of the

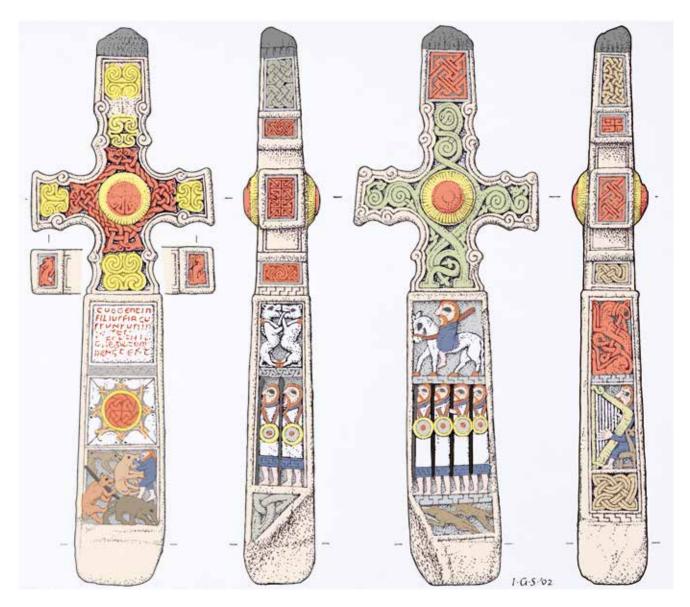


Figure 8.45 Constantine's Cross with speculative colour rendering applied to Ian Scott's drawing. While no paint has been identified on the sculpture itself, this palette is inspired by available pigments, which have been used to highlight the decorative features

others lies east of the royal monastery at Abernethy: the Mugdrum cross (Henderson and Henderson 2004, 189) on the Fife border.

We have discussed how **Invermay** and **Constantine's Cross** probably acted as thresholds to the royal estate (Chapter 2). Judging from its setting, the **Gask** slab seems to have served a similar function in defining the march between the royal estate and that of the Earls of Strathearn based at Dunning/Duncrub. The other crosses at Forteviot and at Dunning may have also acted to mark portals into the sacred space of the monastery as defined by its *vallum*. In this they would have reflected the Irish tradition seen in the placement of multiple crosses at the entrances to monasteries such as Clonmacnoise, Glendalough and also Iona. At St Vigeans, a similar siting for the main inscribed crossslab has been suggested (Geddes 2017, 26, VIG001). At St Andrews there is more than enough sculptural evidence (including as many as four crosses) to support such usage there and reflecting the account in the St Andrews Foundation Legend, which writes of twelve crosses being erected.

8.4 Royal politics and the Forteviot monuments

We have seen how the imagery on the sculptures was used to project a picture of the king at Forteviot as a good Christian king, but the more subtle message was to establish him as a counterpart to Continental figures such as Charlemagne and his palaces, including the best-preserved at Aachen (Airlie 1994). The siting of major crosses in the landscape formed part of this image projection, with the threshold to the royal estate being marked by very visible, and in the case of **Constantine's Cross** explicitly intimidating, symbols of power (Fig 8.45). This unique deployment of sculpture at Forteviot seems to have been an innovation (see Chapter 10.6). The political context for this display can be seen in the extension of control of the kings of Fortriu over the southern areas of Pictland (Driscoll 1998b; 1998c; Driscoll and Forsyth 2009; Woolf 2007). The new overlords were, quite literally, stamping their mark on the landscape by the erection of these monuments which represented a large investment of resources (Gondek 2006), but they also drew on forms and styles from Dál Riata and Northumbria as well as ideas from Rome, Byzantium and the Continent, to project a picture of a ruler as a member of the European elite.

GREEN OF INVERMAY RINGWORK

with Tessa Poller and contributions from Gemma Cruikshanks, Derek Hamilton, Fraser Hunter, Susan Ramsay and Robert Will

9.1 Introduction

The enclosure at Green of Invermay was first identified as a cropmark on aerial photographs taken by the Royal Commission on Ancient and Historical Monuments of Scotland (RCAHMS) in 1977 (Fig 9.1), and this provided the initial stimulus to investigate the archaeology of the Invermay estate. The subsequent work described below established the high quality of the archaeological resource at Green of Invermay when a single season of excavation was undertaken in 2009 as part of the wider SERF programme of excavations at potential hillfort sites (Poller 2009). This excavation was supported by field survey within the policies of the Invermay estate (McKellar 2011), along with building surveys of the adjacent dovecot (Driscoll 2011) and the ruined chapel at Muckersie (Driscoll 2008) on the eastern borders of the estate (see Fig 9.3). The insights from this fieldwork contribute to clarifying the significance of Invermay to the medieval history of Forteviot and Strathearn. Invermay provides an ideal setting to explore questions relating to the interrelationships between medieval landed estates, parish development and political power.

The influence of the earliest known owner of the estate in the 14th century, Sir Robert Stewart of Innermeath (cousin of King Robert II), is difficult to discern, but the presence of late medieval and early modern occupants can be read in the landscape, which preserves a good range of evidence for both settlement and landscape design. The historical observations presented here should be regarded as provisional, as limited primary historical research was undertaken to support the archaeology. For the purpose of this study we have used the Invermay policies as a proxy for the medieval Innermeath estate and Muckersie parish.

The cropmark enclosure is located towards the western extent of the policies of Invermay, which have been defined by a 9-foot (c 3m) high perimeter wall since the early 18th century (see Chapter 2.2). Pont's map no 21 (c 1583-1614), the earliest of the area, shows the Old House of Invermay, newly built at the time, but nothing is depicted at the site of the enclosure (Fig 9.2). On the 1st edition Ordnance Survey map of 1866 the field is laid out as it is today and named Dovecot Park for its distinctive tower-like dovecot, which stands just outside the enclosure ditch and is clearly marked. The date of the construction of the dovecot is not certain, but from its architectural elements it may be contemporary with the Old House of Invermay (see below). It may be significant that the dovecot is situated just outside the earthwork enclosure (Fig 9.3).

The enclosure lies within a ploughed field and no upstanding elements survive. The RCAHMS reconnaissance identified a curvilinear ditch, backing on to a steep river terrace slope overlooking the Water of May. The interior measured roughly 55m by 32m and the ditch varied in width from 4m to 6m. There was a clear entrance gap on the south-east corner and a less-convincing gap on the west side at the edge of the field where the crop thins out (see Fig 9.1).

Other cropmarks, including a rectangular enclosure, a possible ring-ditch and a possible pit alignment, have also been recorded within the same field (NO01NE 57, 65, 67, 73). These features are located downslope from the enclosure and cannot be directly related to it. The cropmark complex extends west across the road to the adjacent fields and includes numerous pits, a possible stone circle, a large palisaded enclosure, roundhouses and a site known as the Gallows Knowe (NO01NW 29, NO01NW 62) (Fig 9.4).



merdunnyn

Figure 9.1 Aerial photograph of Green of Invermay (Site A) cropmarks, showing the ditched enclosure backing on to the tree-filled valley of the Water of May, the standing dovecot, and an unexcavated square enclosure (SC1705769; © Crown Copyright: HES)

Figure 9.2 Timothy Pont map no 21, late 16th century, showing Invermay and possibly Forteviot (Reproduced with permission of the National Library of Scotland)

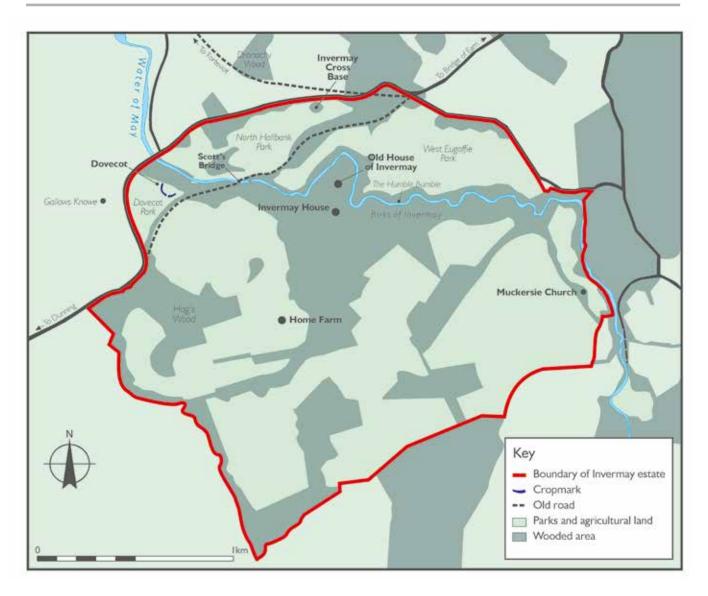


Figure 9.3 Interpretive map of Invermay Estate showing key features mentioned, based on Ordnance Survey mapping and SERF fieldwork



Figure 9.4 Aerial photograph of Gallows Knowe cropmarks to the west of the Green of Invermay, separated from the estate by the road (SC1705210; © Crown Copyright: HES)

9.2 Place-names

The earliest forms of the name Muckersie indicate that it derives from Gaelic *muc* ('pig'), *ros* ('promontory') and *-in* (a locational suffix), hence 'place of the pig promontory' (Watson 1995, 104–5; Taylor with Márkus 2006, 340–1, 450–1). In view of Invermay's later reputation as a hunting estate, this may be an early indication of its function as a (royal?) hunting ground. The promontory element may perhaps describe the cliffs of the May and the Humble Bumble gorge which may have been used in hunting.

The earliest clear references to Invermay are Inuirmed AD 1183 (St A Lib 59), Innermeth AD 1452 (RMS ii no 573), Innermeith AD 1465 (RMS ii no 826), et de Innermythe AD 1474 (here with le Grene 'green' and pomarium 'orchard', RMS ii no 1169). Only in the late 16th century does the second element become may. The first element is Gaelic inber, 'confluence, mouth'; used about rivers, this refers to the

The main secular landowners in Muckersie parish were the Lords of Invermay. The first individual to be associated with the estate is Sir Robert Stewart (d 1388), son of Sir James Stewart of Pearston and Warwickhill and cousin of King Robert II, mentioned paying fief to the king for the lands of Innermeath at Culross Abbey (RMS Index, 151/8). This branch of the Stewarts was politically successful and successive Lords of Innermeath held high office in Scottish Government. By 1452 (probably between 1429 and 1439), these Stewarts became Barons of Invermay: the lands of Ennerdonyn (Inverdunning), Baldonys (Baldinnies) and Kyldeny, as well as other Fife and Kinross lands, became part of this Barony (Meldrum 1926, 194; RMS, 1424-1513, nos 573-4: ERS 5, 604). These Stewarts held many estates, so it is not clear when Invermay became their principal seat, but according to the Calendar of State Papers in 1577 'their chief house, called Innermeath, lies in Strathearn' (CSP 5, 261). It may be that we should expect that the earliest fortified stone dwelling was built by the Stewarts; by 1584 the Register of the Privy Seal refers to the 'Old House' of 'Innerrmeyth with manor, tower, fortalice, orchards, woods and forest' (RSS 8, 2114). The Stewarts exerted a powerful influence on the infrastructure of their district. They seem to have been instrumental in building the first stone bridge across the Earn around 1402 (ERS 3,

confluence of the Water of May with the Earn. The 'may' element is more problematic (see Chapter 2.2). On current evidence it is difficult to decide whether it was coined by speakers of a Celtic language or is a pre-Celtic name of unknown meaning (Nicolaisen 1976, 173).

The fieldwork has revealed a long history of activity here extending back to early prehistory, but the key features relate to the medieval and post-medieval period when the estate occupied a pivotal position within Strathearn, controlling east–west movement over the Water of May. This control was achieved by a series of fortifications commanding the principal crossing of the May, the earliest of which may date to the 11th/12th century. Subsequent residences were not genuinely martial, but the castellated tradition is well reflected and the final phase of enclosure in the 18th century is monumental.

9.3 Historical context

548) and over the May. McKellar has argued that the Old Bridge of Invermay (also known as 'Scott's Bridge'), now a picturesque ruin (Fig 9.5), was built in the second half of the 15th century (McKellar 2011, 25). There is little indication that the Stewarts took an active interest in Forteviot church and the presence of an effigy of Sir John Stewart (died c 1421) in Culross Abbey suggests that their patronage was directed elsewhere (RCAHMS 1933, 73). The Stewart line died out and the estate was sold in 1605 to the Grahams of Montrose whose main accomplishment in their brief tenure was to introduce the modern name Invermay (usually spelt Innermey) (Meldrum 1926, 207-9; McKellar 2011, 18). By 1619 the estate had been acquired by a branch of a local kindred, the Drummonds of Ernoch (Irish), so-called for having taken refuge from a blood feud for a period in Ireland. They are responsible for the refurbishment of the tower in 1633, involving the remodelling of the original tower (Meldrum 1926, 217).

The parishes of Forteviot and Muckersie were united in 1618 (SRO TE 29/15, Bundle F, v; Rogers 1992, 104), although there were attempts to separate the parishes again later in that century (Meldrum 1926, 98–103). After the merging of Forteviot and Muckersie, the Lords of Invermay claimed to be patrons of Forteviot (Meldrum 1926, 65, 73–4, 133–7), although



Figure 9.5 Scott's Bridge, now replaced, originally carried the old road from Dunning to Bridge of Earn over the Water of May (photo courtesy of Gordon McKellar)

they seem also to have chosen to patronise the church at Muckersie with a new font (Fig 9.6). This font was presented to Forteviot church, where it now stands, by the Lord of Invermay in 1905 (Meldrum 1926, 279–80). Perhaps coincidentally, the Drummond lairdship saw a period of decline for the church at Forteviot, which is only reversed in the late 18th century.

In 1717, the lands and barony of Invermay were sold to Mr Alexander Belsches, Sheriff Clerk of Edinburgh (Meldrum 1926, 218–29). John Belsches (Lord 1745– 77), or his son John (Lord 1777–1819), abandoned the old Tower of Invermay and built a new mansion house, which in 1798 was described by the minister as 'not of an old date' (*OSA*, 119), but which may incorporate a 17th-century building by Sir William Bruce (Haynes 2000, 60). The Belsches took an active role in the running of Forteviot parish. For instance, in 1719 James Mackie, who was appointed to Forteviot, is described as 'chaplane to the Laird of Invermay'. The



Figure 9.6 Baptismal font from Muckersie Church bearing the Drummond arms, moved to Forteviot church in 1905

first Belsches Lord of Invermay was often an elder of Forteviot kirk, and he presented two communion cups to the kirk using the vacant stipend (Meldrum 1926, 221–3). The Belsches family transformed Muckersie church into a family burial chapel. They also undertook an extravagant works programme, possibly motivated by a desire to recapture a period of past glory as the family had ancestral links to the Stewart lairds of Invermay.

This work involved significant modification to the policies, such as the creation of pleasure paths along the banks of the May, most notably by the landscape gardener Walter Nichol. The most imposing element of the Belsches scheme was the 3m-high wall around the policies undertaken at vast expense. 'Endermay's Dykes' became a local landmark which was regarded as one of the seven wonders of Strathearn (Meldrum 1926, 223–4). The expense of these improvements seems to have been too much for Belsches, who failed to pay his taxes and was summoned for debt in 1802 (Hall 2011, 162). It is perhaps at this time that the base of the Invermay cross was moved into the grounds of the estate, and repaired to support an obelisk which could been seen from the new house (McKellar 2011, 34–8; Hall 2011, 160).

Invermay went out of the hands of the Belsches in the late 19th century and after the First World War many of the lands of the lairds of Invermay, including Bogtonlea, Muirhead, Henhill, Myretoun, Broomhill, and Gateside, were sold as farms (Meldrum 1926, 230).

9.4 Excavation summary

There were three main aims for the excavation of the enclosure (Fig 9.7):

- to define the character of the enclosure ditch and retrieve dating evidence;
- to identify features within the enclosure;
- to characterise the state of preservation of the archaeological deposits.

After clearing the standing crop, a trench measuring approximately 22m long by 2m wide was opened up by hand. It was laid out to cross the ditch at a right angle and to expose a swathe of the interior. However, owing to imprecision in the transcription of the cropmark the trench did not quite reach the far side of the ditch (Fig 9.8). Due to the depth and complexity of the ditch sequence the trench was stepped inwards; once excavation reached 1.2m below the ground surface, examination of the lower fills of the ditch was confined to a narrow slot in the centre of the trench only 0.5m wide.

The trench exhibited a deep plough horizon over 0.5m deep, which severed all stratigraphic relationships between interior features and the ditch. Ephemeral traces of prehistoric activity recovered within the interior of the enclosed area consisted of a late Iron Age brooch and a small fragment of undiagnostic hand-made pottery, both of which came from the plough horizon. Redeposited charcoal recovered from a medieval palisade slot 931 produced a 3rd-millennium BC radiocarbon date (see below). Apart from demonstrating the long period of activity in this location, it is impossible to comment on the nature of the activity.

9.4.1 Ditch (Figs 9.9 and 9.10)

It is estimated that the overall width of the ditch was 5m, of which 4m was exposed and excavated. The primary ditch 909 cut a broad V-shaped profile with rounded base into the natural gravel subsoil 908. Inside the inner lip of the ditch cut were two layers of redeposited natural silt 915 and gravel 937, which may represent *in situ* traces of rampart make-up that had slumped within the ditch shortly after construction. Too little of this material survives to comment on the nature of the rampart and no dating material was recovered from these deposits.

The lowest fills of the ditch were layers of reddishgrey brown silty clay, with frequent gravel and small pebbles (929 and 936) observed on both sides but not in the basal deposits in the centre of the ditch. These contexts seem to represent slumped rampart material or merely slumped subsoil from the ditch sides, although they could represent deliberate infilling. There is a suggestion of a recutting of the ditch through these primary layers of fill. The profile of the postulated recut is narrower and steeper than the original ditch profile. Unfortunately the tightly confined working space at the bottom of the excavation trench made it difficult to identify the edge of the recut with confidence, hence no cut is identified in Figure 9.8. However, the central deposits, interpreted as infill, were a distinctive reddish-grey brown waterlogged clay, with frequent cobbles and pebbles 935.

This primary phase of activity when the ditch was open, and presumably functioning as a defensive



Figure 9.7 View of excavation in progress on the Invermay ditched enclosure (Site A), looking south-west towards Dunning and beyond to Ben Effrey

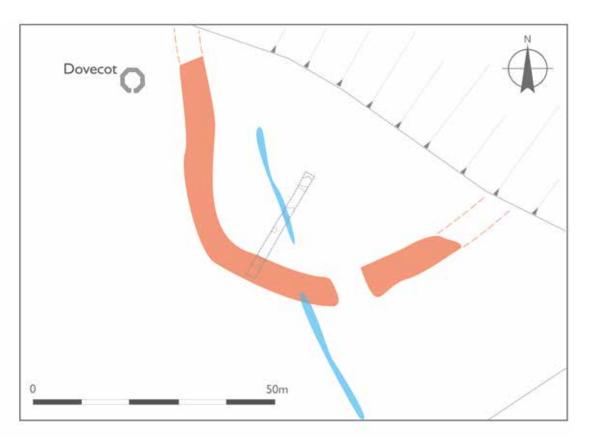


Figure 9.8 Plan generated from cropmark evidence of castle enclosure (pink) and linear feature (blue) showing excavation trench and position of dovecot

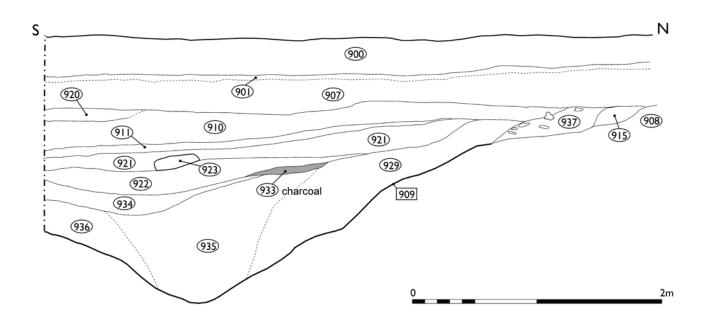


Figure 9.9 Drawing of west side of section through castle ditch 909



Figure 9.10 Castle ditch 909 under excavation, view from the east

structure, is difficult to date. A single strap handle of a Scottish Medieval Redware (SMR) jug was recovered (SF119) from a deposit 934 which sealed the infilled recut. Charcoal was recovered in bulk samples from the primary silting 936 and in the deposit 934 with the jug handle, but neither of these samples is ideal from a taphonomic perspective because the source of the charcoal is unknown. From a stratigraphic perspective the best dating sample was provided by an *in situ* spread of burnt ash and charcoal 933, mid-way up the ditch fill which sealed the putative secondary cut fill 935. The two radiocarbon estimates from the lessreliable context are very similar; both span the early 11th century to the mid-12th century (see Table 9.1). However, the more secure deposit 933 dates to the mid-12th to mid-13th century, which fits better with the SMR pottery that is typically dated to the 13th century. The dating implications are considered below, but it is worth pointing out that by the time these deposits had accumulated the ditch was substantially infilled and certainly no longer functioned as a defensive feature.

The second phase of activity in the ditch represents the infilling of the remaining shallow ditch hollow with rubble, gravel and small quantities of domestic rubbish (including pottery and animal bone). These deposits, (921, 922), contained both Scottish White Gritty Ware (SWGW) and SMR sherds as well as charcoal which provided radiocarbon dates (see Table 9.1). Again the source of the charcoal is unknown, but the age range of 11th to 13th century corresponds to the pottery dating. The final major event in the ditch was the deposition of a loose clayey silt 910 containing 50 sherds of SWGW and twelve sherds of MSR evidently a deliberate effort to tidy up and fill the ditch hollow. Most of these sherds were found near the inner edge of the ditch fill and all were small fragments indicating that this pottery had been broken elsewhere originally before being redeposited in the ditch fill.

9.4.2 Interior features

Deep ploughing of the site had not only removed almost all traces of the ditch rampart but had also obscured stratigraphic connections between the ditch and features of the 'interior'. Isolated patches of compacted soil deposits may represent the vestigial



Figure 9.11 Photo of sickle SF017 in situ

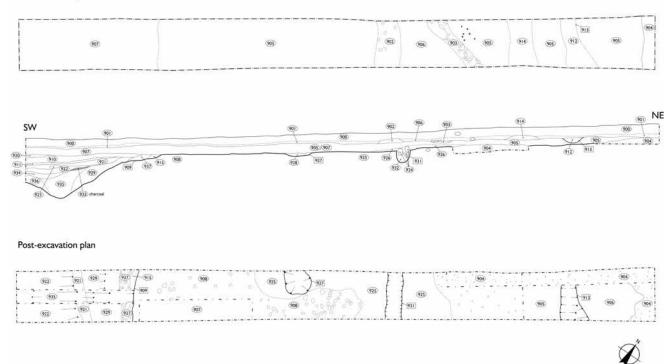


Figure 9.12 Photo of spread of small cobbles and stones 902

remains of structures and occupation surfaces, but these were too poorly preserved to permit precise interpretation. A few finds suggest that they represent medieval activity, including a curved iron blade, interpreted as a sickle SF017 (Fig 9.11), which was uncovered along with a sherd of SWGW. The most substantial positive feature was composed of a compact clayey silt 906 that appeared to be defined on its north side by a single unsubstantial line of stones 903 and to the south by a rough spread of small cobbles and stones 902 which incorporated a few fragments of SMR and SWGW (Fig 9.12).

The most substantial negative feature apart from the ditch was a linear slot 931 (Figs 9.13 and 9.14), which is interpreted as a palisade trench. Although it runs roughly parallel to the ditch, it was 9m from the inner ditch edge, making it unlikely to be part of the same building scheme. This crisp feature had steeply sloping sides 0.60m wide and a rounded base 0.45m below the plough horizon. The fill included sub-angular and rounded stones (924) set on edge to support a continuous line of posts and sufficient charcoal to provide a radiocarbon date spanning the 14th to 15th century (see Table 9.1).





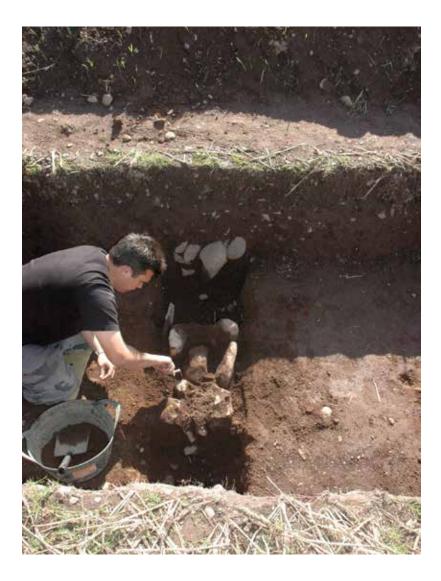


Figure 9.13 Plan and section of Green of Invermay excavation showing ditch 909 and palisade slot 931

Figure 9.14 Photograph of the palisade slot showing excavation to reveal the packing stones between two post settings

9.4.3 Agricultural features

There is evidence for two episodes of cultivation following abandonment of the settlement. The earlier phase included a shallow linear feature 913 cutting into the clayey silt 905/907, which was interpreted as a possible cultivation furrow from a medieval or early modern strip field system. The later episode was modern ploughing.

9.4.4 Artefacts

Metalwork

The most striking artefact was a late Iron Age brooch SF001 recovered from ploughsoil 901 at the north end of the trench. This dates to the late 1st to 2nd century AD and suggests Iron Age settlement nearby. The other notable metal artefact is an arrowhead SF071 of medieval form associated with hunting, which dates from the 11th to 13th century AD. The remaining iron objects are not well preserved or particularly diagnostic, but are characteristic of archaeological assemblages recovered from agricultural soils.

The Romano-British brooch

by Fraser Hunter

SF001 Distorted Romano-British copper-alloy trumpet brooch. Head bent and flattened, much of original surface lost, foot lost recently, spring and pin very fragmentary (Fig 9.15). Bow bears six-petalled knob with central disc, flanked by a channel and worn single moulding (not clear on bow side). Lug for headloop and integrally cast loop to take spring; only half of this survives, with three coils and internal chord (spring D 8.5mm, rod D 2.5mm). The surviving tapered pin tip $(13 \times 3 \times 1.5mm)$ is rectangular in section and must represent a replacement for the original circular-sectioned one. Bow has a rounded triangular section with a ridge underneath from the catchplate. L 56.5mm, W 16.5mm, H 20mm. GR09, context 901.

This style of trumpet brooch is typical of the northern part of Roman Britain (where it was made), and was widely adopted beyond the Roman frontier. It is of later 1st- to 2nd-century AD date, and falls into Collingwood's type R ii, Hull's type 158A, Bayley and Butcher's type A or Mackreth's type TR 1.a3 (Collingwood and Richmond 1969, 296-7; Bayley and Butcher 2004, 160-1; Mackreth 2011, 117, pl 79). This suggests there was Roman Iron Age occupation on the site as well as medieval. Its poor condition is unsurprising given its discovery in topsoil, but the presence of a spring and pin tip suggests it was intact when deposited. The deposition of intact Roman brooches is known on other later prehistoric sites, often from contexts which suggest they were deliberate deposits (such as a palisade foundation at Seafield West, Inverness-shire, or an entranceway Carronbridge, Dumfriesshire; Hunter 2011, 17; Johnston 1995, 250); the disturbed context of this one makes it uncertain whether it too had such a fate. The pin tip is a very unusual form for a Roman brooch, and must come from a repair; such a hammered pin could readily be made to substitute for the more complex spring technology once this broke. It is impossible to know if this repair took place when it was still

5cm

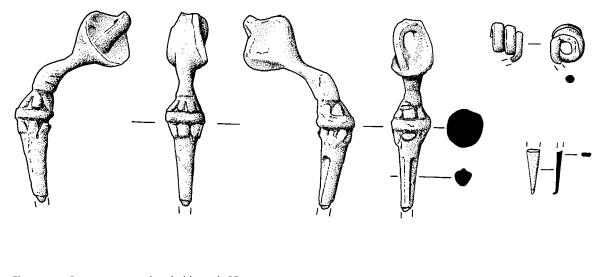


Figure 9.15 Roman trumpet-headed brooch SF1, length 56.5mm (Drawing by Alan Braby) in Roman hands or after it passed to indigenous ones. Trumpet brooches are the commonest Roman brooch type found on Iron Age sites, probably because their form appealed to local tastes as it resonated with local art styles (Hunter 1996, 122–3; 2013a); there is in fact some evidence of their production on indigenous sites in southern Scotland (Hunter 2013b).

Ironwork

by Gemma Cruickshanks

Excavations at Green of Invermay produced a small assemblage of eleven wrought-iron artefacts. Most are fragmentary portions of fittings or tools with the notable exception of a barbed, socketed arrowhead (SF71; Fig 9.16). The arrowhead is medieval in form, with parallels from the 11th to 13th century AD (Halpin 1997; 2008, 111; Museum of London 1993, 65–70). It was retrieved from the upper fill of ditch 909, context 910. Projectiles, by their nature, are notorious for intruding into earlier contexts but in this case it would be consistent with a medieval date for 909.

SF17 is part of a large curved blade-like object with a scalloped outer edge (Figs 9.10 and 9.17). No exact parallels have been found, though some sort of agricultural tool akin to a sickle blade seems likely based on its size and form. Its good condition hints at a recent origin.

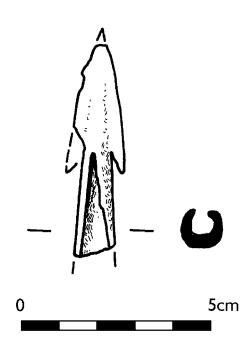


Figure 9.16 Medieval arrowhead SF71, length 57mm (Drawing by Alan Braby)

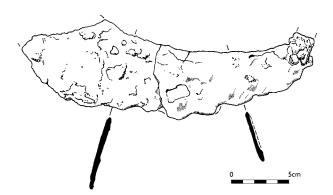


Figure 9.17 Sickle SF017, length 274mm (Drawing by Alan Braby)

None of the other iron artefacts is chronologically distinct. Two fragments of knife blades (SF13 and SF39) are too small to be able to identify their exact form, but their blade heights (12mm and 16mm) indicate they were likely to be small, multi-purpose knives. Other items represent an assortment of building hardware. One lump of slag hints at nearby ironworking.

Pottery

with Robert Will

In his assessment of the medieval and later pottery from 22 SERF excavations, Bob Will (2012) considered the Green of Invermay group to be the most coherent of the medieval assemblages. Of the 100 sherds recovered, 63 were Scottish White Gritty Ware (SWGW) and mainly cooking pots or storage jars. Scottish White Gritty Ware is most plentiful in eastern Scotland, although it is also known across southern Scotland, where there is one confirmed kiln site at Coulstoun, near Haddington (Hall 2007; Hall et al 2012). Recent scientific analysis suggests that there were a number of different productions sites producing visually similar vessels (Haggarty et al 2012). The earliest SWGW group is dated to the late 12th century (Tabraham et al 1985), but this longlived tradition lasts until the late 15th or early 16th century.

The SWGW material from Green of Invermay is predominantly undecorated cooking pots, often with pronounced rilling or throwing marks on the bodies. The bases are generally flat, but the body sherds are too small to determine whether the vessels were straight-sided or globular. The thickness of the bodies was generally between 3–4mm, characteristic of the high technical ability of the SWGW potteries. Many of the sherds were sooted, showing that they were used for cooking. There were relatively few jugs represented within the SWGW assemblage, but such sherds were often finished with a light green or yellow glaze. There was limited evidence for other decoration consisting of stab marks and a single example of an applied strip with incised decoration. The great majority of this material was recovered from the ditch deposits. The character of this SWGW group, particularly the low proportion of jugs, suggests a date of the 13th century.

Almost as plentiful as the SWGW was the group of 30 Scottish Medieval Redwares (SMR) sherds. Scottish Medieval Redwares are common in the east coast burghs from Aberdeen to Falkirk and generally are dated to the 13th to 15th century (Hall *et al* 2012). Although cooking pots were present in the SMR assemblage, the majority of the Green of Invermay sherds were from jugs. The well-made, thin-walled vessels in both the SWGW and SMR fabrics, and the presence of cooking pots, reinforce the view that the bulk of the assemblage dates to the 13th century. A small number of post-medieval sherds spanning the 16th to 19th centuries were recovered from the ploughsoil, the character of which is typical of the material recovered elsewhere during the SERF project.

Coarse stone

by Gemma Cruickshanks

Two coarse stone artefacts were recovered from Green of Invermay: a pounder (SF36) and a possible palette (SF129). Both tools are typical finds on later prehistoric sites but not closely dateable in their own right. While simple stone tools like these probably still saw limited use on medieval settlements, they are perhaps more likely to be residual from an earlier phase.

9.4.5 Charred plants

by Susan Ramsay

Carbonised assemblages were recovered from the enclosure ditch and the palisade slot (Ramsay 2010). The basal ditch deposit 935 of clay, cobbles and pebbles was overlain by a silty clay 934 containing bone fragments and medieval pottery. The carbonised assemblage from 934 contained a diverse range of charcoal, including alder, birch, hazel, heather-type and elm. There was also a mixed cereal assemblage with oats, barley and wheat all represented, but the cereal grains were not well-preserved. Overlying the northern edge of 934 was an ash deposit 933, which

contained a similar charcoal assemblage to that seen in 934, as well as the same mix of cereal types; this can be dated to the 12th or 13th century. In context 933, some of the cereals were well-enough preserved to identify them more fully to type. Six-row barley (Hordeum vulgare sl) and oats (Avena spp) were present but the most abundant type was bread wheat (Triticum aestivum), although a large proportion of the cereal grain was indeterminate in origin. This context may be debris from cereal processing, although only a single fragment of cereal chaff was recovered, along with a few carbonised weed seeds. Above 933 was another ashy layer 922, with alder, hazel and oak charcoal, together with large numbers of carbonised cereal grain. In this case, oats were the commonest type present, although six-row barley and bread wheat were also identified. A few fragments of chaff and carbonised weed seeds were also present, suggesting that 922 is another dump of cereal-processing waste. Context 922 was sealed by a layer of rubble 923, which in turn was sealed by a layer of clayey silt 921. Context 921 contained a small amount of alder and oak charcoal, together with carbonised cereal grains, although most of these were too poorly preserved to be identifiable. This appears to be another episode of cereal-processing waste deposition. The uppermost fill 910 of the ditch 909 contained numerous fragments of medieval pottery. The carbonised assemblage from this fill contained a diverse range of charcoal types including alder, hazel, heather-type, cherry-type and oak, together with a small number of cereal grains that were mainly identifiable as oats.

The palisade trench exposed within the enclosure contained a gravel fill 932, thought to be redeposited natural. However, this fill contained small quantities of charcoal, including alder, hazel, heather-type and oak as well as a few carbonised cereal grains, suggesting that some domestic hearth waste or cerealprocessing waste was also present within the fill. AMS radiocarbon dating of hazel charcoal from 932 produced a date of 2290-2030 cal BC (3755 ± 30 BP; SUERC-29227) but the presence of oats suggests a much later date for at least some of this fill, so this appears to be a very mixed age assemblage. Stone packing 924 which had been placed along the edges of the trench also contained significant quantities of charcoal and a few cereal grains, again suggesting that domestic waste had been deposited into the trench, perhaps as additional packing material. There is no evidence for the burning of any wooden posts that formed the palisade.

Discussion

The diverse range of charcoal types from the enclosure ditch suggests non-specific collection of wood for fuel. Of particular note were the numbers of carbonised cereal grains recovered, especially from fill 922, which suggests the carbonised assemblages are the result of the dumping of domestic hearth waste or cerealprocessing waste into the ditch. The cereal assemblages were generally a mixture of oats, six-row barley and wheat, with bread wheat identified from several contexts. Wheat was often the dominant cereal type within these ditch-fill samples. Bread wheat is not common in the Scottish archaeobotanical record. There is evidence for the growing of bread wheat during the Neolithic period in Scotland, after which there are only sporadic records until the medieval period but even then it was never a commonly grown cereal type (Dickson and Dickson 2000). Medieval sites in Scotland which have produced bread wheat are generally urban in nature, rather than rural, and often of high status, for example Edinburgh Castle (Driscoll and Yeoman 1997) and Aberdeen (Fraser 1981). It is difficult to determine whether the bread wheat from these sites was grown locally or imported as a luxury item. Bread wheat requires well-fertilised soils and significant amounts of warmth and sunshine to flourish - conditions not commonly found in Scotland. The fertile land at Forteviot, on the floodplain of the River Earn, may have been one of the northernmost sites capable of producing a viable crop of bread wheat. The presence of bread wheat at Green of Invermay along with other cereal types, chaff and weed seeds is strong evidence for local growing and processing of this crop rather than importation. Its occurrence at this site is also strong evidence for the existence of a high-status structure or site in the vicinity.

9.4.6 Radiocarbon dating and Bayesian modelling

by Derek Hamilton

Seven radiocarbon measurements were made on material from the medieval enclosure and palisade ditches at Green of Invermay (Table 9.1). Five of these measurements are from material at varying levels within the middle fill of the enclosure ditch, and with some stratigraphic relationships. The lowest-dated fill (936) is from the possible collapse of the rampart on the south edge of the ditch. From here there is one result (SUERC-29226) on a fragment of birch charcoal. SUERC-29225 is on a fragment of birch charcoal from fill 934; this is similar in physical characteristics to fill 922 but under fill 933. SUERC-29224 is on a single charred grain of wheat in fill 933, an ash layer/lens on the north side of the ditch. From fill 922 there is a result (SUERC-29220) on a carbonised grain of oat. Finally, there is a result (SUERC-29219) in the upper fill 921, associated with medieval pottery, on a fragment of alder charcoal. This fill is relatively thick and characterised as containing charcoal flecks. The discrete nature of fill 933 is important, in that a high level of confidence can be placed in the result (SUERC-29224) accurately dating the formation of that context. While this result suggests that the ditch was infilling by cal AD 1155-1265 (95% confidence), Bayesian statistical analysis has been applied to this series of dates in an effort to increase the precision.

There are two results on samples from contexts associated with the palisade trench 931. There is one result (SUERC-29227) on a fragment of alder charcoal from an upper fill 924 in the trench that is medieval in date, and a second (SUERC-29228) on a fragment of hazel charcoal from a lower gravel fill 932 in the trench that is Bronze Age in date.

The Bayesian approach adopted for the interpretation of the chronology of the medieval ditch permits more precise estimates of when the ditch was dug and in use (Buck *et al* 1996). These more precise date estimates are arrived at by using the absolute dating information from the radiocarbon measurements in conjunction with the stratigraphic relationships between samples.

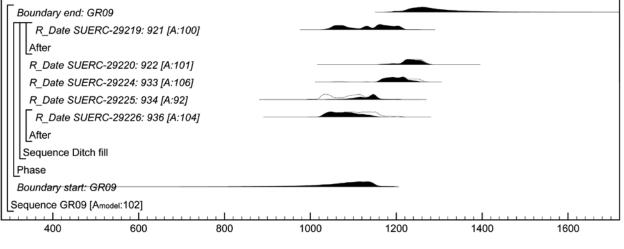
The methodology that allows the combination of these different types of information produces realistic estimates of the dates, which remain estimates. The *posterior density estimates* produced by this modelling are not absolute, but are interpretative *estimates*, which can and will change as further data become available. The technique used is a form of Markov Chain Monte Carlo sampling, and has been applied using the program OxCal v4.2. Details of the algorithms employed by this program are available from the online manual or in Bronk Ramsey (1995; 1998; 2001; 2009). The algorithm used in the model described below can be derived directly from the model structure shown in Figures 9.18 and 9.19.

The five radiocarbon measurements used in this model are from material at varying levels within the middle fill of the enclosure ditch with some stratigraphic relationships, as described above, and following the order from lowest to highest (oldest to youngest):

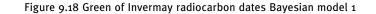
Site Code	Lab Code	Context	Description	Material dated	Radiocarbon Age BP	calibrated at 20 (highest %)	Phase
А	SUERC- 29227	924	Upper fill, stone packing in palisade [931]	Charcoal: Alnus	525 ± 30	AD1390 (80.7%) AD1450	3
А	SUERC- 29219	921	Middle to upper ditch fill	Charcoal: Alnus	890 ± 30	AD1040 (95.4%) AD1220	2
А	SUERC- 29220	922	Middle ditch fill, under stone collapse	Charred grain: <i>Avena</i>	800 ± 30	AD1180 (95.4%) AD1280	2
A	SUERC- 29224	933	Middle ditch fill	Charred grain: <i>Triticum</i> aestivum	835 ± 30	AD1150 (95.4%) AD1270	1b
A	SUERC- 29225	934	Middle ditch fill	Charcoal: Betula	960 ± 30	AD1020 (95.4%) AD1160	1b
A	SUERC- 29226	936	Possible collapse of rampart on S edge of ditch	Charcoal: Betula	930 ± 30	AD1020 (95.4%) AD1170	1a
А	SUERC- 29228	932	Lower gravel fill within palisade trench	Charcoal: <i>Corylus</i>	3755 ± 30	2290BC (78.5%) 2110BC	0

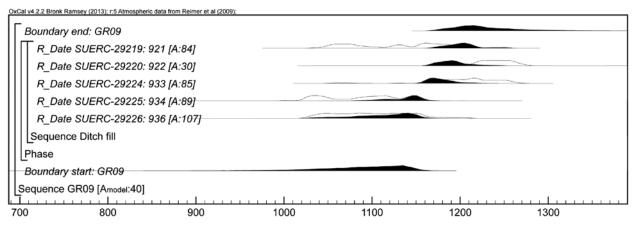
Table 9.1 Summary of radiocarbon dates from Green of Invermay (Site A)





Modelled date (cal AD)





Modelled date (cal AD)



936, 934, 933, 922, and 921.

The initial model has poor agreement between the radiocarbon dates and the stratigraphic ordering (A_{model}=40), suggesting that either some material is residual or intrusive. The model assigns the lowest individual agreement value to SUERC-29220, which is a measurement on a carbonised grain of oat from fill 922. The model would suggest that this result is too recent, and it could be intrusive; however, the fill is actually made up of continuous discrete layers of ash dumps. The overlying fill 921 is less-taphonomically secure, especially given that it is characterised as containing charcoal flecks. The result (SUERC-29219) is likely residual and only provides a terminus post quem result for the formation of its context. Furthermore, the excavation notes for the initial dated fill 936 suggest it could be redeposited natural, and so the result from this context (SUERC-29226) has been included as a *terminus post quem* here as well.

The subsequent model that includes the two results as *terminus post quems* has good overall agreement (A_{model} =102). The model estimates that the ditch was dug by *cal AD 675–1205 (95% probability*; Fig 9.18; *start GR09*), and probably by *cal AD 1015–1155 (68% probability*). The model can also be used to slightly refine the date by which the ditch was certainly no longer being maintained, providing a date for fill 933 of *cal AD 1155–1245 (95% probability*; Fig 9.19; *SUERC-29224: 933*), and probably *cal AD 1170–1225 (68% probability*).

Dating discussion

The artefactual evidence points to some undefined prehistoric activity at the site. In addition to the unclassifiable sherd of handmade pottery (SF130), there is the brooch. However, the overwhelming bulk of the finds, from within the features and in the plough zone, are medieval in date. Expert opinion is that the medieval pottery assemblage dates to the 13th century. The Bayesian analysis of the ditch samples suggests that it was probably dug in the 11th or 12th century (*cal AD 1015–1155*). The defended site appears to have gone out of use in the 12th or 13th century if we consider the likely date of the pottery.

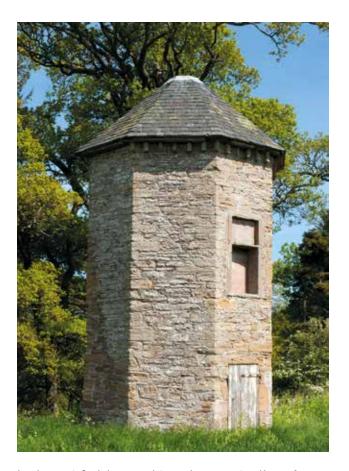
The final radiocarbon date derives from the palisade slot 924 which relates to a later episode (*cal AD 1320–1450*), long after the ditched enclosure had been filled in. There is little in the pottery assemblage that dates to this period and no sign that the palisade was renewed, so it may be a short-lived activity.

9.5 Dovecot tower

The most noteworthy architectural feature at the Green of Invermay is an elegant octagonal tower adjacent to the site of the ditch cropmark (NO 0520 1625, see Fig 9.8). It seems unlikely that the dovecote would have been placed so close to the enclosure while it was still functioning, supporting the view that the enclosure had been levelled by the late medieval period. The tower is prominently positioned on the crest of a steep scarp overlooking the west bank of the Water of May, where it would have been a conspicuous feature along the road from Bridge of Earn to Dunning as it passed through the Invermay estate. The field was formerly named the Dovecot Park for this local landmark (OS 1st edition, 1866).

The dovecot takes the form of a tall (6.5m) and narrow (4m broad) tower with little ornamental detail apart from the small machicolations crowning the wall head and a very slight plinth course (Figs 9.20 and 9.21). The tower is constructed of several varieties of local sandstones. The largest and best-cut stone, used in the quoins, the doorframe and elsewhere, is an orange-yellow colour with frequent, conspicuous, large pebble inclusions. The bulk of the tower fabric consists of the more familiar local red-grey sandstone laid as coursed rubble. Originally the building was harled, but only a few traces of a cream-coloured render remain on the northern sides and the lower levels. The door is located on the south-west elevation and above it a rectangular opening has been inserted, which has been subsequently enlarged. The margins of these inserted openings are formed of red sandstone. This feature apparently provided access for the pigeons, grooves in the frame indicating the presence of small openings. Presumably the original bird entrance was via a cupola in the roof. The building is in good condition (about 80% of the pigeon-boxes remain) and weathertight thanks to a new roof (installed c AD 2000). The survey did not examine the interior in detail, so did not determine whether the pigeon-boxes were an original feature or a later insertion.

Both the form of the dovecot and its location are unusual. In Scotland, dovecots are frequently designed as architectural ornaments as well as for agricultural functionality. The most common forms resemble



beehives (cf Elcho Castle), or lecterns (Stell *et al* 2003 200–2; Peterkin 1980), whereas this one emulates an elite architectural structure, incidentally recalling the 17th-century dovecot modelled as a mock defensive tower built into the barmkin at Exmagirdle House (NO11NW 3.01). The location of this dovecot, nearly 1km from Old Invermay House, was selected for high visibility by traffic using the road through the estate.

As can be seen from a recent aerial photograph, Old Invermay House is located in the gardens of the 18th-century mansion house (Fig 9.22). The Old House has a complex architectural history (Fig 9.23), but it lacks a detailed modern survey (NO01NE 85.02). The Figure 9.20 View of the Dovecot from the west. The ashlar quoins are of the same stone as the Old House of Invermay. The form of the recently restored roof may not reflect the original design

Figure 9.21 Detailed view of the Dovecot showing corbelled wall head



towerhouse was probably built in the late 16th century and was extended in 1633 (Meldrum 1926, 240; Haynes 2000, 61). Conspicuous amongst the building materials used in the core of Old Invermay House are blocks of the orange/yellow-coloured sandstone with the distinctive pebble inclusions identical to that used in the dovecote tower. Use of the same quarry strongly suggests that the dovecot was built at the same time as Old Invermay House. If the site of the (silted-up) ditched enclosure was recognised as the medieval centre of the Innermeath Estate, then marking its location with the dovecot takes on a symbolic value intended to memorialise the ancient estate centre.

9.6 Discussion

The fieldwork at Invermay has provided new insights into the organisation of the medieval landscape of Strathearn and how it evolved from being on the periphery of the royal centre to becoming the most significant medieval landholding in the parish before eventually being preserved in a Romantic designed landscape.

The excavations allow us to recognise that the heart of the Innermeath estate was originally at the Green of Invermay earthwork, perhaps from as early as the 11th or 12th century, remembering that it is first mentioned in 1183 (see 9.2). Certainly, by the 13th century there was a significant residence here to judge by the accumulation of pottery. The earliest fortification, represented by the cropmark, was a substantial curving earthwork enclosing an area 55m by 32m and utilising a natural slope. This form of defensive structure is best described as a ring-work, an early form of castle. Simple ring-work castles are closely related to mottes and timber castles that date from the 12th century onwards in Scotland (Stell 1975, 28–9; Tabraham 1997, 22–4). It is presumed that the



Figure 9.22 Aerial photograph of Old Invermay House and Invermay House (DP135620; © Crown copyright: HES)

Figure 9.23 South elevation of Old Invermay House, with round stair tower probably added as part of remodelling in 1633



enclosure contained timber buildings, possibly including a tower. This structure was built no later than the 13th century, and perhaps more likely in the 12th century, predating the earliest textual evidence for the lordship of Innermeath. These structures represent the first phase of territorial lordships and combine elite residences with military fortification. It is also possible that this early castle had some royal associations, as both Malcolm IV and William I signed charters at Forteviot, and Sir Robert Stewart payed a fief to the king at Culross Abbey for the lands of Innermeath.

While it is impossible to comment on the detail of the Green of Invermay castle owing to the subsequent agricultural damage, the nearby fortification at Ha' Tower may provide some indication of the form of the internal structure. Until recently the remains of this small fortification were situated on a shallow promontory formed in the Garvock Burn, less than 2km to the south-west. The principal feature was a rectangular building, probably the stump of a tower or a hallhouse measuring 5.7m by 4.3m, standing on the summit of a mound encircled on the south and west by up to three ditches with external ramparts which enclose an area approximately 50m by 25m (NO01SW8, Lock and Ralston 2017, SC3010). Additional, less wellpreserved earthworks suggest the medieval site incorporated an earlier promontory fort. The tower was very ruinous when visited in the 1980s and has subsequently been demolished. The Green of Invermay enclosure could have accommodated a similar-sized building, although it is unlikely to have been of masonry.

A second, more distant comparison is provided by the excavated example at the Castle of Wardhouse, Aberdeenshire (Yeoman *et al* 1999). Here the oval ditch and rampart (70m by 40m) survived as upstanding features, but like Green of Invermay the preservation of internal features was poor having suffered plough truncation. The site appears to have been established in the 13th century as the fortified residence of a Flemish knight (*ibid*, 584) as part of the extension of royal authority in the north-east.

While it is tempting to include Green of Invermay within the corpus of twenty moated sites to have been identified in Tayside and Fife (Coleman and Perry 1997, 176–87) on account of similarities in scales and chronology, this should be avoided. Moated sites are distinguished by having rectilinear, angular ditches, as for instance at Ardargie (NO01SE 3), *c* 3.5km to the south-east, but more importantly they are not estate centres, rather they represent the enclosed farmsteads of a lower social strata.

9.7 Concluding narrative

This brief account does not to do justice to the richness and complexity of Invermay, but some general points can be drawn out from the fieldwork. There seem to be two chief motives for the construction of the castle at Invermay and its subsequent development: control of a strategic river crossing and hunting.

It appears that a fortified stronghold, in the form of an earthen ringwork castle, was established probably by the 12th century, perhaps during the 11th century, to control the western approach to the key crossing of the Water of May. Stobie's map (1783) indicates that this was the only route linking Dunning to the important judicial site at Kintillo, to Abernethy Abbey, and to the lowest crossing of the Earn at Bridge of Earn. The castle at Green of Invermay may also have had direct visual contact with Forteviot, so could have provided some security to the royal centre as well as controlling the crossing.

Whether the lordship of Innermeath had been established as an independent territory by then or remained dependent on the royal estate at Forteviot is impossible to say. Similarly, the identity of the builder of the earliest castle is unknown: could it have been a Stewart at such an early date? Certainly by the mid-14th century the Stewarts were well established, and we may presume that by then travellers on these roads would have been in no doubt of the authority of the lairds of Invermay, the site of Gallows Knowe (c NGR NO 049 161) being clearly visible from the castle c 200m distant. This reinforces the notion that this was originally the centre of the estate.

The second clear archaeological event noted on the summit of the Green of Invermay was the construction of a palisaded enclosure, probably in the 14th century. The absence of evidence for repair or associated features could suggest that it was a short-lived structure, perhaps a military encampment from the Wars of Independence, or perhaps more likely, that the core of the settlement was nearby but outwith the area of the excavations.

A second rationale for Invermay may have been as a hunting ground. The name of the parish Muckersie embodies the word pig, perhaps suggesting the presence of wild boars. Whether or not Invermay began as a royal hunting enclave, there is certainly later evidence for hunting. The arrowhead from the excavation with its prominent tangs is characteristic of hunting arrows. Meldrum notes that in 1723 the Forteviot kirk session minutes reported a shooting competition at the Green of Invermay, which he suggests was a descendant of earlier archery contests there (1926, 161). In modern times, Invermay has retained a lively hunting tradition as testified by some of the early modern buildings, such as kennels and a game larder.

The next event at Green of Invermay was the building of the dovecot tower at the same time as the Old House of Invermay was being erected in the late 16th century, perhaps still under the ownership of the Stewarts. The construction of the nearby Old Bridge over the May can also be very loosely dated to the late Middle Ages.

The Old House of Invermay was refurbished by the new lairds, the Drummonds of Ernoch, in 1633. This involved the heightening and extension of the tower, while an elaborate geometric sundial, similar to that erected at Drummond Castle (Mac Gibbon and Ross 1887–92, V, 418; Somerville 1988), was added to the grounds. The Drummond patronage of the chapel at Muckersie is attested by the commissioning of a baptismal font adorned with their arms, which is now in Forteviot church (Fig 9.6).

The final event to note here was the acquisition of the estate by the Belsches in the early 18th century. These distant relations of the Stewarts transformed the estate into a monument to their ancient forebears. This involved the building of a great wall to enclose the policies and exclude traffic from the estate, diverting it to a new bridge over the May. They built a new house as part of the programme of Romantic landscape design, which appears to have relocated the base of the broken-down Invermay cross southwards to where it could be seen from the new house. To increase its visibility they inserted a plain obelisk in the empty base. The Belsches continued to direct their ecclesiastical patronage to Muckersie chapel where they established a family burial place.

The making of Royal Forteviot

10.1 The making of a royal centre

This examination of the archaeology of Forteviot sets out to explore substantial questions about this formative period in Scottish political life, when the ideology of rulership was transformed from one based on kinship and underpinned by ancient religious practices to one constructed around a concept of kingship informed by the Roman imperial tradition and sustained by a Christian ideology.

To frame these discussions about the significance of Forteviot's archaeology, we identified a series of research questions and associated themes at the beginning of the project.

- The first question, posed by the proximity of Forteviot to a dense prehistoric ritual landscape, was to understand how the practice of kingship was linked to the prehistoric landscape. The excavations revealed that the physical engagement with the prehistoric monuments involved subsequent excavations, burials and the (ritual) use of fire. While such associations are widespread within Insular Celtic ceremonial practices, the Forteviot evidence for early medieval activity is without close parallel.
- The second question, posed by Forteviot's exceptional assemblage of sculpture, examined the interaction of Christianity and Pictish kingship. The presence of an important Pictish church and the production of iconographically complex sculpture provide direct insights into the ideology underpinning the formation of the kingdom of Alba.
- A third question, also suggested by the sculpture, concerned how these early medieval social transformations were revealed in the archaeological record. The suggestion is that they were part of a landscape designed to glorify the king and the kingmaking process.

A supplementary research theme that emerged during the post-excavation reflections relates to the origins of new forms of territorial lordship which become historically visible in the 11th and 12th centuries.

The discussion that follows draws upon textual

evidence, but fundamentally is concerned with the archaeological view. What can we know and surmise about these matters based upon a consideration of the material residue of the period?

Our principal findings can be summarised as follows:

- Forteviot is best understood as an ancient ritual complex of such spiritual and cosmological resonance that, by late Roman times, it had become a regional assembly place, probably where kings of southern Pictland were made.
- In the late 8th century the Forteviot landscape was transformed through the establishment of a significant church. Sculpture was used to repurpose (if not appropriate) the pagan ceremonial landscape. This moment of ideological change appears to have coincided with rule of Custantín son of Uirguist (AD 789–820) and his successful dynasty.
- This innovative reimagining of the pagan complex at Forteviot included a distinguished royal residence, described by contemporaries as a palace. It seems to be a local response on the edge of the Western world to the Christian empire of Byzantium.

The study points the way for future investigations into the social and economic foundations of the kingdom of Alba.

In the introductory chapter we sought to frame the Forteviot project chronologically and geographically. In trying to understand what made Forteviot special, we ran up against the most fundamental question: What was Forteviot? Was it a cult centre? A royal site? An assembly place? Or a Christianised pagan sacred landscape? Clearly at certain points it was all of these things. Given the complexity and time-depth of the archaeological evidence, we do not wish to reduce it to a single thing. The parallels cited throughout this chapter from Scotland, Ireland, England and beyond emphasise this kaleidoscopic shifting of meaning and function. Although it is convenient to refer to it as Pictish, Forteviot in the early medieval period was a place where contrasting ideas about kingship contributed to fashioning the myth, authority and social order of a new entity: the Gaelic kingdom of Alba. The raw materials with which to fashion Alba included the remains of antiquity in the form of ancestral monuments and landscape features. The setting of the central Earn valley with its river, productive soils, rich grazing and sheltering hills allowed the dispersed rural communities of southern Pictland to access the power of the supernatural to ensure a better future.

One presumption that underpins the SERF project is the existence of a powerful spiritual presence at Forteviot which, we now know, was first commemorated in monumental fashion in the 3rd millennium BC. Although constructed of timber and earth, the monumental Neolithic enclosure and ritual complex established Forteviot as the focus of religious and political activity for over three millennia (see Fig 1.8). Understanding the shifting nature of the spiritual connections between place, monuments and people is central to this study. A critical aspect of our approach was to treat the Picts as knowledgeable social actors who consciously chose to establish a royal presence here because it was a place of ancient significance, and to curate and enhance that monumental landscape. In short, the connections between the actions of successive generations visible over the centuries were deliberate, not coincidental.

Our reading of the evidence indicates that profound cultural principles concerning the nature of authority and cosmology were articulated at Fortieviot using monuments and architecture, and that these ultimately came to characterise medieval Scotland, with its strong bond linking kingship to Christianity. The construction of this symbiotic relationship between the church and the state characterises the earliest steps towards medieval European nation-building (Geary 2002, 91–2) and is manifest in the early development of kingship in Dàl Riata (Fraser 2007; Bannerman 1974). What is noteworthy and distinctive about the Picts of Forteviot is that they established Christianity within arguably the most potent arena of pagan spirituality in northern Britain (just as the Swedes would do at Uppsala).

By the 9th century, when we have the earliest contemporary sources about Forteviot, Christianity

was well-established amongst the Picts and the representation of kingship on the Forteviot sculpture is unambiguously Christian. And yet, there must have been profound tensions created by introducing Christian worship into the heart of this pagan religious place. Although no tradition of religious showdown at Forteviot survives comparable to St Patrick's contest with the druids at Tara, or St Columba in the court of the Pictish king (VC II.34), there is a hint of tension in the St Andrews Foundation Legend (see Chapter 2.3), and in the tale of St Serf slaying the 'dragon' at nearby Dunning (Macquarrie 1993). The initial arrival and presentation of St Andrew's relics at Forteviot and the subsequent erection of crosses suggests a deliberate flexing of muscles.

Does this mean that these late 8th- and 9th-century kings of Forteviot were the first rulers of a fully Christian kingdom in Pictland? This could be an implication of the St Andrews Foundation tale, which, we must remind ourselves, does not survive in a contemporary text. Whether or not the southern Pictish kingdom was the first fully 'Christian' kingdom north of the Forth, it seems clear that Forteviot represents the strongest manifestation of Christian kingship seen in the north. A Christian ideology would be consistent with the sophistication of the Pictish intellectual world that Isabel Henderson has observed reflected in the sculpture (1999). Christianity was not novel in the 8th century and the Hendersons have convincingly shown that the Picts had been formulating sophisticated theological reflections in stone since the 7th century (Henderson and Henderson 2004). To this we can add a willingness to adopt political symbolism drawn from the Byzantine world, a political world view shaped by the legacy of Constantine the Great and the cult of the Cross.

Forteviot thus emerges as the focal point for significant social and political innovations, the influence of which persisted long after its period of glory as the Picts' principal sacred centre and regional assembly place. In addition to issues of royal and moral authority, these innovations penetrated to the foundations of land tenure, with the authority of the kindred replaced by document-driven legal administrative practices.

10.2 Prehistoric monuments and Pictish cosmology

The traces of pagan sacral kingship practice to be seen amongst the neighbours of the Picts – Gaels, Britons, Anglo-Saxons and Scandinavians - all have the power to illuminate Pictish evidence. Recent scholarship on Irish Royal sites reveals that: an important quality of landscapes associated with sacral kingship is that they are endowed with topographical features that can be conceived of as symbols of divine world order, for they lend themselves to rituals of cyclical regeneration and the human participation in the order of being.

(Newman 2011, 38)

The performative aspect of this cosmological significance is emphasised by Doherty who writes that:

Tara, Emain Macha and Cruachu were not simply concerned with the inauguration of "world kings". They were points at which the creation of the world was re-enacted... As such they were the physical expressions of a sophisticated philosophical reflection on the cosmos.

(Doherty 2005, 31)

This implies an active tradition of use and remembering as part of the rituals of social reproduction. These ritual acts involved the active use, if not appropriation, of prehistoric monuments, and their embellishment with new burial grounds. At many Irish royal places the names of gods and heroes survive in place-name and mythic tradition (Schot et al 2011), but at Forteviot only the thinnest traces of the mythic tradition survive - the St Andrews Foundation Legend, the Treachery of Scone, St Serf and the dragon and the illegitimate birth of Malcolm Canmore. Nevertheless, the starting point for these reflections must be the influence of prehistoric tradition on Pictish practices, with the assumption that there were traditions, embodied in mythology, and that some of these traditions were linked to specific tangible landscape features and monuments (Driscoll 1998b; FitzPatrick 2004a; Bhreathnach 2005). We do not have to know the details of this lost Pictish mythology to recognise the existence of a conceptual apparatus linking the mythological tradition/belief with the concrete materiality of kingship and cosmology as a whole (Newman 2011, 23). While we may lack the textual evidence for Pictish mythology, we are blessed by an abundance of Pictish sculpture which makes plain that the Picts had a lively, if disturbing, mythic tradition, every bit as pervasive as the Irish world view (Henderson 1989). Indeed, some of these incredible beasts are found in the Forteviot sculpture (Chapter 8.2).

If there is a unifying concept of 'Celtic' kingship found across Britain and Ireland, it is the sacred significance of the connection between king and land. This is perhaps most explicit in the 7th-century Old Irish text *Audacht Morainn* ('the Testament of Morann') which has as its central theme the tenet that the king's justice – *fir flathemon* ('true ruling') – brings about the fertility of the land (Kelly 1976; 1988, 235–6; Bhreathnach 2014a, 49–50). One of the most well-known themes of early Irish literature, and one of the most intensely studied, is the mythic personification of the land as a goddess of sovereignty whose ritual marriage to the rightful king is the defining act of royal inauguration (Mac Cana 1955; 1958).

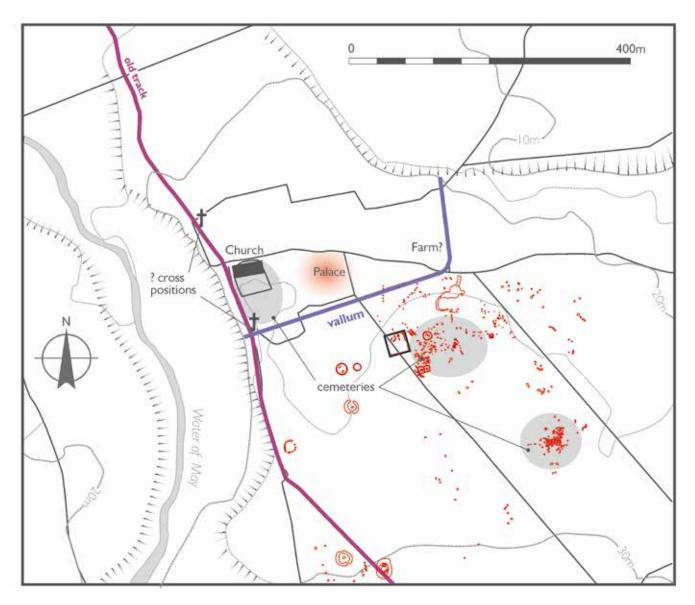
The performance of rituals representing the symbolic marital union of the mortal king and the sovereignty goddess is central to 'Celtic' sacral kingship (Deane 2011), but around Forteviot no clear trace of a sovereignty goddess survives. River names provide a most promising hiding-place for ancient female goddesses, as has been suggested for the Dee (Deua, 'goddess'), but it is not known whether the 'water-course' element embodied in 'Earn' also referred to a forgotten deity (Nicolaisen 1976, 177-9, 187). Equine symbols are also fundamental, but there seems to be no strong horse tradition in the placenames or folk traditions of Strathearn (apart from the horses represented in the sculpture). The earliest female linked to our part of Strathearn is Christian, an 'Ethne', probably referring to St Columba's mother, who is commemorated in Forgandenny (Watson 1926, 381). The name Ethne seems to have been popular in 11th-century Perthshire, but given the promotion of Columba by the dynasty of Custantín son of Uirguist this interest may have been kindled in the 8th century. Nearby Abernethy is dedicated to St Bridgit, but she has no obvious links with Forteviot apart from both sites being beneficiaries of royal patronage.

The earliest historically recorded female from Forteviot is Cínead mac Alpín's daughter, Máel Muire ingen Cináeda (d AD 913), a remarkable figure and arguably the most significant woman of her generation in the Gaelic world. Her influence can be most easily seen in Ireland, where she was successful queen to two Kings of Tara, first to Aed Finnliath (d AD 879) of the Cenél nEógain (Northern Uí Néill) and then, to ensure an orderly succession, to Flann Sinna (d AD 916) of Clann Cholmáin (Northern Uí Néill), who was in turn succeeded by her son by Aed Finnliath (Herbert 2000, 68-9; Connon 2005, 269). However, her influence in Scotland may have been equally substantial because Herbert suggests that far from being a trophy wife, she was politically engaged and a conduit for political ideas which could have included the adoption of the title rí Alban to describe King Domnall son of Custantin (d AD 900), echoing the newly coined title rí Erenn (Herbert 2000, 69).

In some ways the closest we have to a female fertility figure is the unnamed miller's daughter who in the later Middle Ages was said to be Malcolm Canmore's mother (Chapter 2.5). The story as related by Wyntoun is recognisable from folklore as the 'king in disguise' motif and the context of its introduction is understandable in terms of early 15th-century politics (Purdie 2015). However, the localisation to Forteviot is curious given the obscurity of the site by the later Middle Ages. If we reject the notion that Canmore's father-in-law was actually the Forteviot miller, it is possible that the tale contains dim recollection of an association between sex, kingship and the land localised at Forteviot.

There is circumstantial evidence that Forteviot was a locus of communal, perhaps religious, gatherings from at least Roman times. The most substantial traces of Roman activity consist of the marching camps at Forteviot (on the west side of the Water of May) (see Fig 2.1) (Jones 2013, 205-6) and at Dunning (ibid, 191-2). Both camps are on the south side of the Earn, on the opposite bank from the main corridor of Roman activity represented by the road running along the Gask Ridge frontier. There may be good tactical reasons for these camp locations south of the Earn, but the positions might also reveal something of the native Caledonian social landscape. In the highly dispersed settlement landscape of the later Iron Age, large-scale gatherings of people coincided with seasonal festivals. Thus it may be that the Forteviot Roman Temporary Camp was located to monitor the most significant assembly place in the region. It has seen little

Figure 10.1 Plan identifying the main areas of archaeological activity in the 1st millennium AD, and indicating a hypothetical layout for the Pictish palace complex



archaeological work, but a gold coin of Hadrian was reportedly found here in 1829, and both it and the larger Dunning camp have been suggested to be of 2nd-century date (Jones 2013, 117). It is worth remembering that the prehistoric cropmark complex was only discovered while searching for the Roman camp, which might give us pause to think that it is not purely coincidental that the camp was entangled with prehistoric activity. Our proposed interpretation of the square enclosure adjacent to the eastern Pictish burial ground is as a Roman-inspired ritual precinct, which could suggest a deep entanglement with the ancient sacred space (Fig 10.1). It is disappointing that we recovered no evidence to reveal whether the square precinct is contemporary with the camp (Chapter 3.1), although the 1st-century activity on Site H shows that there was intervention in the prehistoric monuments at that time. The positioning of the Roman structures respects the prehistoric monuments: the camp is separated by the Water of May, while the square enclosure is located east of the prehistoric cropmark complex, adjacent to one of the larger concentrations of Pictish burials (Chapter 4). Until we have more refined knowledge about the chronology of the Roman camp it seems not unreasonable to hypothesise that the Roman camp was positioned to monitor activities at the prehistoric cult centre, because it periodically attracted significant numbers of people.

The early medieval interest in ancient sites and traditional seasonal festivals for social and political ceremonies is wide-spread in the insular Celtic world. The quality of the Irish evidence makes it particularly valuable for understanding the relationship between beliefs in the Otherworld and sovereignty (Carey 1987). Although less rich, evidence for such beliefs in northern Britain suggest that equally powerful traditions operated in a Scottish Gaelic milieu (Newton 2009, 231-4). From Ireland there is compelling evidence, both archaeological and historical, that some of these major ['royal'] sites, far from being an ancient memory, were active centres of ceremonial and other activities well into the medieval period (Waddell 2011, 206). In Scotland, Forteviot is not alone in providing archaeological evidence for the reuse of prehistoric monuments in early medieval times (see 10.3, below).

What use did early medieval peoples make of the prehistoric monuments? In purely practical terms the elevated summits of burial cairns could provide convenient platforms for performative acts or addressing large crowds, as happened in Ireland where Swift (1996) has highlighted how pagan monuments in Meath were used for legal judgements in Christian times. Where such mounds did not already exist, it was sometimes felt necessary to construct replicas of these ancient earthworks; indeed, Waddell considers the construction of earthen mounds to be one of the unifying features of Irish royal sites (2011, 210). Referred to as a *forrad* (inauguration mound), these may be considered the central focal point for ceremonial activities (FitzPatrick 2004a; Newman 2007; 2011; Fenwick 2018). Nor should we overlook the wider monumental influence on the landscape through their role in creating structured patterns of movement. Processions work by evoking cosmological themes via reference to ancient and new constructions, to glorify the participants and legitimise legal decisions and political actions. Thinking beyond the practical and the judicial spheres takes us into more philosophical realms and leads to consideration of the cosmological properties of the monuments.

Evidence for sacral kingship ritual is very faint at Forteviot. The remarkable extended death notice of Cináed son of Alpín alerts us to an awareness of sacral kingship at Forteviot (Chapter 2.3), because noting the specific place and day of death is a feature of accounts of the ritual killings of Irish kings (Dalton 1970; 1972) and of the death-tales of the early kings of Tara which celebrate a royal sacred power that transcends this world (Ní Bhrolcháin 2011). Beliefs and practices inspired by pre-Christian cosmology seem to underpin the most remarkable evidence of Pictish-period activity amongst the prehistoric monuments: digging into them and lighting fires in and around them. This can be linked to belief in the sith (fairy folk) who were a constant presence, but most active at the turn of the year, at Samhain. One function of the festive bonfires was to provide protection from sith (Black 2005, 25), but that was not their only purpose. Fire was used, particularly at year end, for divination of the future (ibid, 559). These beliefs may allow us to understand the conspicuous use of fire seen in the Forteviot excavations, where it appears to have been used to make offerings including the transformation of the dead, 'cooking' the bodies reducing them to their essential constituents: smoke and ash. Ancient Irish burial cairns, with or without fire, were also linked to divination and prophetic vision (Waddell 2011, 202), not least because they served as portals to the Otherworld (ibid, 200). The passages of chambered tombs (for instance at Knowth or Long Crew) provided convenient access to mystical realms and were used in early medieval times (Waddell 2014; Byrne et al 2008). At

Forteviot, where there are no ready-made underground passages, the Picts appear to have created their own by excavating large pits within the earlier monuments.

How relevant is this Irish material in a Scottish context? Although the Scottish historical and literary record is not nearly as rich as the Irish, there are clear signs of shared beliefs preserved in seasonal festivals and associated practices, although these survived less well than the Irish ones due to the proximity to the Anglo-phone world and the lack of medieval royal patronage for Gaelic literature (Newton 2009, 233). The 19th-century folklorist, John Gregorson Campbell, documented widespread beliefs in the fairy folk (sith) and in a Gaelic 'Otherworld' all across the Gaidhealtachd (Black 2005). This Otherworldly race, who were malevolent and capable of great mischief, were encountered through openings in the ground, particularly burials. Scottish fairy belief was not confined to the Highlands, as it is well attested in the Lowlands. The fairytale telling of Thomas Rhymer's adventures in Elfland is not unique; as Henderson and Cowan make plain, belief in Fairies and Wee Folk was widespread until after the Reformation (2007, esp 35–73).

There are three points to take from this brief discussion of the cosmology of Samhain. The turn of the year is a liminal moment chronologically: as it is inherently unstable it provides an opportunity to see into the future. Samhain is also dangerous, because it provides an opportunity for the *sith* to come amongst human society, with the potential for drawing some into the Otherworld. The final point is that fire is critical in this context because it provides protection from the supernatural forces while providing a medium for divining the future.

10.3 Introducing Christianity to Forteviot

The prominence of Christian monuments and architecture at Forteviot sets it apart from analogous royal sites in northern Britain, such as Yeavering and Rhynie, but also from the royal sites of Ireland. Unlike these sites, Forteviot exhibits clear evidence for activity before, during and after the 6th century (Maldonado 2017, 339). Understanding how users of the pagan ceremonial centre and Christians resolved potential conflicts can be approached by considering the interplay of burial practice and monument reuse. It is clear that while Forteviot was a long-lived, multi-period ceremonial site, the last flourishing of the prehistoric monuments is represented by their reuse as a burial place in the 5th to 9th centuries AD. The majority of the investigated burials took place during this chronological span: 24 were excavated by the SERF project and another 30 or more are visible as cropmarks. The project also identified ritual activity contemporary with these burials within the prehistoric monuments, including massive pits dug into Neolithic henges and evidence of fire-rituals involving the burning of grain and human cremation in and around the various prehistoric earthworks and enclosures (see Chapters 3 and 5). By the dawn of the 9th century, at the latest, the Forteviot complex had been claimed by the ascendant Pictish royal dynasties for one of its major churches and it appears as an assembly place for a Christian elite. The sacred royal precinct was demarcated by high crosses of stone and centred on an architecturally sophisticated palace complex which is

now evidenced only by the monolithic span of the Forteviot arch. By the end of the millennium, these rituals and burials seem to have stopped rather abruptly, just as the documentary and archaeological evidence reveals that a new royal ceremonial centre and assembly place was emerging at Scone on the Tay (Broun 2003; 2007; Driscoll 2004; Woolf 2007; O'Grady 2018). The institutional seeds of Christianity were also taking root across southern Pictland at the powerful religious centres of Abernethy, Dunkeld, and St Andrews which serviced the new, Gaelic-speaking elite.

The reuse of prehistoric landscapes is a well-trodden theme in early medieval scholarship, one most often used to study the construction of kingship. However, at Forteviot a major difference is the lack of evidence for feasting and occupation. Although there is evidence for fire rituals, including the burning of grain and of bodies (Chapter 5.3), this is more akin to cultic activity as glimpsed at contemporary Irish 'royal sites' and at Roman Iron Age temples and ritual enclosures. A close parallel is the prehistoric ceremonial complex of Uisneach, Co Meath, strongly associated in the early literature with fire rituals linked to the god Lug, who was believed to be buried there, possibly as part of the festival of Lugnasa (Schot 2011, 112). Uisneach at once occupied the sacred centre, the navel, of Ireland, while simultaneously occupying the ultimate boundary position, being traditionally considered as the meeting point of the five provinces. Archaeological work there has shown that early medieval burial

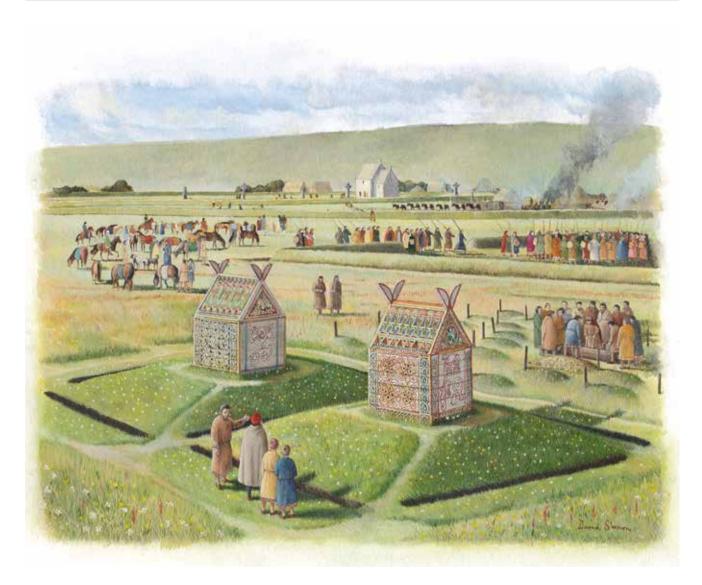


Figure 10.2 Imaginative interpretation by David Simon of the Pictish square barrows sited adjacent to the square enclosure, looking north-west towards the church. The settings of four posts around the graves have been reconstructed as supports for a mortuary building modelled on churches as presented in the Book of Kells. The four-posted structures could have supported anything, but even if imagined as a simple fence or table it shows a degree of elaboration not seen on earlier Pictish burials

activity respectfully surrounds the prehistoric monument complex rather than cutting into it. It revealed evidence for frequent burning, including large pits with carefully structured sequences of firing and deposition dating from the later Iron Age. Significantly, it only seems to acquire a royal residence in the 7th century following its acquisition by the Clann Cholmáin, when a figure-of-eight enclosure (Rathnew) was superimposed on an earlier cultic focus at the heart of the ritual landscape (Schot 2006; 2011, 98). The limited evidence suggests that while it was a major assembly place and venue for sensitive political negotiations, it was not primarily residential. Periodic or seasonal use seems more likely.

The early medieval cultic activity within the Western Complex of Forteviot continued until the 9th century

in the form of burials. High-status settlement represented by the palacium was located elsewhere. Yet no graves were seen cut into the prehistoric earthworks; instead, they seem to respect the postulated earthen bank associated with the massive Palisaded Enclosure (see Brophy and Noble 2020, chapter 3.3), as if it was seen as inappropriate or taboo to be buried within this ritual space. This recalls the Neolithic bank with internal ditch known as the *Ráith na Ríg* ('rampart of the king') at Tara, which serves as a 'termon' (sacred boundary) for the ceremonial centre of the hill and may provide the etymology for the name Tara (Newman 1997, 45-71; 2007, 415; Bhreathnach 2014a, 56). If, as seems likely, the extent of the great Neolithic timber enclosure at Forteviot remained visible until the early medieval period, then it may have served a similar sacred boundary function. At Forteviot, the only exception not respecting this boundary was the cremated human bone within the cist and pits of Site F. It may be that these late cremations were special in some sense, as cremation by this time would not be normal Christian practice. The ultimate appearance of Forteviot is one where the dead are seemingly 'assembled' around a sacred centre, and this may be the clue to understanding the layout of the site. Other examples of early medieval graves within square enclosures (presumably under cairns or barrows) 'gathered' outside a prehistoric monument include the Welsh cemeteries of Capel Eithin (near Aberffraw), Anglesey; Plas Gogerddan, Ceredigion; and Tandderwen, Clwyd (Longley 2009). In the latter case, the Bronze Age barrow was actually enclosed by a causewayed square enclosure itself (Brassil et al 1991). As the causeways provided access to the monument, this was not likely to be a sign of fear of the past but of respect for the ancestors, by granting them a similar form of enclosure as that given to the early medieval dead. Like Forteviot, the monuments to the dead may indeed be for high-status individuals, but they are rather commemorating the relationships between them and the ancestors. As such, these burials are participating in and claiming the existing sacred topography. We might speculate that the distinct, dispersed foci of Pictish burials represent the cemeteries of particular kindreds, perhaps where they gathered at assembly times.

This observation allows us to interpret why such commemoration activity continued beyond the 7th century, at a time when ancestral burial grounds began to be abandoned across Scotland (Maldonado 2013). At Forteviot, burials continued to be made down to the 8th/9th century outside the churchyard, but at this point we begin to see a change. If the dates obtained are reliable, then SB1 and SB2 (Site J, Chapter 5) are the latest square barrows in Scotland. By the time these monuments were raised, the fashion for causewayed square barrows was fading or was already a thing of the past (Fig 10.2). There would have been a conservative, even antiquarian, flavour to the monument.

Deliberate archaism as a form of ideological statement is well-attested in royal and ecclesiastical sites of the later 1st millennium in Ireland (FitzPatrick 2004a; Ó Carragáin 2007), and this may provide the best explanation of these features at Forteviot. Within the uncertainty of radiocarbon dating, these could belong to the same burst of activity which saw the erection of Constantine's (Dupplin) Cross and the *palacium* of Cínead mac Alpín, and would have been part of the sacred topography these monuments commemorated. If so, it is notable that within the Western Complex, fire-rituals not only continued but began to incorporate cremated human remains (Chapter 5.3), something which had not been done since the early Neolithic (Brophy and Noble 2020, chapter 4.3). It may come as a surprise that the founders of churches and patrons of Christian art would continue such cultic practices, but again these sites show how the rhetoric of kingship – and the practice of Christianity itself – was shaped and reconceptualised by the rituals of the past (Clarke *et al* 2012, 174–7). In this respect, Forteviot is linked conceptually to early medieval kingship which Mac Cana argued represented:

a reflex, or a replica, of sacral kingship ... and even when Irish rulers owed their accession more to force of arm than to hereditary right, they were always careful to legitimise their claims by reference to the primal myth and ritual of sovereignty.

(Mac Cana 1985, 57)

The placement of burials at the edges of the ceremonial focus of the site also fits well with the notion of royal use of the site. Royal inauguration rituals at Tara and Cashel incorporated the 'legal sacrament' of the tellach (Bhreathnach 2014b, 170; 2011; Newman 2007), ie the ceremonial entry to establish a hereditary claim to land by riding over ancestral burial mounds and the lighting of a fire (Charles-Edwards 1993, 259-73). At Cashel, an angel declared that kingship of Muster would be entrusted to whoever first kindled a fire there (Bhreathnach 2014b, 175). A team of two horses was another element of the *tellach* ceremony which found their way into the inauguration rites at Cashel and Tara. This raises the possibility that Constantine's Cross, with its pair of linked horses, includes specific inauguration imagery. The juxtaposition of peripheral barrows and central fire rituals at Forteviot may well be an eclectic variation on this theme relating to inauguration rituals. The symbolic, protective, and prophetic significance of fire has already been mentioned. The widespread practice in Celtic Britain and Ireland of extinguishing and rekindling fires at Beltane and Samhain emphasises the sacred significance of fire (Rees and Rees 1961, 79, 157; Schot 2011, 109) and strongly suggests the conscious use of fire in and around the prehistoric monument represents Pictish 'cult' activity.

What can be said for certain is that people were being buried here in the period well before and up

to the reign of Cináed mac Alpín, but that there is no evidence of continued burial in areas outside the churchyard after the 9th century. It is presumed that at this point burial activity shifts to consecrated burial places such as the Forteviot churchyard (Site Q), the most likely location of the royal church. The existence of a large ecclesiastical settlement here is suggested by the volume of early sculpture, the graves from Site Q (in the cemetery extension), and the substantial enclosure ditch (Site M), which may define the inner ecclesiastical precinct or the royal residential compound. The 8th- to 9th-century date from an early phase of the ditch corresponds with the proposed dating for the sculpture, suggesting the creation of a new, Christian focus to the north of a long-standing ritual complex. This may be the point at which elite burial shifted away from Forteviot, permanently.

What then can we say about the complete lack of evidence for a *palacium*? In her summary of the evidence for royal use of Irish assembly sites, Bhreathnach highlights the various words used to describe the king's residence at *óenaige* (fairs, gatherings), noting how often these would have been temporary structures: hence the words *pupall* (tent), *both* (wooden hut), *sosad* (camp) and *forad* (mound, platform) are amongst the most common (Bhreathnach 2011, 146–7). However, the word *palacium* used in the description of Cínead's death implies a permanent structure, one which conveyed a sense of grandeur in the local context, even if it was a distant echo of the contemporary palaces in Aachen or Constantinople.

Although the dynasty of Cínead mac Alpín ruled until the 11th century, the 9th century seems to mark the end of the use of Forteviot as a major ritual centre: no new sculpture was commissioned and the grave markers which characterise other Scottish royal burial grounds (Meigle, St Andrews, Iona and Govan) are conspicuously absent (Driscoll 2003). Perhaps we should imagine that like other 'former' royal capitals (Bhreathnach 2011; Lane and Campbell 2000, 39), the site was still used on an *ad hoc* basis for important public gatherings, including the signing of charters and legal declarations as attested during the later medieval period.

While the reconfiguration of Forteviot through the introduction of Christian rites and monuments was an innovative act, we are learning that the Picts' deep fascination with prehistoric monuments was not unusual. At modern excavations with access to good radiocarbon dating programmes, evidence for early medieval ritual practices at ancient sacred places is becoming increasingly recognised, for instance the lighting of fires at the Clava Cairns at Balnauran (Bradley 2000, 57–8) and the erection of a small slab and deposition of pottery in the centre of the Callanish stone circle c AD 500 (Ashmore 2016, 1080). Future research will clearly enrich our understanding of Pictish interaction with ancient monuments at nonroyal sites.

10.4 Kingship and Assembly: the reinvention of the ancient landscape

One of the most distinctive features of the political development of early medieval Scotland and Ireland is that aspects of the ideology of kingship derive from pre-Christian concepts of sacral kingship. These ideas are seen most clearly in Ireland where we have extensive Latin and vernacular legal material dating from as early as the 7th and 8th centuries (Kelly 1988), along with abundant vernacular literary material which focuses heavily on the concerns of kings (Ó Cathasaigh 2005; Ní Bhrolcháin 2009). From this there has built up a detailed understanding of the nature of kingship and the exercise of royal power (Jaski 2000; Charles-Edwards 2000b, 522-85). The textual evidence from Celtic Britain is much more fragmentary and elusive but such evidence as we have suggests that social and political structures were broadly similar. The archaeological manifestation of this phenomenon is that in both Scotland and Ireland, the evolving institution of kingship was explicitly linked with the ancient pre-Christian past through the staging of royal ritual amongst prehistoric monuments which dated as far back as the Neolithic.

Here is not the place to rehearse the detailed scholarship on the nature of Irish kingship, though it is true to say that historians today would lay more emphasis than in the past on the extent to which Irish kings were effective rulers in the familiar early medieval mould (war lords and law makers) rather than Indo-European sacral kings; that is, kings in name only, 'priestly vegetables' as Binchy memorably put it (1970). Kings and regal practice can be seen readily at Forteviot, while popular assembly – the social machinery of kingship – is invisible, and yet the practice of kingship requires popular witness and assent. There are various reasons for thinking that this was also the case at Forteviot. Again, the better-understood Irish evidence provides a model with which to compare the Forteviot evidence. One of the key socio-political institutions in early medieval Ireland was the *Óeneach* ('fair', festival, aonach in Scottish Gaelic) at which the polity came together and through a mass gathering over several days, political, legal and social business was transacted (FitzPatrick 2004a). These *óenaige* typically took place in boundary locations at culturally significant sites with conspicuous prehistoric monuments.

Forteviot's geo-political situation on the northern frontier of Strathearn, adjacent to the Gowrie, with its conspicuous prehistoric burials conforms to the typical setting of an Irish *óeneach* (FitzPatrick 2004a). At a more refined level of individual monuments and features, the extent of the Pictish activity within the prehistoric ritual landscape and the location of the pre-eminent Pictish royal centre was not coincidental. It was clearly the result of a long sequence of conscious decisions and activities. The evidence for Pictish activity reveals the site was maintained as open pasture and subject to repetitive ritual interventions over a considerable period, the nature of which is consistent with them being specifically associated with kingship. Ritual practice and belief may convey a sense of legitimacy to a king, but the social basis of sovereignty was built on more than a sacred landscape: it was built on people, on the folk who constituted the imagined community of the realm. Sovereignty was constructed through personal networks of kinship and obligation (Mac Niocaill 1972, 42-69; Broun 2015a), which were celebrated at popular assemblies convened at seasonal festivals, under the protection of the ancestors buried underground (Fitzpatrick 2004a; Gleeson 2015).

The combination of people, place and the past are necessary for examining the kingship process archaeologically. The closest parallels for the range of activities observed at Forteviot come from the Irish provincial royal capitals, highly charged sacred topographies which formed the focus of religious and political gatherings across the 1st millennium AD. Here Elizabeth FitzPatrick has untangled monuments, tradition and text to reveal the evolution of royal assembly practices in Gaelic Ireland (2004a; 2004b). Of the shared qualities of the royal assembly places, the chief ones are the presence of ancient (ie prehistoric) burial monuments and being set on a border. Consideration of the boundaries of the earliest clearly delineated institutional territories in Scotland - mormaerdoms and dioceses - reveal that Forteviot is on the north-eastern frontier of the mormaerdom/earldom of Strathearn,

where it marches with the Gowrie. The link between early kingship, prehistoric monuments and assembly in Ireland has been explored in depth by Edel Bhreathnach (1996; 2011), and she argues that the meaning of these gatherings changed significantly, from cultic 'feasts' of the later Iron Age to ritualised expressions of kingship through the sponsorship of regular assemblies (*óenaige*) on royal land in the early medieval period (Kelly 1997, 403; Gleeson 2015, 34), and eventually to the more irregular, symbolic use of ancient gathering places for ecclesiastical synods, the proclamations of law (cain), and royal inaugurations. The evidence from Forteviot appears to start on a similar course with the obscure fire-marked activities ('cultic feasts'?), before changing direction to become a royal residence which served as a setting for declarations relating to ecclesiastical organisation, law and inauguration.

Using archaeological and literary evidence, Cathy Swift has shown that *óenach* sites are always described as open-air gatherings in fields 'outside areas of normal habitation, made up of numerous mounds, and as sites of ancient burial places' (2000, 115-16). These burial places, particularly prehistoric barrows but also contemporary cemeteries, are points of contact with the supernatural, in which the ancestors can be called upon to guarantee oaths, settle disputes and lend authority to land claims (Carey 1987; Ó Carragáin 2003; Warner 2004). Even well after the conversion of Ireland to Christianity, the rhetoric of authority and legitimacy was still being constructed using the grammar of ancient ritual: the appropriation of existing ceremonial landscapes, the invocation of myth and legend by the learned class, and the retention of cosmological principles and taboos (Bhreathnach 1996; Gleeson 2012; Newman 2007).

The discourse on the Irish provincial royal sites is bound up with interpreting the mythological tradition as it has been applied to the prehistoric monuments (Waddell 2011; 2014). On one level Tara, Rathcrogan, and the others provide compelling analogies to Forteviot, but fundamentally something different took place at Forteviot. This difference is signalled by the prominence of Christianity at Forteviot, which goes some way to explaining why there are no echoes of Forteviot's pagan past in the historical record or the place-names. This difference indicates how Pictish kingship took a different intellectual and ideological path from the Irish. Evidently the prestige and sanctity of the ancestral landscape remained potent, even while the spiritual and practical strengths of Christianity were being recognised and applied to rulership. One point of absolute convergence between Forteviot and the Irish royal sites is that in both places the longevity of their social significance was constructed and reasserted through the deep sequence of architectural interventions made at the sites (cf FitzPatrick 2004a; FitzPatrick *et al* 2011; Newman 1997; 2005; Waddell *et al* 2009).

In discussing the topography (Chapters 1 and 2), we noted that Forteviot does not conform to the elevated setting which typifies royal sites in Ireland (FitzPatrick 2004a), although Forteviot does conform by sitting on a boundary and having conspicuous prehistoric monuments. Clearly the social and political value of landscape prominence (elevation and visibility) has been calibrated differently in the shadow of the Grampians to that in Ireland. However, if we shift our attention from its immediate setting to look at the broader landscape context, Forteviot is well situated to serve as a regional centre, being at the heart of domesticated lands suited for crops, grazing, games and assemblies. In the Gaelic tradition, this domesticated space would be described as a plain (mag), which signifies land cleared for productive social and agricultural purposes. In Irish creation mythology, 'the clearing of the forest is about the taming of the wild and bringing it into the human sphere, whether for agricultural purposes or for social purposes such as the holding of assemblies' (Toner 2019, 84). In the Gaelic tradition the land clearance is undertaken by gods and ancestors - it generates fertility and the mythical process of domestication is commemorated in place-names. It is impossible to be certain that the Gaelic sense of mag was shared in Pictland, but contemporary Gaelic use of mag to describe Pictish territories is suggestive. Nicholas Evans has plausibly identified Strathearn and Strathmore with Mag Gerginn ('the plain of Circin') (Evans 2013).

The preference for assembly places at ancestral burial grounds is not unusual in Europe: its occurrence describes an arc across north-western Europe from Ireland to Scandinavia, precisely those areas beyond the limits of the Roman Empire. When the artificial mounds used for legal proceedings ('court hills') are investigated in Britain and Ireland, they are often, but not always, found to incorporate prehistoric monuments (O'Grady 2014; Bhreathnach 2011, 146). Interestingly, in southern England, where social connections with ancestral monuments were severed due to ethno-linguistic replacement, the use made of prehistoric monuments for assembly in Anglo-Saxon England is more limited (Petts 2002; Semple 2004; 2011; Reynolds 2018). In Scandinavia, thing-sites often make use of burial grounds because of their otherworldly qualities (Brink 2003; Nordeide and Brink 2013), and this predilection for using ancestral monuments for thing-sites can be seen in Scandinavian Scotland too (Sanmark 2017, 194-240). In Ireland, enclosed sacred space has been described as an enduring paradigm for 'royal' sites (Fenwick 2018) because decades of geophysical investigation have revealed monumental enclosures even when they do not survive as upstanding earthworks. It would be interesting to establish whether these ephemeral timber structures influenced subsequent patterns of activity in the way the Neolithic palisaded enclosure and square enclosure (Site K) seem to have done at Forteviot. At wellpreserved Irish sites, it is possible to identify the focal monument with a degree of confidence; these tend to be flat-topped mounds of no great height, which vary greatly in diameter and often incorporate earlier monuments. It is presumed that they served as platforms for performance and display, for proclamations, judgements and, episodically, inaugurations. At Forteviot, because of ploughing and erosion it is not possible to identify a focal mound, despite the suggestive survival of the name Haly ('holy') Hill (see Chapter 2.5). We might have expected that Haly Hill described a low, flat-topped mound such as the Moot Hill built at Scone in the early 10th century (RCAHMS 1990; Driscoll 2004; O'Grady 2018, 6).

10.5 Church and ecclesiastical landscape

The clearest measure of Forteviot's ecclesiastical importance during the early medieval period is the sculpture used to colonise an ancient prehistoric pagan ritual landscape. The archaeological investigations have advanced our understanding of this without necessarily resolving some important questions relating to the foundation of the church and the nature of the religious foundation. In what follows we review the key issues relating to Forteviot church in Pictish times and later. As the minister of Forteviot wrote in the *Statistical Account* 'this parish is situated on the fertile banks of the river Earn' (*OSA* 1799, 117), a setting with good access to land and water communication routes and good agricultural land, which Cramp has pointed out is characteristic of many important Early Christian sites in northern Britain (2005, 348). While Forteviot is well positioned with respect to the ancient road network (as currently understood), it cannot be said to have particularly convenient access to good water communications. (This may have been a decisive factor in the shift to Scone at the main crossing place and tidal limit of the mighty River Tay.)

What is more noteworthy in a North British context is the placement of Forteviot church adjacent to, perhaps within, a major prehistoric ritual complex that was evidently the focus of pre-Christian seasonal gatherings. Only the Northumbrian royal residence of Yeavering occupies a similar situation in the heart of a prehistoric ritual landscape (Hope-Taylor 1977), yet at Yeavering there is no convincing evidence of a church: Building B, which Hope-Taylor identified as a timber church, is more reasonably considered as a 'pagan temple' (Frodsham and O'Brien 2005). Bede's famous account of Bishop Paulinus baptising catechumens for 36 days in the River Glenn does suggest that Yeavering was an established place of assembly (Driscoll 2005), making the absence of a church at this Northumbrian royal vill particularly noteworthy. Rhynie too exhibits the qualities of a major assembly location - plentiful prehistoric monuments and a border position - but despite evidence of far-flung contacts in the 6th century, it was then abandoned and there is no sign of any early ecclesiastical activity, unlike say, the assembly site of Tullich on Deeside (Geddes et al 2016).

As Christianity was such an essential component of the kingdom of Alba, a more appropriate comparative perspective should focus on pagan royal centres which engage with Christianity effectively. A particularly thought-provoking comparison is provided by the Llys of Aberffraw, the principal seat (eisteddfa arbennig) and chief court (prif lys) of the Kingdom of Gwynedd from the 7th century until 1282. Aberffraw commands one of the most attractive approaches to Anglesey (Môn), an island conventionally regarded as the pre-eminent pre-Roman druid sanctuary in Britain (Koch 2006, 1301-2). Like Forteviot, significant prehistoric ritual monuments concentrate around Aberffraw, notably a uniquely sited coastal passage grave (Barclodiad y Gawres) and Llyn Cerrig Bach (Lynch 1970), the watery place which attracted rich Iron Age deposits (Fox 1945). The royal residence was built within a 1st-century Roman fort and by the 13th century this residence of the princes of Gwynedd was renowned for its lavish and substantial buildings, none of which

survives, apart from a fine Romanesque arch built into the parish church (White and Longley 1995; Jones 2000, 309–18; Koch 2006, 1–4). The clearest evidence of early and significant ecclesiastical activity is an ambitiously complex Latin inscription to king Cadfan (d c AD 625) at nearby Llangadwaladr church (Edwards 2013, 80–3). The point is that Aberffraw followed a trajectory not unlike Forteviot. It utilised the prehistoric sacred landscape and Roman military site to fashion a major Christian royal palace (*llys*) that rose to eminence c AD 825, but unlike Forteviot, it remained a potent political symbol for centuries until it was deliberately slighted during the English conquest of 1282.

10.5.1 Ecclesiastical origins

These excavations did not reveal the primary building phase of the existing church building. The earliest *in situ* fabric indicates a medieval, perhaps 12th-century date, but there was certainly an earlier stone church in the Pictish period – as indicated by the stone arch. If the sculptural analysis presented above is correct (Chapter 8.2), this stone church would date to the start of the 9th century. Given the limited information about the circumstances of the arch's discovery (Chapter 7.1), we should presume that the Pictish church stood on the same site as the existing church, until proven otherwise.

Some 20m to the south of the existing church, evidence for a small sill-beam structure could well represent an earlier timber church, since it is intimately associated with a series of simple dug graves (see Chapter 7.2.3). While both building and graves are undated, they are believed to be early medieval. If so, it would suggest a diffuse ecclesiastical complex, perhaps consisting of more than one church, as well as a multi-focal burial ground.

Historical sources are similarly unable to resolve questions regarding the origins of Christianity at Forteviot, indeed the traditional dedication to St Andrew cannot be identified in medieval sources (SSPN). Forteviot is prominent in the St Andrews Foundation Legend, but there is no way of telling whether the Pictish king in the story was Onuist filius Uurguist (AD 729–61), conqueror of Dunadd, or his descendant Onuist filius Uurguist (AD 820–34), brother and successor to Constantin filius Uurguist (AD 789–820) (see Chapter 2.3). While it is tempting to gravitate toward the earlier Onuist on the basis of his military and political reputation, both are equally possible. If the first church with the arch was founded during the reign of Constantine son of Fircus as part of the same programme of Christianising the wider landscape, then the direct dynastic association may have been of interest to the compiler.

10.5.2 A monastic site?

Both recent and not so recent excavations at early monasteries in Scotland provide rich evidence for layout and material culture signatures (Carver 2008). (See, for example: Iona (Campbell and Maldonado 2020; Campbell 2019b); Portmahomack (Carver et al 2016); Isle of May (James and Yeoman 2008); Inchmarnock (Lowe 2008); Hoddom (Lowe 2006); Whithorn (Hill 1997).) Such material can be amplified by Northumbrian evidence from Lindisfarne (O'Sullivan and Young 1995; O'Sullivan 2001); and Monkwearmouth/Jarrow (Cramp 2005). The most striking shared characteristic revealed by these studies is the lack of uniformity in layout and the variability of activities which changed over time, leading to problems in defining what monastic sites are, and how to distinguish them from other substantial episcopal centres (Ó Carragáin 2009). For example, is Whithorn in its pre-Northumbrian phase a monastery as Hill argued (1997), or a secular site with a church as Campbell (2007) and Maldonado (2011) suggest? In the absence of textual evidence, the disproportionate presence of male burials is often the only sure way to identify a monastery. Unfortunately, the poor bone preservation at Forteviot made sex determination impossible for all the burials.

For the moment, the argument at Forteviot focuses on the sculpture. In Scotland, large quantities of early medieval sculpture are generally found at sites believed to be monasteries: Iona, Portmahomack and St Andrews, definitely; Whithorn, St Vigeans, Meigle, perhaps. But quantity is not everything, particularly in a royal context: despite the large quantity of early medieval sculpture at Govan, there is no compelling evidence that it was a monastery (Driscoll *et al* 2005), while on the other hand, Deer is widely believed to have been a monastery but has left very little sculpture (Forsyth 2007b, 398–438).

The suggestion that Forteviot was a monastery was first introduced by Aitchison who read the iconography on the arch in the light of the foundation panel on the Cross of Scriptures at Clonmacnoise (2006, 192–8). The proposition is attractive, not least because of the later medieval propensity for the Scottish crown to establish palatial residences at monasteries, as seen at Scone, Dunfermline, and Holyrood (Dunbar 1999). One difficulty of reading the Forteviot arch imagery in the light of Clonmacnoise is that Forteviot is probably earlier. Following Isabel Henderson, we have argued that it dates to the opening of the 9th century (see Chapter 8.2), while Clonmacnoise is dated to the beginning of the 10th century (Harbison 1979; FitzPatrick 2003, 77–80). So rather than interpreting it as a foundation scene, a more neutral reading of the arch would be that it represents an encounter between a king and lesser figures dressed in classical garments, all bearing staffs, which might be an emblem of high office or the sign of a pilgrim.

Practical logic can suggest various administrative reasons why a community of ecclesiastics would have been beneficial to the crown. On the other hand, it might be thought unnecessarily provocative, not to say religiously ill-advised, to select a famous pagan place for a Christian spiritual centre. Such an important Christian foundation would be without parallel in Ireland before the emergence of Cashel in the 11th century (Bhreathnach 2014b; Gleeson and Ó Carragáin 2016); the closest would be Armagh, still some 2km from Emain Macha. In later medieval Strathearn the principal monastery was Inchaffray ('isle of masses'), some 12km to the north-west of Forteviot, which appears to have early medieval origins (Cowan and Easson 1976, 48 and 91; Spearman 1993). Abernethy is 16km to the east, but was not linked to Forteviot in the Middle Ages as far as is known. Moreover, one might have expected some tradition of an early medieval monastery at Forteviot to have survived had there been one, as such traditions have been noted at far less-significant places (Cowan and Easson 1976). It is also worth noting that while the Byzantine palace complex at Constantinople included a great number of components, this did not include a monastery (Rollason 2016, 295-8). So while it is possible that there was a monastic presence at Forteviot, there is no compelling evidence for its existence and if there had been one, it was entirely eclipsed by the shift of royal ceremonial attention to Scone in the 10th century, which was a monastery from the outset.

10.5.3 Ecclesiastical landscape features

The northern and western sides of Forteviot village are delineated by the terrace edges of the May and Earn floodplains. The southern and eastern extent of the ecclesiastic site may have been defined by the enclosure ditch whose upper fills date to the 7th-9th centuries AD (Site M, Chapter 6.4). This ditch creates a D-shaped or sub-rectangular enclosure encompassing much of the current village of Forteviot. In northern Britain, early medieval ecclesiastical layouts varied, but major churches were generally enclosed by a boundary defined by a wall or more commonly a bank and ditch (vallum). In Ireland, this vallum was almost invariably circular or curvilinear, and this circular model has been used to interpret the fragmentary ditches at Scottish examples, such as at Whithorn (Hill 1997), Dunning (Cook 2008) and Inchmarnock (Lowe 2008), on the basis that these are also 'Celtic' sites. However, there is no real evidence to support the use of this model on Scottish sites. No major monastery in Scotland can be shown to have had a circular enclosure, all known examples being sub-rectangular or D- or C-shaped (Campbell 2019b, 25-6; Campbell and Maldonado 2020), although many lesser church sites in Scotland are in curvilinear enclosures. In this light, the speculative reconstructions of circular boundaries at Whithorn, Inchmarnock and Dunning appear to be misguided. Forteviot thus has at least one common element of a monastic site to place alongside the sculpture and the structure on Site Q. The estimated enclosed area at Forteviot would be approximately 75 hectares (about 185 acres), which is roughly comparable to the enclosed areas of monastic sites at Hoddom and Iona (Lowe 2006, 186). Whether the site functioned as a monastery similar to those sites is debateable, given the current lack of evidence for monastic buildings, segregated burial, and craft activities at Forteviot, and instead it may have been a palace/church/cemetery complex.

10.5.4 The parish church

Forteviot follows a familiar trajectory of rural parishes during the later Middle Ages and into the early modern period. Its history was very wellresearched by the Rev Neil Meldrum (1926), whose comprehensive study finishes with the reorganisation of the village in 1925. The painted glass windows and floor tiles are exceptional in a typical parochial context and indicate high levels of patronage (Chapter 7.1.3), possibly as a result of the St Andrews connection. The foundations of the 13th-century church are of good-quality masonry and where they can be traced suggest that it was almost as long as the existing church, but narrower, similar in proportion to the ruined parish churches at nearby Muckersie and Ecclesiamagirdle (CSMPC). The history of Forteviot church reveals the usual institutional wrangling over the parish (and its teinds) leading to inevitable periods of neglect by local landowner patrons, none of which contributed to the curation of the historic church fabric or the sculptural monuments. Meldrum (1926) mined the raw material for a fascinating account of the post-medieval parish, but that requires more space than is available here.

The most striking suggestion to emerge from this consideration of what we can say about Christianity at Forteviot is that the first church could have been introduced c AD 800 as part of the sustained effort by Custantín son of Uirguist (AD 789–820) and his dynasty to re-imagine Forteviot as a Christian sacred place. To demonstrate this could be an objective of future church excavations, either by extending the excavations described above or digging for the earliest church inside the existing church.

10.6 Byzantium, Forteviot and the Kingdom of Alba

In this section we develop the argument that early medieval Forteviot was influenced by Byzantium in the 8th and 9th centuries in ways that had not been appreciated previously. This discussion comes with a disclaimer: it is not definitive but rather is intended to initiate a discussion. Apart from anything else, there are too many connecting Byzantine threads to unravel here.

The components of the argument lead to the conclusion that the formation of Scotland, as represented by the Kingdom of Alba, was influenced by practices of rulership that were perfected in Constantinople. The components include a review of the iconography of the Forteviot sculpture and a consideration of the socio-political context behind the Pictish interest in Constantine, and the influence of Byzantine court culture, the most coherent influences of which relate to imperial displays, specifically the practice of processions. McCormick (1986) has demonstrated how wide-reaching was the influence of the late Roman triumphal displays on ceremonies in the early medieval successor states across Western Europe, but he did not, however, consider Britain.

10.6.1 Byzantine influences on Forteviot's Pictish sculpture

As with so many Scottish early medieval sites, we would be at a loss to understand Forteviot without the sculptured monuments, which are the most enduring and eloquent sources for religious belief and political ideology in this period. At Forteviot, the sculptural assemblage signals a decisive shift in the political landscape of northern Britain. The sculpture is part of a sophisticated re-purposing of the pre-Christian religious place as a Christian royal centre, inspired by ideas of regality spreading across Europe after the collapse of the western Roman Empire, following the example of Byzantium. It would be possible to document the lineage of specific motifs as they travelled across Europe, but here we are focusing on the conceptual and ideological influences, leaving the detailed exploration of the mechanism of transmission for another time.

On account of their completeness and clarity of carving, the two most important pieces from Forteviot in iconographic terms are the Forteviot arch and Constantine's inscribed cross from Dupplin. The remaining sculpture serves to reinforce the idea of the contemporaneity of the assemblage, including similar motifs, such as the mounted warrior, while the fantastic snake-tailed beast (Chapter 8.2, Forteviot 2) reminds us of the potency of the Pictish mythical tradition at Forteviot.

Starting with the cross, although lacking Pictish symbols this is emphatically a Pictish composition displaying a deep engagement with the Insular milieu (Henderson 1999, 163). First and foremost it is the symbol of the resurrected Christ, but the military imagery is highly prominent. The principal face is dominated by the portrait of a mounted warrior, presumably Constantine himself, which occupies a panel at the top of the shaft in the equivalent position to the inscribed panel on the opposite face. The equestrian figure is identified as a military commander 'by means of the four heavily armed foot-soldiers who form a sort of plinth for him to ride on' (Henderson and Henderson 2004, 135), while additional armed foot-soldiers with extravagant moustaches occupy the whole of one side of the shaft.

The figurative religious imagery reinforces the royal message with representations of David, the Divinely sanctioned Old Testament king, depicting him 'as protector of his people, in the act of saving his sheep from the lion's jaws' (Henderson and Henderson 2004, 191), and as the devoted psalmist. King David is a theme particularly associated with Pictish royal sculptures, including, tellingly, the St Andrews sarcophagus (Henderson 1986; Henderson and Henderson 2004, 129–33). In Byzantium, from the 7th century onwards images of David were used as substitute representations of the emperor (Wander 1973; 1975).

Despite the importance of these political military elements, considerable attention has been expended on details which mimic a jewelled altar cross. The central bosses are intended to represent a gem stone, possibly a rock crystal magnifying a relic (a sliver of the true cross?). The crosshead is sufficiently detailed that it may be a representation of a specific – rather than generic – altar cross. The panel of eight doves, which Henderson interprets as a Columban motif, also carries a political message as a signifier of Custantín's dedication to St Columba, demonstrated in his patronage of Dunkeld and the expansion of the cult of Columba in step with the geographic expansion of his dynasty (Henderson 1999, 176).

Two panels on the narrower sides, but at the same level as the rider, are perhaps inspired by home-grown mythology: one shows an imaginary beast with a snake-tail, possibly a dragon, while the opposite contains a pair of horses (see above for suggestion that this may connote inauguration ritual; horses are discussed in detail by FitzPatrick (2001)).

To return to the rider, if the identity can be presumed to be Custantín son of Uirguist, the style of the representation is less certain. The form of the rider, unarmed and carrying a rod, cannot be easily paralleled in the corpus of Early Christian Monuments of Scotland (Allen and Anderson 1903). What sets this rider apart from other Pictish riders is his attire and the emblem he carries. The condition of the stone renders some of the readings conjectural; in our view the rider appears to be wearing a loose-fitting short tunic (?in the Roman manner) with no visible ornamentation, in contrast to many (?most) Pictish riders whose garments display detail at the waist or hem. Less ambiguously, he carries a rod over his far shoulder. In the absence of a point it is hard to argue that it is weapon. It is possible that it represents the simple hazel rod (slat na ríghe, 'king's rod'), the principal prop which symbolised legitimate royal authority in the Gaelic world (FitzPatrick 2003, 77). The use of such rods is mentioned in descriptions of the later medieval inauguration ceremonies of the Lords of the Isles (Caldwell 2003; 2009, 50). However, if the



Figure 10.3 Glasgow's oldest equestrian statue, of King William III (of Orange), was erected at the burgh cross in 1735 where it is shown in front of the Tontine building in this Thomas Annan photograph *c* 1868. This representation of the king as Roman emperor is heavily indebted to the Marcus Aurelius statue in Rome (© J. Paul Getty Museum)

identification of this rider as the Pictish Constantine is correct we should perhaps expect to identify a Roman or Byzantine model. There are surprisingly few equestrian representations of the emperor in any permanent media and only one surviving statue, that of Marcus Aurelius erected in AD 175 on the Capitoline Hill, Rome (Stewart 2012). In this most famous representation of the emperor on a horse he is wearing a short tunic, is unarmed, and is making on open-handed gesture of public address. This is a very influential piece of sculpture, reproduced at various moments through the Middle Ages and into the modern era - Glasgow's oldest surviving statue, an 18th-century representation of William of Orange, is modelled on it (McKenzie 2002, 67-71) (Fig 10.3). Incidentally, the Marcus Aurelius statue may owe its survival throughout the Middle Ages to having been mis-identified as Constantine the Great, the first Christian emperor. If our mounted figure was inspired by a Roman model, then the rod that Custantín carries over his shoulder may represent the *vitis* ('vine staff') carried by Roman and Byzantine commanders (Robinson 1975, 156–7). This metre-long rod was a well-established emblem of the centurion, for instance on the 1st-century tombstone of M. Favonius Facilis from Colchester (Phillips 1975). Public sculpture would have been available to someone looking for a suitable Roman symbol of authority, perhaps one that echoed native practices.

It seems not unreasonable that in the sculpture we are intended to see both Custantín son of Uirguist, at his moment of triumph, and his namesake, Emperor Constantine the Great. The symbolism of the 'majestic rider' on Pictish stones, including Constantine's Cross, has recently been reinterpreted as symbolic of the *adventus* or triumphal entry of the king and the position of Constantine's Cross at the northern approach to Forteviot's sacred landscape seems intended to reference the triumphal procession and its arrival at the sacred royal destination (Cameron 1976; McCormick 1986; Clarke *et al* 2012, 154–8).

Isabel Henderson's argument that the stylistic similarities of the carving of the Forteviot arch and the Cross indicate that they should be regarded as contemporary strengthens the case for considering them as parts of a comprehensive re-imagining of Forteviot as a Christian centre. Whether or not the figures on the arch represent 'defenders of faith' (Henderson 1999, 176–7), in their moustachioed swagger they certainly represent Pictish lordship, in this case attired as if recently arrived from Ravenna. Given the combination of imagery, we are bound to ask whether Constantine's Cross was erected at Dupplin to commemorate the inauguration of Custantín son of Uurguist, and whether the destination of the inaugural procession was the church containing the arch.

10.6.2 The 'High Cross' tradition of landscape demarcation and royal display

The impulse to create stone crosses on a monumental scale and place them in the landscape is a dramatic local response to the development of the Cult of the Cross in the wider contemporary Church. In parts of Scotland this enthusiasm has generated exceptional concentrations of monumental sculpture, consideration of which has informed our understanding of Forteviot. This Scottish enthusiasm is rooted in a deeply established indigenous tradition of erecting stone monuments in the landscape. It flourished in a context in which stone architecture was generally lacking and where churches were small and intended as 'commemorative shrines and places of pilgrimage' (Stalley 2005, 720; Ó Carragáin 2010a; Foster 2019). Their small size meant these churches could support socially exclusive worship.

The use of monumental sculpture to make political statements is a phenomenon which can be documented throughout the Insular world (for a more-developed version of this discussion see Driscoll and Forsyth 2009). The 'High Cross' tradition of complex, multielement monuments of the 8th and 9th centuries (Stalley 1991) is strongly associated with Iona where it may have begun (Fisher 2001). These monumental crosses were, in many cases, representations in stone of jewelled metalwork crosses (ie decorated sheet metal covering wooden cores), used in processions and on altars. Their decoration often recalls metalwork effects and constructional methods, for instance, binding strips, bosses covering nails, and settings for jewels. It is widely thought that some such crosses might be recalling actual metalwork crosses housed inside a church on site or at the mother-church, acting, in a sense, as an advertisement for the cross within. Until comparatively recently, our understanding of Irish metalwork crosses was based on fragmentary components and the spectacular, but later, Cross of Cong, a processional reliquary cross dated by inscription to 1125 (Wallace and Ó Floinn 2002, 217-18, 249). However, the 1986 discovery of a late 8th/9th-century metal-encased wooden cross from Tully Lough, Co Roscommon provides a complete example contemporary with the stone crosses (Kelly 2003). From Scotland there are the much more fragmentary remains of a similarly large, bronze-encased wooden cross dating to the later 8th century from Dumfriesshire, decorated with Anglo-Saxon-style vine-scroll ornament (Webster and Blackhouse 1991, 173-5).

Royal patronage of crosses is attested in contemporary Ireland and 'may be seen to document not only cooperation between Church and ruler at the time, but also a king helping to commission a High Cross to bolster up his own importance' (Harbison 1994, 104). Even innovative monumental sculpture such as was being produced in 8th- and 9th-century Scotland deliberately evoked tradition (not least through the continued use of Pictish symbols on Class II sculpture such as the Borestone of Gask and the use of ogham inscriptions). Perhaps the most powerful and politically charged expression of memory in sculpture is genealogical, which is why inscriptions include information that reveals not only the ancestry of the commemorated individual but also identifies (to a contemporary audience) their kindred (a strategy which may explain the use and longevity of Pictish symbols). The ability to fix a person, a kindred, or an event in the landscape is a well-understood property of inscribed monuments and in this context it is instructive to consider the remarkable Pillar of Eliseg, erected by Conchenn king of Powys (d AD 854). The long and complex inscription on this cylindrical column monument, erected on a prehistoric burial cairn, was intended to confirm territorial claims in part by invoking the memory of the patron's great-grandfather Eliseg, who is credited with uniting the kingdom of Powys in the mid-8th century (Nash-Williams 1950, no 182; Edwards 2009; Murrieta-Flores and Williams 2017). It is particularly worth noting the form of this monument, which is characteristic of the Roman civic and military architecture adopted by the Anglo-Saxons. The pillar form contrasts with the Forteviot high crosses, which are executed in a firmly Insular idiom.

In Scotland, the most spectacular example of the interplay between territoriality and monumentality is found on the Tarbat peninsula, the slim expanse of extremely fertile land on the coast of Easter Ross. At the northern, Dornoch Firth end of the peninsula stands Portmahomack, the site of a previously utterly unknown major Pictish monastery (Carver *et al* 2016). Fragments representing up to four ambitious relief-carved cross-slabs (*c* 3m tall and 1m broad) are known from the site, including one with an elaborate inscription using Insular display capitals carved in relief, a highly unusual feature in Insular epigraphy (Higgitt 1983).

While the monastery was lost to memory, and its sculpture deliberately smashed and buried in a catastrophic event attributed to a Viking raid between AD 780 and AD 810 (Carver et al 2016, 259), sculpture elsewhere on the peninsula survived. There are three huge cross-slabs carved in distinctive Pictish styles, all of which, Henderson argues on art historical grounds, date to the second half of the 8th century (James et al 2008); some are probably contemporary with the Forteviot sculpture. The combination of Pictish symbols and other images of authority with their display of cross imagery makes them 'as confident and splendid as anything in Europe in this period' (Henderson and Henderson 2004, 138). The Shandwick cross (ibid, 76-7), the Hilton of Cadboll stone (James et al 2008), and the 'ravishingly elegant' slab from Nigg (Henderson and Henderson 2004, 140) seem to have stood above harbours and to have been visible from the sea (Carver 2008, 178). Furthermore, the positioning of the monuments in settlements at key landing places presumably relates to local devotional enthusiasm and a desire to signal their relationship with the church at Portmahomack.

The carving on all three displays great technical expertise comparable to the high standard seen on the Portmahomack fragments, which suggests a connection with the monastery, a suggestion reinforced by the sophisticated ecclesiastical knowledge evident in the carvings. Isabel Henderson emphasises the iconographical sophistication of these monuments which she sees as functioning within a 'coherent liturgical landscape' (James et al 2008, 201). While this expertise and knowledge emphasises the connections with the monastery, the sculptures also include strong secular themes through which one catches glimpses of local politics, perhaps amongst rival kindreds. The most explicit secular representation is on the Hilton of Cadboll stone (which has been on display in the National Museum in Edinburgh since the 1920s). The reverse of the cross slab is framed by a masterly rendering of inhabited vine-scroll motif and at its centre, an unparalleled female equestrian figure, wearing a brooch and depicted frontally on her mount, at the centre of a hunting scene of familiar Pictish type. It is a matter of ongoing debate whether the image is a representation of a specific powerful noblewoman, or a personification of a timeless ideal of female nobility and power (Henderson 2008, 183-9; Clarke et al 2012). Either way, she is unequivocally an image of authority.

It is clear that the sculpture of the Tarbat peninsula can only be understood as a group, and then only if appreciated in its landscape context. Carver (2008, 187) considers that the four coastal sites 'together represented an expanded version of the monastic precinct, signifying a time, in the later eighth century, when the whole peninsula had become the monastic estate'. The crosses therefore marked out the 'protected, or rather proclaimed, space' of a monastic sanctuary. The idea of marking sacred space and asserting local political messages seems to have been well understood on the Tarbat peninsula, though sadly there are no texts to indicate who commissioned or created the sculpture.

The extent to which a textually rich environment is required to appreciate fully the political significance of sculpture can be seen in the case of Clonmacnoise, one of the wealthiest and most politically important monasteries in pre-Norman Ireland (King 1998; 2003). It has over 700 early medieval carved stones, the single largest collection in Ireland or Britain by a huge margin. The Clonmacnoise collection consists mostly of individual grave stones, but also includes three high crosses commissioned by kings dating to the mid-9th century, a watershed in the history of the monastery, as in the history of Ireland as a whole. We see the rise to power of Clann Cholmáin ('children of Colmán') dynasty, part of the mighty Southern Uí Néill. We have already encountered this expansive kindred in the context of the seizure and adoption of Uisneach (see above). Clann Cholmáin were kings of Míde, and the

most powerful of them were able to claim the kingship of Tara. One of these, Máel-Sechnaill son of Máel-Ruanaid (AD 846–62), who at his death was described uniquely as *rí hÉrenn uile*, 'king of all Ireland' (Annals of Ulster sub anno 861), erected the first stone cross at Clonmacnoise, the so-called 'North Cross', although Stalley would date this later (2014).

It is the contribution of Máel-Sechnaill's son, Flann Sinna (AD 879-916), which has been regarded as being of particular importance for understanding Forteviot. It is worth remembering that he was married to Cináed mac Alpín's daughter, Máel Muire ingen Cináeda (d 913). Flann Sinna, jointly with Abbot Colmán, built a great stone church at Clonmacnoise, which was very unusual for the time. He also erected two additional monumental crosses at the site, including one of the most famous of all Irish High crosses, the so-called 'Cross of the Scriptures' (Harbison 1992, i, no 54; Stalley 2014, 157-61); significantly, he also repositioned his father's cross and erected his own crosses with reference to his new stone church (Manning 1998). The Cross of the Scriptures is aligned on the church's west door and includes a panel depicting king and abbot in an act of co-founding, with their hands together on a staff or stake (Harbison 1992; Aitchison 2006). Below this is part of an inscription which not only records the names of king and abbot but asserts that Flann is 'king of Ireland', a highly charged and contentious declaration. In erecting this cross Flann Sinna committed an act of piety, an act of patronage, but also an act of propaganda.

Other Irish kings saw the symbolic potential of such acts. Máel-Sechnaill's contemporary and sometime rival Cerball mac Dunlainge (AD 847–88) was the most successful ruler of the small kingdom of Ossory and he erected the famous Ahenny crosses in 'conscious imitation' of Máel-Sechnaill, to assert his power at symbolically important locations on the borders of his kingdom (Ó Floinn 2001, 11–12; 2012).

The importance of patronage in boundary locations comes across powerfully from these well-documented comparisons. The decision to display these royal monuments so visibly at Clonmacnoise, on the frontier of their arch-rivals in Munster, rather than in the Clann Cholmáin heartland, is particularly significant for understanding Forteviot's position on a regional boundary. The choice to patronise the ancient ritual assembly site of Forteviot has direct echoes of the appropriation of Uisneach by Clann Cholmáin. Conquest is also conveyed by the choice of Forteviot for the display of triumphal monumental sculpture, as the capture of the spiritual centre of southern Pictland emphasised the significance of the southern expansion of the territorial holding of the kings of Fortriu.

The example of the dual endowment of church and monumental crosses is also of interest from a Forteviot perspective, because we appear to be seeing the same phenomenon. The famous image on the Clonmacnoise Cross of the Scriptures of the king and abbot jointly planting a wooden rod in the ground has been interpreted by Aitchison (2006, 192-8) as a foundation ritual or ceremony, and used to argue that the figures on the Forteviot arch represent the founders of a royal monastery. FitzPatrick has interpreted this scene differently, identifying the staff with the hazel rod (slat na ríghe) used in royal inauguration and the participation of the abbot as an endorsement by the church (2003, 78-80). In some ways the biggest obstacle to using Clonmacnoise to interpret Forteviot is the relative sequence: Constantine's cross and the arch are likely to be about 100 years older than the Cross of the Scripture. So if we are looking for channels of influence, it would seem more likely that the interpretive flow ran westward from Pictland to Ireland. We can never know, but Flann Sinna could easily have been influenced by what he learned about the importance of stone crosses in Pictish royal ceremonies at Forteviot through his Pictish wife Máel Muire ingen Cináeda and her entourage.

10.6.3 The significance of Constantine for the Picts

Returning to Forteviot, we can note the proliferation of the name Constantine among the late Pictish kings and the kings of Alba, including Constantine III son of Áed (d AD 952) (Anderson 1973, 197; Woolf 2007, 126-9). The significance of Constantine for the Picts begins, of course, with the peerless reputation of Constantine the Great in the Middle Ages: as the epitome of a successful ruler who won great victories, made his people secure and delivered economic prosperity, but above all his early medieval reputation was as a champion of Christianity. By endorsing Christianity and giving it institutional legitimacy Constantine created the circumstances for making his subjects spiritually complete. The indirect influence of Constantine the Great derives from his reputation, to such an extent that his name virtually became a title and became inseparable from Christianity. Although it did not emerge in his lifetime, Constantine's subsequent reputation and imagery becomes fused to the

cross (Bardill 2012; Meredith 2011). So significant is the cross that it becomes an integral symbol of imperial sovereignty by the 6th century (Cormack 2000, 45-6), universally recognised from Constantinople to Forteviot. While the post-Roman Western World splintered into short-lived barbarian kingdoms, Byzantium flourished; it remained the prime example of royal authority – despite territorial erosion. Through Byzantium the Roman Empire endured and was magnificent. In this context it is not surprising that aspirational dynasties in Pictland would be drawn to Constantine's name; what is more surprising is that it did not happen elsewhere in Europe. Perhaps the remoteness of northern Britain obscured the disparity of scale between a small kingdom and the mighty Byzantine empire.

The idea of Constantine exerts two powerful influences over understanding the developments of 9th-century Pictland which are directly related to the emergence of the Kingdom of Alba around AD 900. Directly, this was through the deeds of Constantine the historical figure, whose rule (AD 789–820) was conspicuously successful (Woolf 2007, 61–6), inspiring the use of the name by three other kings of Alba before the 11th century (including members of a rival dynasty).

What was it about the late 8th century that prompted a rising Pictish dynasty to adopt the name Constantine and evoke the glory of Byzantium? One reason seems to be the revival of the Byzantine Empire's fortunes in the 6th and 7th centuries, including rejuvenating the image of Constantine. The military successes of Constantine IV and Constantine V must have been noticed, but these later Constantines only served to refocus attention on Constantine the Great. Byzantine developments are not the whole story: the transmission of knowledge about Constantinople was mediated by the heirs to the Western Roman empire, most conspicuously by the Franks (McCormick 1986), and most influentially through the court of Charlemagne (Bhreathnach 2014a).

The political achievements of Custantín son of Uirguist and subsequent dynastic success seem to justify the lofty imperial name. Custantín son of Uirguist, one of the great Pictish kings, was the first individual to hold the kingdoms of both Dál Riata and the Picts concurrently. In early medieval terms his dynasty was highly successful: he was the first of nine Pictish kings to be drawn from three generations of one family which held the kingship for over 50 years and lost power only with the rise of the Meic Alpín. Very little is known about him beyond the Irish chronicle entries for his accession and death. A note in the Pictish King List credits him with founding Dunkeld (Anderson 1973, 194, 266, 273; Macquarrie 1992).

From the Irish annals it appears he won the kingship of the Picts after a great battle in AD 789, gained power in Dál Riata in AD 811, and ruled both simultaneously for nine years until his death in AD 820 (Anderson 1973, 174, 192-4). In addition to his military success, which allowed him to expand south from his home territory of Fortriu (Easter Ross and Moray) to include Dál Riata and Strathearn, he is credited with founding Dunkeld, which came to rival Iona as the most important church of the federation of Scottish monasteries devoted to the cult of St Columba. His religious credentials are confirmed by the fact that he is one of only three Pictish kings to be commemorated in the Durham Liber Vitae (Gerchow 1988, 109-54, 304-20; 2004; Woolf 2007, 67). Custantín was succeeded in the kingship by his brother Onuist, who as we have seen may be the Onuist credited with receiving the relics of the Apostle Andrew to Pictland. The two brothers were part of a dynasty which had dominated northern Britain since the AD 720s but was wiped out a little over a century later in AD 839 in a great battle against Vikings in Strathearn.

10.6.4 Byzantine imperial ceremonies and court-culture

There is little doubt that the greatest influence on European kingship rituals and associated ceremonies was Roman, filtered through Byzantium (McCormick 1986). Palace culture was certainly a significant part of this, but what did it amount to? This is clearly hard to know for Pictland, but Barnwell, writing about the Yeavering grandstand, concluded that late Roman and early Byzantine traditions relating to civic organisation and public entertainment influenced assembly practices and political ceremonies more than is commonly appreciated (2005, 178–80; Gleeson 2015, 36). If this was true of Northumbria, then why not of southern Pictland, only 100 miles further north?

Arguably the boldest innovation at Forteviot was the construction of a royal palace in a landscape redolent of ancient, pagan religion, something not done elsewhere in the Insular world until later. In 7th- to 8th-century Constantinople, the palace, which was part of a sprawling complex of apartments, offices, meeting rooms, chapels, and gardens, was the ultimate destination of long, highly structured processions. It was the place where the emperor could be seen by his subjects, be acclaimed, and receive petitions (Cameron 1976, 162-3, 182-3). This public presentation of the emperor took place at the imperial box, kathisma, in the hippodrome (circus), which is why so many representations of the Byzantine emperors are set within an architectural frame which recalls the kathisma. Selfevidently, for 'palace culture' to exist, it needs a palace. The ideological value of the glamorous neo-Roman arcaded and peristyled palaces of the Carolingian world, such as Aachen and Ingleheim, reveal studied emulation of the imperial palace tradition (Nelson 2000; Rollason 2016). There is a temptation to apply these Carolingian models uncritically to explain Scottish developments, for instance at Scone (O'Grady 2018), but in this we should probably follow Stuart Airlie (1994) in thinking that Cináed's palacium at Forteviot should be regarded as part of this broader European tradition, conceptually similar to Aachen and Ingleheim but not architecturally similar.

At Forteviot we are seeing an attempt to introduce a new structure to the patterns of movement through the landscape which characterised the ceremonial processional tradition of Constantinople (Cameron 1976). The critical part of this was the presentation of the king. In the Byzantine tradition the imperial experience was not simply a matter of a triumphal parade and horse racing; it required the appropriate imperial presentation on an architecturally suitable stage. It is in this context that we should consider the purpose of the Forteviot arch and recognise it as the chief prop for the Pictish king with imperial aspirations. In this sense the palace is not so much an elite residence as a device for constituting and reproducing the community of the realm.

While the recognition of the Imperial Byzantine inspiration at Forteviot sets it apart from other sites associated with kingship in Celtic-speaking lands during the 6th to 10th centuries, the differences go deeper. Forteviot is often described as being open and undefended, but it is fair to say it was lightly enclosed by a bank and ditch (Fig 10.1 and Chapter 6.4). Nevertheless, the flat valley bottom distinguishes Forteviot from the royal strongholds in nuclear hillforts tradition which are emblematic of the period, such as Dumbarton, Dundurn, and above all, Dunadd (Alcock 2003). The Northumbria royal settlement at Yeavering occupies an analogous valley-bottom position, but there may have been a fortified component: the so-called 'great enclosure' may have contained a defended royal compound (Hope-Taylor 1977; Frodsham and O'Brien 2005). The comparison with Forteviot is strengthened because Yeavering is set within a prehistoric ritual landscape, albeit on a more modest scale (Bradley 1987). A similar proximity of royal residences to ancestral burial places can be readily paralleled in Ireland and possibly at Rhynie where there are suggestions of elite habitation near ritual structures and burial grounds (Noble *et al* 2019).

At Uisneach there is greater longevity, but here the residence near to the ritual core is thought to have been used episodically, presumably for assemblies and religious festivals (Schot 2011). Elsewhere in Ireland, a similar, seasonal usage can be argued for other major Irish royal sites such as Tara, Rathcrogan and Emain Macha. The more permanent royal residences, exemplified by Clogher (Warner 1988), correspond to the royal hillfort model of Dumbarton, although adjacent to a monastery with monumental sculpture (Busset 2017). The most thoroughly investigated Irish royal site, Knowth, reveals a different pattern again. Here the kings of Brega built their residence on top of the Neolithic passage grave in the heart of the Bru na Boigne. Their extensive burrowing into the chambers of the passage grave demonstrate the lengths to which they went to establish a link to the mystical ancestral past (Byrne et al 2008, 89-132). These examples highlight the distinctive character of the palacium at Forteviot, which managed to position a royal, 'Imperial' residence within a major, ancient ritual landscape.

10.6.5 The influence of Christianity on Pictish kingship

Speaking of Ireland, Bhreathnach has observed that 'the conversion process can involve retaining or reshaping old practices while at the same time adopting new practices' (2014b, 170). At Forteviot we can see this process at work in burials which respond to and address the existing ancestral monuments, and in the erection of new monuments and buildings. We should, of course, avoid thinking of pagan and Christian as polar opposites (Petts 2011).

In the end it is most likely that the rituals of assembly at Forteviot were not seen as 'pagan' or 'Christian'. They were instead ancestral rites which tapped into the supernatural at auspicious moments, folding Christian notions of time into vernacular conceptions of antiquity (Maldonado 2017, 340–1).

Eventually, traditional kingship rituals in Ireland acquired Christian trappings, but as FitzPatrick has

observed 'where most medieval royal inauguration ceremonies are concerned, the church came to the secular king-making site, rather than the king to the church' (FitzPatrick 2003, 92). We are fortunate that the decisive moment of transition at Forteviot was marked by the erection of Christian monuments, of the most opulent and sophisticated type.

From the time of Custantín son of Uirguist, at the turn of the 9th century, Christianity becomes intrinsically entangled with royal authority and this Christianisation of Forteviot is manifest through the use of monumental crosses to mark boundaries and to guide movement. If identifying the Christianisation with the appearance of sculpture is correct, then Constantine's Cross takes on added significance as a precocious example of manifest regal involvement through religious patronage in Pictland; this is a generation before the practice was established in Ireland. Assuming some of the unprovenanced sculpture fragments stood around Forteviot church, then the 'destination' of processional movement through this ceremonial landscape also seems to have been marked by the crosses.

10.7 Conclusions

The SERF project has allowed us to trace a narrative arc of Forteviot from its early prehistoric origins (SERF 1: see Brophy and Noble 2020) through the development of a monumental ritual landscape over many centuries until it became the spiritual heart of the Kingdom of Alba. The scale of the prehistoric ceremonial landscape and intensity of its use indicates that it was the most substantial pagan religious centre and assembly place north of the Forth so far known. There is little doubt that Forteviot was a place of regional religious significance for millennia; in these concluding remarks, we will summarise why the events of the early Middle Ages were equally important. The formation of the Kingdom of Alba has been recognised as a watershed moment by scholars concerned with political history and the development of institutional structures of the medieval Scottish state (Broun 2015b; Woolf 2007; Bannerman 1974; Duncan 1975; Driscoll 2002b). Forteviot has implicitly been considered to be part of the political landscape of Alba's birth, not least because of the concentration in the 9th century of contemporary references to the most successful kings (Chapter 2.3). As a result of this archaeological study it is possible to argue that Forteviot was not incidental to the creation of Alba, but rather was central to its conception and, further, that archaeological evidence reveals some of the ideological apparatus which underpinned the new kingdom, most clearly reflected in the sculpture and burial practices. In social terms, the innovative aspect of Alba was that the kingdom was no longer exclusively a kin-based organisation, but was a geographically ambitious polity. The name Alba (Gaelic for 'Britain') included both Pict and Gael in a geographic kingdom, rather than defining the kingdom on the basis of descent or ethnicity as had previously been the case (Broun 2015b).

Forteviot emerges from this study as an early example of a royal inauguration and assembly site, which effectively combined pagan and Christian traditions. This study makes plain the symbolic (and presumably ideological) importance of Christianity to the identity of the kingdom. The centrality of Forteviot in the process of shaping the dominant ideology of kingdom is evident through the ceremonial landscape of ancestral and Christian monuments and in the original synthesis of native and Christian sculptural symbolism. From this perspective, Forteviot assumes a much more significant place in shaping Scotland's destiny during the 9th and 10th centuries: the most important place in Britain north of York, more influential at this pivotal moment than other centres such as Dumbarton, Edinburgh, Dunadd, Dundonald, Whithorn, Birsay or Rhynie.

Here we emphasise the contribution that archaeology makes to understanding these social and political transformations. Archaeology is not just illustrating the historical texts but providing new evidence with which to construct new historical understanding. Since antiquarian times, archaeology has been critical to recognising Forteviot's political significance (Chapter 2.5), particularly through the sculpture. Constantine's Cross achieves a remarkably rare thing (which memorials are intended to do): it reaches across time to identify the creation of an otherwise remote historical actor, to position him in space and time, and to remind us of his critical role in the birth of Alba. Without the sculpture, Forteviot could have easily been overlooked: the discovery of the arch was important to the first serious historian to take an interest (W F Skene), and more recently, the Forteviot sculpture was instrumental in attracting the Alcocks to investigate the site.

From what we can see at Forteviot, the Picts did not emulate Carolingian practices closely, or indeed Byzantine ones. Nevertheless, the synthesis of new royal ceremonial practices combining traditional Pictish ones and established Christian ones drew inspiration from the 8th-century heart of Christianity, Constantinople. Exploring the means of transmission and understanding the role of the network of monasteries stretching over the Alps connecting the Insular world to Rome and Ravenna is too large a task for this study, but clearly there is scope for a detailed contextual study of the process of transmission and adoption.

10.7.1 Returning to the research questions

The reuse of an eminent prehistoric ceremonial centre as the setting for kingship rituals is one of the most exciting findings of the project. In demonstrating that the reuse was not incidental or accidental, but conceptually essential, we find ourselves in a position to engage with the debates on early medieval Celtic kingship which argue that it represents 'a reflex, or a replica, of sacral kingship' (Mac Cana 1985, 57). These debates have, justifiably, been dominated by scholars concerned with Ireland, but this study thrusts Forteviot into the discussion. The ancient ceremonial complex is much more than a stage for royal inaugurations: the prehistoric monuments provide the platform for building an explicitly Christian kingdom. The innovative amalgamation of two traditions of belief (prehistoric and Christian) regarding the nature of kingship predates the earliest similar process in Cashel by decades if not centuries (Bhreathnach 2014b, 170). These late 8th- and 9th-century kings of Forteviot brought Christianity into the heart of the ancestral burial ground and used their political authority to support Christian institutions across the kingdom.

In addition to contributing to a new political cosmology, Forteviot make a substantive contribution to the development of the institutional apparatus of Scotland, justifying the phrase 'cradle of Scotland'. The imaginative leap of redefining kingship in Christian terms was not confined to ideological beliefs, but involved the introduction of a new social contract. Given that Forteviot was the principal royal residence, the new mechanisms of administration must also have been worked out here. The limited investigations on the Invermay estate suggest that evidence for the rollout of the new system may survive in Strathearn.

The implications of the identification of Custantín son of Uirguist as the patron of the inscribed cross from Dupplin takes on added significance as a precocious example of an explicitly regal, public monumental statement in Pictland, several decades before the practice was established elsewhere in Ireland or Britain (Broun 2015b). Constantine's Cross, which is perhaps best regarded as an inauguration monument, emphasises that the lords of Forteviot were more aware and more deeply engaged with the wider post-Roman Europe than is generally appreciated. Despite the remaining gaps in our knowledge, these excavations demonstrate that we are entitled to claim that Forteviot was the 'Cradle of Scotland'.

10.8 Research recommendations

If we were starting SERF again, what would we do differently? What should be done next?

- There are substantial gaps in our knowledge about the earliest phase of burial associated with the church. In the near future, before it is filled up, some priority should be given to excavating the rest of the graveyard extension.
- Major questions remain about the early sequence of churches. We know nothing about the Pictish-period church (or churches) apart from the fact that one had an arch. Is the earliest church contemporary with the late 8th century? The absence of earlier Christian sculpture might suggest it is.
- Are there ways to identify the presence of the crowds which we believe would have attended the popular assemblies? Does evidence survive in the

ploughsoil in the form of chemical signatures to complement sparse numbers of small finds (beads, pins, etc)?

- Forteviot village has scarcely been examined archaeologically. No attention has been given to Forteviot Mains, which might reasonably be expected to have been the 'home farm' in the Pictish period. Similarly, the grounds of the former manse, adjacent to the church, represent the most likely location for the palace complex. Here an intensive history of non-mechanised gardening has provided a deep protective accumulation of soil.
- The Invermay policies, and neighbouring estate with emparked policies, could hold the key to understanding the transformation from the Pictish land holding and administration to the system introduced across the Kingdom of Alba.

Epilogue

Archaeological research only thrives when it is socially engaged. This is not the place to review the publicfacing dimensions of the SERF project other than to say that public participation and communication were never far from our minds. For instance, a strong feeling of obligation to present our archaeological and historical insights to the public as soon as possible provided the motivation behind the *Cradle of Scotland* exhibition (2015–16) (Fig 10.4). Exhibitions are ephemeral and reach specific audiences, while as we have seen stone sculpture has the capacity to connect across centuries. Probably the most enduring legacy of the SERF project has been to inspire the creation of a new Pictish cross for Forteviot. We are fortunate that because of the SERF project, Forteviot was included within the scope of the Tayside Landscape Partnership, which commissioned the work by David McGovern. This original creation takes inspiration from the Insular tradition and importantly recognises that for the Picts, tales of pagan forebears were not enough, they required Christian concepts to represent their place in the world (Fig 10.5).

This public use of stone sculpture is particularly appropriate as it revives the Pictish practice of using monumental sculpture for place-making. McGovern's sculpture shows a remarkable sensitivity to early medieval artistic conventions while accepting the challenge of telling a story about this place with reference to

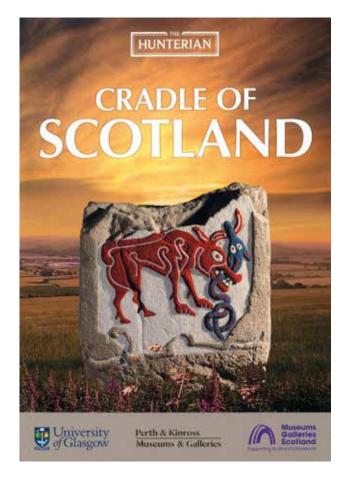


Figure 10.4 Poster for the *Cradle of Scotland* exhibition at the Hunterian Museum and Art Gallery and Perth Museum and Art Gallery was the first sustained exploration of the themes presented here. While thinking has moved on since 2015, the virtual display lives on¹ (Exhibition designed by Chris MacLure)



Figure 10.5 The unveiling of the new Forteviot cross brought the Forteviot community together with officials and dignitaries from across Perthshire. From the left are Alexander Dewar of

Dupplin Estate, the Lord Lieutenant of Perth and Kinross, Brigadier Sir Melville Johnson, who presents the sculptor David McGovern with a commemorative plaque while Dennis Molloy, Provost of Perth & Kinross looks on. This ceremony was the culmination of the Tayside Landscape Partnership's significant efforts to enhance Forteviot's sculpture, ancient and modern (photo by Mark Hall; © Perth Museum and Art Gallery)

¹ https://www.gla.ac.uk/schools/humanities/research/ archaeologyresearch/currentresearch/serf/cradleofscotland/

historic figures and their contemporary social context. The technical expertise of the sculpture complements the Art and Crafts aesthetic of the village, making it a fitting monument to celebrate the importance of this historic place and to lift it from obscurity. The unveiling of the sculpture was fundamentally a community celebration (Fig 10.6), but the community addressed by the cross is not limited to people who have the good fortune to live in Forteviot, Strathearn, or Perthshire, but includes all the people of Scotland. This is appropriate in part because the Picts themselves relied upon stone sculpture to signal the place's importance, but it also draws attention to Forteviot's unique quality. Amongst Britain's major prehistoric ceremonial centres, this is the only one to play an important role during the early medieval period when it shaped and nurtured the Scottish nation.

Figure 10.6 The new Forteviot cross stands in centre of the village. In its combination of new and old it echoes the foundation inscription of the new village constructed in 1926, which invokes 'Fothuir-tabaicht royal residence' and memory of 'Kenneth I [MacAlpine]' and can be seen in the background of Figure 10.5







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ROYAL FORTEVIOT

The Strathearn Environs and Royal Forteviot Project (SERF), run by the University of Glasgow, was one of the largest research projects undertaken in Scotland in recent decades. The original stimulus for the project was a major complex of cropmarks situated to the south of the early medieval royal centre of Forteviot in eastern Scotland, celebrated as the site of the palace of Cináed mac Alpín (d AD 858), and home to an internationally significant collection of Pictish sculpture.

A programme of survey and excavation over five seasons, supported by over 130 radiocarbon dates, revealed not only a prehistoric ceremonial complex covering some 26ha but also Pictish burials and cremations both within and respecting the earlier monuments. The fieldwork results are complemented by studies on history, architecture, place-names, and landscape, as well as the first detailed account of one of the most important collections of Pictish sculpture in Scotland, including two large free-standing crosses. This study places the Pictish ceremonial centre within the context of Celtic royal sites, explores the apparent Byzantine influences behind the royal ceremonial practices of the 8th to 10th century, and positions Forteviot as having a decisive influence on the emergence of the Gaelic Kingdom of Alba *c* AD 900.

This volume reports on the early medieval remains; details of the prehistoric investigations can be found in CBA Research Report 176: *Prehistoric Forteviot: excavations of a ceremonial complex in eastern Scotland* (Brophy and Noble 2020).



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