The Dupplin Cross: recent investigations

Gordon Ewart*, Dennis Gallagher† and Anna Ritchie‡

ABSTRACT

Widespread public concern about the weathering of the Dupplin Cross resulted in its removal from its site in the parklands of Dupplin Castle to a sheltered environment at St Serf's Church, Dunning. An archaeological investigation of the immediate environment of the cross was carried out as part of this operation. This paper describes the cross and its context in the royal and ecclesiastical milieu of the ninth century. Cartographic evidence shows that the cross was in its present location from the late 17th century; its survival is traced in the context of a developing post-medieval designed landscape.

INTRODUCTION

The 9th-century Dupplin Cross (NO 05051 18969) stood in the parkland of Dupplin Castle, on a slight terrace at a height of *c* 85m AOD some 500m to the north of the River Earn and 1.5km north of the village of Forteviot (illus 1). Deterioration of the stonework in this exposed position led to its eventual removal in 1998 to the National Museum, Edinburgh, and, subsequently, within the tower of St Serf's Church, Dunning (NGR: NO 01905 14490). Archaeological excavations of the immediate environment of the cross were carried out both during and after the removal of the cross.

THE ARCHAEOLOGICAL AND ART-HISTORICAL CONTEXTS

Anna Ritchie

There was relatively little interest in the Dupplin Cross until Leslie and Elizabeth Alcock included Forteviot in their programme of research excavations on high-status sites of early medieval date in Scotland in 1981 (Alcock

& Alcock 1992). The site of the cross was not easy to visit, and the cross itself was considered to be a Scottish monument (Stevenson 1955) and thus fell outside the upsurge of interest in Pictish studies that began in the 1970s. It was only with the identification of a Latin inscription on the cross in 1990 that its importance as an intact monument associated with an historically documented royal site was fully appreciated. The inscription has been examined by Katherine Forsyth (1995), though only two of the seven lines have been deciphered, and the art-historical context of the cross has been explored primarily by Isabel Henderson (1999). What follows here is a synopsis of current knowledge and opinion about the cross, greatly aided by Ian Scott's new drawings of 2002 (the new drawings may be compared to those in Allen & Anderson 1903 and Scott 2005, figs 14.3 and 14.4).
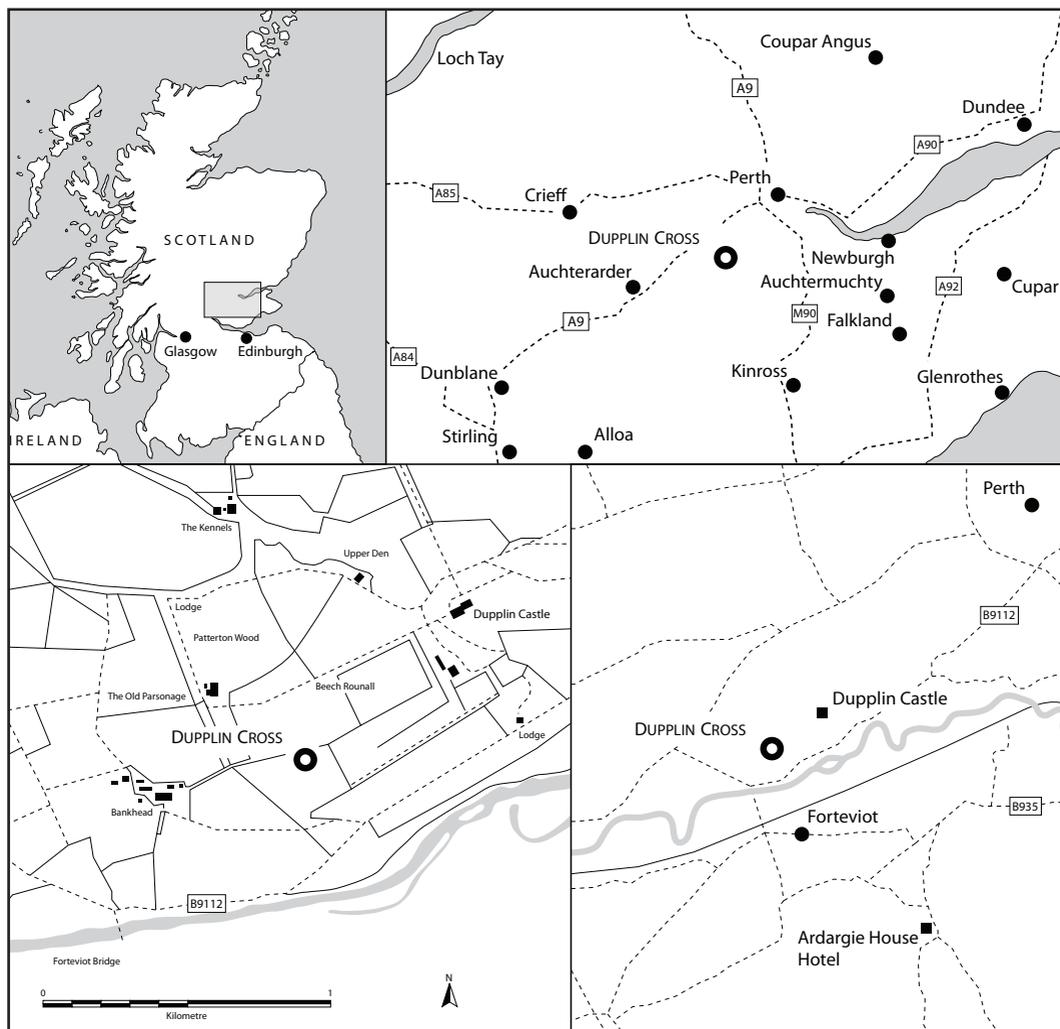
THE FORM AND DECORATION OF THE CROSS (ILLUS 2)

Dupplin is a freestanding cross carved from a single block of Old Red Sandstone and set in a solid stone base in the form of a truncated

* 4 Western Terrace, Edinburgh EH12 5QF
† 4 Sylvan Place, Edinburgh EH9 1LH
‡ 11/13 Powderhall Rigg, Edinburgh EH7 4GG

ILLUS 1   Location plan

pyramid. The cross stands at the west end of the base, perhaps to provide a platform for kneeling or for offerings (Fisher 2005, 88). Along the angle of the arris at the top of the base on the west and south sides are incised strokes that were thought at the time of their discovery in 1990 to be ogham letters, but they have proved impossible to read and there is doubt about their interpretation (Forsyth 1995, 237–9; Katherine Forsyth pers comm). They may represent the

grooves made by sharpening iron blades in later times. On the base there is a plain moulding round the rectangular socket and traces of interlace decoration (illus 3). The cross stands 2.62m high above its base, and the short tenon adds another 0.3m that is sunk into a socket in the base. The latter is rectangular in plan, 1.4m in length, 1.15m wide and 0.6m high. The span of the side-arms measures 0.94m. The four arms have a double-curved edge for which Henderson

invokes inspiration from Iona, with, at the top of each curve, scrolled cusps that have no parallel in contemporary sculpture and may relate to metalwork (Henderson 1999, 166). The top of the cross has a tegulated finial similar to those on Irish crosses, and the overall decoration of the cross-head is entirely separate from that of the shaft, a feature derived from Northumbrian influence (Henderson & Henderson 2004, 190). The central boss projects about 700mm from the surrounding cross-head on both sides of the monument and indicates the considerable labour involved in preparing the sandstone slab, which must have been at least 0.39m thick when carving began. Easily visible only to a kneeling supplicant are animals carved on the underside of the two horizontal arms. Both sides of the cross are decorated, as are those of contemporary tall cross-slabs (Henderson 1999, 168).

In Allen and Anderson's (1903, 319–21) description, the west face is taken to be the front of the cross, but modern scholars agree that the front is the side that faced east when the cross stood on the hillside (and still faces east today in St Serf's Church in Dunning).

THE EAST FACE (FRONT)

Cross-head

The central boss has a deep border of ribbing around a much worn dome. The entire cross-head is filled, apart from a small top panel of geometric interlace, with two stems of vinescroll emanating from basal plinths. The location of the vinescroll, like the relationship between the head of the cross and its shaft, emulates Northumbrian sculpture, and Isabel Henderson (1999, 167) discusses the English parallels.
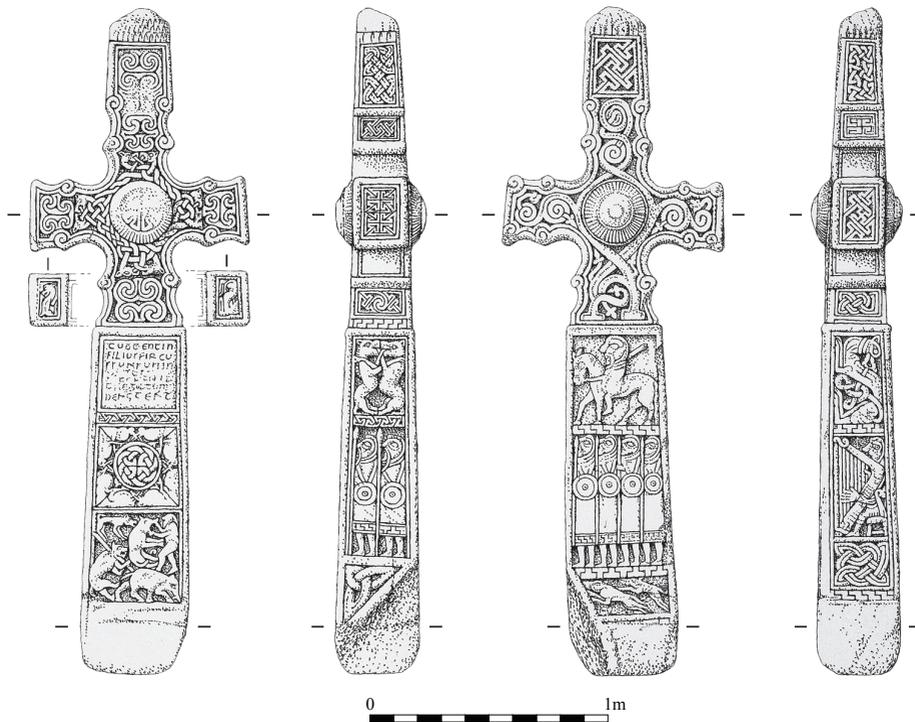
ILLUS 2   The Dupplin Cross (© Crown copyright Historic Scotland; drawing by Ian G Scott)

Shaft

The shaft is divided into three panels of decoration separated by ornamented borders. The top panel contains a single male figure seated well forward on a horse and seen in profile, typical of the rider images used throughout western Europe to denote political authority (Henderson 1994, 49). He has a prominent 'block' nose, oval eye, and flowing moustache, and, although the carving is too worn to make out much of his clothing, his garment appears to be draped into folds at the neck. There are hints surviving of a saddle-cloth, sword and circular shield, and a long object protrudes behind the rider on his right-hand side. It may be the lower part of a spear, but it has a carved terminal that is more suggestive of a sceptre-type of object. The prime position on the shaft of this rider, together with the convention of showing his head disproportionately large, indicates his social pre-eminence, and his horse has all four feet on the ground in what Alcock and Alcock (1992, 240) recognize as 'a symbol of royal permanence'.

The middle panel is occupied by four tightly ranked foot-soldiers in knee-length tunics, whom Henderson and Henderson (2004, 190) see as a bodyguard for the commander above. Their tight ranking and rigid demeanour convey a sense of the massed forces behind them. They wear circular shields on straps round their necks and they carry spears at rest in their left hands, and the fact that they lack moustaches may suggest either their youth or their inferior social standing.

The narrow panel at the bottom shows two leaping hounds, a graphic reminder of the royal pastime of hunting.

THE WEST FACE (BACK)

Cross-head

The central boss has a deep border of ribbing around a dome ornamented with step-pattern, and the decoration on the arms combines animal-headed interlace with double-spirals.

Shaft

Again the shaft is divided into three panels, and the border between the top two panels is decorated. The top panel contains an eroded seven line inscription in the Roman alphabet, using both minuscule and majuscule letters, which is 'the longest Roman alphabet inscription in early medieval Scotland' (Forsyth 1995, 240). Its partial decipherment was a tour de force in turning 'a confusing mass of ridges and furrows' into letters, and it may prove possible in the future to recognize more letters. The first two lines read 'Custantin filius Fircus', who is recognized from historical sources as Custantin mac Forcussa (AD 789–820). The prime location of this inscription matches that of the regal horseman on the front of the cross.

The central panel is carved with four pairs of plump birds encircling an interlace-filled roundel. The birds are interpreted as doves and their presence here as a 'coded' reference to St Columba, whose name means dove (Henderson & Henderson 2004, 190).

In the bottom panel, the sculptor has allowed a degree of free expression not seen in any other panel, in the sense that the scene is not tightly wedged within its frame but overlaps the frame here and there. There appear to be two registers of activity: at the top a naked figure wrestles with the jaws of a lion, accompanied by his sheepdog. The naked figure is identified as David the shepherd and his nakedness as an Irish sculptural trait (Henderson 1999, 175), and the animal face to face with David has been identified as a bear (Alcock & Alcock 1992, 238), but its long tail favours the more common David and lion iconography. Thanks to Ian Scott's new drawing, the quadruped below David can be seen to have a short tail, a long snout and protruding fang, and an identification as a boar seems preferable to that of a bear. The upright figure behind now appears to be a bear impaled by a spear, rather than a human wielding a stick. Thus the sculptor has depicted David's successful struggles with both lion and bear. The implications of David

iconography in Pictish art are discussed by Henderson (1986).

THE SOUTH FACE

Cross-head

Panels of both geometric and curvilinear interlace are carved on the ends of the side-arms and the sides of the upper and lower arms of the cross-head.

Shaft

The sides of the shaft echo the layout of the two faces in presenting three panels of decoration. At the top two opposing lions stand on their hind legs in heraldic fashion, each with its left paw in its opponent's jaws and its right arm on the other's shoulder. In the case of the right-hand beast, the arm is placed awkwardly on the other's right shoulder rather than its left, in order to maintain an appearance of symmetry.

In the middle panel are two foot-soldiers, identical to those on the front of the cross except that these sport splendid long moustaches. Alcock and Alcock (1992, 240) suggest that these are under-kings or leaders of military units.

The bottom panel is triangular owing to the natural shape of the base of the stone, and it contains a triquetra knot.

THE NORTH FACE

Cross-head

Again there are panels of curvilinear and geometric interlace and one of step-pattern on the sides of the cross-head.

Shaft

The uppermost of three panels contains a single animal with its head turned back to bite a long knotted tail that is threaded through its body. The animal, perhaps a hound, has a collar like those on the cross-slab at Tower of Lethendy in Perthshire (Fisher & Greenhill 1972, 238–40, pl 36a).[1]

The middle panel is almost filled by a great triangular harp of Pictish type, leaving just enough space to depict a somewhat elongated harpist on a low chair. The terminals and frame of the harp are decorated, and the chair-back has a zoomorphic terminal. Nine strings are clearly depicted, as are the fingers of the harpist's hands, making this a powerfully realistic image. The harpist has been identified as David (Henderson 1986, 90, 102). Although the harpist has the same 'block' nose as the secular figures, he lacks a moustache, as does the other David figure on the west face. Henderson (1999, 172–3) draws attention to an Irish parallel for the 'block' nose at Moone, Co Kildare.

The basal panel contains double-ribbon interlace similar to that at the base of the cross-head.

THE FUNCTION OF THE CROSS

There is a consensus of opinion in print that the function of the cross bore complex political implications: Clancy (1996, 121) sees it as 'a vibrant monument to Christian kingship', while Driscoll (1998, 174–5) emphasizes its role as a clear example of the 'interconnection of religious and political discourses', and, more specifically, George and Isabel Henderson (2004, 191) view its function as 'a means of promoting a saint and a king'. It was formerly regarded as a triumphalist monument associated with Cinaed mac Alpin's takeover of Pictland in the mid-9th century, but the discovery of the inscription identifying Custantin mac Forcussa suggests that the king commemorated was Custantin, or Constantine, rather than Cinaed, and thus the monument may be three decades older than previously thought (Alcock & Alcock 1996; Henderson 1999, 163; Henderson & Henderson 2004, 190). The extent of Irish influence on the form and decoration of the cross has consequently been reconsidered, and it is seen as 'a significant amalgam of Ionan and
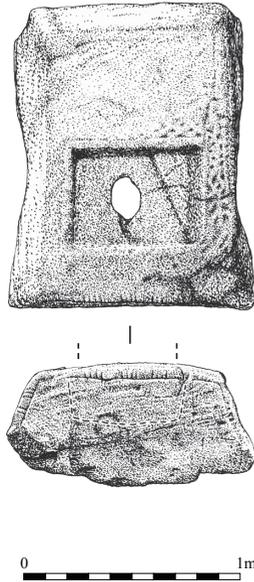
ILLUS 3   The Dupplin Cross and base (© Crown copyright Historic Scotland; drawing by Ian G Scott)

Pictish art' and 'reflects the revival of the cult of Columba in Perthshire' (Henderson 1998, 154). The problems of dating stone monuments by archaeological means have been discussed by James (2005, 110), and Dupplin is a rare example that can be dated by an inscription.

Constantine is recorded in the Irish annals as becoming king of the Picts in 789 and of the Dàl Riata in 811, and his death occurred in 820 (Anderson 1980, 174, 192–4). Although others had ruled both peoples, he was the first king to rule concurrently over both the Dàl Riata and the Picts, and the decoration of the Dupplin Cross reflects the dual cultural milieu of his court. It is not clear from the small part that can be deciphered of the inscription whether Constantine himself commissioned the cross or whether it is a memorial to him, but either way the military scenes and David iconography serve to underline his royal authority. Tradition ascribes the founding of the church at Dunkeld to Constantine, which Driscoll (1998, 175) interprets as recognition by Constantine of the

political value of supporting the Church, and some of the relics of St Columba were taken from Iona to Dunkeld after Iona became a focus for Viking attacks.

The function of the cross is also bound up with its topographical location in relation to the power-centre at Forteviot, situated on the plain close to the confluence of the rivers Earn and May (illus 4; Alcock & Alcock 1992, illus 12). The cross stood at the edge of the terrace above the Earn, though its visibility from Forteviot would have been limited, particularly as it stood side on to the view from the south rather than silhouetted against the sky. Nonetheless, it was part of the palace environs and was probably placed deliberately beside a routeway along Strathearn that linked Pictland with Dalriada. It is possible that it also marked the location below of a crossing-place across the river. The Dupplin Cross was matched by another free-standing cross to the south-east of Forteviot at Invermay (NGR NO 05981664), both located at 91m OD and both about 1.4km from the palace. Sadly the Invermay Cross was 'wantonly destroyed' in the 18th century and survives only as fragments and a base (Allen & Anderson 1903, 327–8; Alcock & Alcock 1992, 240–2), but it too acted as an outlier of the royal complex (as an elaborate royal complex, Forteviot has been compared with the Carolingian palace complex of Ingelheim: Airlie 1994, 34–6). It bore diagonal key pattern similar to that on the Dupplin Cross and the monument as a whole may have had similar political and military resonances (Alcock 2003, 232).

The base is a solid truncated pyramid with a single step, and it measures 1.34m by 1.14m at the base, 1.06m by 0.9m at the top and 0.64m high. It is in fragments held together loosely by iron clamps. A groove has been carved round the top of the arris, and the latter is 0.1m wide, the step rising 0.07m above the arris. The socket appears to be about 0.3m by 0.5m, which suggests that the shaft of the cross had a breadth similar to that of the Dupplin Cross. The base is taller than the Dupplin base, and the cross was set centrally within it. The surviving identifiable

fragment is decorated with square and diagonal key pattern.[2]

The historical evidence for a royal centre at Forteviot in the 8th and 9th century has been discussed by Leslie and Elizabeth Alcock and need not be rehearsed here (Alcock 1982; Alcock & Alcock 1992). Its location is traditionally on Haly Hill beside the Water of May, and, although excavations in 1981 failed to uncover any trace, the areas excavated were very small in relation to the likely extent of the site and there is known to have been severe erosion by the river in the past. Aerial photography has revealed a cemetery, probably of early Christian date and including ditched square barrows, to the south-east of modern Forteviot, together with an early prehistoric complex south of the village (Brown in Alcock & Alcock 1992, 231–4), which support the historical and traditional evidence for the location of royal Forteviot. Alcock (2003, 229) observes that the prehistoric henge monuments were probably still upstanding earthworks in early medieval times. Most striking evidence of the palace is presented by the monolithic carved stone arch found in the Water of May below Haly Hill, which derived almost certainly from a stone-built royal church contemporary with the Dupplin Cross (Alcock & Alcock 1992, 223–7; Forteviot no 2), and its significance is supported by a fragment from a ringed cross, rare in Pictland (Alcock & Alcock 1992, 223, illus 5; Henderson & Henderson 2004, 193; Forteviot no 3). The existence of a royal palace set, apparently without fortification, in the rich agricultural lands of lower Strathearn, and embellished with monumental sculpture, points to the strength of royal authority in the early 9th century. Cinaed mac Alpin was in residence at Forteviot, *in palacio Fothiurtabaicht*, at the time of his death in 858 (Anderson 1973, 250), and Spearman (1993, 136) has suggested that the association of this king both with Columban relics and with Forteviot implies that the royal church at Forteviot may, when necessary, have housed Columban relics normally to be found at Dunkeld.

THE CROSS IN THE RECENT LANDSCAPE

Dennis Gallagher

Historically, the area of Dupplin has long been associated with the site of the battle of Dupplin Moor, where Edward Balliol, with English support, defeated the supporters of the young David II, led by the earl of Mar, in 1332. Pennant (1776, ii, 89), for example, includes a lengthy account of that event. The section for the parish of Dupplin and Aberdalgie in the *Statistical Account of Scotland*, written in 1796, adds that 'the spot where the battle was fought, has not been ascertained' for the cross, at this period, appears not to be associated with the battle (Sinclair 1796, 164). The cross is described in the separate account of the parish of Forteviot of 1796–7 that 'there is a stone cross, quite entire, a good way up the rising ground (Bankhead) on the opposite bank of the Earn, almost straight north from the ford by which Bailiol's army crossed the river' (Sinclair 1796, 200). Some writers from the 19th century saw the cross as marking the site of the battle of Dupplin, similar to that commemorating the battle of Neville's Cross of 1346, an interpretation that has continued to the present (Hooker 1843, 155; Marshall 1879, 84; McKerracher 2000, 212). The earlier accounts, however, do not mention any association of cross and battle and the connection seems to have been a creation of 19th century writers who were eager to present visible physical evidence of the battle site.

The ford on the river immediately south of the cross, cited in the Old Statistical Account, was in use until replaced by the present bridge in *c* 1770, situated to the west (Sinclair 1796, 194; Meldrum 1926, 170). Evidence for the ferry appears in former place names in this location. It is shown as Cobble Haugh on Adair's manuscript map of 1683 and on General Roy's Military Survey of 1747–55 there is a settlement named Boathouse (Roy 17/4b). While this crossing was directly below the cross, these early maps do not show roads. There is no evidence that the latter was situated on a route to the north.

ILLUS 4   The Dupplin Cross in its landscape in 1990 (© The Tom & Sybil Gray Collection, RCAHMS)

The cross lies within the parish of Forteviot near its boundary with that of Dupplin and Aberdalgie parish, the latter having been formed in 1618 by the amalgamation of two medieval parishes (Scott 1923, 193). Despite its prominence in the local landscape, it does not appear to have any significance as a boundary marker in recent times. The boundary of the civil parish, as defined in 1845, is *c* 100m to its east and is marked on the 1st edition OS plan of 1860 as undefined along this length. The 1783 map of Perthshire by Stobie shows the boundary following the line of the road to its west, with the cross in Aberdalgie parish, although the accuracy of this may be doubted. However, while

the cross was not positioned on the present civil boundary, it is likely that it related to an earlier boundary line. Forteviot parish is elongated in form and the part in which the cross stood forms a discreet block north of the River Earn, the lands of Cairny. 'Cardny and Dalcorachy was granted to Inchaffray Abbey in 1314' (Lindsay et al 1908, 114–5, no CXXI). The place names of Kerny, Over Kerny and Dalwhorachy appear on the late 16th-century manuscript map by Timothy Pont (NLS Pont 21). A grant of 1582 also includes 'the land of the Chapel, commonly called Chapelland of the Muir' (RMS 5, 289–90, no 900), located by Meldrum (1926, 174) at Chapel Field on the present farm of Bankhead,

c 0.6km to the north-west of the cross. It is probable that the cross lay on the boundary of this early estate.

Cartographic evidence indicates that the cross has been located in the same area, if not the precise location, for the last 300 years. It stands to the west of the grounds of Dupplin Castle, the seat of the Oliphants and thereafter the earls of Kinnoul. The earliest map of the area is the manuscript map of Lower Glen Almond and Strathearn drawn by Timothy Pont in *c* 1583–96. This includes a small sketch of Dupplin Castle but does not appear to show the cross, although this section is in a very sketchy state and obscured by several alterations (NLS Adv.MS.70.2.9, Pont 21). The cross does appear on John Adair's manuscript map of 1638 standing to the west of a stylized depiction of the castle within its grounds (NLS Adv.MS.70.2.11; illus 5). The cross is depicted as standing on a square base; this differs from the symbol used for a church, a cross on a circle, as shown with the former parish church of Dupplin to the south-east of the castle and a mill to the south. The cross, church and mill were omitted from the version of John Adair's map printed in 1720.

The map of the area of Dupplin in the Military Survey of 1747–55 by General Roy (Roy 17/4) gives greater detail of the layout of the grounds at that date, much of it the result of planting by George Henry Hay, 8th Earl of Kinnoull, who died in 1758 (Kernan 1993). There are small plots, possibly parterres, near the house. The eastern part of the garden has a focus of radiating walks, identified on later plans as the Octagon. The cross is not shown, but must lie in the area


ILLUS 5   Detail of *The Mappe of Straithern* by John Adair, 1683, showing Dupplin and Cairny in relation to the cross (reproduced by permission of the Trustees of the National Library of Scotland)

of enclosed fields to the west of the house. There is evidence of rapid change in the garden in the later 18th century. The Octagon to the east of the house was complimented at the other cardinal points by avenues terminating in roundels, shown on a 1780 plan of the parklands by John Keir (illus 6) and on the OS 1st edition map. The 1780 plan shows that by this date, elements of a less geometric layout were being superimposed on the earlier design, with a serpentine driveway cutting across the line of the former south avenue. The cross is shown on this plan of the parkland and, in more simplified form, on Stobie's county map of 1783 (illus 7). At that time it stood in enclosed parkland, within a pasture named Cross Stone, indicating certain respect for its antiquity. But it formed no part of the garden plan, neither as a focal point nor even a casual garden ornament, with the only access for the interested being across an open field. Even the lengthy analysis of the planting, form and history of the gardens in *Woods, Forests and Estates of Perthshire* by Hunter (1883, 214) has no mention of the cross, underlining its irrelevance in the designed landscape. By the mid-19th century, the alignment of a nearby field boundary had been changed to run close to the cross, providing it with a little more protection (Ordnance Survey 1866, Ordnance Survey 1901), a situation that remained until its removal in 1998.

In conclusion, the cross was situated close to the parish boundary and it is possible that it was
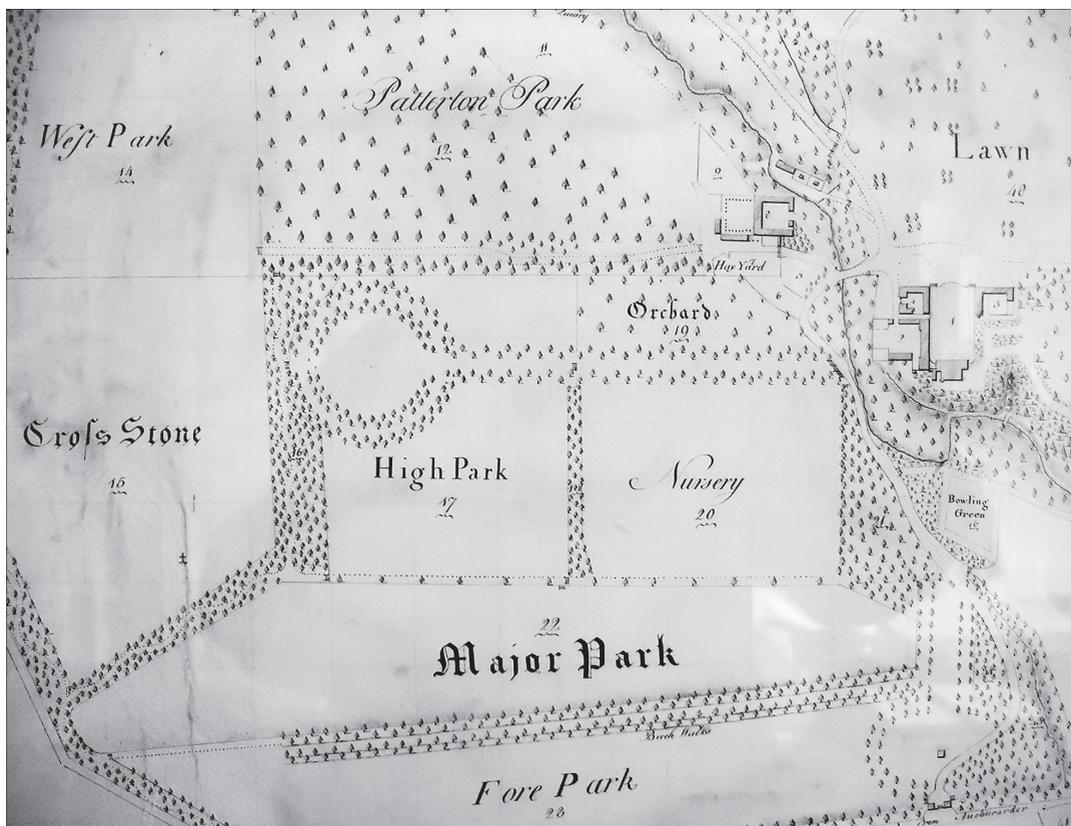
ILLUS 6   A detail of *A Plan of the Parks of Dupplin*, 1780 (reproduced by permission of the Trustees of the Dupplin Trust)

associated previously with the early estate of Cairny, in Forteviot parish, rather than Dupplin. It appears to have had virtually no impact on the recent landscape, either as a boundary or as an ornamental feature within the designed landscape of Dupplin Castle. Despite this, it was nevertheless preserved in recognition of its value as a local antiquity.

RECENT HISTORY AND CONSERVATION

In the mid-19th century, the cross was protected by small iron railings forming a 4m² enclosure against a field boundary, protecting it from damage from grazing animals (OS Name Book, 23). By this period, the cross had developed a lean, as shown in a pen and ink sketch made by James Skene, drawn in 1832 (NMRS MS 28/464). This prompted conservation in the early 20th century.

CONSERVATION

In 1925, the Ministry of Works, encouraged by the first Lord Forteviot, undertook conservation work to stabilize the cross, the date being incised into the concrete (NAS MW1/856; Lord Forteviot). During that work, a hole was drilled into the base of the cross and up into the cross-shaft. A long, metal bar, rectangular in section, was then inserted 1ft 4in (40cm) into the cross-shaft and fixed with a very hard, gravity-grout mix of neat Ordinary Portland Cement (OPC), which is designed to pour freely and has no sand aggregate. The bar projected a further 15in (38cm) from the cross-shaft with a 3in (76mm) vertical cut at the bottom. This cut enabled the two halves to be bent out at right angles (in opposite directions) and act as a very effective 'key'. The material specified in the drawings for this fixing is referred to as 'gun metal', a non-ferrous, cuprous alloy with a yellow colour which visually resembles brass. A hole was broken through the floor of the socket in the base stone to facilitate the insertion of the projecting metalwork and a small hole was dug to accept the splayed end of the metal bar, and the base stone was sited and levelled on top of this.

A ring foundation of coarse aggregate concrete was formed around the base of the stone, possibly to limit grout leakage. An assortment of mixed stone and brick fragments was used to loosely fill the hole beneath the base, and the cross and metal-work were then lowered into the socket. Once the cross was made vertical in both axes, an OPC gravity-grout mix was poured into the socket from where it filled the hole beneath the base stone and encapsulated the stone fragments therein. The socket was filled to around 30mm of the top of the base stone with OPC grout. A coarse aggregate, lime-mortar, was applied on top of the grout to a depth of 30mm, so as to be flush with the upper surface of the base stone. This ensured the base stone would shed water, and that the mortar at surface level was not so hard as to result in preferential erosion of the stone.

It is not clear from any of the information whether the stone was worked upon on site or elsewhere. Given the early date of the works, the procedure carried out was well-planned, well-executed and effective. Whilst the level of intervention to the historic material (holes formed in both base and cross) was much greater than we would consider appropriate now, the materials used were considered. The metal was non-ferrous to avoid the hazards of rust-jacking and the lime-mortar cap on the socket was equally well specified. Only the OPC grout would be out of place in a modern solution, given its salt content and irreversibility.

RECENT HISTORY

The Dupplin Cross was situated on an exposed north-facing slope in an agricultural field. It suffered from weathering and there were also problems of access for the general public, as the cross was located on private land. In 1993, the National Museums of Scotland (NMS) sought to acquire the cross for display in the new

Museum of Scotland, scheduled to open in 1998. However, local opinion, particularly on the part of the newly formed Friends of the Dupplin Cross, was strongly in favour of retaining the monument in the locality. A Public Local Inquiry was held in December 1995 to consider two Scheduled Monument Consent applications, one for its relocation to the new Museum of Scotland, and one for its rehousing in Forteviot Church. The decision of the Secretary of State for Scotland in 1998 was that the cross should be taken into state care. It was owned by the Trustees of the Dupplin Trust and was taken into care in lieu of the inheritance tax payable on the cross. On 1 July of that year, the cross, still in its base, was lifted (in a double box for soft suspension) by Historic Scotland and taken to its Conservation Centre in Edinburgh. Small scale repairs were made with acrylic resin and organic growths on the stone were treated and the difficult task of detaching the cross from its cemented base was undertaken. It was then loaned to NMS for display in the Hawthornden Court in the Museum of Scotland for three years, and NMS conservators erected the cross in its base on top of a steel beam constructed base. At the close of the three years, the cross was returned on 17 December 2001 to Historic Scotland's Conservation Centre, where 3D laser scanning was carried out, and the interface of the cross and its base was modified again to allow the cross to sit at its original level in the socket.

The medieval church of St Serf at Dunning (NGR: NO 01905 14490) had been identified by Historic Scotland as a suitable long term home for the cross on the grounds that it was secure and located only about 5km from the original site, in line with policy to keep carved stones as

ILLUS 7   Detail of *The counties of Perth and Clackmannan* by James Stobie, 1783 (reproduced by permission of the Trustees of the National Library of Scotland)

close as possible to their original findspots. In state care since 1978, this church was first built in the late 12th century with a chancel, nave and square west tower, and it was modified as a T-shaped kirk in 1810. On 26 March 2002, the Dupplin Cross was installed within the tower, beautifully framed by its Romanesque arch, and on 7 September that year the Dunning Parish Historical Society held a formal celebration of its arrival. The cross and base are mounted on epoxy resin pads on a stainless steel plate to protect it from any threat of damp.

THE ARCHAEOLOGICAL EXCAVATION

Gordon Ewart

A small scale excavation was completed by Kirkdale Archaeology on the area immediately adjacent to the Dupplin Cross during and after its removal for conservation (illus 8). There were two parts to the brief; the first took place between 27 June and 1 July 1998, whilst the second was conducted between 7 and 15 September 1998. The first phase was the excavation of the immediate area around and under the cross and socket stone. This was in order to recover any evidence concerning the physical context of the cross and, hopefully, to cast light on when the cross was erected. The cross was removed for conservation during this part of the work. The second phase was the excavation of a larger area to the north of the site of the monument in order to investigate the possibility that there may be features nearby which related to the cross.

The first phase centred on the area immediately around and under the cross. A trench was opened measuring 4m north–south by 2.9m east–west with an extension to the north 1m wide and 2m long and one to the west 0.6m wide and 2.25m long. It was dug to a maximum depth of 600mm. The second phase extended the previous trench to the north and west, with an area measuring up to 6m east–west and 5m north–south that incorporated the north end of the earlier trench.

Two 1m wide trenches extended from the main area – one 5m to the east, the other 3.5m to the north.

Excavation Phase 1

Immediately prior to any work, a wire fence attached to wooden posts was removed from the area around the stone. Iron posts and pieces of fence wire from another enclosure were noted, although no sign of this fence remained above ground. The south side of the stone had been pinned and grouted and a concrete skirt put around the full depth of the socket-stone. The skirt was cut off the base of the stone before it was removed. The monument was covered with a protective wrap, lifted with a crane and put into a cage on the back of a low-loader. Excavation around the cross base removed two general deposits – topsoil and a reddish brown subsoil, cumulatively 500mm deep. This excavation revealed the socket stone itself, a large, roughly squared sandstone block measuring 1.38m east–west, 1.1m north–south and 38cm thick at the east and 42cm at the west end. The stone was laid directly on compact pinkish coloured clay with sandstone fragments, partially sealing small patches of concrete.

This preliminary excavation also revealed evidence of two further fence lines apparently associated the stone. These comprised wooden posts and a series of concrete post settings.

Excavation Phase 2

Initial excavation revealed more of the concrete post settings and when the general subsoil deposit was removed a series of large features were revealed. These comprised a narrow slot or gully and an area of crude paving. The former was a slightly curvilinear feature some 300mm wide and up to 200mm deep, with fairly steep sides and a flat base, which ran ENE–WSW for 7.5m across the trench. The fill of the slot was a very compact, mid brown-pink clay with approximately 5% small pebbles
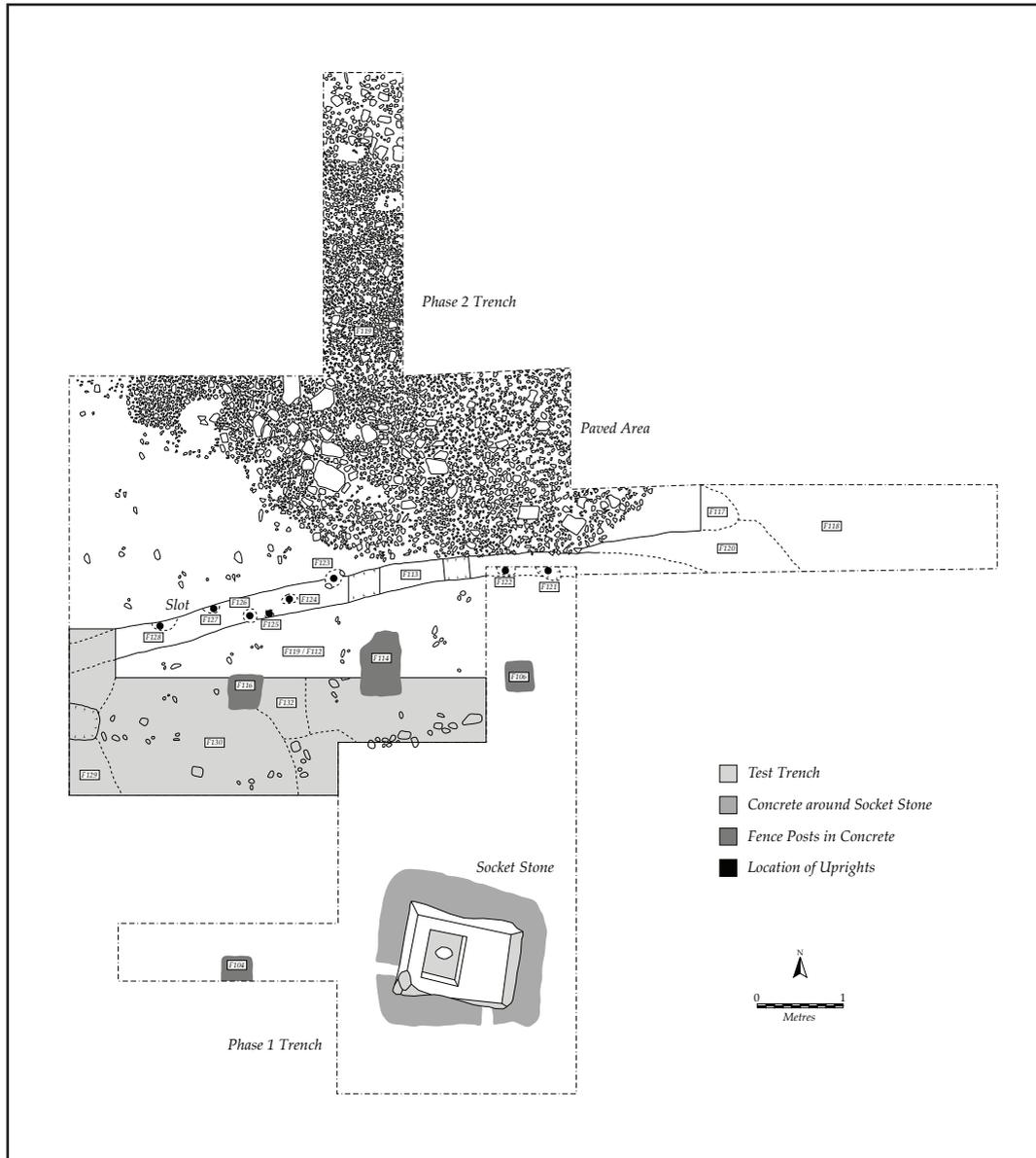
ILLUS 8 Plan of the excavation

(up to 50mm in size) occasionally upright at the edge of the feature. Eight small rounded features were noted along the length of the slot. They were irregularly spaced, both in terms of the distance between each feature (from 10mm to 1.6m apart) and in their position within the cut, usually at one side or the other rather than centrally placed. Four of these features were investigated, all having similar fills – a moderately compact mid brown silty clay with

occasional small pebbles up to 30mm in size. One contained a sherd of 19th-century transfer-printed white earthenware.

A large area of crude paving was revealed in the north part of the trench, throughout the north extension and in the west part of the east extension. This comprised mostly sub-rounded to sub-angular stones, 60mm by 40mm in size on average, but with a few larger, more slab-like stones measuring up to 350mm by 200mm. There were occasional small gaps in the stone surface, probably due to later disturbance. The overall area exposed indicated that the paving may have been sub-circular in shape, indicated by the curving line of its south limit. Its northern edge was delimited by less frequent and larger stones, giving an overall area of some 6m both north–south and east–west.

The paving sealed a compact and friable mid-red-brown clayey sand, which was present across the main area of the excavation. Trial trenching to a depth of 200mm within this general deposit revealed a series of slight variations in colour and consistency.

Interpretation

The apparently sterile contexts revealed by the trial trench cut across the south part of the Phase 2 area were probably not archaeological deposits but minor variations, visible as discrete patches, in the main B/C horizon subsoils. The subsoil therefore included compact brown-pink clay with fragments of degraded sandstone and compact, friable mid-red-brown clayey sand. The horizon reflected by these deposits was quite level at this point halfway down the hillside, and had apparently been cleared to receive the crude paving. The function of the latter is uncertain and no finds were recovered from it, but its proximity (*c* 5m) to the cross in an otherwise featureless area seems an unlikely coincidence.

The shallow gully post-dated the paved area and is in turn dated by a sherd of 19th-century transfer-printed white earthenware that was found in the fill of a feature within it. The gully with its associated holes was most likely the line of some sort of boundary. It was not possible to estimate the overall line of the gully as it was not regular, changing from a straight to a slight curved line in the general vicinity of the cross. In addition, excavation showed that once the gully was originally dug out, uprights were placed in the trench and material backfilled around them. This sequence suggests that the feature may be a hedge line with individual plants placed in a rough 'zigzag' along the length of a shallow, narrow bed, rather than a fence with hammered-in posts.

In addition, there was evidence for a total of three modern fences enclosing the cross. The earliest had iron uprights with wire attached through holes in the upright. Some of these survive on the line of the current field fence. The second fence was a rectangular enclosure 2.4m to the north and 1.6m to the west of the stone setting and consisted of wooden posts set into poured concrete bases. The concrete in these bases appeared to be the same type used in the 1925 repair of the cross and socket stone, so it is likely that this fence was erected at the same time. The latest fence was the wooden one removed immediately prior to the uplift of the stone in 1998.

In 1925, when work was undertaken to stabilize the cross, it is possible that it may have been supported and the socket stone levelled, pinned, grouted and concreted without actually lifting the stone completely out of context. However, it does seem as likely that the cross was lifted up and the socket stone taken out of position during the 1925 work. The presence of concrete fragments below the stone may indicate that it was completely lifted out of context. It is also possible that the concrete seeped down, either through cracks or because the socket pierces right through the stone. However, the encasement of the sides of the stone in a skirt of concrete may have removed a cut for the stone and has certainly destroyed the stone's physical relationship with the ploughsoil and the subsoil sequence below.

DISCUSSION

The principal point of interest is whether the Dupplin Cross was in its original position and, if not, when it was imported to the location.

Although the excavation produced very little direct or conclusive archaeological evidence, it is likely that the base slab was not lifted in 1925 and the presence of concrete beneath the stone was due to the filling of the socket from above. This would therefore suggest that the crude paving to the north of the cross is a contemporary feature in that it seals the same cleared subsoil horizon, creating an artificial terrace. The presence of paving and the kneeling platform on the cross base itself, give some indication of how the cross was actually used. The paving may define a gathering place or viewing point a short distance from the cross or an area for large numbers of worshippers with the opportunity for more intimate and individual veneration offered by the kneeling platform.

ACKNOWLEDGEMENTS

NOTES

1 The stone has been removed from the stairwell since Fisher and Greenhill wrote their 1972 paper, revealing a second collared animal carved on the front of the cross-slab (Ritchie, Scott & Gray 2006, 38–9).

2 Allen and Anderson recorded three fragments at Invermay, which were taken to Forteviot in the mid-20th century, but only one fragment is identifiable today. The Invermay cross is known locally as the Dronachy cross. The Invermay base is in urgent need of protection and conservation. There are 8 fragments of sculpture at Forteviot, including Allen & Anderson's numbers 1, 2 and 4 (no 3, the arch, is in the Museum of Scotland in Edinburgh, and numbers 5 and 6 appear to be lost).

REFERENCES

Anderson, M O 1973 *Kings and Kingship in Early Scotland*. Edinburgh.

Airlie, S 1994 'The view from Maastricht', *in* Crawford, B E (ed) *Scotland in Dark Age Europe*, 33–46. St Andrews.

Alcock, L 1982 'Forteviot: a Pictish and Scottish royal church and palace', *in* Pearce, S (ed) *The Early Church in Western Britain and Ireland*, 211–39. Oxford, BAR British Series 102.

Alcock, L 2003 *Kings and Warriors, Craftsmen and Priests in Northern Britain AD 550–850*. Edinburgh.

Alcock, L & Alcock, E 1992 'Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84; 5: A, Excavations & other fieldwork at Forteviot, Perthshire, 1981; B, Excavations at Urquhart Castle, Inverness-shire, 1983; C, Excavations at Dunottar, Kincardineshire, 1984', *Proc Soc Antiq Scot* 122, 215–87.

Alcock, L & Alcock, E 1996 'The context of the Dupplin cross: a reconsideration', *Proc Soc Antiq Scot* 126, 455–7.

Allen, J R & Anderson, J 1903 *The Early Christian Monuments of Scotland*. Edinburgh.

Clancy, T O 1996 'Iona, Scotland, and the Céli Dé', *in* Crawford, B E (ed) *Scotland in Dark Age Britain*, 111–30.

Driscoll, S T 1998 'Political discourse and the growth of Christian ceremonialism in Pictland: the place of the St Andrews Sarcophagus', *in* Foster,

S M (ed) *St Andrews Sarcophagus, a Pictish Masterpiece and its International Connections*, 168–78. Dublin.

Fisher, I 2005 'Christ's Cross down into the earth: some cross-bases and their problems', *in* Foster & Cross (eds), 85–94.

Fisher, I & Greenhill, F A 1972 'Two unrecorded carved stones at Tower of Lethendy, Perthshire', *Proc Soc Antiq Scot* 104 (1971–2), 238–41.

Forsyth, K 1995 'The inscriptions on the Dupplin Cross', *in* Bourke, C (ed) *From the Isles of the North: Early Medieval Art in Britain and Ireland*, 237–44. Belfast.

Foster, S M & Cross, M (eds) 2005 *Able Minds and Practised Hands: Scotland's Early Medieval Sculpture in the 21st century*. Leeds.

Henderson, I 1986 'The "David cycle" in Pictish art', *in* Higgitt, J (ed) *Early Medieval Sculpture in Britain and Ireland,* 87–123. Oxford, BAR British Series 152.

Henderson, I 1994 'The Picts: written records and pictorial images', *in* Bowman, E O, Robertson, N M & Burt, J R F (eds) *Stones, Symbols and Stories. Aspects of Pictish Studies,* 44–66. Edinburgh.

Henderson, I 1998 '*Primus inter pares*: the St Andrews Sarcophagus and Pictish sculpture', *in* Foster, S M (ed) *The St Andrews Sarcophagus: a Pictish masterpiece and its international connections,* 97–167. Dublin.

Henderson, I 1999 'The Dupplin Cross: a preliminary consideration of its art-historical context', *in* Hawkes, J & Mills, S (eds) *Northumbria's Golden Age*, 161–77. Stroud.

Henderson, G & Henderson, I 2004 *The Art of the Picts: sculpture and metalwork in early medieval Scotland*. London.

Hooker, W J 1843 *Perthshire Illustrated*. London.

Hunter, T 1883 *Woods, Forests and Estates of Perthshire*. Perth.

James, H F 2005 'Pictish cross-slabs: an examination of their original archaeological context', *in* Foster & Cross (eds), 95–112.

Kernan, C 1993 Dupplin Castle, unpublished draft report for Historic Scotland & Scottish Natural Heritage. *Inventory of Gardens and Designed Landscapes in Scotland*.

Lindsay, W A, Dowden, J & Thomson, J M 1908 *Charters, Bulls and other documents relating to the Abbey of Inchaffray*. Edinburgh.

McKerracher, A 2000 *Perthshire in History and Legend*. Edinburgh.

Marshall, W 1881 *Historical Scenes in Perthshire*. Edinburgh.

Meldrum, N 1926 *Forteviot. The History of a Strathearn Parish*. Paisley.

OS Name Books: Ordnance Survey Original Object Name Books for Scotland: Forteviot parish, Perthshire. 1859–64.

Pennant, T 1776 *A Tour of Scotland*. London.

Ritchie, A, Scott, I G & Gray, T E 2006 *People of Early Scotland from contemporary images*. Angus.

RMS 1882–1914 *Registrum Magni Sigilli Regum Scotorum: The Register of the Great Seal of Scotland, 1306–1668*. 12 volumes. Edinburgh.

Scott, H 1923 *Fasti Ecclesiae Scoticanae vol 4*. Edinburgh.

Scott, I S 2005 'The bulls of Burghead and Allen's technique of illustration', *in* Foster & Cross, 215–19.

Sinclair, Sir J (ed) 1796 *The Statistical Account of Scotland*. Volume 18. Edinburgh.

Spearman, R M 1993 'The mounts from Crieff, Perthshire, and their wider context', *in* Spearman, R M & Higgitt, J (eds) *The Age of Migrating Ideas: early medieval art in Northern Britain and Ireland*, 135–42. Stroud.

Stevenson, R B K 1955 'Pictish art', *in* Wainwright, F T (ed) *The Problem of the Picts*, 97–128. Edinburgh.

CARTOGRAPHIC SOURCES

Adair, J 1683 *The Mappe of Straithern, Stormont, & Cars of Gourie with the rivers Tay and Ern*. (NLS Adv.MS.70.2.11, Adair 2)

Adair, J 1720 *The Mapp of Straithern, Stormount, and Cars of Gourie, with the Rivers Tay and Jern*.

Ordnance Survey 1866 Perthshire CIX, 1:10560.

Ordnance Survey 1901 Perthshire CIX.2, 1:2500.

Pont, T *Late sixteenth century manuscript map of Lower Glen Almond and Strathearn*. (NLS Adv. MS.70.2.9, Pont 21)

Stobie, J 1783 *The counties of Perth and Clackmannan*. London. (NLS EMS.b.2.30)

William, R 1747–55 *Military Survey of Scotland*. Map 17/4b. (SCRAN 000–000–191–041–C)