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Roman Camps in Scotland

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CHAPTER 9

‘Series’ of camps

Northern Britain exhibits a large number of temporary camps with a wide variety of sizes (table 4). The range of sizes and the similarities between many of the camps led St Joseph to postulate several specific series of campaign or marching camps, focusing on northern Scotland, where the probable historical contexts were more limited. These were based on the similar sizes, morphological characteristics and consistent spacing (interpreted as regular marching distances) between sites; one series (Stracathro-type) being defined solely by gate type. His thoughts were published in a series of papers (1958: 93; 1969: 113–19; 1973: 228–33; 1977: 143–4).

Stracathro-type camps

This group, so called because of their distinctive gate type recognised by St Joseph at the eponymous site of **Stracathro** (discovered in 1955), but in fact first recorded by Roy at **Dalginross** in 1755 (1793: 63–4, Pl. XI), was first proposed by St Joseph in 1958 and subsequently enlarged as more examples of this gate-type became known. By 1973, some seven examples were known (1973: 228) and

indeed some eighteen camps have now been identified as probably exhibiting this distinctive form of gateway of external *clavicula* and oblique traverse (illus 40e & 42; Jones 2009c; and see above, section 7b). That they form a rather different group to the other ‘series’ was acknowledged by St Joseph himself, who recognised that their differing overall size meant that they were not the product of a single campaign (1973: 229).

30-acre series (12ha)

This series was identified by St Joseph in 1969 (114) and comprised a group whose broad characteristic, apart from their size, was four gates defended by *tituli*. St Joseph originally recorded some seven camps in this group, though later removed the camp at **Inveresk** (which is at least 40 acres). However, in his original group he also included the putative camps at **Bellie**, **Bonnytown** and **Cardean II**, the smaller camp at **Dornock** (some 23.4 acres – 9.45ha), and the larger camp at **Finavon** (39.5 acres – 16ha). Therefore this group does not hang together as originally constituted (also observed by Hanson 1978a:

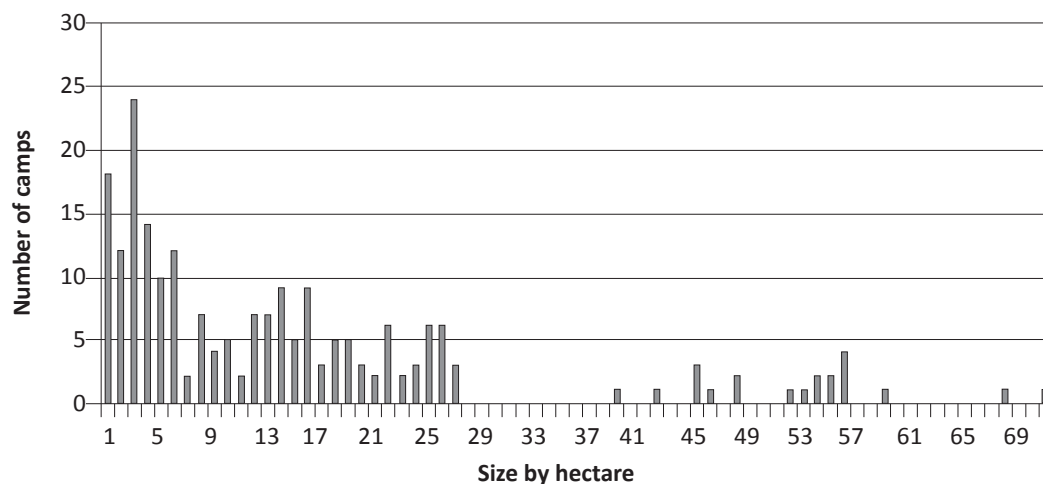


Table 4

The number of camps by hectare recorded north of Hadrian’s Wall.

144; Maxwell & Wilson 1987: 35–6), although there are around 20 camps now recorded in the general size range of 11–13.5ha (27–33 acres). A glance at table 4 demonstrates the considerable number of camps recorded between 10–18ha (c 25–45 acres) and, while this general size range was clearly frequently used to house armies on the march, the so-called ‘30-acre’ series as first proposed by St Joseph does not cohere.

63-acre series (25ha)

The camps in the ‘63-acre’ series form the most homogeneous group (illus 62). St Joseph identified some nineteen camps within it, although his original listing included four for which the size is unconfirmed (**Castlecraig I**, **Eskbank I**, **Carpow** and **Lunanhead** (1973, 230)). A further camp at **Edenwood**, discovered in 1978, has been added. There are distinct morphological similarities between the camps in this group: they appear to have six gates which were protected by *tituli*, and their

plan is tertiate in form, with most coefficients in the 1.4 – 1.6 range, the main exception being **Kirkbuddo** which exhibits a pronounced elongated plan (with a coefficient of 2.16) (illus 160). A further defining characteristic is the presence of an annexe at all but three or four of the camps (see above, section 7e).

As originally suggested by St Joseph, the camp at **Castlecraig I** could be a member of this group, because it has two *tituli* on its longer north-west side, suggesting that it had six gates overall. It covers an area of at least 17ha (42 acres), the location of its north-eastern side being unknown (illus 100). However, its cross dimension is 332m, rather smaller than that of other camps in this group, unless it was extremely elongated like **Kirkbuddo**, and assessment of the topography and gate positions suggests that it enclosed only some 21ha (52 acres). Neither is an annexe currently recorded. Not enough is known of the camps at **Eskbank I** and **Lunanhead** to confidently attribute them to this group, although the known dimension of the former is 414m, which could fit if this were the shorter side of that camp (illus 125). **Carpow** will be discussed further below.

The argument that the camps in this group are part of the same campaign is persuasive given the uniformity in their morphology and also the consistent spacing between them, possibly reflecting a day’s march (illus 62). With the exception of **Kirkpatrick-Fleming I**, which lies considerably farther south, the camps form two distinct lines north of the Forth. The northern of these two runs from Stirling along the Roman road to Perth, then along Strathmore on the north side of the Sidlaw Hills to **Keithock**, less than 2km from the Flavian fort at Stracathro. The southern route includes the two camps in Fife alongside that at **Forteviot** on the south side of the River Earn, then through the Carse of Gowrie on the south side of the Sidlaw Hills again to **Keithock**. No camps of this size are recorded farther north than **Keithock**, which lies on the south side of the Cruick Water and the River North Esk.

The northern route has a level of cohesion, with none of the rivers presenting major obstacles: the Knaik and South Esk are relatively small rivers; the likely crossing point of the Earn is where the Roman Road crosses at Strageath fort; that of the Tay is where there was reputed to be a Roman bridge at the fort of Bertha (Crawford 1949: 60–1). The distance between the camps at **Eassie** and **Marcus**, at 19km (12.9 Roman miles), is not so far that the putative camp at **Lunanhead** need be placed in this group. At the southern end of this route, **Craigarnhall** lies only 24km (16.2 Roman miles) from the complex of

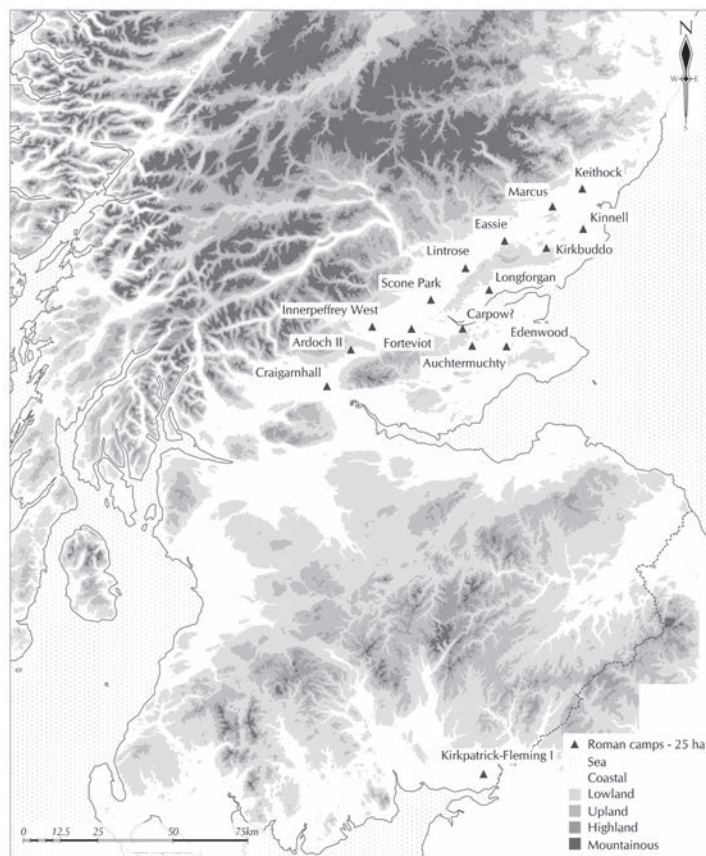


Illustration 62

Distribution map of the 25ha (63-acre) camps in Scotland. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.



Illustration 63

Aerial view of the 25ha (63-acre) camp at Forteviot, taken from the north in 1992. © Crown copyright: RCAHMS. SC1164091. Licensor www.rcahms.gov.uk.

camps at **Lochlands**. If **Lochlands VI** extends across the whole plateau, as is proposed (see gazetteer), then it would enclose some 25ha, but its morphology and proportions would be rather different to the rest of the camps in this grouping. Conversely, the southern group is less regular in distribution, with the distances from **Forteviot** (illus 63) to both **Auchtermuchty** and **Longforgan** seeming too long without an intervening camp because of the imposing presence of the Ochil Hills between **Forteviot** and the former, and the long distance and probably two river crossings between **Forteviot** and the latter. While **Forteviot** could represent an intermediary point between **Innerpeffray West** and **Scone Park**, the farthest two apart on the northern route (it lies 13km from the former, and 11km from the latter), this seems unlikely, because both these camps lie to the north of the River Earn, whereas **Forteviot** lies to its south. However, if one of the camps at **Carpow** were placed in this group, as proposed by St Joseph, the distances seem far more reasonable, with **Carpow** sited 8km (5.4 Roman miles) from **Auchtermuchty** across the Ochil Hills, 16.5km (11.2 Roman miles) from **Forteviot**, and also situated on the south side of the Rivers Earn and Tay, and 15km

(10.1 Roman miles) from **Longforgan** with a crossing of the Tay. If **Carpow II**, the unusual apparently polygonal enclosure visible just to the south of the fort, had its northern boundary in the same position as the northern boundary of the fort, then it could potentially enclose up to 26.6ha (65.9 acres) and fit within this group, despite the differing morphology demonstrated by the recorded perimeter (illus 97).

St Joseph suggested that the army represented by this group marched in a circular direction, effectively to **Keithock** along one route, returning via the other. While this is possible, it would require the construction of more camps than was strictly necessary. Where the army camped on return from campaigns is unclear – it might have reoccupied earlier camps or built new ones. Relatively small-scale trenching has taken place at twelve of the camps in this group, but at no point has an obvious recut been observed. This does not mean that the camps were not reoccupied, but that any reoccupation did not require large-scale recutting of the perimeter ditch. The

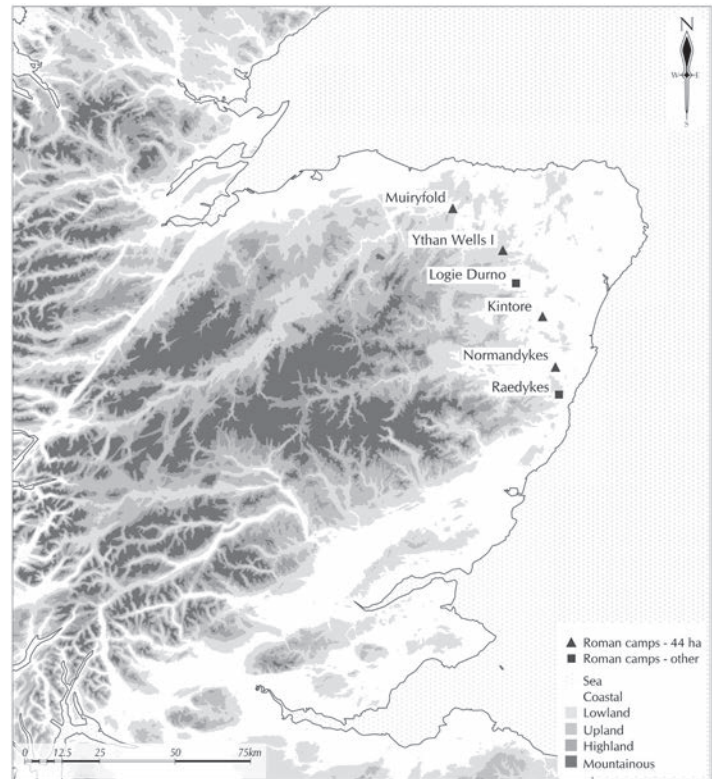


Illustration 64

Distribution map of the 44ha (110-acre) camps and other large camps in northern Scotland. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

orientation of the camps gives no further clues to any proposed direction of travel.

One explanation of the distribution could relate to the need to campaign against the local population which occupied Strathmore and the Carse of Gowrie, rather than necessarily seeing it as an area through which the army traversed en route to tribes which occupied land further north. The camps could therefore represent campaigns against the Venicones and/or the Vacomagi who, it has been argued, occupied this territory (Rivet & Smith 1979: 141, 491; Ogilvie & Richmond 1967: 43–4; although Mann & Breeze argue for their location in Strathspey (1987, 90)). Maxwell suggested that these camps were made after a river crossing (1989a: 65), but not all camp sites involved the crossing of a river, and this also requires the presumption that we know which way round the army was travelling, if indeed its marching route was a large ellipse.

110-acre series (45ha)

The larger camps in northern Scotland were initially grouped into what was referred to as a '120-acre' (c 49 hectare) series (St Joseph 1958: 93; 1969: 118–19), but later this group was refined into two series: '110 acre' (c 45 hectare) (illus 64) and '130 acre' (c 54 hectare) (illus 66) (St Joseph 1973: 231–3).

Morphologically, the '110 acre' (c 45 hectare) camps appear similar to one another: they are tertiate with six gates protected by *tituli*.

Muiryfold (illus 65 & 182) and **Ythan Wells I** (illus 213) are close to a parallelogram in shape, but **Raedykes**, by far the smallest and probably should not be included in this group, exhibits an extremely irregular form (illus 16 & 193) and is one of the most irregular camps so far recorded in Britain. St Joseph argued for its presence in this group, despite its small size, on the basis that troops might have been away from the camp guarding the bay at Stonehaven some 5km to the south-east (1978a: 277–8). While a putative camp is recorded at Arduthy (see gazetteer), there is not enough evidence to support this assertion.

130-acre series (54ha)

This series contains a group of camps running from **Ardoch** to **Kair House** on the Bervie Water (illus 66), and probably also includes the camp at **Househill Dunipace**, across the River Carron from the group at **Lochlands** and, feasibly, **Wooden Home Farm** in southern Scotland. The camps are tertiate and probably had six gates protected by *tituli*, but not all are regular: for example, **Innerpeffray East** exhibits projecting corners on its eastern side (illus 148).



Illustration 65

Aerial view of the south-east side of Muiryfold, one of the camps in the 45ha (110-acre) series, taken from the north-east in 1982. © Crown copyright: RCAHMS. SC354843. Licensor www.rcahms.gov.uk.

Furthermore, the area enclosed by the large camps at **Pathhead III** and **Channelkirk** is not known, but topographically both could enclose some 55ha (c 135 acres), although St Joseph has argued that both enclose a larger area, which is also possible given the lack of knowledge of their overall size (see section on '165-acre' camps below).

North of the isthmus there is little regularity in spacing between the camps (illus 66). The gap between **Househill Dunipace** and **Ardoch I** is large and required a crossing of the River Forth, so it is likely that there would have been an intermediary camp in the Stirling area,

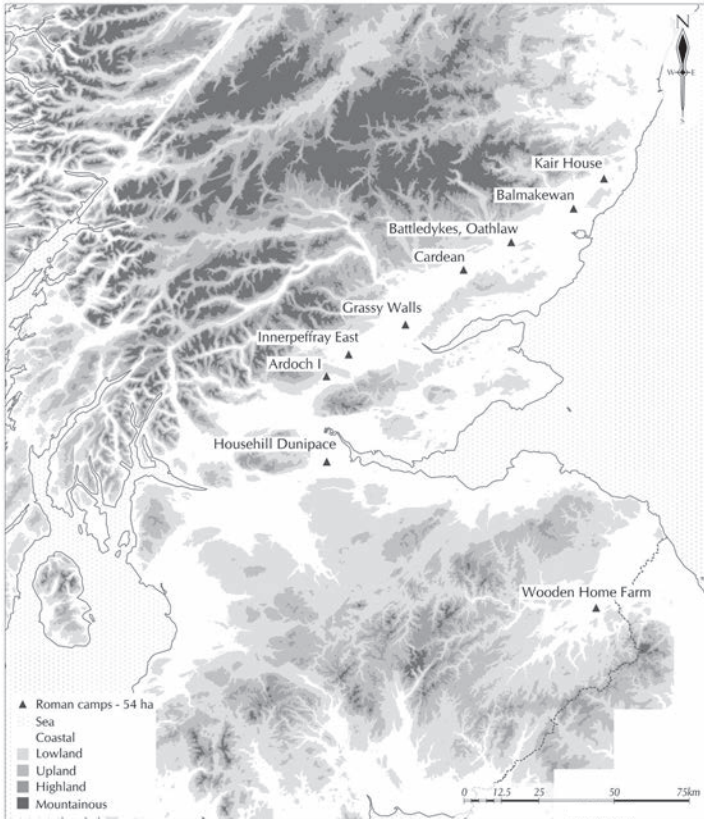


Illustration 66

Distribution map of the 54ha (130-acre) camps in Scotland. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

possibly in the vicinity of **Craigarnhall**, **Ochertyre** or **Hillside Dunblane**. Regarding topography, Maxwell has commented that the army in these camps (as with the 25ha camps) usually bivouacked after crossing a river (1989a: 65–6; 1991: 111–12). On the assumption that the army was travelling in a northerly direction, this could be another feature of the camps in the 54ha/130-acre group. However, the crossing of a river prior to bivouac was not confined to camps in these groups, with other examples known at **Normandykes** (44ha) and **Drygrange** (across the Tweed from **Newstead** – up to 19.6ha). The fort and camps at **Castledykes** are located on the north bank of the Clyde (and range from c 1 to 24ha in size); **Lochmaben** (c 23ha) is on the west side of the Annan, and, indeed, camps are located on both sides of the River Annan at **Beattock** (ranging from 1.4 to 15.4ha in size) and close to its mouth at **Annanfoot** and **Hillside Annan**; while the camps at **Crawford** are situated on both sides of the River Clyde. Forces could be moving in a transverse direction along river valleys

and not necessarily require the river to be crossed. This is particularly apparent in parts of southern Scotland. The camp at **Wooden Home Farm** lies on the south side of the River Tweed, but is geographically removed from its northern counterparts and may represent the movement of a lateral force up the Tweed, potentially from an unidentified fort in the Berwick area to Newstead. The camps in Strathmore occupy land on the north side of the marshy central lochs of the strath, now broadly indicated by the River Isla and the Dean Water, and in this area there is a similarity between the distribution of the 54ha camps and the 25ha camps (illus 66 & 62).

165-acre series (67ha)

St Joseph first identified three camps in southern Scotland with his ‘120-acre’ series (see ‘110-acre’ and ‘130-acre’ above), while noting that they appeared appreciably larger (1958: 93). He later refined these into a new ‘165-acre’ series, expanding the number of sites involved (1969: 118)

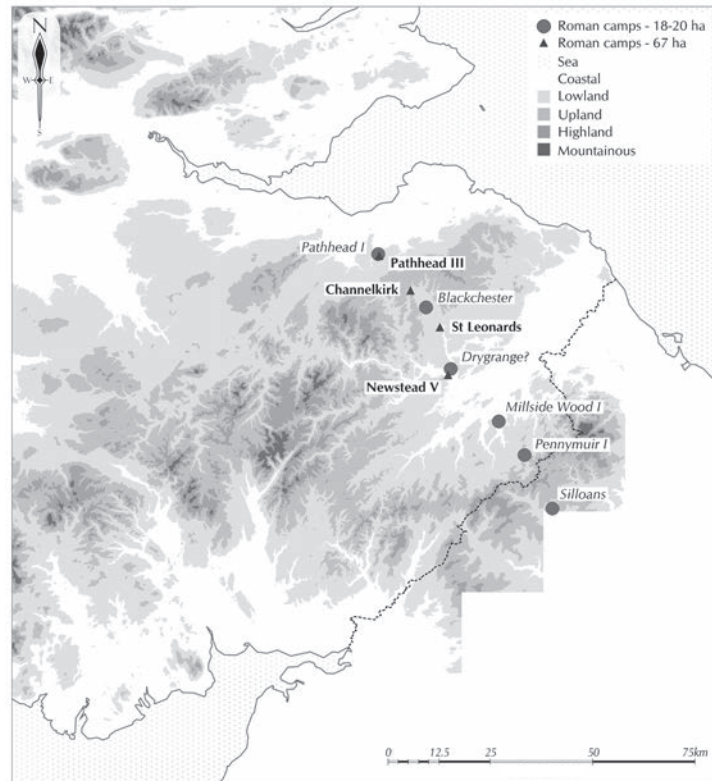


Illustration 67

Distribution map of possible groups of camps on Dere Street: the 67ha (165-acre) camps and a possible new 18–20ha group. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.



Illustration 68

Aerial view of the east side of the very large (67ha/166-acre) camp of Newstead V and the eastern part of Newstead IV. Taken from the south-east in 1977. © Crown copyright: RCAHMS. SC1164039. Licensor www.rcahms.gov.uk.

(illus 67). However, the size of three of the five camps that he proposed is not verified.

The large size of **St Leonards** is known and parts of all four sides of **Newstead V** are recorded, giving a good indication as to its overall area. **Inveresk I** should be discounted from this series, and the inclusion of **Channelkirk** and **Pathhead III** is open to debate, although the camps lie at a fairly regular distance from one another (*c* 11km). If **Channelkirk** (illus 103) is as large as its southern neighbours, then it would enclose some irregular ground, but the whole length of one side is known, and this does equate with the long lengths of the camps at **St Leonards** and **Newstead V** (illus 68 & 183). Of the camp at **Pathhead III**, a similar length in excess of 700m is known of both sides (illus 190). St Joseph recorded a *titulus* on the south-west side of the camp, but the cropmarks are not clear, and the feature visible could relate to other activity at the edge of the field. However, if this cropmark is a *titulus* and the camp covers some 65 hectares or more, then the gate may be less than 200m

from the south corner, although this does not necessarily discount it from the group.

Lower Strathearn to the Tay

St Joseph also noted a potential pairing in the camps at **Dunning** and **Carey** (Abernethy), because of their similar morphology (1973: 218–20) (illus 118 & 95). The camp at **Dunning** appears to be slightly larger than its eastern counterpart, but less of the camp is known, and slight changes in the perimeter could adjust its overall area measurement. St Joseph also suggested that **Carpow I** was of similar dimensions, because the distance between the two identified linear cropmarks at **Carpow** was some 670m (illus 97), the same as the length of **Carey** (1973: 218–23). However, **Carey** and **Carpow** lie only 3km apart, which makes them unlikely members of the same series, and not enough is known about the dimensions and morphology of the camp at **Carpow**.

The difference in dating revealed by the artefacts recovered at these two camps (sherds from a probable

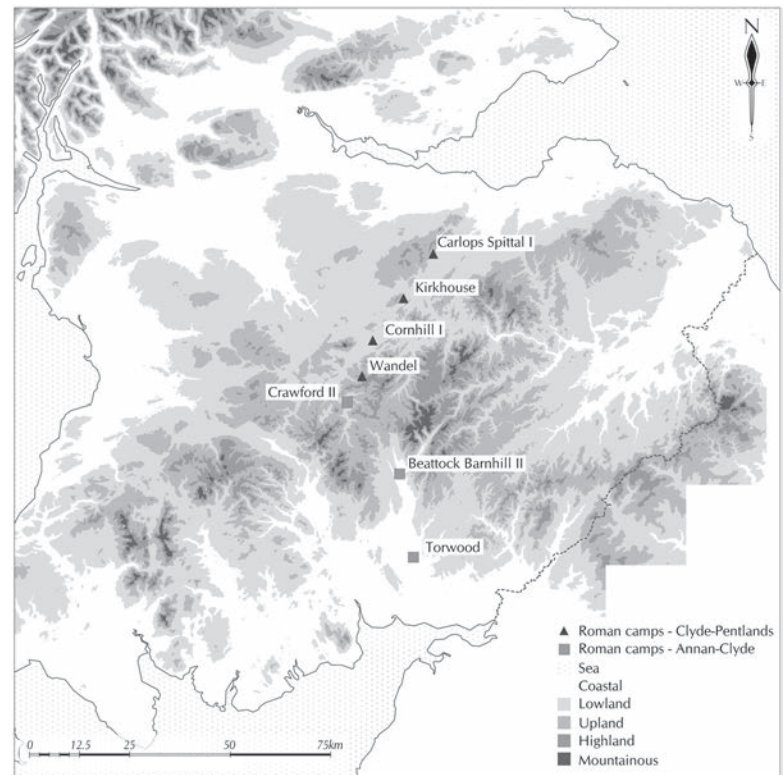


Illustration 69

Distribution map of the camps from Solway to Forth, including the possible Annandale to Upper Clyde and Clyde to Pentlands groups. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Antonine bowl from **Dunning** (Dunwell & Keppie 1995) and a late 1st-century fragment of samian from **Carey** (St Joseph 1973: 220) suggests non-contemporaneity, but evidence of a recut at **Dunning** demonstrates the complexity in the archaeological record. Furthermore, a faint linear cropmark within the camp at **Dunning** might represent a reducing earthwork in a second phase of use. Intriguingly, if the estimated size of **Carpow** is correct, it and **Dunning** could relate to one campaign, and **Carey** and **Dunning** to another, although it is not known whether both occupations of **Dunning** required the same size of camp.

Maxwell’s groupings

Besides St Joseph’s series of camps, only a limited amount of work has taken place on the type and date of temporary camps in Scotland, chiefly by Gordon Maxwell. Together with W S Hanson, he noted the number of camps in southern Scotland that enclose some 17–22ha (42–54 acres) and attempted to assign some to the Antonine period on the basis of morphology – the tendency to tertiate plan – and the relationship between camps and roads where the latter appeared to be the earlier feature (Hanson &

Maxwell 1986: 65–8). Maxwell also, with David Wilson, identified two additional possible groupings in 1987, observing the similarities between the Stracathro-type camps at **Dalswinton Bankfoot I** and **Castledykes I** and possibly that at **Beattock Bankend** (1987: 30–1), and noted a further group comprising some of the camps running on the Roman road from the Upper Clyde Valley that leads up the east side of the Pentlands to Edinburgh (1987: 32–4).

The three large Stracathro-type camps lie in different river valleys and are not on an obvious line of march (illus 21). However, the area enclosed by the camps at **Castledykes I** and **Dalswinton Bankfoot I** is almost identical, and **Beattock Bankend** could have similar dimensions. Maxwell & Wilson proposed that the three represented individual Agricolaan battle groups (1987: 31). While such specific dating can be debated, they represent temporary bases for a large force (or forces) moving through south-western Scotland.

The possible group running from the Clyde to the Pentland Hills also has potential, particularly in terms of size (*c* 17ha) and spatial distribution (illus 69). **Cornhill I** (illus 106) and **Kirkhouse** (illus 161) share similar dimensions; although **Carlops Spittal I** is a little larger and exhibits an elongated form, this is due to the need to site the camp on flat ground along a narrow ridge (illus 96). Maxwell & Wilson were unsure as to whether **Cold Chapel** or **Wandel** represented a likely additional member to the group, but assessment of the ground at **Cold Chapel** suggests that it was smaller, whereas there is space for a *c* 17ha camp at **Wandel**. Both **Cornhill I** and **Carlops Spittal I** had secondary phases of use, and again there are similarities in the size of the reduced area enclosed, both approximating to 14ha (*c* 34 acres).

Subsequent to the identification of this group, an elongated annexe was recognised at one end of the camp at **Carlops Spittal** (illus 70 & 96). While this does not negate the validity of this grouping, the lack of identifiable annexes at the other camps does suggest a differing function for this site and such provision presumably was not a requisite for these *c* 17ha camps, unlike the 25ha group discussed earlier. Therefore there is the possibility here that this small annexe (enclosing 0.84ha) could represent a separate camp which held a small detachment of troops on reconnaissance or manoeuvres. The possible camp at **Boghall**, lying some 11km to the north-east could represent a similar small camp if it stopped short of the Boghall Burn, although not enough is known about this camp (illus 215). **Carlops Spittal** lies some 18km from the Flavian fort at Elginhaugh (see below).



Illustration 70

Aerial view of the annexe and north-east side of Carlops, taken from the south-west in 1996. © Crown copyright: RCAHMS. SC1164175. Licensor www.rcahms.gov.uk.

Other possible groupings

It is difficult to identify other possible groups of camps in north Britain other than to note broad similarities between some examples. The number and range of camps along the Roman roads in southern Scotland exhibit a wide variety of morphology and size. However, a further series of camps can be postulated running up Dere Street, measuring some 18–20ha in size (illus 67). These could start at Silloans in Northumberland (Welfare & Swan 1995: 123–5) and include **Pennymuir I**, **Millside Wood I**, possibly **Drygrange** and **Blackchester** and continue to **Pathhead**. South of Silloans, a similar sized camp cannot currently be identified.

The camps in this group are all tripartite in form (with coefficients ranging from 1.3 to 1.52) and probably had six gates, although not all the gates are known at all sites. Welfare & Swan recorded only four probable gates at Silloans, but later drains and boundary banks have disrupted some of the camp. It is also bisected by Dere Street and, although Maxwell stated that the camp must pre-date the road (1981: 39), detailed field survey could not ascertain the relationship between the two (Welfare & Swan 1995: 125). The other camps in the group lie close to the road but not across its course. Therefore, while Silloans might not be a member of this group, there is a certain level of symmetry in these camps. Only 14ha of **Blackchester** is known at present, but there is space here for a camp of 18–20ha (illus 87); only part of **Drygrange** is recorded but it could enclose a similar size. Where the camps lead after **Pathhead** is uncertain. While **Inveresk** lies only 16.5km to the north, none of the camps here shares similar morphology with this group, although the overall extent of **Inveresk I** is unknown.

Elsewhere on Dere Street, there are some morphological similarities between the two camps at **Ulston Moor** (illus 177) and that at **Kedslie** (illus 155), some 22.5km to the north, although the eastern side of the **Ulston Moor** camps is unconfirmed. West of Dere Street, the camps at **Milrighall** and **Oakwood** in the valleys of the Ale and Ettrick Waters lie some 11km apart (illus 179 & 187). On first glance the camps appear quite different, with **Milrighall** being fairly square in form (coefficient 1.07), having external *claviculae* gates and enclosing 14.5ha (36 acres), whereas **Oakwood** has double *claviculae* (internal and external), encloses 13.2ha (33 acres) and is more elongated with a coefficient of 1.39. However, apart from these differing proportions, the camps are remarkably similar. **Oakwood** is mainly upstanding, whereas **Milrighall** is known only from cropmarks, but

once adjustments are made to account for the differences between the area within the rampart as opposed to the area within the ditch, they enclose very similar internal space. Moreover, **Milrighall**, with its external *clavicula* ditch, is most unusual, but this ditch could have accompanied an external *clavicula* bank, and it is probable that the camp also had internal *claviculae* in the double form visible at **Oakwood**. This situation with an external *clavicula* ditch accompanying double *claviculae* is mirrored in the two camps at Troutbeck in Cumbria (Welfare & Swan 1995: 44–50).

Farther south on the River Teviot, the two camps of **Cavers Mains** and **Eastcote**, lying less than 1km apart,



Illustration 71

Aerial view of the camps at Beattock Bankend and Barnhill, taken from the south-west in 1977. © Crown copyright: RCAHMS. SC1164184. Licensor www.rcahms.gov.uk..

may have similar dimensions to each other, both enclosing just over 11ha, although the full extent of **Cavers Mains** is currently unknown (illus 102). Given their close proximity, they presumably represent two separate conquests or reconnaissances of the area, although admittedly they could represent two forces travelling separately which arrived at the same site to form a concentration. However, at almost

1km apart, this latter explanation seems less likely because there is space for them to have camped directly alongside one another.

In the upper reaches of the Tweed west of Newstead, similarities can be observed between the camp at **Innerleithen** (illus 147) and the larger camp at **Lyne** (I) (illus 172), at the confluence of Tweed and Lyne Water. Both have a very similar length to one another (506m and 509m respectively) and, while the width of the former is unknown, given the position of the entrance gap the cross dimensions may also be similar (some 395m) so that both could enclose some 19.7ha (49.7 acres). This assumes that the course of the River Tweed at **Innerleithen** in antiquity was slightly south-east of its current position. The camps both sit on the north bank of the River Tweed some 13km (8.8 Roman miles) apart. West of **Lyne**, the camp at **Castle Craig I** appears to enclose a larger area and **Bankhead Carnwath I** a smaller area, so no further camps can be added to these two at present.

Some five camps can be identified in the cluster at **Beattock**, with one (**Bankend**) lying south-west of the Evan Water and the other four (**Barnhill I–IV**) lying across the Water to its north (illus 71 & 85). The full extent of **Beattock Barnhill II** is not confirmed, but there are similarities between this camp and that at **Torwood** (illus 205) close to the undated Roman fort at Ladyward to the south. The camps are similar in morphology: both enclose just over 15ha (some 38 acres), have entrances protected by *tituli* and lie 21km apart. The camps at **Crawford** (illus 108) lie some 21km from **Beattock**, and it is possible that at least one of the camps south of the fort here represents a further leg on the **Torwood** to **Beattock Barnhill II** route (illus 69). Furthermore, the *titulus* visible on **Crawford II** lies the same distance from the corner of that camp as the northern *titulus* on **Beattock Barnhill II**, strengthening the proposition that **Crawford II** might join this group. A farther 22km south of **Torwood** would be a location between **Kirkpatrick-Fleming** and Gretna, although none of the camps currently recorded at **Kirkpatrick-Fleming** has a similar morphology or size to these three.

It can be observed that the majority of camps allocated to specific ‘series’ lie north of the Forth–Clyde isthmus. The remaining camps in this northern area cannot easily be grouped by size, although the dimensions are not known for several (such as **Gagie** and **Invergowrie**). The two overlapping camps at **Hillside Dunblane** (illus 143) lie some 12km from **Ardoch** (illus 77) and it is interesting to note that the earlier of the two (at 12.9ha) is about 1ha larger than **Ardoch IV**, and the later is 0.6ha larger than **Ardoch III**. St Joseph argued that the north-western ditch of **Ardoch III** had been deliberately filled during the creation of **Ardoch IV**, but if the sequence mirrored that which has been recorded at **Hillside Dunblane**, **Ardoch III** would represent a reduction of **Ardoch IV**, which is equally possible because the intersection of the two camps has not been excavated. However, the morphology of the camps at **Ardoch** and **Hillside Dunblane** is sufficiently different to discourage grouping, and, as noted earlier, a large number of camps cluster around the 11–13ha mark (table 4).

The dimensions of the two probable camps at **Carpow** are unknown, and, although the polygonal enclosure can be estimated to fit into the 25ha group, this assessment is based on guesswork given the location of the northern perimeter of the fortress, rather than on evidence for the actual size of the camp. Furthermore, Wilson has commented that this enclosure could be a defensive outwork for the Severan fortress (1984: 57) rather than a camp. Yet **Carpow** occupies a convenient position on the Firth of the Tay. It also works as a crossing point for campaigns in Strathmore (Crawford 1949: 58) and has been proposed as a base for the fleet (*Poreoclassis*), following a reading of the Ravenna Cosmography (Richmond & Crawford 1949: 43).

Thus a number of ‘series’ of marching camps can be identified in Scotland, most of which probably represent the sequential movement of troops on campaign (Jones 2009a). North of the isthmus, large groups of camps have been identified in the low-lying areas of eastern Scotland, but south of the isthmus, a wider variety of camps are recorded, only some of which can be placed into potential groupings.