

Transactions
of the
Dumfriesshire and Galloway
Natural History
and
Antiquarian Society



LXXV 2001

Transactions
of the
Dumfriesshire and Galloway
Natural History
and
Antiquarian Society

FOUNDED 20th NOVEMBER, 1862

THIRD SERIES VOLUME LXXV

Editors:

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ISSN 0141-1292

2001

DUMFRIES

Published by the Council of the Society

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EDITORIAL

Contributions are invited on the Natural History, Geology, Antiquities and Archaeology including Industrial Archaeology, of South West Scotland or the Solway Basin, and preference is always given to original work on local subjects. Intending contributors should, in the first instance, apply to the Editors for 'Instructions to Contributors', giving the nature and approximate size of their paper. Each contributor has seen a proof of his or her paper and neither the Editors nor the Society hold themselves responsible for the accuracy of scientific, historical or personal information in it.

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Limited grants may be available for excavations or other research. Applications should be made prior to 28th February in each year to the Hon. Secretary. Researchers are also reminded of the Mouswald Trust founded by our late President Dr R.C. Reid, which provides grants for work on certain periods. Enquiries and applications for grants to that Trust should be made to Primrose and Gordon, Solicitors, Irish Street, Dumfries.

The Council is indebted to the following bodies for substantial grants towards publication costs viz Historic Scotland for Mr Gordon Ewart's paper on Dundrennan, to the Royal Commission on Ancient and Historic Monuments of Scotland for Messrs Cowley and Brophy's paper on The Impact of Aerial Photography, to the Millennium Forest for Scotland Trust and The Forestry Commission for Mr Mearn's paper on Junipers and finally to the Mouswald Trust not only for Mr Allan Wilson's paper on The Novantae and Romanization in Galloway in this volume but also for a grant towards Mr Spaul's paper on Two Problems from Roman Scotland which appeared in Volume 74.

The illustration on the front cover is of the Wamphray cross-slab from the article *The Early Church in Dumfriesshire* by W.G. Collingwood, in volume XII, Series III (1926) of these *Transactions*. It is discussed afresh by Prof. Richard Bailey in *Whithorn Lecture* No. 4 (1996).

JUNIPER, *JUNIPERUS COMMUNIS*, in DUMFRIES AND GALLOWAY

by Richard Mearns

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Summary. *This paper presents the results of the first intensive survey of juniper in Dumfries and Galloway. A review of the historical literature showed that colonies had become extinct in the 19th century as well as in more recent times. A field survey carried out from 1998 to 2000 indicates that juniper occurs in over 100 1km squares within 27 10km squares, much more than was indicated in the UK Biodiversity Action Plan for juniper. However, this is not a real increase in the number of plants nor an extension of its distribution but instead reflects a lack of monitoring prior to this survey. The apparently improved results mask the serious plight of juniper: in more than 40% of the 10km squares where it was recorded there are less than 10 bushes, in five cases only one bush.*

At present, the total number of bushes is nearly 2500, almost half of which are on the west coast of the Rhins of Wigtownshire, where juniper appears to be at a natural level and where there is sufficient regeneration to maintain numbers and distribution. It also occurs in smaller numbers on the coasts of the Machars and Stewartry. Inland juniper is mainly concentrated in the Galloway hills and in mid and upper Nithsdale, but there are only seven inland sites containing more than 35 bushes. Several inland colonies have become extinct, others are reduced in size, the seed viability of old populations is known to be low and there are few places where natural regeneration is taking place. More inland colonies seem set to disappear unless new management practices can be introduced.

Introduction

Along with Scots pine *Pinus sylvestris* and yew *Taxus baccata*, juniper is one of only three species of conifer native to Britain. It has declined over much of its range due to direct clearance, excessive burning and overgrazing, or alternatively insufficient grazing which can lead to shading by taller competing trees. As a woodland type, juniper scrub has become nationally scarce and has been recognised as such by *NCC Guidelines for the Selection of Biological SSSI's* (1989), by *EC Habitat and Species Directive* (European Community 1992) and in the *National Biodiversity Action Plan* (1999). The main juniper strongholds are in the Scottish Highlands and south east England but there are also significant though declining populations in the Scottish Borders, Cumbria and north east England (e.g. McBride 1998, Dearnley and Duckett 1999, Clifton *et al* 1997).

In Dumfries and Galloway juniper has long been considered rather scarce, confined to just a few sites but including Tynron Juniper Wood where there are over 300 bushes. Few other sites were known and in 1998 Scottish Natural Heritage could supply information on only ten sites (McBride 1998). The UK Biodiversity Action Plan for juniper (1999) showed records for only 23 10km squares in Dumfries and Galloway, twenty of which were pre 1970. The author of this paper knew of many more sites and other occupied 10km squares, knew that the plant was very much under-recorded and so began this first intensive survey of juniper in Dumfries and Galloway. It was undertaken in order to establish current population levels, to investigate any recent decline and to help prepare and implement the Local

Species Action Plan for juniper. The results are presented in detail in order to target priority sites for conservation action and to allow reassessment of the juniper population in the future.

Conservation status

Juniper is a long-lived and tolerant species, found over a wide range of soil types and capable of surviving extremes of wind, frost and salt spray. It occurs in a variety of forms, either as slender trees up to 6m tall, as spreading bushes up to a similar height, or as procumbent or semi-procumbent matted shrubs. Large spreading bushes were predominant chiefly in the Nith valley but columnar forms were only found at Tynron Juniper Wood. Coastal juniper tends to be procumbent, sometimes forming matted carpets in excess of 20 metres across.

The subspecies *nana*, known as dwarf juniper, is characterised by its prostrate form and short, soft, curved needles. It mainly occurs in exposed conditions in north-west Scotland and at high altitude in the Scottish Highlands and Lake District. Identification can be difficult as not all prostrate growing juniper is subspecies *nana*, and some small leaved plants are *communis*. Indeed some authorities doubt the validity of this taxon, considering that the various forms may simply be due to growing conditions and other factors. Dwarf juniper has been claimed for the Galloway hills (in Stewart 1990) but no attempt was made during this survey to identify juniper to subspecies level.

Apart from its own intrinsic value, juniper is of importance to an assemblage of wildlife. Wheatear *Oenanthe oenanthe*, ring ouzel *Turdus torquatus*, blackbird *T. merula* and various other thrushes feed on the berries and help to regenerate the plants by dispersing seeds. Black grouse *Tetrao tetrix* also feed on berries and young shoots though there are few places now in Dumfries and Galloway where black grouse and juniper occur together.

Juniper is also important for four species of moth, the larvae of which feed exclusively on juniper: the juniper pug *Eupithecia pusillata*, Edinburgh pug *E. intricata millieraria*, juniper carpet *Thera juniperata* and chestnut-coloured carpet *T. cognata*. So far, the juniper pug is known to occur at Tynron and at Beuchan, Keir; the juniper carpet at Tynron; chestnut-coloured carpet at Portling and Float Bay (Scottish Insect Record Index, R & B Mearns *pers obs*). Lennon in his list of moths for Dumfries (1864) notes that the juniper pug and both carpet moths were found at Whinny Hill near Mabie – from which one can conclude that juniper occurred there at that time. He also found the chestnut-coloured carpet nearby at Dalskairth. There appear to be no local records for Edinburgh pug even though Dumfries and Galloway is within its known range.

Historical Status

During the 19th century Tynron and Keir were the only places where juniper was reckoned to be ‘very plentiful’ (McAndrew 1882). Yet the historical record for juniper is rather scanty and many sites with old juniper have escaped documentation. Specimens at Tynron have been dated back to 1838 (Kerr 1968) but there are also veteran bushes at Beuchan,

Penfillan, Burnmouth, Powmorrick and Warb Law that probably date from the same era. The suggestion that Tynron Juniper Wood is ‘unnatural’, i.e. so unusual for Dumfries and Galloway that it was perhaps planted (Kerr 1968, Shaw 1996) overlooks the existence of these remnant stands of juniper that occur in the wider vicinity. It seems likely that juniper was simply more widespread and abundant in the 19th and 20th centuries than it is today.

Evidence of its former distribution from place-names is rather disappointing. Only two English place-name references were found. Jardine (1841) mentions a Juniper Hill (see table 1, first line) but this name does not appear on current maps nor on the earliest OS maps in the vicinity of Beattock (the locality implied by Jardine); the local name probably died out as the juniper disappeared from the site. Juniper Rock on the north Rhins coast is marked on the current 1: 50 000 OS map and juniper still occurs there. This site is presumably the same as the Juniper Face mentioned by Maxwell (1887) for the sea coast of Leswalt Parish. The Gaelic for juniper [*eithen* or *aitten*] was considered insufficiently accurate in place-names to distinguish between juniper and gorse *Ulex* spp. even though such names as Leithenhall (south of Beattock on Wamphray Water) may well have referred to juniper. Craigwhinnie and Whinny Hill and other such place-names may well have had a past connection with juniper, and almost certainly so in the case of the latter.

Aerial photographs from the 1940s and early 1950s were examined for Tynron, Keir, Mennockfoot and some other sites where juniper still grows on open hillsides. Although its likely extent was clearly visible it was not possible to certainly identify individual bushes, many of which could have been gorse or small broad-leaved trees. For this reason it was not worthwhile searching other areas for juniper by this method.

Published records in the botanical atlases (Perring and Walters 1962, *et seq*) proved very frustrating because they are based on 10km square method rather than being site specific and it proved difficult or impossible to track down the original records and their locations. Many of the 19th century records were more precise and therefore more useful for revisiting.

Table 1. Chronological list of references to juniper in Dumfries and Galloway

Date	Site referred to	Reference	*Now Extinct
1841	“Juniper Hill, above Craigielands, and the hill above Beattock [sic]”	Sir William Jardine 1841	*
1863	“Whinny Hill [and] Dalskairth [Mabie]” - presence of juniper inferred from presence of moths whose larvae feed only on juniper.	Lennon 1864	*
1882	“Almorness”	McAndrew 1882	
	“Mabie Hills” - Robert Service	McAndrew 1882	*
	“Ringour”	McAndrew 1882	*
	“Moffat” – Singer	McAndrew 1882	*
	“Tynron and Keir very plentiful” – James Shaw	McAndrew 1882	
1885	Burnmouth? Juniper is listed for a Dumfries and Galloway Natural History and Antiquarian Society field meeting to the Thornhill area. The itinerary included Burnmouth (where juniper still occurs) as well as Drumlanrig Bridge, Glenairlie Bridge, Tibber’s Castle and Drumlanrig Castle.	Anon. <i>Transactions</i> 1887	

1886	“new to Wigtownshire from [around] Portpatrick”	McAndrew 1890a	
1887	“Juniper Face ‘Leswalt s.c.’ The wild juniper, though well-nigh extinct in Galloway, still survives in a few places on the sea cliffs, and inland on the Moors of Penninghame.”	Maxwell 1887	
1890	“Clanyard Bay”	McAndrew 1890b	
1891	“not common, Kello and Euchar glens”	Davidson 1891	
1893	“Port o’Spital [sic]”	McAndrew 1893	
1895	“Moors of Penninghame” – H.E. Maxwell	McAndrew 1895	*
	“Glasserton, Whithorn and Mochrum shores” – H.E. Maxwell	McAndrew 1895	*
	“North of West Tarbert”	McAndrew 1895	
	“Morroch Bay”	McAndrew 1895	
	“East of Burrow Head”	McAndrew 1895	
No date but before 1896	“once common – now confined to hills and glens – Moffat Water”	Bennet MS	* ?
1896	“Mabie” – Robert Service	Scott-Elliot 1896	*
	“Kello, Euchar” – Davidson	Scott-Elliot 1896	
	“Moffat Hills” – J.T. Johnstone	Scott-Elliot 1896	* ?
	“Raking Gill” – J.T. Johnstone	Scott-Elliot 1896	*
	“Eskdale” – J. Wilson & R. Bell	Scott-Elliot 1896	
	“Castle O’er” – J. Wilson & R. Bell	Scott-Elliot 1896	*
1900	Juniper covered most of Ford hillside [Tynron] around 1900 – from old photograph	Shaw 1996	
1929	Loch Enoch island “is covered with juniper, a remarkable circumstance from the fact that this hardy shrub is almost entirely absent from the district except in one or two inaccessible places. It occurred to me that its absence from the mainland is to be accounted for because the sheep eat it. They have, of course, never had the chance of cropping it on the island, hence, perhaps, its survival.” McBain seems to have overlooked the fact that if he “found easy access to [the island] on the ice” then so could sheep and goats. There is almost no juniper left and grazing animals (especially if stranded there) may have caused its demise. Repeated burning could have had the same effect.	McBain 1929	
1931	“Wigtownshire” – in county plant list, no localities given.	McCandlish 1931	
1934	“Where the [Water of] Luce enters the sea ... Juniper ... found on the hill” ie. East of St Helena Island.	Birrell 1934	*
1950s	Tynron – “In 1950s Juniper covered too much of [Ford] hill right up to Cairnecroft March and [the landowner] bulldozed it because of animals getting trapped.”	Shaw 1996	
1958	Tynron NNR declared. An accidental fire in 1959 destroyed part of the upper slopes but resulted in regeneration.	Huxley 1960	
1962	The <i>Atlas of the British Flora</i> includes records for NX95 (Southernness) and NX96 (Criffel/New Abbey) by Dr Milne-Redhead.	Perring & Walters 1962, VC73 botanical records	* in NX96

1965	Glentrool Park – “on some of the more precipitous rock faces, the dwarf juniper (<i>Juniperus nanus</i>) seems to hold on precariously ...”	Mathews 1965	
1968	Southern Scotland: “Juniper occurs in some 30 10km squares fairly evenly dispersed throughout Scotland south of the Forth/Clyde line (total 285 [10 km squares]), in most of these stations its form is semi prostrate or bushy and the individual junipers or small groups are generally scattered in open sheep country or mixed with hardwoods in gullies ... only at Tynron does it occur commonly in tall, fastigate form.”	Kerr 1968	
1968	<i>Atlas of the British Flora</i>	Perring & Walters 1968	
1972	Juniper listed for VC 72, 73, 74	Redhead 1972	
1976	<i>Atlas of the British Flora</i> (11 10Km squares occupied in D&G)	Perring & Walters 1976	
1977-78	“Drumlanrig Woods” - on nature trail close to castle (perhaps planted)	Lyall & Martin 1977-78	*?
1978	<i>Critical Supplement to the Atlas of the British Flora</i> includes 20 10km squares occupied in Dumfries and Galloway. No records of subsp. <i>nana</i> .	Perring & Sell 1978	
1985	“The 3 native species, Juniper, Scots Pine and Yew are known to regenerate within the county [Dumfriesshire]”	Martin 1985	
1990	Kirkcudbrightshire: “Ssp. Communis Almoness Point J M’A 1882 – scattered on sea cliffs. Occasional on hills, eg by L. Dungeon 1973. Ssp. Nana – L. Enoch DAR 1976”	Stewart 1990	
1990	Wigtownshire: “Scattered on western sea-cliffs.”	Silverside 1990	
1996	Tynron Parish – Tynron NNR, top of Aird Hill and on Cairnecroft. Also single plant on hillside between Tynron Doon and Craigturra.	Shaw 1996	
1999	Distribution map of juniper in UK. For D&G, occupied 10 km squares shows 20 pre 1970, 3 1970-86, 0 post 1987 records.	UK BAP	
2000	The status of Tynron Juniper Wood NNR is under review because it does not fit the new criteria for a National Nature Reserve. It will remain a SSSI and is a candidate Special Area of Conservation (cSAC).	SNH	

DISTRIBUTION AND ABUNDANCE OF JUNIPER IN DUMFRIES AND GALLOWAY 1998-2000

Fieldwork

Many cliffs with juniper were known to the author from fieldwork associated with a peregrine *Falco peregrinus* study carried out in South Scotland 1974-1982 (e.g. Mearns and Newton 1984) and from subsequent years of searching for birds, butterflies and moths on coastal cliffs and in other habitats. Additional records were sought from a variety of organisations and individuals. In 1998 a start was made on revisiting all known sites and searching for new areas, with more sites being visited in 1999 and 2000. Autumn, winter and early spring were found to be the best time for searching as the juniper plants were then easier to see from a distance. Location and numbers of bushes were recorded; estimates of minimum numbers being made where bushes were closely intertwined. Colonies were usually counted as separate sites if they were more than 250m apart, or if they spread into different 1km squares. It is unlikely that any substantial colonies of juniper were overlooked but a few additional bushes may come to light.

Results summary

The three vice-counties have a marked difference in the distribution of juniper (see fig. 1). In Wigtownshire (VC 74) all the juniper is now on the coast with none inland. In the Stewartry (VC 73) there is less on the coast with most in the Galloway hills at high altitude (350-600m). In Dumfriesshire (VC 72) there is none on the coast and most is at lower altitude (70-350m).

For Dumfries and Galloway as a whole, juniper was found to occur in 108 1km squares, within 27 10km squares, with a minimum total of 2473 bushes, and an upper limit perhaps exceeding 3000 (see table 2 and appendix). Eleven of the occupied 10km squares are represented by records of less than ten bushes, in five squares by only one bush. In most instances juniper grows on cliffs inaccessible or difficult to reach by grazing animals and where there is little competition from other plants. The underlying geology is extremely variable, ranging from igneous granites to greywackes and old red sandstones. At Tynron and Keir there appears to be an association with the Closeburn limestone formation.

	Area	Sites confirmed extinct	Extinct 10km squares	Occupied 10km squares	Occupied 1km squares	Number of Colonies†	Minimum number of bushes
Wigtownshire	The Rhins	0	0	7	40	116	1192
	Machars coast	0	0	2	7	13	31
	Inland	3-4	3-4	0	0	0	0
Kirkcudbrightshire	Coast	0	0	6	17	21	92
	Galloway Hills	2	0	5	18	26	230
	Ken Valley	1	1	2	2	2	9
	Eastern Kirk.	3	2	1	1	1	1
Dumfriesshire	Nithsdale	2	1	4	21	36	915
	Annandale	3-4	2	0	0	0	0
	Eskdale	1	1	1	2	2	7
Totals		16-18	10-11	28*	108	217	2473

Table 2. Summary of results.

† as listed in appendix. * includes one 10km square included twice because of overlap across counties

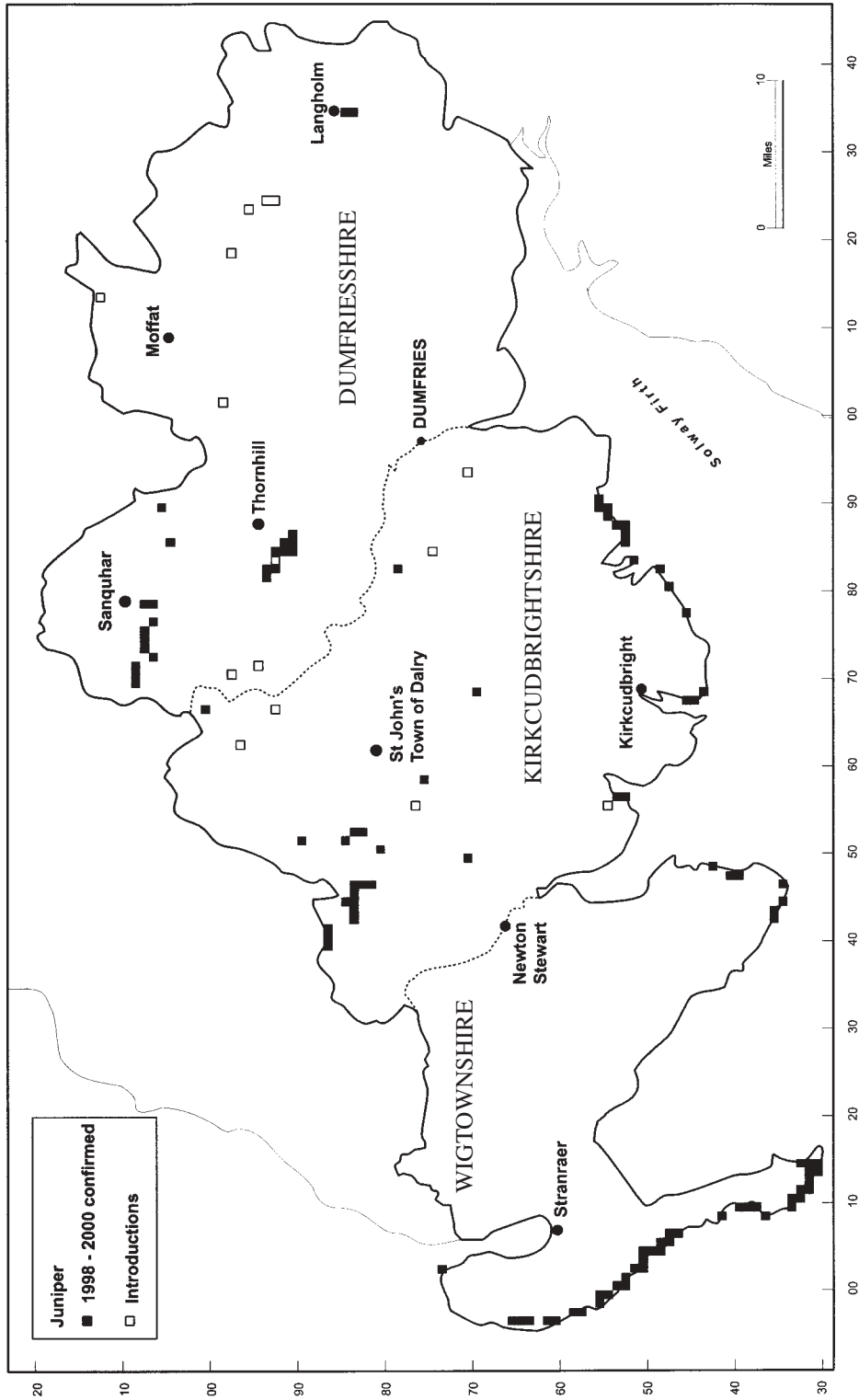


Fig 1. Distribution of juniper in Dumfries and Galloway showing vice-county boundaries (1km square records)



Fig 2 Prostrate juniper in an exposed situation at Salt Pans Bay, Wigtownshire.



Fig 3 Columnar and bushy forms of juniper at Tynron Juniper Wood.



Fig. 4 The rocky west coast of the Rhins holds almost half of all juniper in Dumfries and Galloway.



Fig. 5 In the central Galloway Hills the largest concentration of juniper is on the south side of Kirriereoch Hill.



Fig. 6 Juniper on the south facing slopes of the Kello Water, Nithsdale.



Fig. 7 Juniper at Beuchan, near Keir Mill, Nithsdale.

Coastal sites are usually extremely exposed, suffering the combined effects of desiccation, strong winds and salt spray; many plants in early 1999 and 2000 showed die-back as a result of severe winter gales and, more generally, plants are often wind-sculpted and distorted as a result of prolonged harsh conditions. 48% of all bushes in the region are on the west coast of the Rhins (and another 5% are on the remaining coasts).

Inland sites are mostly in the rugged parts of the Galloway Hills or on sites without rock on gently sloping moorland or grassland. Most colonies are small, 89% have less than 25 bushes, the remainder being concentrated in seven larger sites which contain 84% of all inland juniper, and 39% of all juniper (see table 3). There are only two sites associated with birch woodland (Hensol and Glenmaddie), a feature that is more typical of parts of the Highlands.

Site	Number of bushes	Age classes Old/ mature/ young	Regeneration	Metres asl	Habitat	Status	Owner
Tynron Juniper Wood	300+	O M	—	90	Sloping grassland	NNR (under review), SSSI, cSAC	Private
Beuchan, Kier	200+	O	—	200	Sloping grassland		Private
Upper Kello Water	200	O M Y	***	310	Steep rocky slope		Private
Kirriereoch, Galloway Forest Park	107+	O M Y	**	450-600	Rock exposures with heather	Within larger SSSI	FC
Penfillan, Penpont	75	O Y	***	150	Bracken slope within conifer plantation		Private
Burnmouth, Mennockfoot	50+	O Y	*	150	Semi-wooded enclosure		Private
Redstone Rig, Galloway Forest Park	45-50	M Y	**	540	Rock exposure with heather	Within larger SSSI	FC
Minimum total	977						

Table 3. Inland sites with more than twenty-five bushes.

37% of colonies (41% of bushes) receive a degree of protection as they happen to be included within the boundaries of eleven Sites of Special Scientific Interest (including those designated primarily for geological interest). The second and third largest sites are among those that have no statutory protection (see table 3).

Introductions are not included in the above and are dealt with later (see table 4).

Wigtownshire

Juniper in Wigtownshire now seems to be confined exclusively to coastal cliffs where it chiefly occurs on those parts with a southerly or westward aspect. On the rugged west coast of the Rhins it was not found much further north than Juniper Rock and occurred from there southwards to the Mull of Galloway peninsula. It is by no means continuously distributed but tends to occur in colonies, some slopes being almost covered in mats of prostrate growing bushes. On the rockier cliffs it grows out of crevices and tends to be smaller and easier to count. There are notable concentrations at Morroch Bay, Money Head, and especially between Dunman and West Tarbert. It is absent from Corsewall Point, Mull of Logan and low-lying stretches at Ardwell Point as well as most of the eastern coast of the Rhins.

On the Machars coast the main concentration of juniper was found in the vicinity of Burrow Head, particularly at Castle Feather. In addition, there are a small number of widely separated bushes east of St Ninian's Cave and along the cliffs north of the Isle of Whithorn (between Port Yerrock and Cruggleton). It is apparently absent from the cliffs of Sinniness, Garheugh and Monreith.

In the 19th century juniper was recorded at several inland locations where it now seems to have died out. No plants were found on the moors around Mochrum Loch nor in the vicinity of Whithorn, Glasserton or Penninghame although it could still occur in these areas amongst the extensive undulating parts where gorse is often abundant. However, the lack of reports from these places in the 20th century would suggest that it is either extinct or occurring in extremely small numbers. The SNH record for Torrs Warren SSSI is puzzling as the original source cannot be traced and it was not found there during a recent intensive botanical survey (Doarks *et al* 1990). In the 1930s it did occur on the hill to the east of the current SSSI boundary (Birrell 1934).

Kirkcudbrightshire

Coastal juniper in Kirkcudbrightshire is rather sporadically distributed. There is an unusual concentration on Cat Craig in Fleet Bay but it is not recorded again in any numbers travelling eastwards except at Torrs and Gypsy Points and then between Rockcliffe and Sandyhills, especially at Torrs Heughs. Near Castlehill Point and at Torrs Heughs it grows in close proximity to yew, much of the yew being so wind-sculpted that it could be mistaken for prostrate juniper if not closely examined.

In the central Galloway hills there are few large concentrations of juniper. The reduction of sheep numbers in the hills (due to the large scale change in land use to commercial forestry from the 1960s onwards) has not resulted in any dramatic increase in juniper, partly because grazing pressure is still high (by feral goats and deer). It still mainly occurs on rock faces inaccessible to these animals but there are hopeful signs at Kirrieroch and Redstone Rig where there has been a probable recent increase. The majority of bushes at these two sites are young with many signs of regeneration and though plants are sometimes accessible to grazing animals there is little sign of any damage or die back.

Away from the Merrick area and Rhinns of Kells, juniper occurs in small numbers at one location on Cairnsmore of Fleet NNR and there is a lone bush on Black Craig of Dee. A

single large prostrate plant is known in the upper Ken Valley, much closer to the juniper of Ayrshire and upper Nithsdale than to specimens in Galloway. The juniper found at Hensol (and until recently near the Lowran Burn) is apparently all that remains of the juniper reported for Ringour in the 19th century.

In the east of the county juniper has almost disappeared. Only one bush could be found in the vicinity of Bishop Forest Hill and Glenkiln. None of the original stock can now be found at Mabie where it grew in the 19th century. Botanical *Atlas* work in the 1950s showed that juniper was present in two 10km squares (but without precise grid references) where it no longer occurs: NX96 (presumably growing somewhere on the Criffell massif) and NX95 (presumably on the southern part of the Criffell massif). Extensive searches in these areas, by several observers, have failed to find any plants (except one young plant in NX95, on the coast, which is unlikely to have been the original record).

Dumfriesshire

The main sites in Dumfriesshire are in mid and upper Nithsdale where all but one plant are to the west of the River Nith. It is not confined to rocky terrain and grows instead on open hillsides, in some locations growing as tall as 6 metres. The best known site is Tynron Juniper Wood but there are significant concentrations near Keir, Capenoch, Burnmouth and in the Euchar and Kello valleys (see table 3).

At Powmerrick (near Mennochfoot) there are a handful of extremely old bushes but examination of a 1948 aerial photograph indicates that at that time there were 100-120 large bushes present. Continuing decline and extinction is expected at this site unless conservation action is carried out soon. In the 1950s it was present in NX88, most likely on the southern part of the Keir hills where it is now absent, probably due to agricultural improvements.

In Annandale, juniper has disappeared from the Beattock area, perhaps as long ago as the latter part of the 18th century. No plants now remain in the upper reaches of Moffat Water valley, although there were records in the mid 20th century (and there are unconfirmed records to the west of Loch Skene (circa 1980) and on White Coomb (1992)). In Eskdale, Castle O'er was reported as a location in the 19th century but it must have long since disappeared as there have been no reports since then (except for some planted introductions, see table 4). Remarkably, there are a few large old bushes remaining just outside Langholm. These are the most geographically isolated of all the juniper plants in Dumfries and Galloway, having no known near neighbours in the Scottish Borders or Cumbria. The last remnants of this colony seem set to disappear unless some conservation measures are carried out soon.

Introductions of juniper in Dumfries and Galloway

In the latter part of the 20th century, juniper has been introduced to at least fourteen sites. Ten of these are in 10km squares where there is now no known naturally occurring juniper. This brings the total number of 1km squares with juniper to 124, within 34 10km squares.

These introductions have been small-scale plantings with the total number of plants at each site mostly below thirty (see table 4). Their provenance appears to have been rather variable and though probably all are from Scottish stock, only those at Cairnhead in 1999 and at Capenoch are known to be of local origin. A larger scale introduction is planned by Borders Forest Trust at Carrifran, near Moffat, using stock derived from adjacent areas in the Scottish Borders (McBride 1998).

Grid ref	Site name	plants		Observer
NX560540	Cardoness Estate	?	Introduction about a mile inland 1995 (grid reference is approximate). Scottish provenance. Further plantings using stock from Cat Craig are planned for Mill Knock.	MH 00
NX552768	Bruce's Stone, Clatteringshaws	4	Planted by Forestry Commission (in 1960s?)	FE 99, RM 00
NX67 92	Carroch Hill, Carsphairn	?	Planted 1990s by Tilhill Economic Forestry. Some have since died.	CF 00
NX629966	Moorbrock, Carsphairn	40-50	Planted in 1991 in widely scattered locations in newly planted private forest. Hardly grew at all in first few years but now doing well.	TH 00
NX844733	Barfil, Crockettford	50	Planted 1990s near main entrance.	RM 00
NX932701	Mabie Forest	6	Planted by Forest Enterprise 1997 as an under-storey beneath mature Scots pine. Protected in plastic mesh but danger of shading by self-seeded Sitka spruce. Original Mabie juniper extinct.	FE 99, RM 00
NX717948	Cairnhead, Moniaive	6-8	Planted by Forestry Commission. In 1981 Scots pine and open space, by side of fence.	FE 00
NX701972	Cairnhead, Moniaive	5	Planted on crag by Forest Enterprise 1999 (ex Tynron).	FE 99
NX832926	Capenoch Moor, Penpont	<20	Cuttings from Penfillan planted 1999. Poor survival.	RG 00
NY011985	Blue Cairn, Ae Forest	3	Planted 1979 – no record of provenance.	FE 00
NY241929	Castle O'er	3	In 1945 Scots pine to west of hill fort.	FE 00
NY240938	Castle O'er	4	In small group of 1989 Scots pine in Sitka spruce crop, north of junction.	FE 00
NY233957	Relic Brae, Castle O'er	1	In 1946 Scots pine and lodgepole pine mix at junction.	FE 00
NY187977	Garwaldshiels, Twiglees	20+	In 1995 Sitka spruce at end of top road.	FE 00
NT145133	Carrifran, Moffat Water	0	A programme of introduction is planned to take place from 2001. Berries are being collected from sites in Scottish Borders (Juniper Crag near Peebles, Langhaugh in the Manor Valley and Bowerhope)	BFT 00 HC 00
	Minimum total	180		

Table 4. Planted introductions 1950-2000

Juniper in adjacent areas

Juniper is known to occur along the cliffs of the Ayrshire coast north of Loch Ryan (*pers obs*), and in the northern Galloway Hills at the Yellow Tomach, and at Afton Glen, near New Cumnock (Chris Rollie *pers comm*). In the Scottish Borders the distribution and abundance of juniper is well documented with the inland population in 1997 estimated at 4273 bushes in 71 colonies (McBride and Borders Forest Trust 1998), plus a small amount on the Berwickshire coast (*pers obs*). The Borders Forest Trust aims to plant 50,000 bushes in the Scottish Borders by 2010 (McBride 1998). In Durham and Northumberland there has been a 30% decline between 1973 and 1994, the number of plants becoming reduced to less than 3000 bushes (Barrett 1998). In Cumbria juniper is much more abundant and a recent study was able to select ten sites of more than 1000 bushes each (Dearnley and Duckett 1999). Juniper appears to be absent from the rugged west coast of the Isle of Man and from Ailsa Craig (Perring and Walters 1976), a little surprising in view of the amount that is present on the Rhins of Galloway.

Discussion

The Dumfries and Galloway juniper population is part of the larger Southern Uplands grouping and helps to provide 'continuity' with the populations of the Scottish Highlands, Cumbria and north east England.

The total population in Dumfries and Galloway is about 2500 bushes whereas in the Scottish Borders it exceeds 4000. The difference is more acute when comparing juniper at inland locations, with about 1100 bushes in Dumfries and Galloway and 4000 in the Scottish Borders.

Juniper is still widely distributed in Dumfries and Galloway and though only relatively few sites are known to have become extinct this may be a reflection of inadequate early recording. Coastal juniper would appear to be at a natural level and regeneration there seems to be taking place at a sufficient pace to maintain existing numbers. However, many inland sites, particularly those on cliffs, consist of only a few plants that may or may not be replaced when they die. Where these plants are already moribund they are already effectively extinct so the situation is less hopeful than it might appear. Moreover, juniper continues to face a variety of threats: over grazing, cattle rubbing, deliberate and accidental destruction either through agricultural improvements or inappropriate habitat management, or natural succession to scrub and woodland. In spring 2000 there were at least four major fires at juniper sites, the long term effects of which are not yet apparent. In some instances fire can aid regeneration (Huxley 1960) helping to control encroachment of broad-leaved scrub but at other times, especially if fires are frequent, plants are destroyed.

The creation of Tynron Juniper Wood National Nature Reserve raised awareness of the importance of juniper locally, and though it may lose its NNR status because it does not fit the new national criteria it will remain as a SSSI and is a proposed Special Area of Conservation (cSAC). Elsewhere there has been little conservation or legal protection of other juniper sites in the region except those that happen to fall within the boundaries of SSSIs. There has been a general absence of positive management and as a result some sites have

disappeared, while others are in decline with a preponderance of old moribund bushes and little or no regeneration.

The reality is that inland juniper as a scrub habitat can only be found at seven sites (see table 3). Nowhere, except at Tynron and Keir, does it form a readily visible significant landscape feature comparable to certain juniper-covered hillsides that occur, for example, in the Lake District. The conservation priority is to conserve and expand not only these larger sites but also the other existing inland colonies where regeneration needs to be promoted. Particular attention needs to be paid to maintaining geographical spread and therefore isolated colonies, such as at Langholm, deserve immediate action. Consideration should be given to planting new colonies in areas where it is known to have occurred in the past. These are matters that will be taken up by the Local Species Action Plan for juniper and it is to be hoped that the Dumfries and Galloway population of this plant will subsequently increase.

Acknowledgements

Warm thanks are extended to all those who kindly contributed records. Most are named in the key to the appendix but others who assisted include Alison Barnes, Hugh Chalmers, Dr R.W.M. Corner, Jackie Galley, Peter Norman, Steve Redpath, Joanna Robertson, Paul Taylor, Andrew Walker, Jon Warren and Anna White. Forest Enterprise, Tilhill Economic Forestry, Fountain Forestry and many other landowners kindly responded to my enquiries, as did Scottish Natural Heritage. Keith Bland of the Royal Museum of Scotland supplied information from the Scottish Insect Record Index. Particular thanks are extended to Barbara Mearns for company and assistance in the field. I am especially grateful to Vin Fleming of JNCC who had an interest in juniper when working with SNH in Dumfries and Galloway and who kindly commented on a draft of this paper and contributed in other ways. The publication of this paper was largely funded by a Millennium Award through the Millennium Forest for Scotland. The award also assisted with travel and other costs in 2000.

The Society also expresses thanks to the Millennium Forest for Scotland Trust for a substantial grant towards the publication costs, part of which was contributed by the Forestry Commission.

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APPENDIX. LIST of JUNIPER SITES in DUMFRIES and GALLOWAY

Key to initials used in appendix: **CA** Caroline Allen, **BA** Brian Arneil, **JG** Jackie Galley (Solway Heritage), **DH** David Hawker, **MH** Mark Hannay, **FE** Forest Enterprise, **VF** Vin Fleming, **CF** Charlie Fulton (Tilhill Economic Forestry Group), **RG** Robert Gladstone, **RH** Ray Hawley, **PH** Peter Hopkins, **TH** Thure Holm, **AK** A.D. Kennedy, **SH** Solway Heritage, **SNH** Scottish Natural Heritage, **KK** Keith Kirk, **AM** Andrew McBride, **JM** Jim McCleary, **IM** Ian Miller, **RM** Richard and Barbara Mearns, **CP** Charles Park, **DAR** Derek Ratcliffe, **DR** Dick Roxburgh, **CR** Chris Rollie, **GS** Geoff Shaw (Forest Enterprise, Galloway), **JS** John Shaw, **OS** Olga Stewart, **ST** Stan Tanner (Forest Enterprise, Ae), **CW** Colin Watret (Forest Enterprise, Ae).

WIGTOWNSHIRE				
THE RHINS				
Grid ref	site name (*within SSSI)	plants	notes and comments	Observer
NW961652	Mare Rock a	1		RM 99
NW961650	Mare Rock b	5	Plus 1 dead	RM 99
NW961649	Juniper Rock	2-5	Most on the stack, one on mainland opposite. Plus one dead	RM 79, 99
NW960645	Broad Port	1	On steep slope not rocky cliff.	RM 99
NW961641	Drumahowen	3-5		RM 99
NW961638	Slouchnawen Bay	10	One very heavily browsed at south end	RM 99
NW966614	Salt Pans Bay*	1	Very gnarled and wind-blasted	DH, RM 99
NW968607	Cranberry Point*	18	Plus one long dead	RM 76, 99
NW975592	Cave Ochtree Point	4		RM 99
NW977586	Scabby's Loup	8	Six on stack, singles north and south.	RM 70s, 99
NW989553	Port Kale a	1		RM 86, 99
NW990553	Port Kale b	2		RM 86, 99
NW997543	Portpatrick Harbour	3	On cliff at north end	DH, RM 86, 99
NX001536	Portpatrick south a	1	Seen from path leading to Dunskey Castle	RM 99
NX003534	Portpatrick south b	3		RM 99
NX004534	Dunskey Castle	2		RM 99
NX005533	Craigoch Burn	1	Can be seen from footbridge. One dead on rock pinnacle south side of the mouth of burn.	RM 99
NX005529	Ratten Hole	1		RM 99
NX012526	Morroch Bay* a	17	Morroch Bay mentioned by McAndrew 1895	RM 99
NX014526	Morroch Bay* b	6		RM 99
NX016526	Morroch Bay* c	12		RM 99
NX017526	Morroch Bay* d	3		RM 99
NX018525	Morroch Bay* e	10		RM 00
NX018522	Port of Spittal Bay*	4	On peninsula between two bays. Widely scattered. Also 4 dead	RM 00
NX021519	Drop Cave	1	Above cave	RM 00
NX021518	Cairnhingey	4	On small rock pinnacle. Four dead below Dunaldboys Motte	RM 00
NX022517	Garnavlahan a	15+	Mostly down below main cliff on small stacks	RM 00
NX022516	Garnavlahan b	2	3m x 3m patches on steep grassy slope	RM 00

NX023514	Largywee	3	On ridges to north of deep gully. Plus one dead	RM 00
NX023513	Carby Face	9	On largest most vertical cliff	RM 00
NX023512	Knockienausk Head	4	Just north of Dumbies Hole	RM 00
NX026510	Finlock Bay	2	North facing part of bay	RM 00
NX027510	Mare's Tail a	4	Low down north of waterfall.	RM 00
NX028509	Mare's Tail b	13+	On south side of bay	RM 00
NX028509	Gull Rigging	15+	Scattered all way down cliffs to bottom	RM 00
NX029508	Dunanrea Bay	37+	Two on buttress just north of bay, the rest at northern end of bay with 25+ high up on cliff and 10 lower down on separate rock face. Those at top very weather beaten with little greenery remaining	RM 00
NX031507	Black Isle	7	One small plant in centre of largest flat rock face, another higher up cliff. Five weather beaten specimens a little further south only visible from below	RM 00
NX033506	Camp Bay a	48+	On north side including five very large prostrate bushes on grassy slope some of which 10m x 10m	RM 00
NX035506	Camp Bay b	35	South part of bay	RM 00
NX037504	Portayew a	30+	Some fine specimens at north of bay, mid section of cliff	RM 00
NX039504	Portayew b	25+	On rocks near north side of Portayew Burn	RM 00
NX039503	Portayew c	12+	On south side closer to sea	RM 00
NX039502	Portayew d	15+	On south facing part of headland to south of bay	RM 00
NX039502	Portayew e	8	Very accessible, low down close to sea	RM 00
NX040502	South east of Portayew	3	One high up, and another two 75m further south, also very high up	RM 00
NX039500	Cove	9	Rocky cove with seven on mid part of north ridge and two on south ridge	RM 00
NX041499	Blue Bonnet a	1	20m x 20m patch	RM 00
NX041499	Blue Bonnet b	5	On cliffs at back of inlet	RM 00
NX041498	Blue Bonnet c	8	A little further south	RM 00
NX043496	Red Cave	13	One to north of cave, six to east and further six scattered over slope up to 250m away	RM 00
NX047493	Cairngarroch Bay	40+	Widely scattered but mainly on rocky ridges running down to shore. Six on rock face above access track.	RM 00
NX046489	Fox Rattle	10	On south west facing slope, two high up and rest lower down	RM 00
NX045488	Dun Rock	1	Large flat bush, south facing.	RM 00
NX047483	Money Head	40+	Widely scattered on south east facing cliffs, some very weather beaten with considerable die back. One prostrate bush on flowery slope.	RM 00
NX049482	Stannax	1	On gentle slope of heather and grass	RM 00
NX051482	Strandfoot	16	Widely scattered, some close to high tide mark.	RM 00
NX053480	Goodwife's Cave	15+		RM 00

NX054479	Slunkrainy north	25+	One 20m x 20m patch on slope, but mostly on rocky cliffs. Widely dispersed	RM 00
NX054478	Slunkrainy south	20+	On both sides of grassy gully mostly on south facing side. Some large patches.	RM 00
NX056477	Clow Cave	15+	Well vegetated cliffs with many stunted trees and ivy. Some large Juniper patches, especially low down. Counting difficult because few viewpoints.	RM 00
NX058475	White Laird's Loup	30+	Counting difficult because few viewpoints. Some dead stumps.	RM 00
NX059473	Dove Cave	2	One plant on each side of ravine.	RM 00
NX062473	Float Bay a	4	East of main cave	RM 99
NX061473	Float Bay b	9	West of main cave. Chestnut-coloured Carpet 17.07.99	RM 99
NX067466	Hole Stone Bay	9	Plus one long dead	RM 99
NX088415	Clanghie Bay, Port Logan	1	8m x 4m patch on rocky outcrop on shore	RM 00
NX092397	Slate Heugh Bay north	12	Thriving colony	RM 00
NX092396	Slate Heugh Bay south	4	Two well separated from other two. Mid section of cliff	RM 00
NX093395	Surnock	4	Two well separated from other two. Two at south near cliff top	RM 00
NX094390	Lennans waterfall	1	North of falls, at cliff top	RM 00
NX095388	South Lennans	4	Mid section of cliff	RM 00
NX095387	Strones Bay north	2	One dead to south	RM 00
NX095386	Calliedown	30-35	Thriving colony, some large specimens, some new regeneration	RM 00
NX097383	Calliedown Bay south	1	Low down on cliff	RM 00
NX098383	Carlin House Bay	2	Low on cliff near sea	RM 00
NX099382	Clanyard Bay north	4-6	Clanyard Bay mentioned by McAndrew 1890. Large extended clump, low down near sea.	RM 99, 00
NX095376	Clanyard Moor cliffs	3		RM 70s, 99
NX093375	Muddioch Rocks a	5	All the adjacent heather-clad slopes are regularly burnt in this area	RM 70s, 99
NX092373	Muddioch Rocks b	15		RM 70s, 99
NX091372	Breddoch Bay	10		RM 70s, 99
NX086367	The Saddle a	3		RM 99
NX085366	The Saddle b	1		RM 99
NX084362	Laggantalluch Head	10	One at cliff edge killed by muirburn	RM 99
NX092339	Sloucheen Slunk*	3	One on slope opposite cliff	RM 00
NX096336	Little Dunman*	25+	Both sides of huge gully. One on stack below. One on cliff edge 100m to north	RM 00
NX095335 to NX099333	Dunman*	100+	This large group of cliffs not easy to count. Widely scattered. One plant on level ground above cliffs. None on large bare cliffs at south end, though two plants on scree opposite. About fourteen small aspen trees among juniper at NX096334.	RM 78, 00
NX101331	Auchneight Moor*	10	On sea cliffs	RM 00
NX103328	Morrow Well Burn*	1	On cliff edge by waterfall	RM 00

NX104326	Port Mona*	50+	Most plants on south facing side of the bay right out to headland going north. Two on rocky outcrop at back of bay and one on grassy slope. Two on headland at south.	RM 78, 00
NX107323	Carrickahawkie Heughs*	25+	Ivy covered cliffs and heathery slopes with juniper mostly on other parts both high up and close to shore.	RM 00
NX108322	Craigwhinnie*	13		RM 00
NX109321	Knick of Kindram* a	12	Mostly low down near sea, one on north facing slope. Three on Steep cliff. Dead plant on summit of small stack.	RM 00
NX110322	Knick of Kindram* b	3	High up near dyke at summit	RM 00
NX111320	Knick of Kindram* c	7	On north-west slope	RM 00
NX112319	West Bay of Slochaurie* a	25+	From top to bottom of main most vertical cliff, plants mostly small and bushy.	RM 00
NX112318	West Bay of Slochaurie* b	1+	Large creeping patch on north-west slope of largest stack	RM 00
NX113317	Wallace's Hole*	7	Both sides of gully	RM 00
NX114316	Wild Cat Holes*	3	On north-west slope	RM 00
NX121315	Carrickamickie*	10+	East of 'island' large sloping area 30m x 30m covered in prostrate juniper. Three other plants, quite separate, in the vicinity.	RM 00
NX125314	Port Kemin*	10	Rather scattered. Two very low down on rock outcrops. Some among well-vegetated sheltered slope.	RM 77, 97, 00
NX126313	Cave of Biawn*	3	On steep cliff above main cave	RM 00
NX127313	Old Mill Bay* a	9	On south facing slope at north of bay	RM 00
NX128311	Old Mill Bay* b	18+	Some large patches on main cliff, about 12 plants. Six lower down; one patch 6m x 6m, on rocky outcrop by old pump house.	RM 00
NX128311	Old Mill Bay* c	1	Headland edge. Seven dead plants.	RM 00
NX131311	Bellou* a	1	On headland	RM 00
NX132311	Bellou* b	30+	Widely scattered from cliff top to rocky outcrops on shore	RM 00
NX133310	Carrickgill Bay* a	2	On headland	RM 00
NX134310	Carrickgill Bay* b	3	Low down. Plus one dead	RM 00
NX135309	Carrickgill*	8-10	Below corner of fence	RM 00
NX137309	West Tarbert* a	3-4	Large patches	RM 97, 00
NX137309	West Tarbert* b	1	Small tuft west of dyke, sheep nibbled at top. Plus one dead nearby.	RM 00
NX139310	West Tarbert* c	2	5m x 4m patch on slope. Big tuft on rock pinnacle.	RM 00
NX142306	Carrickcorrie*	4	Four (plus one dead) spreading into turf on cliff top. Three about 10m below.	RM 00
NX147303	Kennedy's Cairn*	0	One long dead plant.	RM 00
NX144311	East Tarbert*	1	North of bay	RM 00
NX144320	Carrickamurlan	4	On sheer rock face north of dyke	RM 00
NX024730	Beef Barrel*	1	On west facing side of rock at cliff base. Only part of bush alive.	RM 00
	Minimum total	1192		

TORRS WARREN				
NX15 55	Torrs Warren*	0	Juniper listed in SNH Recorder. Not in any botanical papers for site. SNH cannot trace original record. Error?	SNH
NX19 55	East of St Helena Island	0	Mentioned by Birrell 1934. Not found RM 00. Probably extinct.	RM 00
	Minimum total	0		
MACHARS COAST				
NX 423359	St Ninian's Cave*	2	To east of cave.	RM 99
NX 431354	Lobbocks*	1	Plus two long dead nearby	RM 99
NX 434351	Carghidown*	1	On shoulder of cliff below blackthorn	RM 99
NX 446343	Castle Feather a	4-5	On stack, with one on mainland	RM 70s, 99
NX 447343	Castle Feather b	1	On mainland	RM 70s, 99
NX 448342	Castle Feather c	2	On mainland opposite stack	RM 70s, 99
NX 448342	Castle Feather d	12-14	On stack west of castle	RM 70s, 99
NX 467347	The Lick a	2	"East of Burrow Head" noted by McAndrew 1895	RM 99
NX 467346	The Lick b	1		RM 99
NX 466345	The Lick c	2		RM 99
NX477398	Shaddock	1	Near where field dyke meets the cliffs. Small tuft, south facing.	RM 00
NX479405	White Port	1	Large prostrate bush near cliff edge, south facing.	RM 00
NX483426	Cruggleton Heughs	1	Scraggy specimen on rock face without much other vegetation.	PH 80s, 90s RM 00
	Minimum total	31		
INLAND WIGTOWNSHIRE				
NX44 40	"Whithorn"	0	Not known to local naturalists in 20th Century	
NX42 38	"Glasserton"	0	Not known to local naturalists in 20th Century	
NX29 52 NX3053	"Mochrum shores"*	0	Not found around Loch Mochrum (nor on shores of Mochrum Parish)	RM 99
NX36 NX37	"Moors of Penninghame"	0	Not known to local naturalists in 20th Century	
	Minimum total	0		

KIRKCUDBRIGHTSHIRE				
COAST				
Grid ref	site name (*within SSSI)	plants	notes and comments	Observer
NX566530	Cat Craig	15	Two large 15m x 3m patches, difficult to assess numbers. Some regeneration.	OS 86, DH 87, RM 99
NX562529	Dalavan Bay	6	Large 2m tall bushes on edge of woods opposite Cat Craig	DH, RM 99
NX673451	Halftide Rocks, Torrs Point*	11		DH 87, RM 94, 99
NX676446	Gauger's Loup, Torrs Point*	3	Below lookout tower	RM 94, 99
NX685436	Gypsy Point	2-5	Very wind blasted, but new growth evident. One dead.	DH 87, RM 94, 99
NX774459	Dropping Craig	1	Same as DHs Spouty Dennans NX7645?	RM 80s, 99
NX797472	Rascarrel Heugh*	0	Old dead stem, high up on cliff in rock crevice.	RM 00
NX801475	Brock's Hole*	2	Fire in April 00 just reached the base of the most easterly plant but expected to survive	OS 91, DH, RM 70s, 00
NX824487	Balcary Heughs*	1-3	Close together, perhaps just one plant. Extensive die-back.	DH 87, RM 00
NX833515	Almorness Point a	1	Single quite large plant, low down near sea.	DH, RM 70s, 00
NX838514	Almorness Point b	1	Single small plant on rocks near sea opposite spit that leads to Hestan Island (no juniper on Hestan). McAndrew 1882 mentions Almorness Point, at which time perhaps more abundant.	RM 00
NX854525	Castlehill Point	4	Above beach at east, single around shoulder further east	RM 80s, 99
NX855525	Castlehill Point	1	Large patch of wind sculpted yew also present nearby	
NX864527	Gutcher's Isle	4	West side of stack	OS 69, 92 RM 80s, 99
NX873529	Long Tongue*	1		RM 99
NX873531	Cow's Snout/ Gillis Craig*	2-3	On mainland west of stack	DH 87, RM 80s, 99
NX878535	Port O'Warren*	1	Among gorse near top of cliff	RM 99
NX885543 To 888545	Torrs Heughs, east of Portling	26	Some yew also on cliffs. Chestnut-coloured Carpet 31.07.99	OS 92, RM 80s, 99
NX890546	Douglas Hall a	3	Above caves	RM 80s, 99
NX892546	Douglas Hall b	1	Overlooking end of stake nets	RM 99
NX899553	Craigneuk Point a	1		RM 99
NX901553	Craigneuk Point b	1	Very spindly and single branched, just above high water mark	RM 99
	Minimum total	88		

GALLOWAY HILLS				
NX399869	Carnirock Stone* a	8	Scattered on rock face. Three accessible to grazing animals. Regeneration evident.	RM 76, 00
NX399869	Carnirock Stone* b	11	To east side of main crag. One further east, nearby.	RM 76, 00
NX403866 To NX407865	Kirriereoch*	97+	Scattered in clumps on or near the more prominent rock faces, but many plants readily accessible to grazing animals. Regeneration evident at most locations. Probable recent increase. Main colonies at NX404867 (25 bushes) and NX405866 (50+ bushes).	GS 80s, RM 76, 00
NX410867 To NX416867	Kirriereoch* (Cantin Heads)	10	Widely scattered in ones and twos. Some accessible. Regeneration evident.	RM 76, 00
NX443849	Loch Enoch west island*	1	Single plant visible from mainland hanging down close to water at south tip.	RM 99
NX444850	Loch Enoch largest island*	1	Island covered in juniper 1920s (McBain 1929). Now only single plant visible from mainland, at south tip	RM 99
NX446852	Loch Enoch east island*	0	Possibly one plant	RM 99
NX447846	South of Loch Enoch*	0	"Single plant ... on granite pavement south of Loch Enoch" (DAR <i>pers com.</i>). Not found in 99 or 00.	DAR 76, RM 99, 00
NX432846	Upper Buchan Burn/* Redstone Rig	40-45	Mostly small young plants, on small cliff. Many of them accessible to grazing animals. One bush 200m north west around shoulder of hill.	JM 91, GS, RM 99
NX427848	Kirn Burn*	1	Large prostrate bush on small rock face.	RM 99
NX459847	Dungeon Hill* a	2		RM 70s, 00
NX462848	Dungeon Hill* b	1		RM 00
NX464849	Dungeon Hill* c	18-20	Mixture of small prostrate bushes as well as larger (1.5m tall) semi-erect bushes. All inaccessible to grazers. Dungeon Hill was severely burnt in April 2000, and some juniper may have been damaged.	RM 00
NX462838 To NX464831	Craignaw*	19	Widely scattered on east facing slope, only on inaccessible rock faces. Largest groupings at Shot Cleuch NX463833 (6 bushes) and 300m further north (9 bushes).	DAR 61, CR 90s RM 70s, 00
NX464828	Dow Spout, Craignaw*	1	High up to south of waterfall at about 450m.	RM 00
NX464824	Snibe Hill*	1	Very small bush, high up at about 450m.	RM 00
NX511891	Craignelder Gairy, Rhinn of Kells	2	Two small old bushes on north side of small gully	RM 00
NX512846	Milldown* a	1	Young bush	RM 00
NX512845	Milldown* b	0	North side of gully at about 500m. Grid ref approximate. Not found	RM 00
NX 516844	Milldown* c	2-3	Small young bushes, close together	RM 00

NX515842	Milldown* d	1		RM 00
NX518841	Milldown* e	2	Small young bushes in gully, one almost hidden behind aspen trees.	RM 00
NX529838	Meikle Lump* a	3	Close together	RM 00
NX527833	Meikle Lump* b	0	Single plant in rock crevice. Not found RM 00.	OS 73
NX526824	Clints of Clenrie*	1	Poorly attached to rock face, some die-back	RM 00
NX509808	Little Millyea*	1	2m x 2m bush covering top of 3m high steep-sided boulder inaccessible to grazing animals except at one side.	AK 95 RM 00
NX522869	Craigbrock, Loch Harrow*	0	Two bushes RM 77. Not found RM 00	RM 77
NX493703	Craignelder Big Gairy* a	1	Small plant on crag beside oak and holly tree.	RM 99
NX496703	Craignelder Big Gairy* b	1	Large old specimen on large ledge	DAR 72, DR CP, CR RM 99
NX497700	Craignelder Big Gairy* c	3	Two small spindly bushes with larger healthier specimen other side of buttress to east. Absent elsewhere on Cairnsmore NNR – not found Door and Knee of Cairnsmore RM 00.	DAR 72, CP, CR, DR RM 99, 00
NX586757	Carluckie, Black Craig of Dee	1	2m tall bush with some snow damage. By small gully, on heather slope with many rock outcrops. Some self seeded spruce in vicinity.	RM 00
	Minimum total	230		
KEN VALLEY				
NX644738	Lowran Burn	0	Two large bushes in 1984. Not seen recently by RH and not found by RM 99 or 00. Destroyed by forestry?	RH 84 RM 99, 00
NX661724	Ringour	0	Mentioned by McAndrew 1882. He was possibly referring to the Warren at NX670715 which has been a conifer plantation since 1920s. Not known on the islands nor from anywhere around Loch Ken except at Hensol (see below).	KK 99
NX683693	Hensol	8	2m tall, spindly, among birch near dyke. Recent cattle damage. One long dead.	RH 81, RM 00
NX662007	The Lorg	1	4m x 4m patch of prostrate juniper.	RM 74, 99
	Minimum total	9		
EASTERN KIRKCUDBRIGHTSHIRE				
NX839781	Glenkiln	1	On small crag; large and ancient	RM 99
NX8575	Bishop Forest Hill/ Dalquhairn	0	Reported in this quadrat 1950s. Not found by RM on Bishop Forest Hill, Skeoch Hill and Dalquhairn Hill.	VC 73 records, RM 00
NX960690	Whinny Hill	0	Not known in recent years. Not found by RM.	RM 99, 00

NX96	Criffel massif	0	Reported in this 10km square in 1950s. Not known in recent years. Not found by VF 80s. Not found Auchengray, Auchenfad, Criffel, Drumburn Hill, Long Fell RM 00	VC 73 records VF 80s RM 00
NX95	Criffel massif south	0	Reported in this 10km square in 1950s. Not known in recent years. Not found Clifton Craigs, Millour, Airdrie Hill, Redbank Hill RM 00. [One small plant on coast at Craigneuk Point just within this Square, see text]	VC 73 records RM 00
	Minimum total	1		

DUMFRIESSHIRE				
NITHSDALE				
Grid ref	site name (*within SSSI)	plants	notes and comments	Observer
NS699089	Kello Water a	1	In open area within conifer plantation	RM 99
NS702089 To 710089	Kello Water b	150	North bank of Kello. Some large bushes; and many smaller ones heavily grazed. Some burnt spring 00.	RM 99, 00
NS710089 To 712089	Kello Water c	50	Continuation of above, with three isolated from main group further downstream. Some burnt spring 00	RM 99, 00
NS723068	Benzien Craig	14-15	3-4 long dead. Sitka Spruce shading some bushes felled by D&G Council Ranger Service June 99	RM 70s, 99 VF 80s
NS724064	Feuchaw Burn	1	South side of Euchar Water. On small crag by waterfall.	RM 99
NS739073	Glenmaddie a	2	Close to Euchar Water. Shaded by trees and moribund. One long dead by largest Scots pine.	SNH 88, RM 99
NS741075	Glenmaddie b	2	Beside tiny burn	RM 99
NS745071	Glenmaddie c	1	Old bush on small crag	RM 99
NS754080	Glenmaddie d	1	Small young bush amongst bracken and hawthorn scrub	RM 99
NS765069	Tongue Burn	1	Young and vigorous	RM 99
NS785072	Powmerrick	5	Tall, very old and moribund. Additional 8 fairly recently died. Alleged eradication by farmer circa 1988 and recent damage by cattle. Aerial photograph of 1948 suggests colony of 100-120 large bushes indicating massive decline.	CA 99 RM 99
NS787061	Eliock Burn	1	Downstream from dense patch of willow scrub	SH, CP 99
NS841048	Burnmouth	50-60	100m x 35m area of juniper is sheep fenced. Some shading from taller woodland. Some regeneration into open area within fence. Juniper reported from other side of road by J. Martin 1970s, not seen VF 87, RM 99.	NCC, VF, RM 70s, 99

NS899056	Birk Cleuch, Penbane	1	Young and vigorous. Only known plant in Nith valley on north or east side of River Nith.	CA 99, RM 99
NX852993	Drumlanrig Woods	0	Reported on woodland walks in vicinity of castle (Druid Loch/Marr Burn) by Lyall and Martin 1997. Not found RM 00.	RM 00
NX811933	Craigturra	4	Becoming shaded by Sitka spruce	RM 98
NX815939	Tynron Doon	5	On open hill between Craigturra and Tynron Doon. Heavily Browsed. Single plant mentioned by Shaw 1996	RM 70s, 99 SH 89
NX825949	Grennan	0	Some yew on site, juniper not found	RG 99, RM 00
NX825932	Ford Hill a	4	Mixed among broom, adjacent to Hutton Wood	RM 99
NX826932	Ford Hill b	12	Among broom	RM 99
NX825930	Ford Hill c	2		RM 99
NX828931	Ford Hill d	6	Six others to west, close to NNR, are in different 1km square	RM 99
NX827927	Tynron Juniper Wood*	300+	5 ha site heavily grazed by rabbits. Some damage and no regeneration seen. A few bushes occur outside boundary fence.	SNH RM 99
NX832928	Capenoch Moor	0	Report of single plant, not found RM 00. Probably shaded out by larch plantation, now at thinning stage	SH 89, RM 00
NX845924	Penfillan Burn north bank	70+	8m x 8m patch of several mature juniper bushes, plus two other mature bushes close by. At least 65 young bushes in vicinity	RG 00, RM 00
NX847924	Penfillan Burn south bank	5+	Two large very old bushes with two small young ones close by. One large patch with 50m circumference (probably all one plant) – very old judging from 30cm diameter stem and 4m height. Lies within commercial forestry plantation and although gap left for it conifers are within 6m and juniper likely to suffer from shading as conifers mature. One small juniper adjacent to this large bush.	RG 00 RM 00
NX857917	Beuchan Juniper Wood, Keir	200+	Large old bushes. No recent regeneration. Large rabbit population. Juniper Pug 29.08.98	SH 89, RM 80s, 00
NX852913	Breconside Hill a	2	In gully, partially protected by single strand barbed wire fence. Old dead trunk on ground near dyke at NX852912.	SH 89, RM 00
NX850904	Breconside Hill b	3	Small young bushes	SH 89, RM 00
NX851907	Breconside Hill c	3		RM 99
NX859913	Beuchanhill Plantation	0	Not found RM 00. Destroyed by forestry operations?	SH 89, RM 00
NX845916	Waterside Moor	2	Hanging over small burn by large rowan. Fairly recently dead bush adjacent.	RM 00
NX842913	Beuchan Moor a	2	Small young bushes, heavily sheep grazed	RM 00
NX845913	Beuchan Moor b	1	250m east of above, heavily rubbed by sheep	RM 00
NX847907	Keir Hills a	1	Keir Hills juniper is scattered on north east side of hills.	RM 99

NX848908	Keir Hills b	1		RM 99
NX849908	Keir Hills c	3		RM 99
NX842904	Laggan Park	2	One old, one small younger plant nearby	RM 99
NX861903	Barjarg Moor	1		RM 99
NX863906 to NX865908	Garroch Burn, Porterstown	6	Large old bushes all at edge of burn. One long dead. One yew present among them.	RM 00
NX88	Dunscore area	0	Reported in this 10 km square in 1950s. Not found on southern Keir Hills, north Bishop Forest Hill, Morrinton, Glenmidge etc.	VC 73 records RM 00
	Minimum total	915		
ANNANDALE				
NT197153	Raking Gill*	0	Noted in Scott-Elliot 1896. Not found by recent observers. Extinct	RM 70s, 99
NT1616	White Coomb*	0	Report with no grid reference 1992. Not known to NTS Ranger-Naturalists. Not found RM 00.	BA 00
NT1614 or NT1615	Mid Craig, Loch Skene	0	Unconfirmed report circa 1980. Not known to NTS Ranger-Naturalists. Not found RM 00.	AM 00
NT0601 NT0602	“above Craigielands, and the hill above Beatoch [sic]”	0	Jardine 1841, now extinct. Sites probably now covered by conifer plantations. Not found in hills further west (Craighoar, Harestanes Heights, Lamb Hill) – RM 00	VF 80s, RM 99, 00
	Minimum total	0		
ESKDALE				
NY24 92	“Castle O’er”	0	Scott-Elliot 1896. No known subsequent records. Not on hill fort or in surrounding area RM 00. But there are three bushes in 1945 Scots pine just to west of fort, presumed planted by FC.	CW 00, RM 00
NY362832	Warb Law, Langholm a	4	Large ancient bushes. Remains of old bushes nearby.	SNH 88 RM 00
NY367830	Warb Law, Langholm b	3	Large, very old and straggly, particularly small-leaved. Possibly all one bush.	SNH 88 RM 00
	Minimum total	7		

EXCAVATION AT HAYKNOWES FARM, ANNAN.

by R. A. Gregory

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Introduction

Hayknowes Farm is located on the coast immediately west of the mouth of the River Annan (Figure 1). The farm and its associated holdings are found on the interface of two superficial geological deposits. To the west the drift geology is composed of heavy Holocene carse deposits laid down during the main inundation of the Holocene marine transgression. To the east, coarse and highly sorted Pleistocene fluvio-glacial deposits are found (Jardine, 1980). They are generally well drained, although localised depressions, or 'kettle holes', have encouraged the formation of small peat deposits.

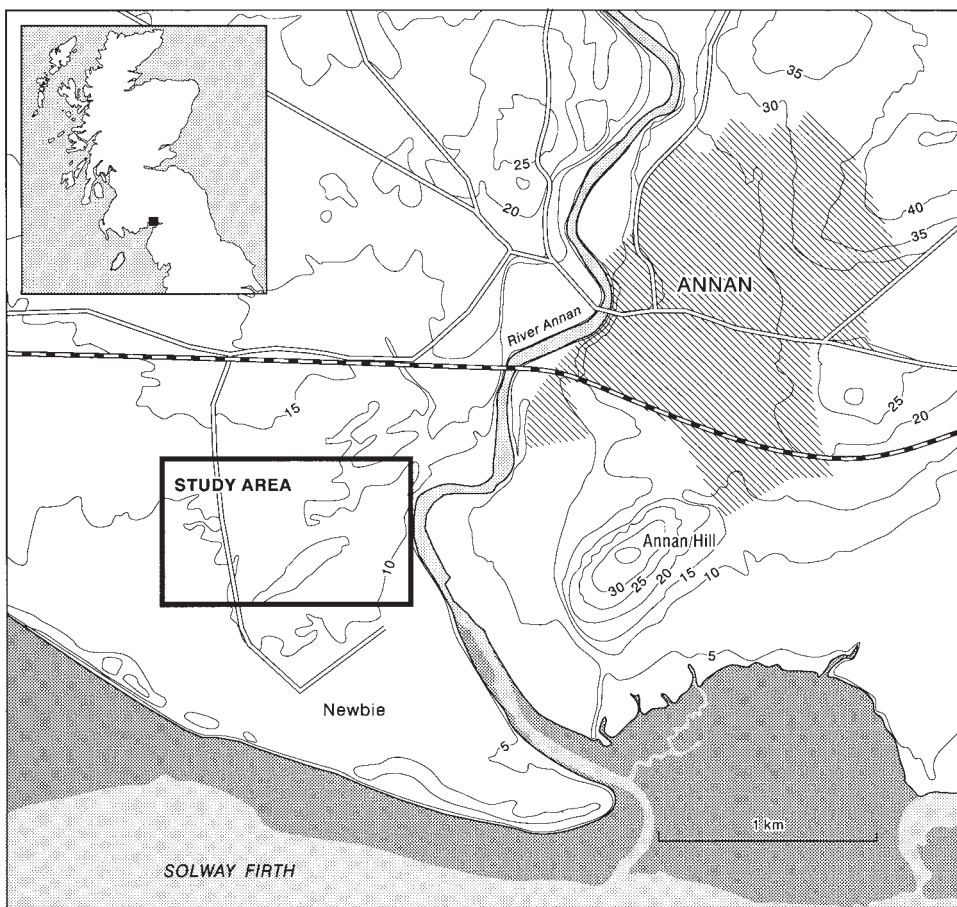


Figure 1: Location of Hayknowes Farm

Aerial photography by the late Professor G D B Jones and the RCAHMS, over the last three decades, has identified a series of crop-marks on these Pleistocene gravels. The crop-marks extend roughly east from Hayknowes Farm towards the River Annan, and it is possible to identify several discrete components within this complex (Figure 2). Next to the farm, and partly obscured by it, is an oval double-ditched enclosure (NGR: NY 1724 6555). This site has an internal area of c.0.7 ha, with a potential entrance on its western side. East of the double ditch is a circular enclosure, or ring-ditch, about 20m in diameter (NGR: NY 1739 6572). At its centre are four visible pits. Immediately to the east of the ring-ditch is a double-ditched linear crop-mark, orientated in a north-south direction, which may represent the remains of a track or drove way. One hundred metres west of the track way is a third enclosure which is rectilinear in form (NGR: NY 1757 6572). It has an easterly entrance and an internal area of c.0.2 ha. The aerial photographs indicate that this enclosure is related to a complex series of ditched boundaries (NGR: NY 174 657) that extend eastwards from the track towards the final visible archaeological site at Annanfoot (NGR: NY 1802 6526). Here the remains of a Roman temporary camp, with an internal area of c.3.5 ha, have been recorded (Gregory, 1996).

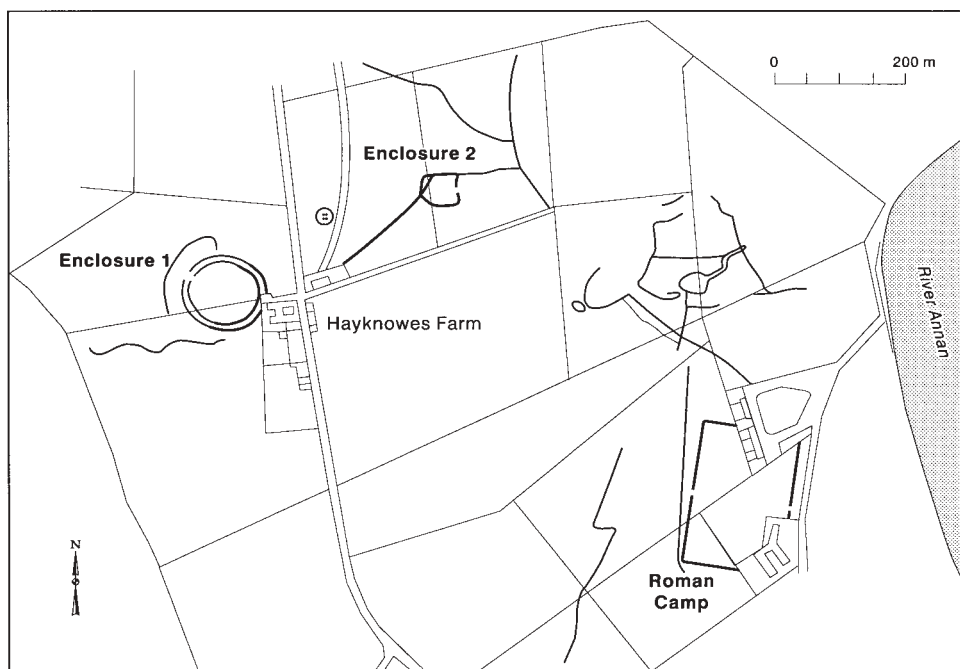


Figure 2: Crop-marks at Hayknowes Farm

The extensive nature of the Hayknowes crop-marks prompted an investigation of their chronology and function as part of an examination of the prehistoric landscapes of Dumfries and Galloway (Gregory, 1998; 2000). This paper reports on some aspects of the Hayknowes excavations which relate the oval double-ditched enclosure, the rectilinear en-

closure, and portions of the boundary system to later prehistoric and early Roman land-use in the area. It lends support to a growing body of evidence which suggests that the north Solway plain was an important centre of pastoral farming in the Late Iron Age.

The Double-Ditched Enclosure

Excavation at the double-ditched enclosure was undertaken during August of 1995 and 1996, following a geophysical survey of the site. Two small areas were selected for excavation in the hope that the function and possible chronology of the site could be determined (Figure 3). These areas included the potential entrance into the enclosure, and a portion of the enclosure interior where a possible circular anomaly had been detected during the geophysical survey.

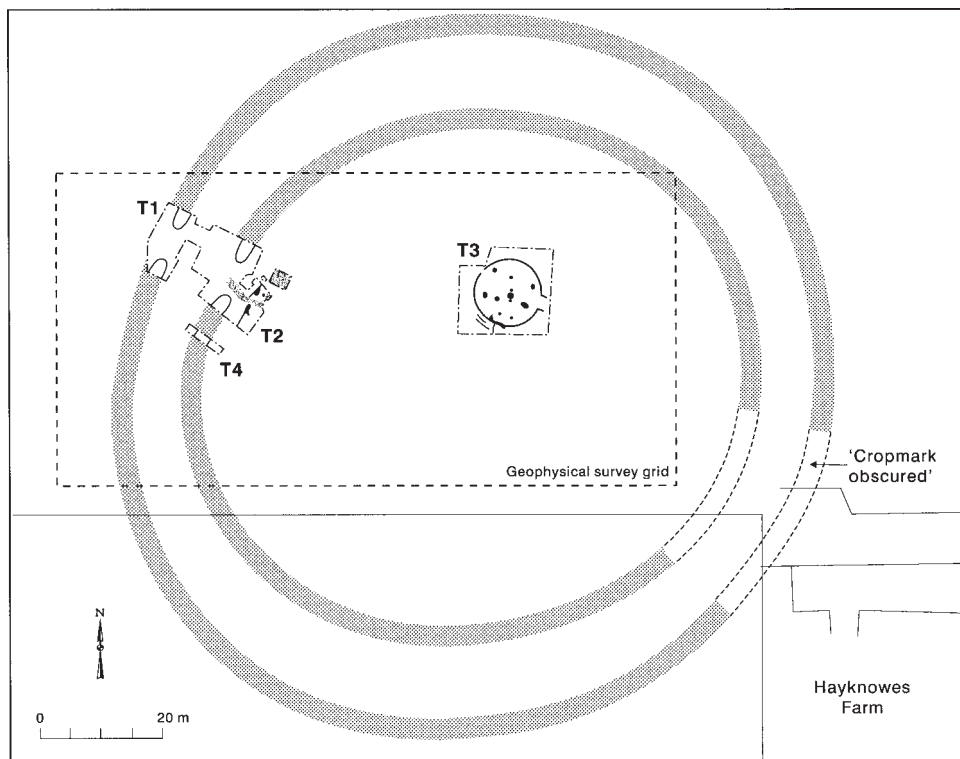


Figure 3: The double-ditched enclosure

The Enclosure Entrance

Over the two seasons of excavation the four ditch terminals visible from the aerial photographs were exposed and excavated. This confirmed that the terminals do indeed represent a break in the inner and outer ditch circuit providing an entrance into the interior of the settlement.

When the fill in both the inner and outer ditches was removed the stratigraphy of the features

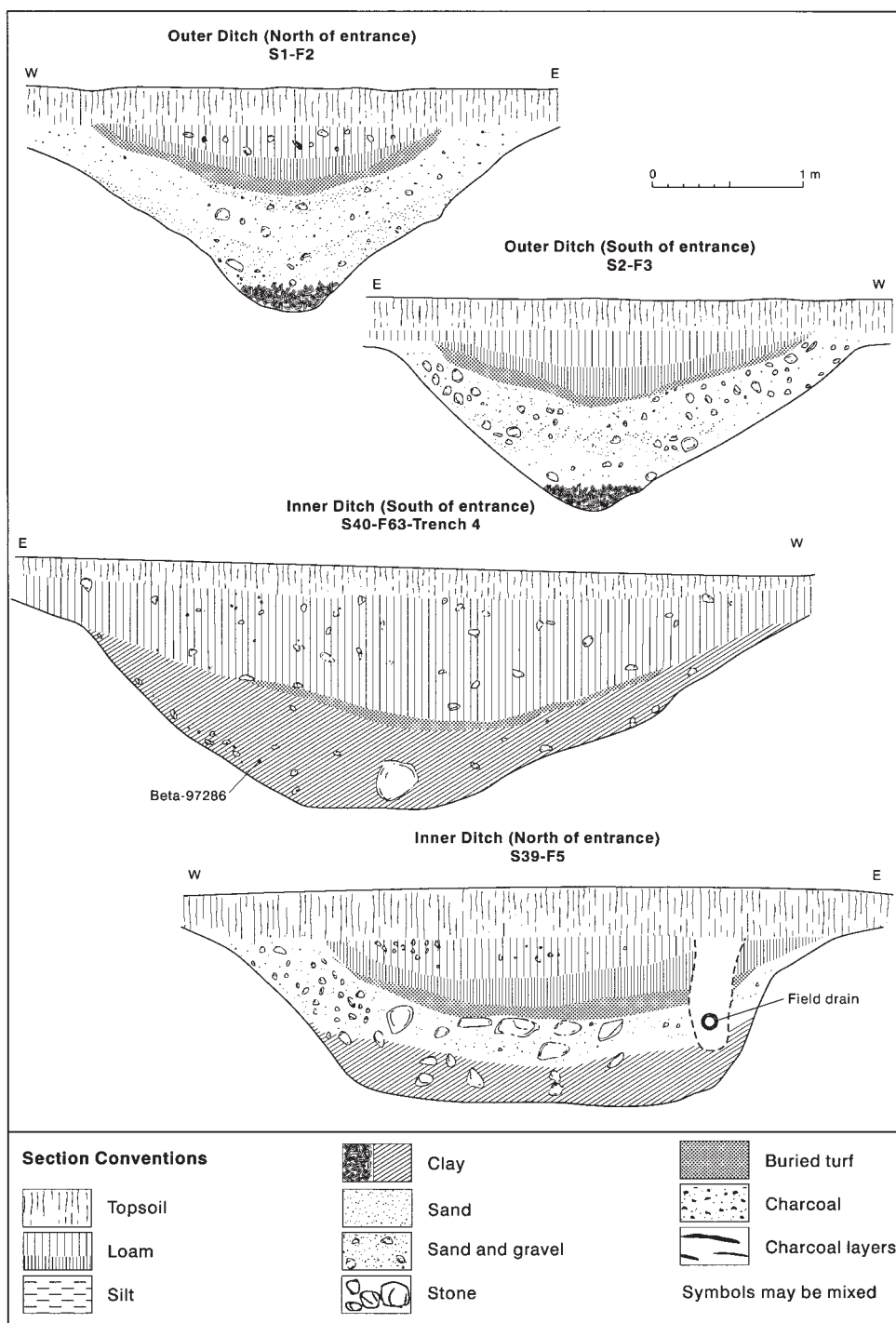


Figure 4: Ditch sections from the double-ditched enclosure

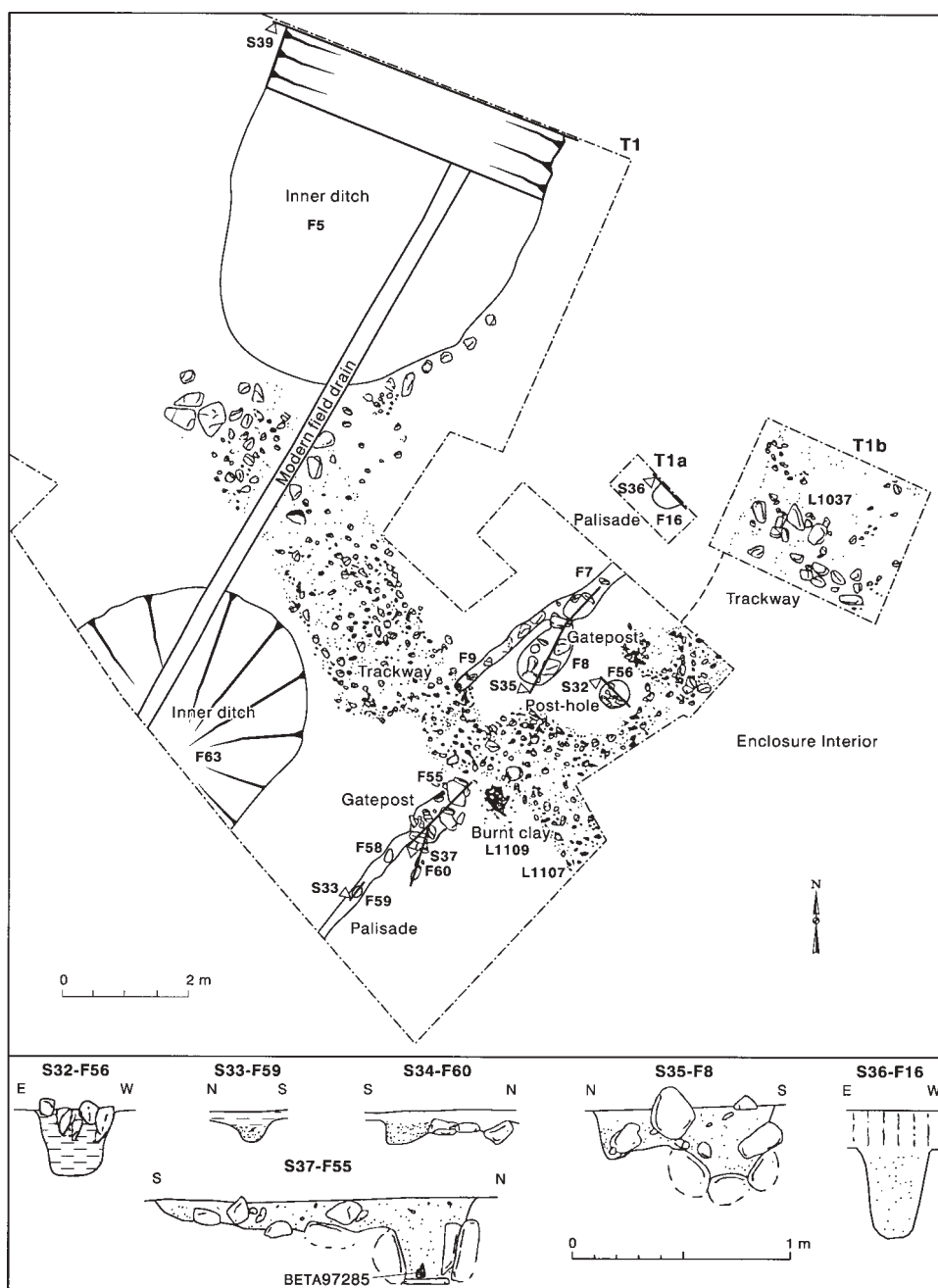


Figure 5: The enclosure entrance

suggested a similar sequence of events for all the ditch terminals (Figure 4). The quantity of clay and stone and the absence of silting in the lower layers of the ditches indicate that they were probably deliberately back-filled with rampart material. Amongst this back-filled material from the northern terminal of the inner ditch (F5) two stones were recovered that may have been used as rubbers. Samples of wood, which were identified as black thorn (*Prunus spinosa*), were also recovered from the base of the inner ditch exposed by trench 4. These samples yielded a radiocarbon date of 2010 ± 60 BP (uncal) (BETA - 97286).

The back-filling episode appears to suggest the levelling of the site during a period of later agricultural activity. The date of this is not clear, but presumably it may have occurred during later prehistory following the construction, or the last cleaning, of the ditches. The gradual settlement of the fill material, however, suggests that the ditches remained visible as ephemeral features. In all the ditch profiles this is attested by the presence of a former turf line. After the establishment of this turf line there is evidence for the reuse of the degraded settlement. This evidence consists in what can be best described as a small hearth located immediately above the turf line in the outer ditch terminal F2. All ditches were then finally subjected to a process of natural filling with a brown loamy deposit. In relatively recent times a modern field drain cut both inner ditch terminals (F5 and F63).

Behind the inner ditch terminals, c.2.5-3m to the east, a series of post-holes was encountered (Figure 5). The position of two of these posts, F8 and F55, suggest that they probably represent the remains of two stone packed gateposts. These were both between 1.2 x 0.8m in plan and 0.4m in depth. The packing stones of both posts had collapsed into the post pits, indicating that the wooden posts had rotted *in situ*. This was confirmed by the discovery of the *Quercus* sp heartwood of the original southern gatepost (F55), which was located on a flat stone at the base of the feature. This sample was submitted for radiocarbon dating and gave a date of 2240 ± 90 BP (uncal) (BETA - 97285). The survival of heartwood is unusual in this type of environment, and probably relates to the presence of peculiar groundwater conditions arising from the natural clay deposit in which the features are cut and the brown sandy loam with which they were later filled. Sub-surface run-off would percolate into the fill more readily than into the surrounding natural clay, encouraging moisture retention at the base of the southern post-pit. The creation of these partial anaerobic conditions may explain the survival of the post heartwood, which would itself be more resistant to decay.

Running from post F8, across a section of the entrance, a small linear stone-packed trench was located (F9). This was c. 0.25m wide extending for c. 1.8m, and was approximately 0.1m deep. The feature may have been used to secure a gate, which would have been of a sliding type rather than hinged to the southern gatepost. When open, the gate may have rested against an ephemeral palisade, represented by a small linear construction trench containing one stake hole (F59) which was found running southwards from the southern gatepost (F58). The fencing was probably wattle. A small assemblage of bird bone was discovered within the base of the stake hole but due to the lack of *epiphyses*, species identification is not possible (Robinson, *pers com.*).

From the northern gatepost a series of posts was also located, running in a northerly direction (F6, F7 & F16). Again, these may be the remains of palisade. The full extent of both these palisade lines was not determined, but it is likely that, if these features were contemporary with the enclosure ditches, the palisade extended to the inner rampart.

Between the gateposts a laid-stone surface was encountered (L1107). This appears to represent the remains of a track running into the settlement. The surface was detected in undisturbed sections between the ditch terminals, running in a south-easterly direction from the gateway to the exterior of the site. The track was also located behind the gateway arrangement (L1037) running partially into the interior of the site.

The final features detected in this area were a post-pit (F56) and an area of burnt clay (L1109). The post-pit was well defined and contained packing stones. Its diameter was c. 0.3m with a depth of



Figure 6: The hut circle

0.3m. Because it is found in relative isolation the precise function of the post-pit is obscure. The area of burnt clay and charcoal which was exposed may, however, represent the remains of a small hearth located on the threshold of the enclosure interior.

The hut circle

In the interior of the enclosure a trench was placed over an anomaly detected during the geophysical survey. The anomaly was vaguely circular in form. Following removal of the plough soil it soon became clear that it could be explained by the presence of a well preserved single-phase hut circle, 11m in diameter (Figure 6; 7). In plan the house consisted of a circular stone-packed ring-groove, or construction trench with an average depth of c. 0.25m. A number of stake holes were located within the ring-groove, which probably housed a wattling wall. An unfinished carnelian bead was also recovered from the feature.

The ring-groove was broken in two places, indicating the position of two opposing entrances. The western entrance was of a simple form. Here the circular construction trench merely terminated producing a break c. 1.1m in width. A more substantial entrance was located, however, to the east, and was clearly defined by a porch way arrangement. Here, the circular construction trenches turned

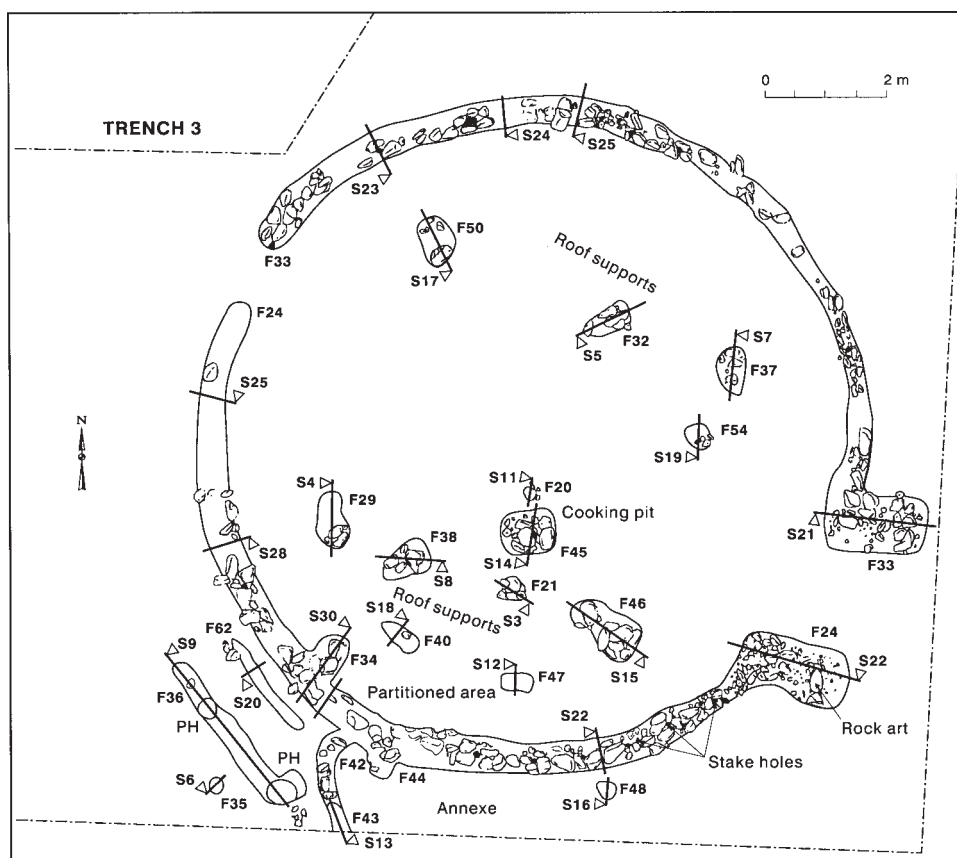


Figure 7: The hut circle

outwards at right angles to produce a threshold which was c. 1.8m wide. The terminals were stone packed and c. 0.3m in depth. In the southern porch (F24), rock art or cup marking was discovered on the underside of one of the larger stones. The rock art consists of various pecked symbols, which are of poor quality in comparison to Neolithic/Early Bronze Age open air examples known further west (cf. Morris, 1979; 1981; 1989) (Figure 8). In this respect the art may be a later imitation of earlier work. Its significance, however, lies in its location as part of the structure of a late prehistoric dwelling.

Inside the hut circle a number of post pits were identified. Four of these, F50, F37, F29 and F46, may have formed a square timber frame within the hut circle from which timber beams could be lashed from the wattling walls to create a circular roof. Other posts were also located inside the hut circle and at least some of these may have aided in supporting the internal frame (F32, F54 and F38).

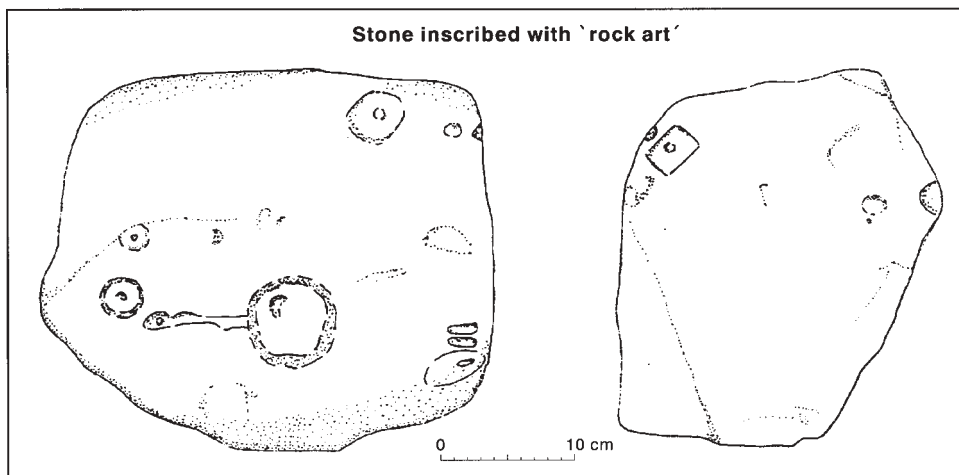


Figure 8: Inscribed stone from hut circle porch

Other internal features included a cooking pit (F45). This pit was c. 0.7m in diameter and c. 0.4m deep and contained fire cracked stone and a small assemblage of burnt bones, one of which had identifiable butchery marks. Again as with the bone assemblage from the entrance these were identified as bird bones, but the lack of *epiphyses* made species identification impossible (Robinson, *pers com.*). Two small posts were located on either side of the cooking pit (F20 and F21) which may have supported a cooking gantry. The final internal features were discovered in the southern portion of the hut, and comprise a post pad (F34) and two post-holes (F40 and F47), which appear to define a partitioned area.

External to the hut circle a portion of a possible annexe was located. This may have acted as an animal pen. It consisted of a two-phase construction slot (F42 & F43), a post pad (F44) that was linked to the ring groove, and a single post-hole (F48). Two linear slots, containing post and stake holes were also discovered adjacent to the hut circle (F62 and F36). The precise function of these features is not clear, but they appear to have housed two wattling screens. It may be significant that their positioning would have shielded a portion of the hut from the prevailing wind.

The Rectilinear Enclosure

Excavation at the rectilinear enclosure was undertaken during August of 1996 and 1997, following an earlier geophysical survey. The objectives were to date the enclosure, establish its function, and determine the relationship between this enclosure and a linear boundary which is linked to a larger system of ditched boundaries (cf. Figure 2). Aerial photographs of the enclosure suggest that at its rear the linear boundary and the enclosure ditch intersect, but it is not clear which of the two features is the earlier. Three trenches were excavated in an attempt to resolve these issues (Figure 9). Trench 1 was positioned at the enclosure entrance; trench 2 was located in the enclosure interior where the geophysical survey had detected a series of possible anomalies; trench 3 was located at the rear of the enclosure, at the intersection of the enclosure ditch and the linear boundary.

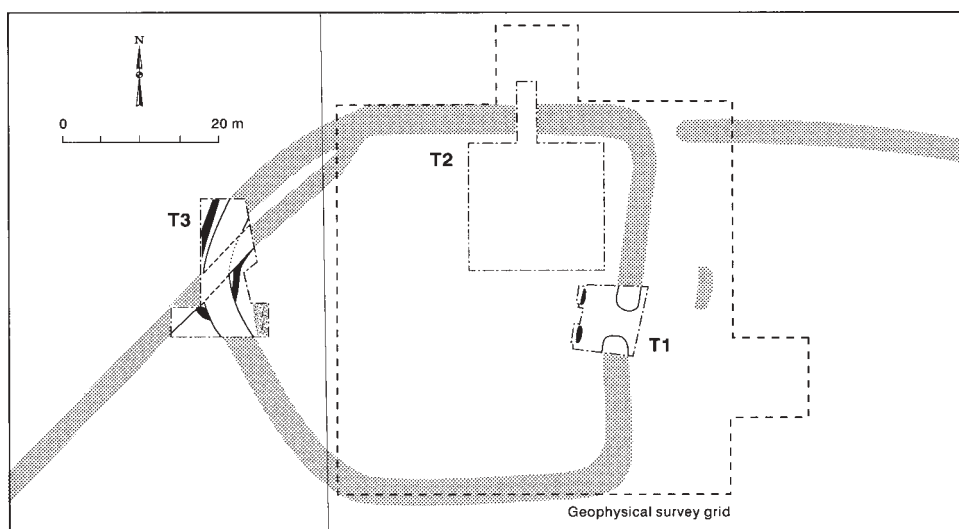


Figure 9: The rectilinear enclosure

The Enclosure Entrance

In trench I two ditch terminals were identified in the north (F1) and south (F17) of the excavation. In plan these terminals create an apparent entrance into the enclosure which was c. 4m wide but no track or compacted surface could be identified between them. The fills of both exposed terminals were removed in an attempt to locate any small finds that might date the features, and to assess the stratigraphy (Figure 10).

The northern ditch (F1) had a 'V' shaped profile and was c. 3.2m wide and c. 1.3m deep. It contained three distinct fills. The lowest of these, which filled the majority of the terminal, was a sand/gravel layer with some silting which appears to represent a natural filling of the ditch. Above this layer was a sand/silt layer overlain by a layer of brown loamy material merging into the plough soil. These upper layers also appear to represent in-filling by natural processes. The southern ditch terminal (F17) had a flat-bottomed profile and was c. 3.3m, and c. 1 m deep. Two stratigraphical layers could be identified comprising a sand/silt layer beneath a layer of brown loam. As with the northern ditch these fills appear to represent natural filling. At the interface between the plough soil and brown loam two small sherds of coarse pottery were discovered. These were identical to sherds recovered

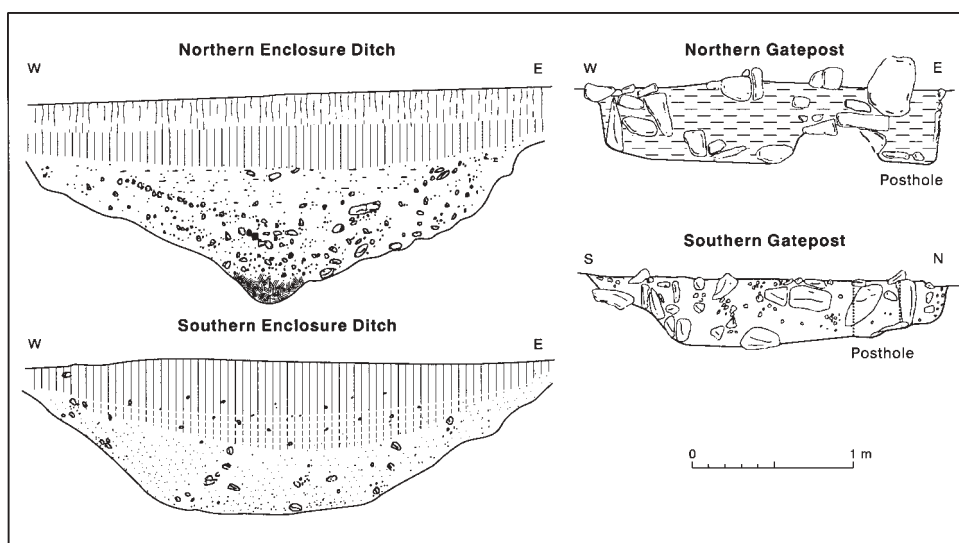


Figure 10: Sections from the rectilinear enclosure entrance

from the ring-ditch site, which are now known to date to the 11th/12th century AD (Gregory, *forthcoming a*). A quantity of carbon was also recovered from the base of F17 which produced a radiocarbon date of 1950 ± 50 BP (uncal) (BETA – 129208)

Behind the ditch terminals, approximately 3m to the west, two linear stone packed features were encountered. The northern feature was c. 2.2m x 0.5m and c. 0.4m deep, while the southern feature was c. 2.2m x 0.3m and c. 0.5m deep (Figure 9; 10). Following half-sectioning, post-pits could be seen at the inner ends of both features. These posts probably represent two gateposts for the enclosure, presumably located at the terminals of an inner rampart. The excavation of a linear slot to house the posts may relate to the provisioning of a wooden brace to secure the gateposts. This would also explain the relatively shallow depth of the post-holes.

The Enclosure Interior

Trench 2 was placed in the interior of the enclosure, over an area that had produced a high anomaly during the geophysical survey. It also exposed a portion of the northern enclosure ditch. It was hoped that this trench would reveal evidence for occupation, or evidence of an earlier palisaded phase, which appears a common feature of many of the northern rectilinear settlements. Unfortunately, the only feature encountered was the northern enclosure ditch. This was of a similar form to those excavated at the entrance. The lack of identifiable domestic features in the area raises questions concerning the enclosure's function. It is possible, however, by analogy with excavated examples of rectilinear settlements from Northumberland, that the trench had exposed a yard area. If this is the case domestic structures might be located to the rear of the enclosure (cf. Jobey, 1977; 1978).

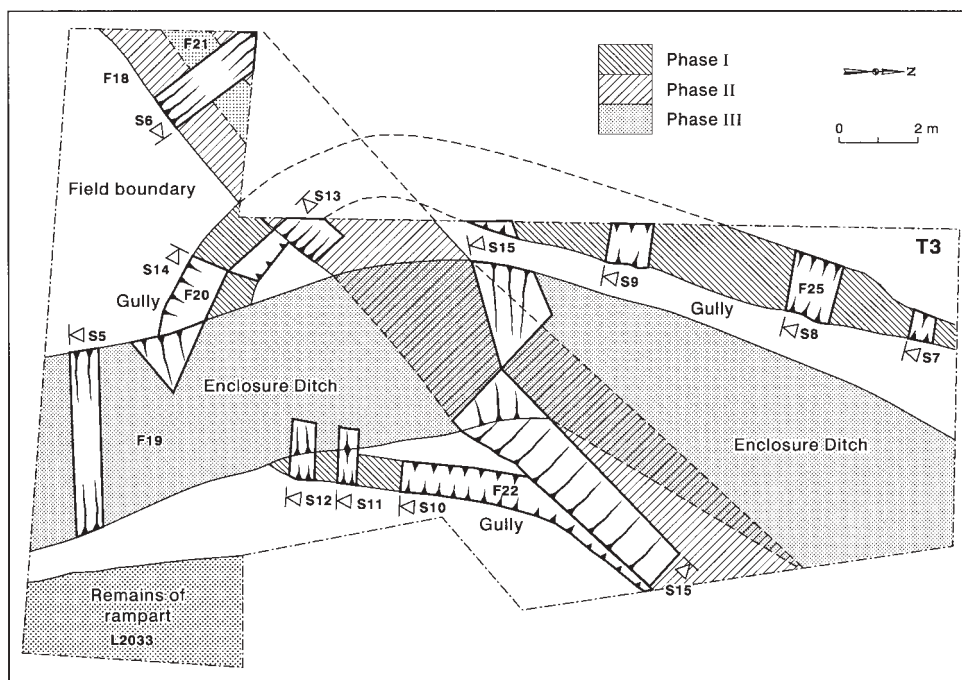


Figure 11: The rear of the rectilinear enclosure

The Enclosure and its Relationship to the Linear Boundary

Trench 3 was placed at the rear of the enclosure with the aim of determining the stratigraphic relationship between the enclosure ditch and the linear boundary, which is linked to a larger system of linear boundaries. With the removal of the topsoil and subsequent excavation of the features it became apparent that three main phases of activity were present in the area (Figure 11).

The earliest phase, phase I, saw the creation of what is probably a single gully, three segments of which were identified (F22, F20 and F25). Approximately 6m of gully F22 were exposed in plan. The gully has a 'U' shaped profile and is c. 0.7m in width, and c. 0.25m deep. At both the northern and southern ends the gully appears to curve. It has been cut by both the enclosure ditch (F19) and the linear boundary (F18). A c. 2.75m curving length of gully F20 was also exposed which, when sectioned, showed a shallow profile c. 1.4m wide and c. 0.3m deep. Like F22 it had been cut by both the enclosure ditch (F19) and the linear boundary (F18). The final gully encountered was F25. Approximately 9m of this feature were exposed. The gully appears to run parallel to the enclosure ditch and narrows at its northern end. The profile was only c. 0.2m in its deepest sections. In this sector no intersection between the enclosure ditch and the linear boundary could be established within the excavated area, but a good case can be argued for its association with the other gullies identified.

Phase II witnessed the construction of the linear ditch (F18). This was later than the phase I gully, which it clearly cuts. Its relationship to the enclosure ditch was established by a carefully placed section at the mid-point of intersection of the two features (S15). The section indicates that the enclosure ditch cuts the fill of the linear ditch, demonstrating that the linear ditch and its fill are an earlier feature (Figure 12). The linear ditch was also excavated in its western section to establish its profile and stratigraphy. This revealed a flat bottomed profile c. 2.4m wide by c. 1.4m deep. The fill of the

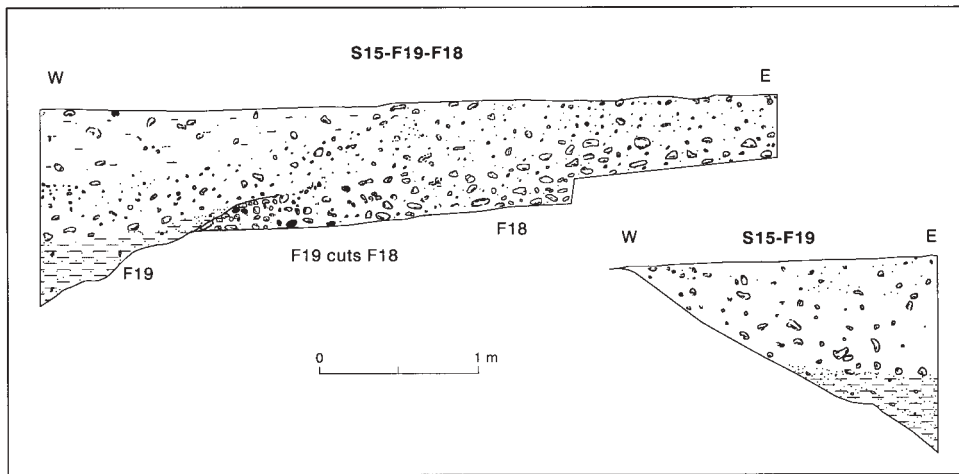


Figure 12: Section 15

ditch appeared to represent a natural in-fill of gravel and sand. A later feature (F21) was also encountered in this section which cut into the upper fills of the linear ditch. The extent of this feature is not clear, since it could only be detected in section. It may, therefore, represent a localised phenomenon. Its relationship to other features in the trench is also obscure, though it appears to be later than the linear ditch. It may either have been cut before the construction of the rectilinear enclosure or at the same time.

Phase III saw the construction of the rectilinear enclosure boundary and associated rampart, the remains of which were detected in one portion of the trench (L2033). The enclosure ditch (F19) could be seen cutting the phase I gully in section, and the phase II linear ditch (F18) in Section 15. The enclosure boundary which dates to the Late Pre-Roman Iron Age/Roman Iron Age transition must, therefore, be the latest feature.

At the time of the enclosure boundary's construction the linear ditch had already fallen into disuse, most of its fill apparently representing natural deposition. The upper layers, however, may represent some intentional back-filling, when the rampart was constructed. Immediately before the construction of the rectilinear enclosure, it appears likely that the linear ditch was an observable feature on the former ground surface. This probably explains why the rectilinear enclosure utilises the line of the earlier ditch for its northern boundary. In this sector, the linear ditch appears to have been completely removed in the later phase of construction, and no trace of it was detected in the section placed across the enclosure ditch in trench 2.

The Linear Boundary System

Although a partial sector of the linear boundary system had been examined during the excavation of the rectilinear enclosure, during August 1997 another small section was excavated with the aim of retrieving secure dateable material. The section selected for excavation was the western boundary ditch of the possible track or drove way. The excavated section was located adjacent to the ring ditch, which excavation has indicated is a Medieval construction (Gregory, *forthcoming a*). On excavation the feature proved small, being c. 1.2m wide by c. 0.4m deep (Figure 13). The profile was a shallow 'U' shape. Carbon was recovered from the base of the feature, which produced a radio carbon date of 2090 ± 50 BP (uncal) (BETA – 129207).

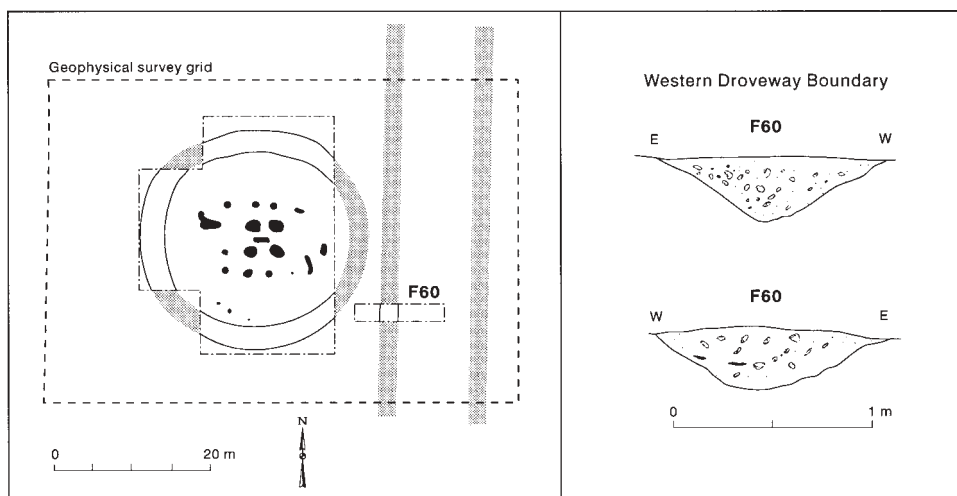


Figure 13: The 'drove way'

Discussion

Excavation at Hayknowes Farm, whilst allowing some discussion of later prehistoric settlement of this area, inevitably creates more questions than can be answered by a small-scale programme of research. One of the primary aims was to formulate a chronology for the different elements of this crop-mark complex. Although a cursory chronology has been constructed, the refinement of it is hindered by some intractable problems. These include the limited number of samples that were suitable for radiocarbon dating and problems in calibrating the subsequent dates, due to ambiguities in the calibration curve which produce a very wide possible date range (Table 1). This means that the continuous sequence of activity originally envisaged by the author is probably best viewed as a series of - occasionally overlapping - discrete, fragmentary events within an extremely dynamic landscape.

Lab No. (BETA -)	Context	Uncal. date	C13/C12 Ratio	Cal. date 1 sigma	Cal. date 2 sigma	Intercept Date
97285	<i>Quercus</i> heartwood from base of F55 – Double- ditched settlement	2240±90 BP	-25.0 o/oo	390-180 BC	415-45 BC	360 BC 280 BC 250 BC
97286	Black thorn from the base of F63 - Double-ditched settlement	2010±60 BP	-27.4 o/oo	50 BC - AD 70	165 BC - AD 120	AD 5
129207	Base of the 'trackway'	2090±50 BP	-25.0 o/oo	180-45 BC	340 BC - AD 20	100 BC
129208	Base of F17 - Rectilinear Enclosure	1950±50 BP	-25.0 o/oo	AD 5 - 95	50 BC - AD 140	AD 60

Table 1: Radiocarbon dates from Hayknowes Farm.

On the evidence of the uncalibrated dates alone, the earlier site in the crop-mark complex seems to be the large double-ditched enclosure. The radiocarbon samples obtained from the inner ditch and the entrance gatepost indicate Mid/Late Pre-Roman Iron Age date. Some caution is required, however, as the contemporaneity of these features is not entirely secure. It is possible that the gateposts and palisade are an earlier phase of enclosure, which may partially explain the earlier radiocarbon date obtained from the southern gatepost as compared with the radiocarbon date from the inner ditch. It seems more probable, however, that this earlier date is a result of dating the post heartwood, and that all features at the entrance are attributable to a single phase of construction. The duration of these boundaries is also unknown, but again it is possible that the rapid back-filling event evident from the ditch profiles also occurred during the later stages of prehistory.

Perhaps the most significant feature to arise from excavation at this enclosure, however, is the hut circle. Unfortunately, it is not possible to directly date this structure, though it probably falls within the calibrated chronology provided by the radiocarbon samples from the entrance to the site. This is confirmed, in some measure, by the architecture of the structure, since the use of a ring-groove to support the walls of the house is a common feature of later prehistoric dwellings throughout lowland Scotland, particularly in the south-east (cf. Hill, 1982). The use of an internal square timber frame as a roof support, however, together with the presence of opposing entrances in the Hayknowes hut circle appear to be novel features and may reflect a local architectural tradition confined largely to the south-west. Further excavation will clarify this, of course, but it is worth noting the discovery of similar house types at Rispaan Camp and Carronbridge where hut circles of later prehistoric date, with opposing entrances, were also discovered (Haggarty & Haggarty, 1983; Johnston, 1994).

The spatial form and orientation of the Hayknowes hut circle may also be significant. One of the most prominent features is the eastern entrance which is emphasised by a porch forming the depositional context for a large stone inscribed with a petroglyph. The use of this stone, inscribed with a relatively crude cup-mark design, may also be connected to a need to appropriate the 'past' *via* the use of earlier symbols in a manner discussed by Hingley (1992) for other sites in Scotland.

Another feature of the structure is the east/west axis created by the opposing entrances. The apparent significance of easterly aligned entrances into round houses, and the importance of an east/west axis is not a novel feature of this period. As various writers suggest, it is common for the entrances of later prehistoric houses to be overtly emphasised, and in the majority of cases these entrances are aligned in an easterly direction (cf. Parker-Pearson, 1996; Oswald, 1997). The reason behind this common spatial trait is not clear. The most obvious explanation is that it originated out of practical considerations, with an easterly orientation favoured because it avoided the prevailing westerly winds. It seems likely, though, that this initial act of pragmatism became embellished by wider, shared, cosmological beliefs (Parker-Pearson, 1996). These may in part have been connected to a series of symbolical connotations associated with the cardinal directions, movements of the sun and moon, or in this case prevailing winds.

These apparent alignments may be extended to the settlement unit as a whole. The excavated western entrance into the settlement is found on exactly the same axial alignment as

the hut circle. Due to the nature of the gateway arrangement this 1.3m entrance is relatively small for a settlement of this size and would seriously restrict access for groups of people, animals and wheeled vehicles. It may, therefore be only a minor or secondary entrance which mimics the minor westerly entrance found in the hut circle. If this is correct, of course, a larger threshold should be found on the eastern side of the settlement, as the evidence from the hut circle suggests that this was the 'correct' or the 'formal' way to enter both the individual dwelling and the settlement as whole. Unfortunately in this area the settlement boundaries have been masked by the presence of the modern farmhouse. The predicted position of this major entrance must, therefore, remain a matter of conjecture.

It is possible that some portions of the extensive boundary system found to the east of Hayknowes Farm are contemporary with the double-ditched enclosure. This is suggested, in part, by the radiocarbon date from the possible track or drove way, and also by the stratigraphic relationship between the rectilinear enclosure and part of the linear boundary. The date of the complete system of linear boundaries, however, is still not clear. It seems likely that these boundaries, now visible as crop-marks extending towards the River Annan, grew by a process of accretion with certain elements falling into disuse and other elements being constructed over a considerable period of time. On the strength of the dating evidence this system was possibly initiated during the Pre-Roman Iron Age, but it appears to have evolved into the Roman period at least. This might explain why one of the linear boundaries post-dates the construction of the Roman camp at Annanfoot, where it appears to respect the south-west corner of the fortification (RCAHMS, 1997).

The precise function of the boundaries at Hayknowes is not clear. Although fragmentary they appear to form large enclosures reminiscent of those recorded in other areas of Dumfriesshire. These include the extensive enclosure systems recorded at the upland sites of Castle O'er and Craighousesteads Hill, in Eskdale, and those discovered by aerial photography which are linked to the settlements at Whinnyrig and Calvertsholm, on the northern Solway plain (RCAHMS, 1997). It has been argued that these systems, which may also be late prehistoric in date, represent cattle corrals (Mercer, 1995; RCAHMS, 1997). By analogy, therefore, it seems feasible that elements of the linear boundaries around Hayknowes Farm were also used for the containment of livestock and that the track way functioned, as the RCAHMS (1997) suggest, as a drove way.

After the establishment and abandonment of at least certain portions of the linear boundary system the rectilinear enclosure was constructed. The single radiocarbon date obtained from this enclosure and its calibrated date-range make it difficult to determine whether it followed, or was partially contemporary with, the large double-ditched enclosure. Although an approximate date may be assigned to the rectilinear site, the portions of the excavated interior allow little more to be concluded. The only internal features encountered were the remains of the entrance gateposts. It is possible, however, *via* analogy with other rectilinear sites of this period, that the remaining unexcavated sectors of the enclosure contain evidence of occupation. It is also possible that a proportion of the linear boundaries found within the palimpsest of features further to the east of the enclosure were also constructed during the occupation of the rectilinear enclosure.

At a broader, regional, level the rectilinear site has many parallels with the rectilinear settlements which have been excavated and recorded in south-west Scotland, the Borders

region, north-east and north-west England (cf. Burgess, 1984; Macinnes, 1984; Higham, 1986; Bewley, 1994). In south west Scotland these excavated sites include Bombie, Kirkcudbrightshire (Anderson, 1947), Craigmuirie, Nithsdale (Clarke, 1951), and Blacketless, Annandale (Truckell, 1958). None of them produced direct dating evidence or indications of internal features. Slightly more secure evidence is found at Rispaig Camp, Whithorn (Haggarty and Haggarty, 1983), and from the series of rectilinear enclosures located at Carronbridge, Nithsdale (Johnston, 1994). At both of these sites extensive occupation was recorded spanning the Late Pre-Roman Iron Age and Roman periods. The rectilinear enclosure at Hayknowes may, therefore, represent another example of this settlement type, which is relatively common across the northern Solway plain, and in the river valleys of Annandale and Nithsdale (RCAHMS, 1997; Gregory, 1998).

Conclusion

The research at Hayknowes Farm attempted to define the date and function of certain elements of the extensive crop-marks found in this small, but unique, coastal landscape. Excavation suggests that many of the visible features date to both the later stages of prehistory and to the early Roman period, and it would appear that within this locale, at least, a thriving Late Iron Age 'centre' became established. The evidence suggests that an integral feature important to the success of this early community may well have been the control of agricultural resources and, in particular, of livestock. Hayknowes, therefore, offers further evidence for an extensive and perhaps hierarchical later prehistoric settlement pattern which is now beginning to emerge on the northern Solway plain (cf. RCAHMS, 1997; Gregory, 1998; *forthcoming b*).

Acknowledgements

This research would not have been possible without the permission and enthusiasm of Alan Thompson and the Hoddum and Kinmount Estate who kindly allowed access to the land. A great debt is also owed to the students and volunteers from the University of Manchester without which the survey and excavations could never have been completed. They include: Hannah Bradbury; Gary Burns; Richard Cherrington; Helen Croft; Clare Davis; Tim Ellis; Pat Gilbert; Simon Harris; Chris Healey; Graham Mottershead; Pete Owen; Paul Thomas; Julian Thorley; and Philip Wooldridge. In Dumfriesshire Mr A E Truckell and Mr W F Cormack's knowledge of the region proved invaluable, as did the help and advice of the Regional Archaeologist for Dumfriesshire, Jane Brann. During the course of the excavations Archie Hamilton of Barrasgate Farm must also be thanked for both machine hire and accommodation. At the University of Manchester, in the School of Art History and Archaeology, Keith Maude provided advice on ground survey techniques, particularly geophysics, while the late Professor Barri Jones kindly allowed access to the North Solway aerial archive. In the School of Geography the support of Dr Mike Robinson and Dr David Shimwell is greatly acknowledged, as is the help of Graham Bowden who kindly produced the figures. The research was undertaken during the tenure of a British Academy Studentship, whilst grants from the Mouswald Trust, the Dumfriesshire and Galloway Natural history and Antiquarian Society, and the Palaeoecological Unit, University of Manchester, allowed the implementation of the excavation and post-excavation analysis.

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THE IMPACT OF AERIAL PHOTOGRAPHY ACROSS THE LOWLANDS OF SOUTH-WEST SCOTLAND

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Abstract

This paper reviews the results of aerial photographic recording of archaeological sites revealed by cropmarking in south-west Scotland. A consideration of patterns of visibility and recovery provides a preamble to a review of the general trends this material reveals. These results have dramatically changed our understanding of prehistoric occupation in the region, in particular of early prehistoric ceremonial and funerary monuments and later prehistoric settlement. Early prehistoric cursus monuments have been recorded in large numbers for the first time, and the pit-defined circles at Dunragit add another dimension to the known ceremonial monuments. The discovery of large numbers of prehistoric settlement enclosures across the lowlands has been equally significant. Of particular note are the numerous rectilinear settlements and the often spectacularly detailed records of timber round-houses and palisades. Case studies on individual sites include: Early prehistoric ceremonial monuments at Curriestanes (cursus), Dunragit (pit-defined circles), West Logan and Trailflat (barrows); Later prehistoric settlements at Kirkland, Garphar, Thornhill, Cairn Connel Hill and East Galdenoch.

Introduction

The south-west of Scotland is not generally recognised for the quality or quantity of archaeological sites recorded as cropmarks on aerial photographs. Indeed, a recent review of the Iron Age notes that aerial survey here has made less impression than in the eastern lowlands of Scotland (Armit and Ralston 1997, 187). Relatively speaking, this is undoubtedly true, but a continuing programme of aerial reconnaissance, primarily by RCAHMS, has yielded spectacular results that should have a fundamental impact on our understanding of prehistoric settlement in the lowlands of the south-west. Some of the results of this aerial survey programme are presented here by way of illustration, against a background to the general trends in settlement that they reflect over a period from the Neolithic to the mid 1st millennium AD.

Patterns of Visibility and Discovery

Dumfries and Galloway can be divided into two broad landscape types: an upland zone of largely unimproved ground, and a lowland zone with a predominance of pasture and limited amounts of arable. Despite large-scale afforestation, intermittent programmes of survey (RCAHMS 1987; 1994; 1997) in the upland areas have highlighted the survival of relict prehistoric and later landscapes. In contrast, the survival of earthworks in the lowlands is generally limited to substantial monuments that have resisted the depredations of



Figure 1. Cropmark sites to the east of Soulsat Loch shown against a background of arable land and forestry. 1:30,000, Crown Copyright.

agriculture, in particular during the 19th century when many sites must have been razed. The formation of cropmarks and their recording from the air is thus of fundamental importance in retrieving information on the distribution and form of past activity in parts of the landscape that are the most fertile and probably the most favoured for settlement. An emphasis on pasture and a wet climate, however, have curtailed the opportunities for cropmark formation outside fairly limited areas of arable on free-draining sands and gravels. The extent to which the archaeological record for the lowlands is conditioned by the extent of arable land can be seen in the illustration of an area to the east of Stranraer (Figure 1). The majority of sites have been recorded in arable fields, but a scatter, visible as parchmarks, hint at the large numbers of ploughed-down monuments that are likely to be hidden under pasture.

The relatively high rainfall and the temperate climate enjoyed by the south-west militate against the differential growth that produces cropmarks, and in most recent years cropmark formation has been negligible. However, in years of unusual weather patterns, cropmarks may appear in considerable numbers. One such year was 1992, when a country-wide drought during June had its most pronounced effect on crop growth in the south-west, producing evidence for even relatively slight timber structures (RCAHMS 1996, 5). Some of the photographs reproduced here were taken during that season and, while the sites may have been recorded previously or since, the definition of features seen then has rarely been equalled. However, while the images of cropmarks recorded on aerial photographs can be very beguiling in their apparent simplicity and clarity, excavation has shown that they are invariably more complex than initial interpretation suggested. While this is an important limitation to the detailed analysis of cropmark material, it should not undermine the value of the morphological analysis of sites revealed in this way. Indeed, such analysis and consequent classification is an essential precondition to excavation if they are to be interpreted in a wider context.

A dichotomy is apparent in the character of the cropmark monuments, broadly reflecting patterns that are well known amongst their upstanding counterparts. While the major monuments of the Neolithic and Bronze Age are largely ritual and funerary, in later periods evidence for settlement predominates. This dichotomy is by no means absolute, but it is reflected in a rough division of the cropmark material under discussion here into two categories, one comprising prehistoric ritual sites, the other later prehistoric settlements. Each of the main sections is introduced by a short discussion of the monuments to provide a context for the case studies that follow. This, necessarily simplistic, view does not adequately account for the blurring of distinctions between the sacred and the secular, nor the changing roles that a monument may have fulfilled during its lifetime. The ambiguities of classifying and dating individual sites should also be born in mind.

The difficulties of classification are exemplified by a large ditched enclosure revealed by cropmarking on the raised beach above the east shore of Loch Ryan (Figure 2; NX06SE 28). The south-west sector of the enclosure has probably been removed by the construction of the road and railway line, but it may originally have been oval on plan, measuring about 150m from north-west to south-east by at least 100m transversely, with an entrance some 16m across on the north-east. The ditch is broad and its edges are irregular, suggesting in places that it may be segmented. A scatter of indeterminate cropmarks litters the interior



Figure 2. Large ditched enclosure at Dalminnoch, seen from the east with the A77 beyond.
RCAHMS B 79502, 1992.

and the area immediately beyond the ditch, while parallel ditches intersecting the north side may be of relatively recent date. The age and function of this enclosure are unknown. On the one hand it may be an early prehistoric ritual enclosure, on the other a later settlement. Excavation is unlikely to take place unless the site is threatened by development, and further morphological analysis offers the only route forward, with the possibility that it belongs to a grouping of superficially comparable enclosures occurring over a much wider area.

Early Prehistoric Funerary and Ritual Sites

The south-west of Scotland is justifiably well known for the variety and quality of its upstanding early prehistoric funerary and ceremonial monuments. Galloway, for instance, has one of the main concentrations of Neolithic chambered tombs in Scotland (Henshall 1972) and the quantity of Bronze Age round cairns is equally striking (Yates 1984). Numerous individual standing stones, four-poster settings, and stone circles have been recorded, including the fifth largest in Britain, the Twelve Apostles (Burl 1976, 102). Rock art is well represented, in the shape of a great number of cup- and ring-marked stones.

The contribution of aerial photography to our understanding of the early prehistory has on one hand been to confirm the distribution of Neolithic and Bronze Age monument types. It has also, more importantly, recorded other types of monuments previously unrecorded in the south-west. This brief discussion will go through the main monument categories in turn,

emphasising the important role of aerial photography both in discovery but also in the interpretation of the Neolithic and Bronze Age of the south-west.

Aerial photography has had little impact on our knowledge of the distribution of megalithic sites such as chambered cairns and long cairns. It is unlikely that the demolished and ploughed-over traces of such tombs or any pre-megalithic mortuary structures would be visible as cropmarks in the lowlands. Nevertheless what appear to be the flanking ditches of a long barrow have been recorded as cropmarks at Barndennoch, Nithsdale (Figure 3; NX88NE 23). These lie on the leading edge of a broad terrace set above the west bank of the Nith and are aligned roughly east-west and define a barrow some 50m in length and about 15m in breadth. The southern ditch appears to have run the length of the barrow but the northern is divided into two segments. To the north-west are two ring-ditches, each with a single causeway on the south-east side; the terminals on either side of the causeway on the northern of these ring-ditches are staggered. The character of these ring-ditches is not known and, while they differ in form from other round-houses known in the south-west (see for instance Figures 9-13 below), a domestic function is the most likely explanation.

Amongst later burial monuments, namely Bronze Age round cairns and barrows, aerial photography has made a more significant impact. Whilst the stone cairns lie on unimproved land, there are examples surviving in the lowlands (e.g. Yates 1984), and aerial photography has revealed a complimentary range of ploughed-down earthen barrows. The identification of a cropmark ring-ditch as a barrow (as opposed to a round-house) is fraught with

difficulty, particularly if the mound has been ploughed away. The presence of a more or less central (burial) pit is perhaps the best indicator, but examples are rare; for instance in the whole of eastern Dumfries-shire only two examples have been recorded (RCAHMS 1997, 105). However, there is a series of ring-ditches that differ from the similarly sized cropmarks of round-houses (below) by virtue of sharply defined unbroken ditches; some of them are likely to be barrows. This group includes several comprising two concentric ditches and it is likely that in these cases a relatively small barrow has been enclosed within a larger mound in a second phase of con-

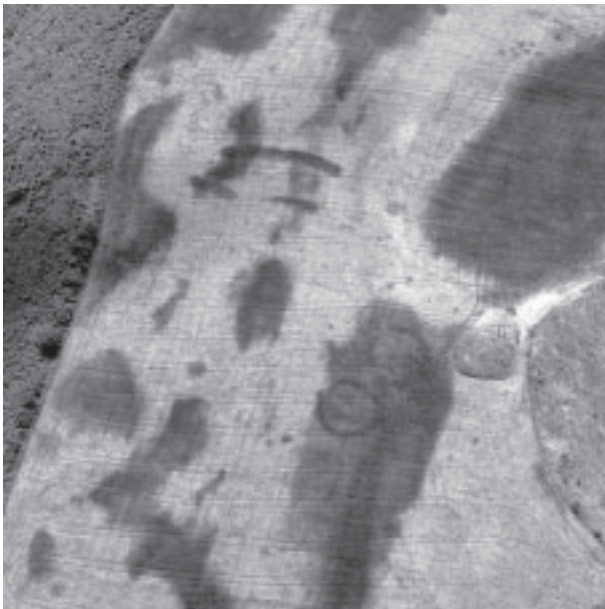


Figure 3. The parallel ditches probably flanked a long barrow aligned from east to west and overlooking the west bank of the River Nith, near Barndennoch. The two ring ditches in the lower half of the photograph may mark the locations of round-houses. RCAHMS DF 2157, 1977.

struction. Recorded evidence of this phenomenon is rare across southern Scotland (see below; RCAHMS 1997, 106). Composite cairn construction is also known in the south-west (Bate 1909; Yates 1984, 30), and these multi-phase cairns indicate that remodelling of burial mounds was part of a wider pattern.

A more spectacular example of the importance of aerial photography has been in the identification of the cropmarks of ceremonial enclosures, where upstanding remains include only stone circles and two henge monuments. The distribution of the latter has not been increased by aerial photography however, with none yet discovered in Galloway. This may simply reflect the difficulty of interpreting the function and date of cropmark enclosures (of which there are many), though few sites display the characteristic circularity, broad ditches, external bank and wide entrances of henges. The best-preserved examples are two earthwork sites in Dumfriesshire, Pict's Knowe and Broadlee, the former only recently interpreted as a henge (Barclay and Fojut 1990), the latter initially identified by aerial photography (Harding and Lee 1987). Pict's Knowe, which has a single entrance in the east, measures about 23m in diameter within a ditch up to 8m across. It has recently been excavated and shown to have a long history of use. Stake-defined structures pre-date the Neolithic enclosure, while later activity on the site is represented by traces of metal-working and the re-cutting of the ditch in which a curious wooden implement was found (Thomas 1998, 149-51). Broadlee is considerably larger, measuring about 50m by 45m internally. The bank and ditches are heavily degraded by ploughing but cropmarks have revealed the broad ditches. Most of the other henge monuments that have been tentatively identified are little more than cropmark ditched enclosures with no indication of the location of any bank, and these may include Kirkland, Nithsdale, with a diameter of some 25m to 30m (see below). Amongst the large number of indeterminate enclosures that defy more specific classification there may be other Neolithic or Early Bronze Age, 'ritual enclosures'.

A group of Neolithic 'ceremonial enclosures' that are more easily classified are the cursus monuments which, in comparison with henges, are commonplace. These extremely elongated rectangular enclosures were until recently relatively unknown outwith southern England. Sixteen have been identified in Dumfries and Galloway out of a total of over fifty discovered in southern and eastern Scotland (Brophy 1999). The majority of these are known only as cropmark sites identified by aerial photography. The sites classified as cursus monuments display considerable variability, nowhere better illustrated than in the south-west. In terms of scale they range from tens of metres to hundreds of metres long, with a variety of enclosing terminal shapes and causeway locations. The rectangular form is defined either by a near-continuous ditch and internal bank, or by alignments of pits which originally may have been left open or held upright timbers.

The largest known ditch-defined sites are concentrated in the Nith valley around Dumfries, namely Curriestanes (see below), Gallaberry and Holywood 1 and 2, all several hundred metres long. The latter two were partially excavated in 1997, revealing complex internal post settings not fully visible on aerial photographs (Thomas 1998). In the interior of the northern cursus excavation recorded three parallel post-alignments running along the interior of the ditch, which either predate the earthwork enclosure or were part of an elaborate revetment of the internal bank. Some cursus-like monuments are narrower than those mentioned above, leaving internal space for only a single bank, comparable to the bank barrow

tradition. The earthworks at Eskdalemuir identified as a cursiform monument by the RCAHMS (1997) give a good indication of what these sites may have looked like.

The identification of presumably more temporary, wholly timber, structures is a still greater testament to the role of aerial photography. Seven pit-defined cursus monuments have been recorded in Dumfries and Galloway, and this type tends to be smaller in size than the ditched sites. Discussions of such enclosures in eastern Scotland (Barclay in Kendrick 1995; Brophy 2000) have emphasised the complex phasing of such sites, and the cropmark evidence suggests these themes were apparent in the south-west. One such cursus, Holm (near Holywood) was excavated in 1998, recovering a sequence in which timbers were erected, burnt and removed, in a repeated cycle over an unknown period of time (Thomas 1998, 153-4).

The use of pits and timbers to define enclosures and structures is by no means restricted to cursus monuments and numerous other settings of pits are now being recorded as cropmarks. At one end of the scale there is a four pit setting some 8m to 10m across at Garleffin, Ballantrae (NX08SE 34), at the other the huge enclosure some 130m in diameter at Dunragit (see below). The four pit settings may well be equivalents of the various forms of four-poster stone settings visible at Park of Tongland (NX65NE 6; McCullagh 1987), Glenterrow (NX16SW 8) and Bagbie (NX45NE 5). While small pit-circles may be comparable with the smaller stone circles, the large enclosure at Dunragit has no megalithic equivalent nor any parallels in the cropmark record of the south-west; indeed it has a greater diameter than the Twelve Apostles stone circle. To generalise, it could be argued that the relatively shallower depths required to set a standing stone as opposed to a large timber would generally preclude the former from appearing in the cropmark record.

In addition, other pit-defined structures have been recorded, with a large concentration south-east of Stranraer in the Dunragit area, including avenues and single pit-alignments. These avenues or roughly parallel pit-alignments are noticeably narrow relative to their length than cursus monuments. For instance, the avenue at Dalswinton Mains, Nithsdale (NX98SW 47), comprising pairs of pits spaced about 8m apart, extends for a distance of at least 50m, passing between a hengiform enclosure and a ring-ditch. Such alignments are difficult to date using aerial photographic evidence alone and, although many may well be Neolithic in origin, evidence from excavations elsewhere in Scotland suggests a variety of dates and functions (e.g. Carter 1996, 47-50).

A wide variety of Neolithic and Bronze Age ritual monuments is represented in the lowlands of the south-west, despite the vagaries of cropmark formation and aerial reconnaissance. The large number of cursus monuments and similar rectilinear enclosures contrast with the few henges, though the problems of interpretation inherent with sub-circular cropmark enclosures may be partially responsible for this under-representation. Whilst for such reasons we should always be wary of projecting regional patterns from cropmark evidence, the cropmark record in the south-west has opened up new areas of Neolithic activity to us, and hints at the subtleties of construction and the significance of place in the resultant monumentality.

The remarkable complex at Dunragit (described in more detail below; see also Figure 6) demonstrates the potential diversity of such enclosed sites. Excavations at some of these

sites have emphasised the longevity of use, both during the active life of the monuments, and as continuing reference points in the landscape in the centuries or millennia after the reasons for their construction may have been forgotten. At other sites sequences between monument types are hinted at that will be valuable in establishing broad chronological schemes in which to order the undated sites. At Holm, for example, the pit-defined cursus was cut by, and cuts, a series of ring-ditches in a concentrated area of features towards the south-east end. In turn, an avenue of pits cuts the earlier pit-defined cursus (Thomas 1998). At Dunragit timber circles, pit-alignments, avenues, ring-ditches and small barrows intersect and overlap. Further, the intermingling of characteristics used to define these monument types highlights the inadequacy of some of these classifications, and some of these themes will be explored in the following case-studies (Figure 4).



Figure 4. Locations of case studies.

Case Studies

Curriestanes, Cursus Monument

NX97NE 85, NX 9575 7510 to NX 9612 7517

One of the most visually impressive cropmarks of a cursus monument in south-west Scotland has been revealed on level ground to the south-west of Dumfries. It is bisected by the A7111 and is partly built over (Figure 5). By far the largest cursus monument in the study area (c.3 hectares), its visible length is about 300m and it varies from 83m to 98m in width within a broad, irregular ditch. The cursus is aligned from east to west and, while the position of the west end has not, so far, been recorded, the east end is clearly defined. Here, the sides begin to converge from a point some 65m from the eastern extent of the cursus before curving sharply round to form a squared terminal. A causeway measuring 5m across interrupts the centre of the terminal. (Where causeways through cursus ditches have been recorded elsewhere they tend to be located along the sides). The location of the western end is unclear; the southern ditch disappears beneath a farmstead while houses and the



Figure 5. Aerial view of Curriestanes cursus looking west along the monument, the scale of which is demonstrated by comparison with adjacent buildings. The irregularity of the ditch is particularly clear in this image. RCAHMS B 23412, 1989.

adjacent golf course obscure the line of the northern ditch. The land becomes increasingly undulating towards the west however, and the cursus may in fact terminate shortly after it is lost from view. A cropmark on the golf course has been interpreted as the western terminal (Murray 1994, 398), though close inspection suggests that this is a fortuitous product of grass cutting. It is also conceivable that the enclosure was open at this end.

The cursus ditch is remarkably broad and irregular, and detailed examination of the southern side (the left side on Figure 5) reveals a very irregular line to the ditch edge that in places displays sharp kinks. Changes in the width and density of the cropmarking indicate a variation in the depth and breadth of the ditch, and these combined characteristics suggest that the ditch may have been cut in a piecemeal fashion, perhaps by different work-gangs or over an extended period of time. This 'segmentation' of boundaries, implying a monument evolving over a period, is a characteristic of cursus sites across Scotland (Armit 1993). It is shared by many cropmark examples and can be seen both in ditch- and pit-defined monuments (Brophy 1999, 2000). It is particularly marked in the central mound and flanking ditches of the Cleaven Dyke, Perthshire, an earthwork monument of Neolithic date (Barclay and Maxwell 1998). Similar observations have been made by the excavators of cursus monuments at Douglasmuir, Angus (Kendrick 1995) and Bannockburn, Stirling (Rideout 1997).

While cursus monuments are rarely isolated from other monuments, this appears to be the case at Curriestanes, *contra* Murray (1994). Indeterminate cropmarks have recently been recorded just to the north of the cursus, but these may be modern and relate to the golf course. Otherwise, the nearest feature is a penannular ring-ditch situated 210m to the south of the eastern terminal.

Dunragit, Cropmark Complex

NX15NW75, 76, NX 148 573

This cropmark complex (Figure 6) lies to the south of the village of Dunragit and briefly attracted media attention in 1999 when a long-term excavation project got under way. Recorded for the first time in the exceptional year of 1992, subsequent excavation has demonstrated how selective even the best cropmarks are in registering negative features dug into the subsoil.

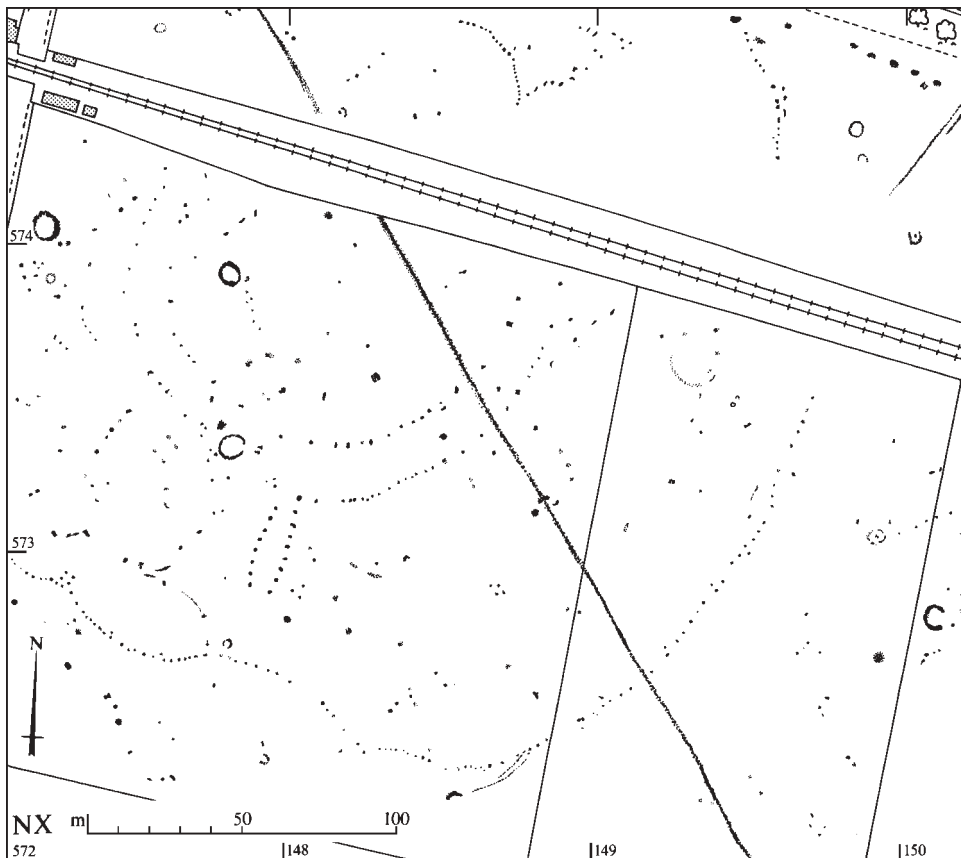
The focus of the complex is a concentric pair of pit-defined enclosures, the larger measuring 130m in diameter. On the south, the outer circle meets an avenue of pits, its sides set about 8m apart but bowing outwards along its length of at least 28m. The railway line to Stranraer cuts across the enclosures and, to the north of the railway, cropmarks of very closely spaced pits lie on roughly the projected line of the outer ring of pits. The first season of excavation in this field has indicated that both the outer and the inner rings extend around the north and that the pits contained large, probably free-standing, timbers; a date in the Neolithic is indicated by diagnostic pottery (Thomas *et al.* 1999).

Outside the concentric enclosures can be seen an irregular, sinuous alignment of pits that lies beyond the avenue on the south. These pits are disposed in a series of arcs and may serve to define a still larger enclosure measuring about 280m across. There are three ring-ditches visible in the interior, as well as numerous pits, some of which form short alignments and possible square settings. Still more cropmarks have been recorded to the west, including an alignment of pits that extends from a penannular ring-ditch for over 100m (off the right side of Figure 6), and at least two small circular ring-ditches which may be barrows, each with a possible central burial-pit.

The recent excavations at Dunragit have confirmed the scale of the monument, and indicate that most of the pits held free-standing timbers as thick as telegraph poles. The apparently random distribution of circles and other features suggests that they are not all contemporary and that this place was revisited and reconstructed over long periods of time, a process involving the re-organisation of the enclosed spaces in different ways.



Figure 6. Aerial photograph (RCAHMS B 72870, 1992) and transcription (1:2500) of the cropmark complex at Dunragit. North is to the top of the transcription. The railway cuts across both images.



Similar pit-defined enclosures with adjacent avenues have been recorded in Scotland at Meldon Bridge, near Peebles, and Forteviot and Leadketty in Perthshire, though none is as complex as Dunragit. At Meldon Bridge (NT24SW 46) an arc of large pits extends from the north bank of the River Lyne, forming a C-shaped enclosure with an avenue leading off to the north-west. Excavation in the 1970s demonstrated that the pits held large timbers, while pottery and radiocarbon dates suggested a Neolithic date (Burgess 1976). At both Forteviot (NO01NE 28) and Leadketty (NO01NW 40) the enclosures form elements in more extensive cropmark complexes. Forteviot encloses at least one henge (St Joseph 1978), as does Leadketty. The latter lies immediately to the south of what may be causewayed enclosure and a scatter of Neolithic lithic material. More recently, a small pit-defined enclosure, which is sub-square on plan, has been excavated on Annieston Farm in Clydesdale, and it also appears to be of Neolithic date (NT03NW 61; Neighbour 1995).

The excavator of Meldon Bridge suggested a defensive role for the enclosure (Burgess 1976) because of the massive and solid nature of the boundaries. However excavations at Dunragit have as yet failed to find any evidence of fence lines between the large timbers suggesting a more porous boundary. Here a ritual role is more likely, perhaps providing a ceremonial focus for a mobile, and perhaps as yet unsettled, population, or, indeed, a relatively immobile but dispersed population.

West Logan, Ring-ditches and Barrows

NX 86 SW 5, NX 8056 6324

J K St Joseph recorded this cluster of ring-ditches as parchmarks in 1949 (Figure 7) on one of a series of pioneering sorties into Scotland on behalf of the Cambridge University Committee for Aerial Photography (CUCAP). These have been photographed from the air only once since, although in subsequent years occasional parching has been severe enough for most of the features to be visible on the ground. During the very dry summer of 1989 it was possible to produce a sketch map of the site, reproduced in a previous volume of these *Transactions* (Page 1989).

The photograph records the cropmarks of four ring-ditches situated on a knoll about 200m to the south-west of West Logan farmsteading, Kirkcudbrightshire. The largest single element in this complex of monuments is a striking pair of concentric ring-ditches, the inner about 16m in diameter and the outer some 35m in overall diameter, situated at the east end of the knoll. The outer ditch is markedly wider than the inner and, although the line of the inner circle fades on the north-east, both appear to be unbroken.

At the west end of the knoll there are two smaller ring-ditches; each is penannular in plan with a wide gap marking an entrance. The southernmost is situated on the south-facing slope of the knoll and has a relatively wide ditch; as such it may be a small henge. The second lies along the crest of the knoll from the concentric ring-ditch and opens towards them. A linear cropmark, presumably a ditch, intersects it on the west, and extends for over 20m. Near the west end of this ditch there is a very faint circular ring-ditch. The latter was not recorded by Page, but she identified another ring-ditch lying in a rough line to the north of the two penannular ring-ditches; annular in plan, this ring-ditch has not been clearly recorded on the aerial photographs.

Page (1989, 86) has argued that these ring-ditches are most likely to be components of a Bronze Age burial complex, and this interpretation has much to commend it. The unbroken concentric ring-ditches may mark the site of a large barrow, constructed in two phases with a small barrow subsumed within a larger mound. Such an interpretation might explain the relative faintness of the inner ring-ditch compared with the outer, and is supported by the identification of a low mound in this location by OS field workers in 1969. This barrow would have occupied a pivotal position on the end of the knoll and may have provided a focal point for a small complex of burial and other ritual enclosures, including the hengiform monument and at least one small barrow.

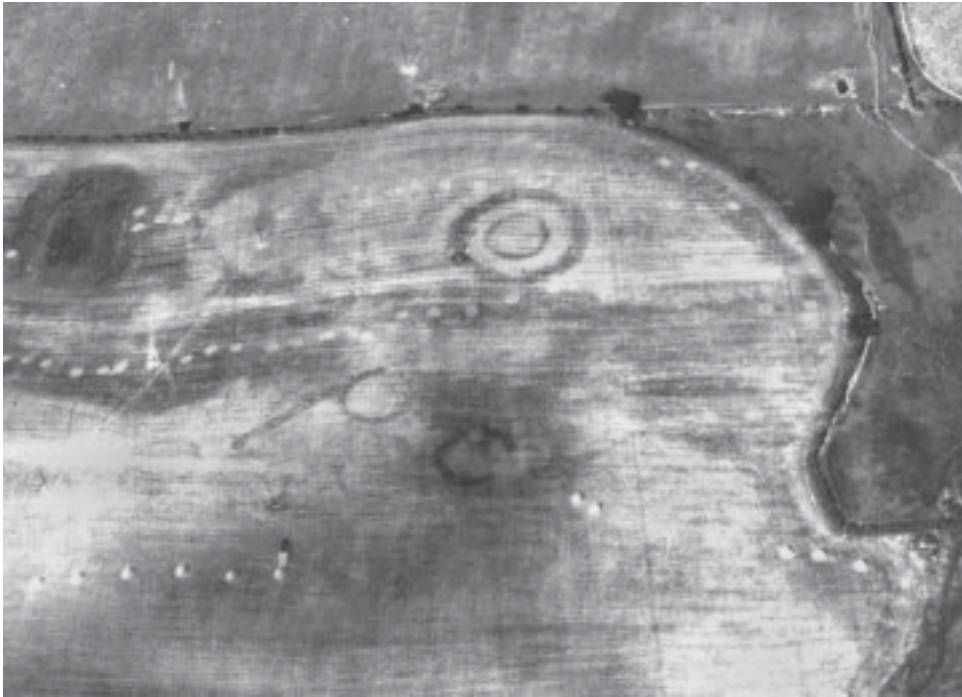


Figure 7. Parchmarks of barrows and hengiform enclosures recorded from the south in a cropped hay field near West Logan. CUCAP DV 74, 1949, © Crown Copyright:MOD

Whilst excavation evidence of composite barrows is relatively rare, the pair of concentric ring-ditches at West Logan is by no means unique. No less than three examples are known from the south-west - Kirminnoch, Wigtownshire (NX15NW 24); Barnhill, Dumfriesshire (NT00SE 54; RCAHMS 1997, Figure 96) and Little Bennane, Ayrshire (NX18NW 4) - whilst two others have been recorded further afield, at East Reston, Berwickshire (NT96SW 38) and Eckford, Roxburghshire (NT72NW 70). With the exception of Eckford the outer ring-ditch in each case is the broader, and at East Reston what may be a burial-pit is located off-centre within the inner ditch. At Eckford the ditch of the unbroken inner circle is about twice as wide as the outer. The outer ditch has a segmented appearance, and there is a clearly defined pit-circle within the inner ring-ditch, suggesting a complex sequence of activity.

Trailflat, Barrows

NY08SE 43, NY 051 848

A discrete group of four ring-ditches has been revealed by cropmarks (Figure 8) near Trailflat farmhouse to the east of Parkgate, Dumfriesshire. The apparent lack of entrances, the small size of the ring-ditches which range from 3m to 6m in diameter, and the breadth of the ditches relative to the diameter of the interior, suggest that although there are no visible burial-pits within the interiors they are ploughed-down barrows. (By comparison round-houses are generally larger and defined by narrow trenches, e.g. Figures 9-13, below). Three of the barrows are arranged in a row aligned roughly from east-south-east to west-north-west and the fourth, which is also the smallest, is slightly off-set to the north.

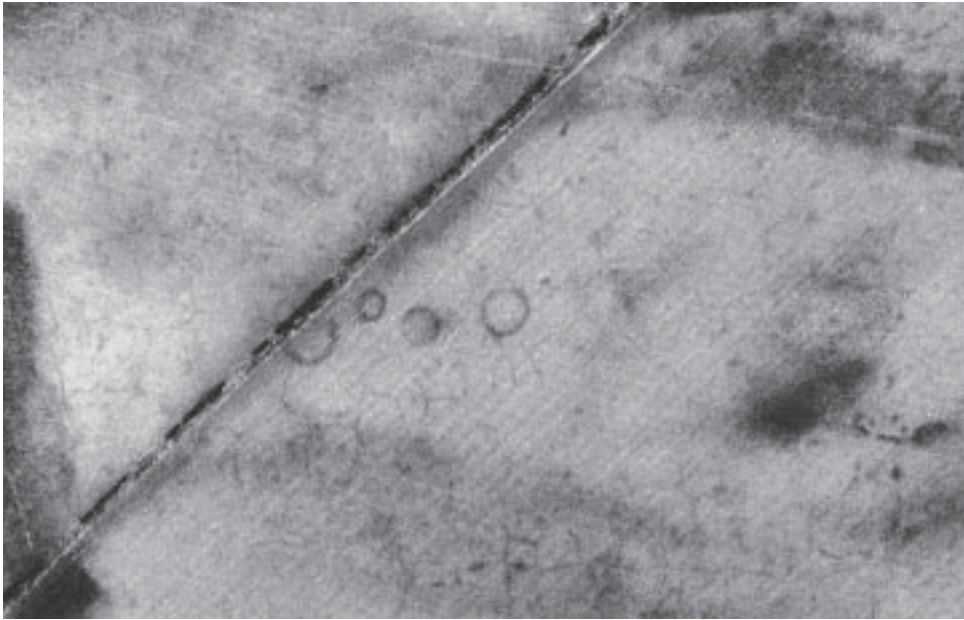


Figure 8. Cropmarks of four ring-ditches, probably barrows, at Trailflat, surrounded by fainter linear marks caused by ice-wedges. North is approximately to the top of the photograph. RCAHMS A 22542, 1984.

Groups of small ring-ditches are relatively rare in south-west Scotland but there are several analogous sites in Wigtownshire. At Little Lochans (NX05NE 42), for instance, a large, sharply defined, ring-ditch encloses an eccentrically-placed small ditched barrow, and three further small barrows, two of which may be square, lie just to the south. Another possible cemetery nearby, to the east of Cults Loch (NX16SW 21), comprises three annular ring-ditches which may be barrows, and a fourth in which a causeway interrupts the ditch.

Cemeteries of small barrows, each including at least a single square example, have been identified also near Gatehouse of Fleet and Thornhill, whilst further afield in the Border hills, there is a scatter of small ditched barrows surviving as earthworks. The majority of barrows are probably Bronze Age in date, but a consideration of the wider context of the small cemeteries recorded across southern Scotland and northern England suggests that many of the barrows may date to the Iron Age or early medieval period (Cowley 1996). While the classification of these sites is, admittedly, speculative, they point to the potential of this material to fill the lacuna in the evidence for later prehistoric burial.

Later Prehistoric Settlement

The impact of aerial photography on the distribution of later prehistoric settlements has been no less dramatic than on the pattern of earlier ceremonial and funerary monuments. While it has extended the scatter of small settlement earthworks known on the hills throughout the lowlands of Galloway, it has also revealed the existence of timber-built settlements of a type previously not well represented west of the Annan.

The nature of settlement during the later prehistoric period has not been established in

any detail west of Eastern Dumfriesshire (RCAHMS 1997), but general trends can be identified (e.g. Cowley 2000). Elements of the site types identified in the Border counties (RCAHMS 1956, 1967), Northumberland (Jobey 1966) and eastern Dumfriesshire (Jobey 1971; RCAHMS 1997) have a general relevance in the south-west. While these earlier surveys can be criticised for employing muddled criteria in their classifications, they have established a number of recurrent classes of site, i.e. open settlements of round-houses, enclosed settlements of varying forms and forts. Further distinctions can be drawn on morphological and/or structural grounds, although few of the characteristics are unique to each class. For example, while curvilinear and rectilinear enclosures can be distinguished on grounds of shape, both groups may be enclosed by either a timber palisade or a bank-and-ditch, or indeed a combination of the two. Another grey area in these classifications can be seen between defended settlements and forts, and even distinctions between enclosures that are curvilinear or rectilinear on plan can often be blurred.

The inter-relationships of the site types in the south-west confirm the general observations made elsewhere in the Borders that there is no simple sequence from unenclosed to enclosed, and that the presence or absence of an enclosure, or its form, is not chronologically significant. On the other hand, some types of round-house may have had a restricted chronological currency (e.g. Hill 1982; RCAHMS 1997). Aspects of the basic groups of settlement that can be identified are outlined briefly below.

A small number of large unenclosed round-houses, with two roughly opposed entrances, have recently been recorded as cropmarks (see Kirkland, below), while two examples of this house-type have been excavated within the interiors of rectilinear enclosures, one in Nithsdale and the other in The Machars. These date to the final century BC and early centuries AD, and they provide a context for this type of house in both unenclosed and enclosed settlements. Another type of unenclosed house which may be of broadly the same date is revealed by cropmarks between two rectilinear settlements on Cairn Connell Hill (below). This house is visible as a dark disc bounded by a wall trench, with what is probably the cropmarks of a souterrain hooking round one side. The arrangement of the house and souterrain suggests that they may be associated. Most unenclosed settlements with souterrains in Scotland date from the final centuries BC or early centuries AD. A similar arrangement of souterrains and large round-houses is present at Garphar in southern Ayrshire (below).

The rectilinear settlements mentioned above have now become one of the commonest types of settlement. While Rispaun on The Machars was for many years the sole representative of this group in Galloway, the cropmarks have revealed over 100 examples scattered from eastern Dumfriesshire to the Rhins of Galloway (Cowley 2000). Furthermore, the cropmarks have shown the existence of a group of rectilinear enclosures defined by palisades rather than ditches and bank. Excavations at Rispaun (Haggarty and Haggarty 1983), Carronbridge (Johnston 1994) and sites elsewhere in the Borders (RCAHMS 1997, 154-5) show that this form of settlement and its timber precursors date from the mid 1st millennium BC to the 2nd century AD, and perhaps as late as the 5th century. Both rectilinear enclosures at Carronbridge appear to have overlain palisades built on roughly the same plan.

Nevertheless, curvilinear enclosures make up the greatest number of the settlements recovered as cropmarks, reflecting those that survive as upstanding earthworks. As with rectilinears, an important group of palisaded examples has emerged, being particularly nu-

merous in Wigtownshire where no examples were previously known. These will probably range widely in date, spanning the period from the early 1st millennium BC to the early centuries AD (RCAHMS 1997, 154). While it is commonly considered that palisades were replaced by banks, the sequence may be reversed. At Morton Mains (NS80SE 7) in Nithsdale, for instance, two successive palisaded defences replaced what may have been an unfinished earthwork.

In overall terms the curvilinear settlements, which represent the least satisfactory classificatory grouping, exhibit the widest range of attributes, including the type of perimeter, internal features and size. The excavations at Boonies (Jobey 1975) indicate that at least some date to early in the 1st millennium AD, and many must relate to the spread of farmsteads across an increasingly settled landscape from the second half of the 1st millennium BC onwards. Little more can be established with regard to these curvilinear enclosures, although a certain amount of regional diversity may be detected amongst them. At least six small curvilinear cropmark sites in the lower and middle reaches of the Nith, for instance, are characterised by a narrow slot, perhaps the wall-trench of a substantial timber house, enclosed by a concentric ditch. The partial excavation of a similar enclosure at McNaughton's Farm produced a single radiocarbon date spanning the second half of the 1st millennium BC (Scott-Elliott *et al.* 1966; below). These settlements lie at the lower end of the size range for enclosures, rarely measuring much more than 40m in diameter. Other examples of regional diversity may find expression in localised groupings such as the small stone-walled 'homesteads' found in upper Nithsdale (RCAHMS 1994, 11-3) and The Machars, or in the small scooped settlements of eastern Dumfriesshire (RCAHMS 1997, 144-9). Further analysis of the mass of curvilinear enclosures may identify other local groupings.

Fortified sites enjoy a wide date-range, from the early 1st millennium BC to the mid 1st millennium AD but, apart from relative sequences in which an undefended settlement is laid out across derelict fortifications, there is little evidence on which to establish the chronology of individual sites. The presence or absence of the visible earthworks of round-houses in fort interiors in eastern Dumfriesshire has been used to identify phases of abandonment (RCAHMS 1997, 157-8). However, this is of little value in the context of plough-damaged sites revealed through the vagaries of cropmark formation, where sequence may be impossible to establish without excavation. There are smudgy circular cropmarkings in some of the enclosures, which may represent the ploughed-down remains of round-houses but, in the absence of excavation and clear cropmarks, the nature of these possible structures remains speculative. The identification of forts, e.g. Castle O'er, which may have been estate centres (RCAHMS 1997, 82; Halliday, forthcoming), highlights the range of functions such sites may have fulfilled in the developing power structures of the early and mid 1st millennium AD.

This brief survey of aspects of the settlement patterns in the south-west has identified certain types of enclosure and their potential date range. In the absence of more detailed dating only generalised trends can be identified, the clearest of which is a dramatic increase in the numbers of farmsteads in the landscape during the later 1st millennium BC, a pattern which extends across much of the Borders. This settlement expansion is reflected in palaeo-environmental records, largely drawn from east of the Nith (Tipping 1997 and in RCAHMS

1997), which point to increased woodland clearance during the second half of the 1st millennium BC, peaking at the end of the millennium and in the early centuries AD. The timing of vegetation regeneration in these records, which might indicate a changing settlement pattern, may also provide clues to its longevity. Regeneration in vegetation cover does not occur everywhere in the south-west during the 1st millennium AD and, where it has been identified, is not synchronous. Nowhere is regeneration evident until the beginning of the 4th century AD, and it can be as late as the 8th century, perhaps indicating the maintenance of settlement patterns into the middle centuries of the 1st millennium AD.

Case Studies

Kirkland, Cropmark Complex

NX89SE 33, 34, NX 876 931

An oblique aerial photograph (Figure 9) records a remarkable suite of features, including two palisaded enclosures, three timber round-houses and a ditched enclosure, at Kirkland, in Nithsdale. The photograph records pronounced variations in the colour of vegetation and these reflect the local topography. Lying on the east bank of the River Nith, the sites are disposed along a low ridge, aligned from north-west to south-east. The ridge is bounded on the west by an old channel of the river and on the east by another ploughed-out water course. Both of these water courses are revealed on the aerial photograph as darker marks, and the complex pattern of braided channels is evident.

The ditched enclosure lies towards the southern end of the ridge and measures between 25m and 30m in diameter within a broad ditch about 5m across; the entrance is marked by a causeway on the south-east. Its location, on the edge of potentially wet ground, and the suggestion of an expansion in the width of the ditch at the terminals echo two traits of the henge monument at Pict's Knowe (above). Alternatively, it may be one of the local group of small settlement enclosures recorded in Nithsdale (see Thornhill, below) mentioned above. The parallel ditches cutting across the enclosure may have formed part of a large rectangular enclosure, the sides of which are barely visible against the darker marks of the water courses, but the northern end of which can be seen cutting across the bottom right corner of the photograph. Probably comprising a bank flanked by ditches, this feature may have bounded a medieval or later field.

To the north of the possible henge the most prominent feature on the photograph is the wall trench of a large unenclosed round-house, which has been recorded in fine detail. The house measures about 13m in diameter and has two entrances, one on the west and the other on the south-east, the latter protected by a porch. Comparable round-houses with two entrances have been excavated within the rectilinear enclosures at Rispaig (Haggarty and Haggarty 1983) and Carronbridge (Johnston 1994) and within a curvilinear enclosure at Hayknowes in Annandale (Gregory 1996). Radiocarbon determinations suggest a date in the 1st century BC or early centuries AD for the former, while the latter may have dated to the 2nd or 3rd centuries AD. Five pits are visible in the interior, four of which are located towards the outer edge of the house. They may mark the positions of timbers supporting a ring beam, although if this were the case other posts would be necessary to maintain structural integrity. These unenclosed houses appear to be part of a wider pattern of open settlement dating to around the turn of the millennium (see Garphar and Cairn Connell Hill, below), at a time when enclosed settlements and forts were also current.

Immediately east of this round-house, there are traces of a second, although in this case it is enclosed by a palisade, which can be seen extending in an arc around its west side. Defined by a narrow wall-trench it is slightly smaller than the first house and, apart from what may be a central feature,



Figure 9. Round houses, palisaded enclosures and a ditched enclosure on a low ridge beside the River Nith, near Kirkland. Note the old river channels revealed as cropmarks on this photograph which is orientated with south roughly to the top. RCAHMS DF 2165, 1977.

possibly a pit, little internal detail has been recorded. Along the ridge to the north-west there is a second, larger, oval palisaded enclosure, possibly with an entrance on the west marked by a large pit on the line of the palisade. The shadowy remains of what may have been a round-house lie in the interior, and the double ditched boundary cuts across the perimeter on the north.

Finally, in the centre of the picture, immediately below (north of) the modern field boundary that crosses the photograph, a sharply defined subrectangular cropmark is visible on the edge of an old river channel. In form it resembles the *grubenhäuser* of early medieval date known in Northumberland (Gates and O'Brien 1988) and elsewhere in England, which have recently been identified in south-eastern Scotland (Armit and Ralston 1997, 229). When excavated, loomweights have frequently been found in these semi-subterranean buildings and some, at least, may have been workshops. Several semi-subterranean buildings have been identified by excavation within the ecclesiastical enclosure at Hoddom, Dumfriesshire, and one has been interpreted as a smoke house (Lowe *et al.* 1991). Single or poorly defined sites are difficult to identify, but similar cropmarks have been recorded elsewhere in the south-west, including good examples beside Castledykes Roman fort in Clydesdale (RCAHMS 1995, 20; NS94SW 7), and a further example may be present at Cairn Connell Hill (below).

Garphar, Palisaded Enclosures and Round-houses

NX18SW 26, NX 108 828

This complex of palisaded enclosures and timber round-houses lies on a terrace above the flood plain to the south of the River Stinchar, a little under 3 km to the east of Ballantrae. A remarkable level of detail has been recorded on the photograph (Figure 10), including postpits within the interiors of the houses. North lies roughly to the top. RCAHMS B 79477, 1992.

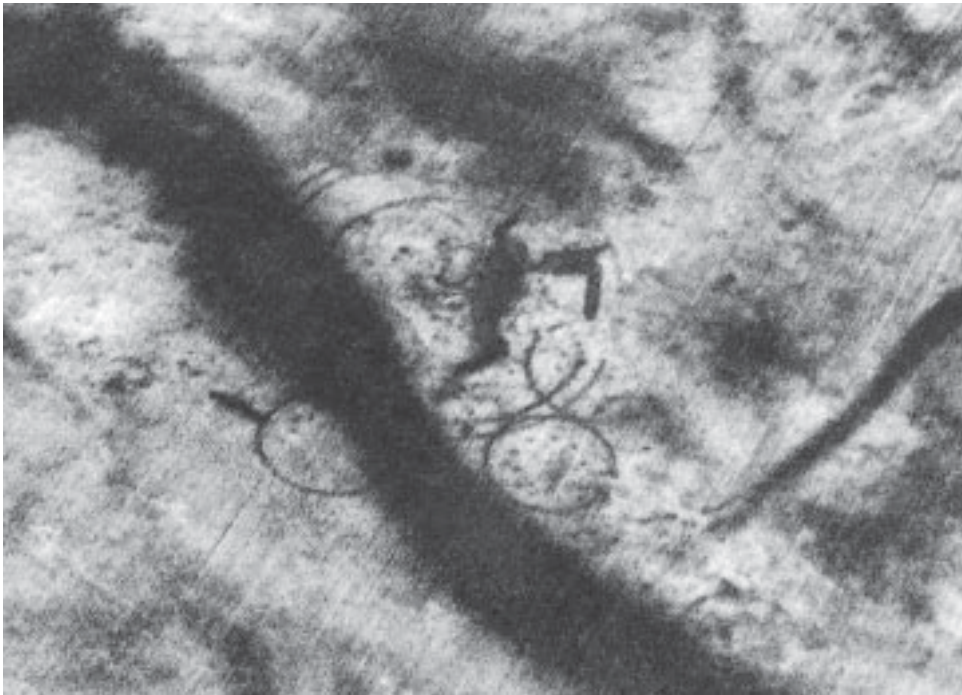


Figure 10. Complex of palisaded enclosures, round-houses and souterrains at Garphar. Note the postpits in the interior of the houses. North lies roughly to the top. RCAHMS B 79477, 1992.

the houses. A dark cropmark cutting across the photograph, from top left to bottom right, marks the line of an infilled gully which may predate the settlement remains. The archaeological features clearly belong to at least five distinct phases of construction, including two phases of palisaded enclosure and three of intercutting round-houses. The marks of the palisaded enclosures are discontinuous but the larger may have measured about 38m in diameter, while the larger round-houses measure between 12m and 14m in diameter. While it is not possible to establish the chronology of the various elements, there are clearly two phases of palisaded enclosure visible at the top left of the photograph. One phase comprises two concentric trenches, presumably of a double palisade, while within the interior of its projected circuit there is an eccentric arc of a single palisade representing the other.

There are numerous pits and fragments of what may be wall-trenches visible within the interior of the enclosures, but it is the houses that lie on the line of the palisades to the bottom right of the photograph that are most clearly defined. Of these, three to the right of the gully, two large and one small, cannot have co-existed with one another, and the large ones, which lie tangentially to each other, cannot have stood at the same time as the palisade. Two 'sausage-shaped' cropmarks can also be seen, extending from the wall-trenches of two of the houses. These are unusual features in the south-west but may be compared with the cropmarks of small souterrains recorded in eastern Scotland. Souterrains are rare in southern Scotland, where the majority of previously known examples lie in the east (Welfare 1984), but possible cropmark examples are now being recorded in small numbers in the west (see Cairn Connell Hill, below). On analogy with the eastern sites, they may date to the final centuries BC and early centuries AD.

Any chronology for this site is speculative but the most clearly-defined house, with its internal arc of postpits and club terminals at the ends of the wall-trench marking the entrance, may be one of the later elements of the site, perhaps overlying the palisaded enclosures. The dating of the souterrains is necessarily tentative but suggests that there may have been an unenclosed settlement here at the end of the 1st millennium BC or early in the 1st millennium AD, perhaps lying towards the end of a long sequence of occupation stretching back into the 1st millennium BC.

Thornhill, Homestead

NX89SE 2, NX 8767 9480

A fine example of a small homestead in Nithsdale is recorded on a photograph taken in 1949 (Figure 11), one of the local group that has been mentioned already. Situated on a low knoll in the gently-rolling land to the south of Thornhill, it was first identified as a possible Roman signal station. On closer examination, however, it is clear that it shares the characteristics of the small group of palisaded enclosures found in Nithsdale that are set within a concentric ditch, probably with an internal bank. This example comprises a penannular ditch about 3m across enclosing an area measuring some 20m in diameter; the gap in the ditch is about 6m across and lies on the east. Some 3m from the inner edge of the ditch, and concentric with it, there is what is probably the wall-trench of a substantial timber round-house rather than a free-standing palisade. The house measures between 12m and 14m in diameter. There is an entrance in the east, in line with the entrance through the broad ditch, and the terminals of the wall-trench expand to either side of the gap.

The combination of a ditch and the foundation trench for a free-standing palisade or house wall invites comparison with an enclosure at McNaughton farm (Scott-Elliott *et al.* 1966). Partial excavation revealed a stone-faced bank some 3.5m thick within the ditch, enclosing an area just under 20m in diameter. An entrance, possibly protected by a baffle or porch, lay on the west. A palisade trench was discovered hard up against the inner face of the bank, and was regarded by the excavators as contemporary. However, the published section drawing shows the packing stones of the palisade extending well above the bottom of the inner face of the wall indicating the likelihood that the pali-

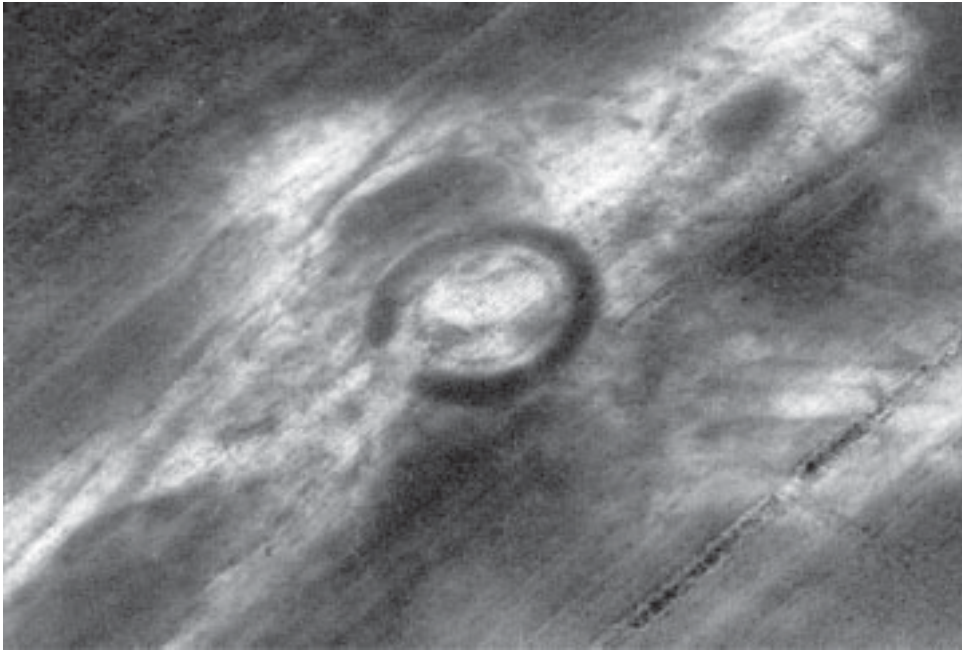


Figure 11. This fort occupies a low knoll to the south of East Galdenoch.
A substantial round-house lies in the interior and there is a rash of random marks,
possibly formed over tree-throw hollows, across the photograph (top is roughly west).
RCAHMS WG852, 1978.

sade is later. The palisade trench at McNaughton is likely to have held the wall of a substantial round-house, although in this instance it is considerably larger than any other recorded round-house in the south-west. In terms of a cropmark, however, McNaughton would be indistinguishable from enclosures such as that at Thornhill. A charcoal sample from the palisade trench at McNaughton returned a single radiocarbon date that spans the second half of the 1st millennium BC.

Cairn Connell Hill, Rectilinear Settlements

NX06NW 41, 42, 43, NX 024 679

Two rectilinear settlements and an unenclosed round-house are situated on a terrace to the north-east of the summit of Cairn Connell Hill in the West Rhins (Figure 12). The settlement enclosures are subtly different in plan; the corners of the northernmost are gently rounded and the ditch is of the order of 4m in breadth, contrasting with the sharper angles and narrower ditch of the larger enclosure. Although the internal area of the larger enclosure is approximately three times that of the smaller, their internal layout conforms to a similar pattern. Towards the rear of the interior of the larger enclosure the wall-trenches of two round-houses are visible, set beside a dark solid cropmark indicating the presence of a hollow. The latter is perhaps the site of a further house, alternatively, it may mark part of a yard set between the entrance and the houses, a pattern common across much of the Borders. A similar arrangement may be present in the smaller enclosure; the solid circular cropmark towards the rear of the interior is likely to be a house, while the subtle darkening of the cropmark inside the entrance may indicate the presence of a slightly hollowed yard.



Figure 12. Penannular ring-ditch enclosing the wall-trench of a large round-house to the south of Thornhill. CUCAP DV 19, 1949, © Crown Copyright:MOD.

Between the enclosures there is a cropmark disc that marks the site of a round-house the interior of which is presumably dug into the ground. The wall-trench of the house can be seen on the east (lower side on Figure 12), where it detaches from the edges of the disc. A 'banana-shaped' mark about 4m out from the wall trench may mark the location of a souterrain, one of an ever-increasing number of such cropmarks recorded in the south-west (see Garphar, above). Opposite the souterrain a small unbroken ring-ditch, which may be a barrow, lies immediately adjacent to the southern arc of the house. Indeed, the rash of small elongated pits beside the barrow and extending up between the rectilinear enclosures and along the east of the smaller rectilinear enclosure indicate the presence of a cemetery. The pits are remarkably regular in their layout and most are aligned roughly east/west, suggesting that the cemetery is probably of early medieval date. A roughly subrectangular cropmark beside the barrow may be a *grubenhaus*, such as that suggested at Kirkland (above).

The significance of rectilinear settlements in the expansion and infilling of settlement in the landscape which must have characterised the end of the 1st millennium BC is unclear. As seen here on Cairn Connel Hill, it is notable that very few rectilinear settlements overlie, or modify, earlier enclosures, in marked contrast to curvilinear settlements. It is possible that the rectilinears were on the leading edge of the expansion of settlement, both breaking in previously unoccupied ground on the periphery of settlement and infilling between existing farmsteads on prime ground, with a consequent agricultural intensification. They were, perhaps the improved farms of the day, reflecting the intensification of agriculture from Northumberland to the Rhins. The subtle differences between the settlements on Cairn Connell Hill may be a sign of settlement expansion, with the establishment of a new discrete unit rather than the extension of an existing enclosure so often seen in Northumberland. The majority of known rectilinear settlements in the south-west have been recorded as cropmarks, and their distribution is clearly a product of differential recovery and cropmark formation on responsive

gravel deposits in the Nith and around Stranraer. The examples scattered between these clusters suggest a much more extensive original distribution, concentrated on the prime agricultural land which could support an increased number of farmsteads.

East Galdenoch, Fort

NX 15 NW 20, NX 1023 5532

This fort is situated on the edge of a broad terrace overlooking the Allivo Burn, a tributary of the Piltanton Burn, and has an open outlook towards Luce Sands. The cropmarks (Figure 13) reveal two roughly concentric ditches, with entrances through both on the south-west and south-east. The slight stagger in the alignment of the gaps in the inner and outer ditches on the south-east is either a defensive device or indicates phasing in the construction of the defences. There were presumably ramparts along the inner lip of both ditches. Allowing several metres to accommodate the inner rampart, the interior measures about 60m in diameter. In the east of the interior there is the wall-trench of a large round-house measuring about 14m in diameter; the locations of an arc of internal postpits are also recorded on the photograph. What may be the wall-trench of a smaller house lies in the west of the interior. While there is nothing to date the construction of the fort, many of the large round-houses in the south-west date to the final centuries BC and early 1st millennium AD, although whether this house is contemporary with the defences or built within its derelict ramparts is unknown.

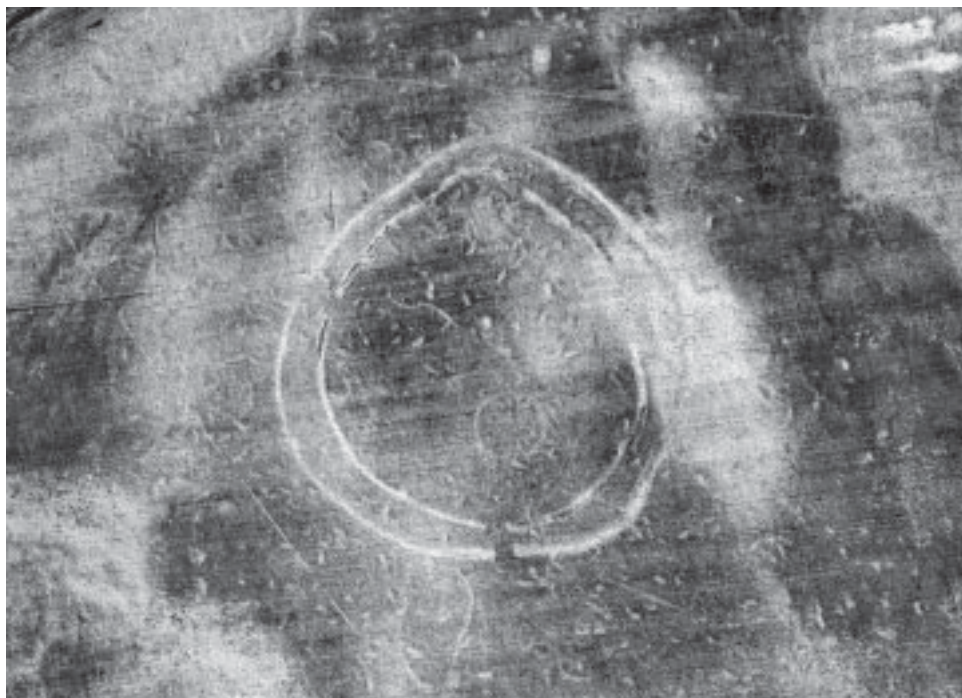


Figure 13. Two subtly different rectilinear settlements, both containing the wall-trenches of round-houses, on Cairn Connell Hill. An unenclosed round-house and souterrain lie between the enclosures, amongst a scatter of small, elongated marks, possibly the remains of a long cist cemetery.

RCAHMS B79765, 1992.

The light smudges on the right of the photograph are geological in origin, probably reflecting variations in drift deposits. The scatter of other small marks across the photograph may include archaeological features but most are likely to be hollows caused by wind-thrown trees; indeed many have the characteristic D-shaped form of tree-throw hollows.

Conclusion

This survey has highlighted the diversity and quality of the cropmarks in the south-west, a part of the country not usually associated with such remains. This material has a far-reaching impact on our understanding of prehistoric settlement, and will continue to do so as future reconnaissance reveals further features. Monuments like the huge pit-defined circles at Dunragit can only be discovered through cropmarking, coming to light by the fortuitous coincidence of an appropriate crop, drought conditions and well-timed aerial reconnaissance. The presence of other monument types, e.g. rectilinear settlements, has been known for some time, but their place in later prehistoric settlement has not been appreciated because of their rarity. The programme of aerial survey has seen an explosion in such information and, coupled with the results of excavation, there is a solid basis from which analysis can proceed. Excavation has a fundamental role to play in this process, providing evidence for dating and use, as the excavations at Carronbridge, Dunragit and Holywood have demonstrated. However, excavation is an expensive and slow process, which can only hope to examine a minute percentage of known monuments. Consequently, analysis of the mass of material that has been recorded already is vital if excavations and other work are to be directed towards the monuments that may illuminate wider patterns, for example, in establishing if some of the small barrows identified above really are of later prehistoric or early medieval date. Further analysis will inevitably refine the morphological attributes of such sites, but even the simple classifications which have been applied to date have a demonstrable utility, and there remains considerable potential to isolate other useful groups of monuments.

Acknowledgements

The material drawn together in this paper represents a tiny percentage of the holdings of the National Monuments Record of Scotland and, having been collated over half a century, is the work of numerous individuals. Aerial reconnaissance by RCAHMS has been undertaken since 1976, variously under the direction of G S Maxwell, M M Brown and H G Welfare, with photographs taken by R M Adam, T M Duncan, A G Lamb, J M Mackie, A P Martin, D M Smart, S A Thomson and S Wallace; the development of computer-aided transcriptions has largely been the responsibility of K H J MacLeod and I G Parker. The authors are grateful to S D Boyle, M M Brown, A R Gannon, S P Halliday, R J Mercer, J B Stevenson and G S Maxwell for comments on various drafts of this paper, and for assistance in the interpretation of the photographs. This paper was written while K Brophy was RCAHMS staff.

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trations are Crown Copyright: RCAHMS and we are grateful to Kevin MacLeod for preparing Figures 1 and 6 and Rob Shaw for producing Figure 4.

The Society is indebted to the Royal Commission on the Ancient and Historical Monuments of Scotland for a grant towards the publication costs of this paper.

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THE NOVANTAE AND ROMANIZATION IN GALLOWAY

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SUMMARY

Archaeological evidence indicates that at the time of Roman conquest the Novantae were politically decentralized with a mixed farming economy augmented by crafts and light industry. Their economy would have adapted to Roman requirements and Roman influence may be detected suggesting probable pro-Roman alignment. Roman material, however, is found on few native sites in the first century AD, probably reflecting Rome's unwillingness to proliferate essential points of contact; these were widened in the second century but political and economic readjustment was likely following Roman withdrawal. Third and fourth century Roman material is found at Botel Bailey and in later archaeological contexts at Whithorn. Late Roman frontier strategy may have encouraged centralization and accelerated the process of morphological change from tribal confederacy to Early Historic kingdom. A significant late aspect of Romanization is the emergence of a Latinate church with a focus at Whithorn possibly originating in a local Romano-British community.

INTRODUCTION

Divergent perspectives on Romanization

The debate on Romanization is characterized by divergent perspectives. Two of the most divergent are exclusive 'Romanist' and 'Nativist' perspectives, one imperialist, Romanization being imposed on a resistant or suppliant native population (Mommmsen 1886; Haverfield 1923) ¹ and the other anti-imperialist, Romanization being superficial and irrelevant to the development of indigenous culture (Vinogradoff 1911). ² The former belittles the native contribution to Roman civilization and the latter minimalises and marginalises the Roman contribution to native culture. A balanced view perceives Romanization as a two-way process promoting Roman objectives but also offering possible political, social and economic advantage to the native elite (Millett 1990, 1; Burnham 1995, 121 ff; Wilson, A 1997, 1 f). Another two divergent perspectives are the 'non-interventionist' and 'interventionist'. The former assumes Roman policy on Romanization in Britain was *laissez-faire* (eg Millett 1990) and the latter that it was deliberate (eg Hanson 1997A), as implied by Tacitus (*Agricola*, 21). ³ Romanization in the military north differed, however, from the civilian south being focussed not on towns and villas but selected native sites. Failure to appreciate the brevity of Roman occupation and the nature of Romanization in Scotland can lead to minimalist and distorted assessment (Macinnes 1989, 114).

1 On this perspective see Freeman 1997.

2 On both perspectives see Forcey 1997.

3 On both perspectives see Grahame 1998.

Terms of reference

'Romans' were not just Italians but also provincials rising to the highest military and political office. The term 'Romano-British' reflects this provincial dimension but also conveys various nuances of meaning. It may signify 'Roman' influenced by 'Native' or vice-versa or describe artefacts from a common cultural milieu in which it may not be possible to identify distinctive Roman or Native origin. Within this category of artefact are certain types of bangles, brooches, combs, fasteners, pins and torcs and a range of ironwork which changed little over centuries. In this article the term Romano-British is used to indicate cultural affinity and the terms Iron Age, Roman Iron Age and Early Historic to denote chronological periods. There are also complexities in determining Celtic identity and descriptions of Celts by classical writers are unreliable (Rankin 1995). Like the Romans, Celts had a variety of backgrounds (Green 1995) ⁴ and the concept of a unified pan-European Celtic community is highly questionable (Gwilt and Haselgrove 1997, 4); even the very concept of Celtic culture has been challenged (James 1999). The organization of the *Novantae* cannot be determined therefore simply by analogy from contemporary or later Celtic communities elsewhere in Britain, Ireland or mainland Europe. 'Barbarians' are caricatured by classical writers as the uncivilised living beyond the fringe of Empire (Williams 1998; Wells 1999) but they could also become Roman and rise to high office. The 'Picts', first recorded in 297 AD (Eumenius, *Panegyric of Constantius* 11.4), are depicted by classical writers as barbarians living north of the Forth (Friel and Watson 1984; Small 1987). The southern Picts probably lived in Angus and Fife; there is little evidence for the 'Picts of Galloway' and the 'Niduarian Picts' cannot be located in Nithsdale (Wainwright 1956, 40 ff). The 'Gael', or *Gall-Gáidhil*, settled in Scotland in the Early Historic period (Foster 1996) but 'Galloway' may be derived etymologically from 'Galli', the 'Gauls' (Hill, P 1997, 4), with whom there was particular contact in Roman Britain.

Roman Conquest in Galloway and Roman Material on Native Sites

The conclusion that Galloway was not conquered by the Romans (Macdonald 1934A, 337) has been disproved by subsequent discoveries though knowledge of these appears to be limited (Conquest 2000, 348). Roman sites at Glenlochar, (Richmond and St Joseph 1953), Gatehouse of Fleet (St Joseph 1983) and Glenluce (*Britannia* 24, 1993, 281) and the recent discovery of probable stretches of the South Galloway trunk road leading westwards from Dalswinton towards Stranraer (Wilson 1989, 8 ff; *Britannia* 23, 1992, 266, 24, 1993, 281 and 27, 1996, 402; Cowley 1996, 107 f, figs 1 & 2; RCAHMS 1996, 25), confirm the Roman conquest of Galloway and indicate that further sites await discovery. ⁵ Roman material on native sites may indicate primary contact with the Roman army or secondary contact through traders. It may not therefore represent casual drift (Curle 1932A; Robertson

4 On Celts in Scotland see MacKie 1995 and Armit 1997.

5 The location of Glenlochar and Gatehouse at strategic crossings of rivers not navigable from the Solway suggests westward Roman penetration by land, though there may be a Roman military site at Botel on the Urr which is navigable from the Solway (fns 42 & 68); on possible Roman bridge foundations at Machermore on the Cree see fn 94; on Roman coins recently discovered near the probable crossing of the Skyre Burn see W29; quarry pits have also been observed from the air on either side of the road near Soulseat (RCAHMS 1996, 25); on this road further west see fn 80.

1970) but deliberate acquisition, gift or bribery, trade or booty (Haselgrove 1984; Gosden 1985; Keppie 1989, 69; Hedeager 1992, 87 ff; Hanson 1997B; Wilson, A 1997, 2).⁶ Romano-British artefacts on native sites may indicate Roman influence but not necessarily direct Roman contact as they may have been procured through trade. Some Romano-British artefacts may even have been produced by natives specifically for the Roman market (Allason-Jones 1991). Roman and Romano-British material also survived in later historical contexts.

Assessment of Romanization

Romanization in Galloway is assessed on evidence from native sites including Roman and Romano-British finds, most of which I have examined.⁷ These, together with hoards/scatters, native finds from Roman sites, and isolated Roman and Romano-British finds, are listed in the inventory. Sites and finds in the body of the text are numbered according to the inventory and illustrated finds asterisked. Earlier surveys (Curle 1932B; Robertson 1970; Scott 1976) included isolated finds in assessing Romanization but, while included in the inventory for completeness of record, these are excluded from assessment as not necessarily contemporary native losses. Assessment is subject to particular limitations. Dating of native sites to the Roman Iron Age on the basis of Roman finds may overlook earlier or later occupation. Early excavations were often limited in scope and technique, lacking the meticulous recording and scientific analysis of current archaeology. Finds, including *fauna* and *flora*, were frequently unstratified or even unrecorded. Isolated finds, which may be significant for typological studies, can be difficult to identify and date as they lack secure archaeological contexts.

Acknowledgements

I am indebted to many institutions including RCAHMS and individuals for their help. In particular I should like to thank Lindsay Allason-Jones, Donal Bateson, Coleen Batey, Jane Brann, Elizabeth Brown, Bill Cormack, David Devereux, Carol van Driel-Murray, Sheppard Frere, Richard Gregory, Jenny Hall, Mark Hall, Martin Henig, Peter Hill, Fraser Hunter, Lawrence Keppie, Alan Leslie, Gavin MacGregor, Euan MacKie, Gordon Maxwell, Alastair Penman, John Pickin, Siobhain Ratchford, Jennifer Rose, Charles Thomas, Julian Thomas, Alf Truckell, Joanne Turner, Angela Wardle, Gareth Wells, James Williams and of those no longer with us, Eric Birley, Elsie McCaig, Raleigh Radford, R C Reid, Leo Rivet, Anne Robertson, Jack Scott and Robert Stevenson.

The Society is indebted to the Mouswald Trust for a generous grant towards the publication costs of this paper.

⁶ For bibliography on Romanization in Scotland see Wilson, A 1997, 13.

⁷ On material culture and social continuity in Roman Britain see Grahame 1998.

THE *NOVANTAE***Political geography**

Galloway lay within the Solway-Clyde province of the Scottish Iron Age (Piggott 1966, fig 1, region 36) much of it uninhabitable, mountainous areas, forests, bogs, marshes and swamps. The coastal plain and river valleys attracted settlement. Ptolemy, a contemporary Roman geographer, locates the *Novantae* in Galloway with territory including *Novantarum Peninsula*, the Rhinns, several rivers, *Abravannus*, probably the Luce, *Iena*, perhaps the Cree, *Deva*, the Dee, and *Novius*, the Nith and Roman forts or settlements at *Rerigonium* near Loch Ryan and *Leucopibia* further east (Jones and Mattingly 1990, 16). The term '*Novantae*' may be etymologically derived from the *Novius* but the root means new or fresh (Rivet and Smith 1979, 425) implying a 'lively, vigorous folk' (Watson 1926, 27) or perhaps newcomers on the exposed Galloway coast. The northern boundary with the pro-Roman *Damnonii* probably lay near the Stinchar and Southern Uplands Boundary Fault. The eastern boundary with the anti-Roman north west *Brigantes*⁸ was probably the Nith, but Iron Age tribal boundaries were fluid not static.

Socio-political perspectives

Two large hillforts have been identified in Galloway, the Moyle and the Giant's Dyke (Coles 1893, 97 ff no 7, figs 5-9; RCAHMS 1914, 72 no 121; Feachem 1966, 80) but no 'central place' in Galloway or southern Strathclyde (Wilson, A 1997, 2) appears to have been active during the Roman Iron Age. The concept of a Late Iron Age hierarchy dominated by such sites is highly questionable (Haselgrove 1989, 11). Sites occupied at this time in Galloway were the smaller scale structures, brochs, crannogs, duns, forts etc, indicating not centralization but political fragmentation suggesting the *Novantae* were probably a confederation of septs.⁹

Four probable Roman Iron Age brochs are located on the Wigtownshire coastal plain at Crammag Head, NY 0890 3404,¹⁰ Ardwell Point, NX 0670 4468, Teroy, NX 0992 6410 and Stair Haven, NX 2090 5335 (Curle 1912; RCAHMS 1912, 20 ff, 54 f, 114 & 152, nos 28, 143, 310 & 433; Feachem 1977, 174; Yates 1983; ASM 1985, 18 f, nos 97-98 and 1987, 24, no 158).¹¹

Crannogs are widely distributed in Galloway lochs (RCAHMS 1912, xxvii f; ASM 1985, 20 & 1987, 56; Barber and Crone 1993). Scottish crannog occupation occurred in three periods, Late Bronze/Early Iron to Roman Iron Age, Early Historic and the thirteenth to seventeenth century. Barean Loch (K1) and Milton Loch 1 (K8) were built in the Early Iron Age with probable Roman Iron Age occupation as at Black Loch (W2) and Dowalton Loch

8 On the north west *Brigantes* in Dumfriesshire see Wilson, A 1997, 12 f.

9 Tacitus refers to lack of centralization (*Agricola* 12, 1).

10 A lighthouse and other buildings have been erected on the site since 1912.

11 On brochs in southern Strathclyde see Wilson, A 1997, 4; Sharples and Pearson 1997, 254 ff, Main 1999 and Dunwell 2000 should be added to the bibliography on brochs.

(W5). Other crannogs such as Airyolland and Lochrutton may also be Iron Age.¹² Barean Loch, Dowalton Loch and Milton Loch 3 were occupied in the Early Historic period and at least Dowalton and Lochrutton in the Middle Ages. Crannogs vary in methods of construction and materials. Dowalton 1 and 3, Lochrutton and perhaps Barhapple Loch (Munro 1882, 182 ff)¹³ were probably *packwerk* construction, built of different layers of material deposited on the lake bottom.¹⁴ Construction at Milton Loch 1 was log-platform with the homestead apparently resting on a timber raft floating on mud (Piggott, C M 1955, 141; Crone 2000, 105).¹⁵ Elements of both types of construction, however, may have been present on the same site. The only settlement on a natural island producing Roman material was Castle Loch, Mochrum (W3).

Duns occur particularly on the West Machars and are small scale fortified structures with plans following natural contours (RCAHMS 1912, xxxii; Piggott 1966 map; ASM 1985, 19, no 99).¹⁶

Forts are the commonest monument in Galloway, particularly hill and promontory forts, some displaying vitrification (Coles 1892 and 1893; RCAHMS 1912, xxviii ff and 1914, xxxiv ff; Cotton 1955, 38 ff, 68 ff; Feachem 1966, 76; Hogg 1979; ASM 1985, 14 ff, nos 75-96 and 1987, 24, nos 155-7).¹⁷ They proliferate on or near the Galloway coast, varying in form, scale and method of construction being either univallate or multivallate.¹⁸ Roman Iron Age occupation is suggested at Cruggleton (W4), McCulloch's Castle (K7) and Rispain (W7). Iron Age occupation has been postulated but not established at the Early Historic sites of Castlehaven (K5), Mote of Mark (K10) and Trusty's Hill where a rotary quern may indicate earlier occupation (Thomas 1961, 67). The ramparts of Tynron Doon across the border in Dumfriesshire suggest Iron Age origin but limited excavation indicates Early Historic occupation (Williams 1971).

As to unenclosed sites, the hut circle at Moss Raploch (K9) produced Romano-British glass rings datable to the first two centuries AD and Roman and Romano-British material dated from the late first to the late fourth century AD has been found at Botel Bailey (K3). Many sites await excavation (Truckell 1984; ASM 1985, 20 ff & 1987, 11 ff; Cowley 1996).¹⁹ New sites have been excavated, however, at Fox Plantation (MacGregor 1996, 1997 and forthcoming), Dunragit (Julian Thomas, Southampton/Manchester Universities) and Soleburn (Cullen 1996).²⁰ The ditch of a late Neolithic/Early Bronze Age henge was recut in the

12 Airyolland crannog produced beads and a possible sword tang cap suggesting Iron Age occupation (NMS HT45-46; MacGregor 1976, no 173; Guido 1978, 17, 73 ff & 180, class 8); Lochrutton crannog (Barbour 1905 & 1906) produced medieval and later finds (DM 1934.899-94; HM B1951, 880-2) but the lower levels were not excavated.

13 Barhapple crannog was examined in 1878.

14 Cf Buiston crannog in Strathclyde (Crone 2000, 3 & 14 ff).

15 On Scottish crannogs see Morrison 1985, Barber and Crone 1993 and Crone 2000, crannogs in southern Strathclyde, Wilson, A 1997, 4 & MO 2 f, 5 ff, 28 ff, 39 ff, 49 ff & 59, and Early Historic crannogs, Laing 1975, 23 ff.

16 On duns in southern Strathclyde see Wilson, A 1997, 4 & MO 1 ff & 19 ff; it is questionable whether duns constitute a separate category of fort (Ralston 1996, 139 f).

17 On Scottish hillforts see Armit and Ralston 1997, 176 ff, Eastern Dumfriesshire hillforts, RCAHMS 1997, 126 ff, southern Strathclyde hillforts, Wilson, A 1997, 4 ff & MO 4, 25 ff & 44 and Early Historic hillforts, Laing 1975, 1 ff.

18 Seventeen promontory forts on the Galloway coast have recently been surveyed (DES 1997, 24).

19 On similar sites in Eastern Dumfriesshire see RCAHMS 1997, 118 ff and southern Strathclyde, Wilson, A 1997, 6.

20 At Dunragit two undated round houses have been discovered; Soleburn III may be Late Bronze Age with a post ring structure and eastern porch similar to Fox Plantation A and Blairhall Burn 1 (Strachan, Ralston and Finlayson 1999, 60 ff).

early centuries AD at the Picts' Knowe, NX 953 721 (*DES* 1998, 29 f). Caves tend to afford occasional utility rather than continuous occupation and those at Borness and Torrs were inhabited in the Roman Iron Age (K2 & 13).²¹

A Roman Iron Age burial was discovered at High Torrs (W6) but the grave mound at Crossmichael (K6) cannot be so closely dated. Human bones were found at Rispain (Haggarty and Haggarty 1983, 25) and child burials at Borness (Clarke 1876, 307 and 1878, 675) but these are undated. Local Iron Age burial practice was inhumation.²² Cremation at High Torrs therefore probably indicates Roman influence (Breeze and Ritchie 1980, 82). Cremated human bone deliberately incorporated in constructional slots of structures B and I dated Late Iron/Roman Iron Age at Fox Plantation (MacGregor forthcoming), may also indicate Roman influence bearing in mind other suggested Roman influence at the site. Cremation occurred in the La Tène III Aylesford-Swarling culture of southern Britain (Whimster 1981, 147 ff; Wait 1985, 121; Philpott 1991, 6) and, considering its almost universal adoption following Roman conquest (Jones 1987, 829; Wait 1995, 507), it is possible it is another of the indicators of Romanization ahead of conquest (Haselgrove 1984).

There is little evidence for a Roman Iron Age Novantian warrior elite. The spearhead from Brighthouse Bay (K4/4) could be Roman Iron Age or later and the bolt head from Cruggleton (Ewart 1985, 65 f, fig 32/20) is probably medieval. Southern Scottish hillfort defences at this time were probably inactive simply indicating social status or isolating occupants from neighbours (Bowden and McOmish 1987; Hingley 1990; Collis 1996).

Attention has focussed recently on the symbolism of boundaries and enclosures, the use of space and the significance of 'place' in Iron Age homesteads. Recent radiocarbon dating suggests a Middle/Late Bronze Age origin for the Iron Age round house. Iron Age homesteads in Galloway vary in scale and construction. Crannog homesteads had diameters of c 7.5 m at Barean Loch, c 14 m at Black Loch and c 24 m at Lochrutton though these could be later. At Botel Bailey the 'round house' of timber and wattle construction, had a diameter of c 5.4 m with a north east porch and internal mud-packed floor but no hearth (Penman 1997, 13 ff). At Cruggleton the hut circle had an internal diameter of c 8 m (Ewart 1985, 12). At Fox Plantation houses B and I had internal diameters of 14 and 10 m and south-eastern and eastern porches respectively (MacGregor 1996, 19 and 44), structure B having a sequence of rebuilding similar to the Iron Age settlements at Boonies (Jobey 1975) and Burnswark (Jobey 1978). At Dunragit a possible Iron Age round house with eastern porch had a diameter of less than 10 m (personal communication, Julian Thomas). At Soleburn 3 an Iron Age or possibly Late Bronze Age house had an internal diameter of c 7.2 m (Cullen 1996, 15). At Milton Loch 1 a circular timber homestead of diameter c 12 m had a superstructure of piles and horizontal beams with internal wattle partitions creating a series of rooms radiating from a central hearth (Piggott, C M 1955, 139 ff). At Moss Raploch the hut circle of diameter 5.5 m probably had wattle screen partitions and an internal thrust ring to support the roof rafters in a form of cantilevering (Condry and Ansell 1978, 109). The rectilinear enclosure at Rispain, like enclosure A at Carronbridge (Johnston 1994, 239 ff), enclosed a timber homestead with diameters of 13.5 m for the ring groove and c 10.3 m for the inner

21 On Romano-British caves see Branigan and Dearne 1992 and Cleaves Cove, Strathclyde, Wilson, A 1997, MO 23 ff.

22 Evidence for cremation surviving into the Scottish pre-Roman Iron Age is uncertain (Cook 2000, 275).

post ring.²³ Stair Haven and Teroy brochs had internal diameters of 7 m and 9 m respectively. It should not be assumed, however, that scale and status are commensurate.

Socio-economic perspectives

The primary woodland of southern Scotland was dominated by oak, elm and alder with subsequent pine colonization in the Galloway Hills (Tipping 1994, 30, ill 3 and 1997). Oak, hazel, alder, birch, pine and willow were found on a number of Iron Age sites though ash and elm were not as well represented. Pine was regarded as an isolated phenomenon at Moss Raploch (Condry and Ansell 1978, 112) and elm was in decline at Brighthouse Bay (Maynard 1994, 30). Woodland clearance occurred in southern Scotland before the Roman advance (Wilson, A 1997, 11 and refs). A percentage drop in alder and oak was noted between the Roman Iron Age and the Early Historic Period in Durno's pollen diagram for Luce Sands (Cowie 1996, 88). Whithorn has been dated 278-752 AD on dendrochronological evidence from the southern sector and one sample of mixed alder, birch, hazel, oak and willow from the floor of Building 1/2 produced a radiocarbon date 222-446 AD, a date incompatible with the discovery of a *Bi* amphora sherd (Hill, P 1997, 595 ff).

The Iron Age economy was dependent on mixed farming. Faunal assemblages from the early excavations permit only limited assessment of pastoral farming. Cattle and sheep bones were present in the Iron Age at Dowalton Loch 3, High Torrs, Rispaïn and Torrs and possibly Airyolland and at sites of longer occupation at Black Loch, Borness, Castlehaven, Lochrutton and Trusty's Hill.²⁴ Pig bones were present at the same sites apart from High Torrs. Deer bones were present in the Iron Age at Dowalton Loch 3, Rispaïn and Torrs and also at sites of longer occupation at Black Loch, Borness, Castlehaven and Lochrutton, suggesting hunting as part of the economy. Horse bones were present in the Iron Age at Dowalton Loch 3, Rispaïn and Torrs and at sites of longer occupation at Borness and Lochrutton.²⁵ Bones of goats were present in the Iron Age at Dowalton Loch 3 and Rispaïn and possibly Airyolland and at sites of longer occupation at Borness and Lochrutton, and those of dogs at Airyolland, Dowalton Loch 3, Rispaïn and Torrs.²⁶ The remains of birds were discovered at Borness, High Torrs and Torrs. Varieties of fish were present at Castlehaven and Lochrutton and shellfish at Borness, Brighthouse, Teroy and Torrs. The above evidence suggests the stock raising of cattle, pig and sheep/goat at native sites supplemented by fishing, hunting and the collection and processing of marine shells. More intensive cattle and pig husbandry occurred in Roman Britain to meet increasing demand not least from the Roman army,²⁷ but the faunal evidence from Galloway precludes further inference.

23 On the scale of British Iron Age round houses see Wilson, A 1997, 8 and on ring grooves Blairhall Burn 3 (Strachan, Ralston and Finlayson 1999, 65 f), Broxmouth (Hill 1982, 170 f), Buchlyvie (Main 1999, 299), the Candle Stane (Cameron 2000, 362), Carronbridge (Johnston 1994, 244 ff), Hayknowes (*DES* 1996, 27 f & forthcoming report by Richard Gregory), Lower Greenyards (Rideout 1996, 226, fig 18, ill 19) and St Germain's (Alexander and Watkins 1999, 213 f).

24 Bones at Borness, Dowalton Loch 3 and Torrs indicated smaller varieties of cattle and sheep.

25 Horses of ten/eleven hands were noted at Dowalton Loch 2 and Lochrutton.

26 Bones of dog, pig and sheep were discovered in an Early Iron Age deposit at Torrs.

27 On Roman animal husbandry see Applebaum 1987, animal husbandry in Iron Age and Roman Britain, Grant 1989, Hambleton 1999 and Maltby 1981 and 1996, meat production in Roman Britain, King 1991, and *fauna* in the Roman Iron Age in southern Strathclyde, Wilson, A 1997, 8 ff.

There is evidence of agriculture in the Late Bronze/Early Iron Age at Milton Loch I where a plough stilt and head were ritually buried below the foundations (Piggott, C M 1955, 143 f). By the Late Iron Age spelt was replacing emmer as the principal wheat but barley was still the commonest cereal (Boyd 1988, 104). During the Roman Iron Age hulled barley was present at Rispaïn (Haggarty and Haggarty 1983, 37) and produced a radiocarbon date 23-238 AD at Fox Plantation I (MacGregor forthcoming). Bread/club wheat, a free-threshing cereal, was also present during the Roman Iron Age at Rispaïn and Fox Plantation I where radiocarbon dated 56-246 AD (MacGregor forthcoming). Carbonized grains of wheat were also discovered at Borness and Castlehaven where there was later occupation. A range of weeds including bindweed, charlock, fat hen, hemp nettle, knot grass, oracle, redshank and spurrey were recorded at Rispaïn.²⁸ Wild radish was also recorded at Rispaïn.²⁹ Hazelnuts provided a common food source and hazel trees/nuts were found in the Iron Age or later at Barhapple, Borness, Brighthouse, Dowalton Loch 1 and 3, Fox Plantation, Milton Loch, Moss Raploch and Rispaïn. Grains of wheat outnumbered barley by 3:1 at Rispaïn and if such wheat was grown locally during the Roman Iron Age, it could have been significant for Roman troops in the area. It is also possible the bread/club wheat at Fox Plantation I and Rispaïn may have been Roman imports.³⁰ There was also evidence of a well-managed field system at Rispaïn. Scythe blades deposited in Carlingwark Loch (K15/11) may indicate Roman influence and the adze type hoe from Rispaïn (W7/4) and balanced reaping hook or sickle deposited in Carlingwark Loch (K15/13) could be Romano-British.³¹

Querns on native sites indicate grain consumption and one stage of processing but not necessarily on-site grain production.³² They are often poorly recorded or not preserved and the surviving record may therefore be inadequate. Five undated querns were discovered at Dowalton Loch (Stuart 1868, 121), a bun quern at Milton Loch 1 (Piggott, C M 1955, 146, fig 10) and seven native querns at the Roman fortlet at Gatehouse (K18/1). There is an unpublished Iron Age upper beehive quern from Castle Gower, presumably the vitrified fort (SMK; Coles 1892, 131 f, fig 44; Cotton 1955, 70), and another from Lochfoot, NX 899737, possibly from Lochrutton crannog (MacKie 1996, 108).³³ Iron Age querns may have been found on later sites at Castlehaven (Barbour 1907, 78) and Trusty's Hill (Thomas 1961, 63). Two undated querns were found at Barlockart crannog (Munro 1882, 56) and an upper rotary quern at Teroy (Curle 1912, 187). Whithorn produced two probable Roman millstones in a later context (W8/7). A grain storage pit was discovered at Rispaïn.

Crafts and light industry including textile production featured in the native economy. Spinning and weaving are indicated by bone pins and toggles at Torrs Cave (K13) and needles, pegs, toggles and 'weaving combs' at Borness (K2).³⁴ It is possible two slate

28 On weed ecology see van der Veen 1992, 101 ff.

29 On the significance of the Romano-British radish see Fitzpatrick 1991.

30 On the import of bread/club wheat on Roman sites see van der Veen 1988, 358 ff & 1992, 154 f.

31 On Iron Age crop husbandry see Jones 1981 and 1996, Romano-British agricultural tools, Rees 1979, agriculture in Roman Britain, Jones 1989 and 1991A and Roman Iron Age agriculture in southern Strathclyde, Wilson, A 1997, 8 ff.

32 On crop processing see van der Veen 1992, 81 ff.

33 Another quern from Lochrutton was found on a circular stone island, NX 901 731 (DM 1971.127; DES 1971, 25).

34 On the Borness toggles see Stevenson 1966, 26; the function of 'weaving combs' is uncertain (Allason-Jones 1991, 3); on the Roman and Iron Age textile industry see Wild 1970B.

spindle-whorls from Castle Loch, Mochrum could be Roman Iron Age (W3/5) though like one of slate from Barlockart crannog (Munro 1882, 56), five of lead from Lochrutton crannog and two of lead from Whithorn (W8/6) may be later. Glass bangles were discovered at Barhobble (W1/1), Black Loch (W2/1), Borness (K2/2a-c), Dowalton Loch 2 (W5/2a-c), Moss Raploch (K9/1a-b), Threave (K12/1) and Whithorn (W8/4b), the first and last two being later survivals. Beads of definite or possible Iron Age date have been found at Airyolland (Guido 1978, 17, 73 ff and 180), Castlehaven (K5), Castle Loch, Mochrum (W3/4), Crossmichael (K6), Dowalton Loch (W5/3) and Mote of Mark (K10). These, like the bangles, may represent trade not on-site manufacture. It has been suggested the substantial number of isolated beads from Luce Sands may indicate a local bead factory (Guido 1978, 35) but this is questionable as there is no concentration of distinct types as at the Culbin Sands. Molten glass at Botel Bailey (K3/4) may indicate on-site working. Enamel was used to good effect on a range of artefacts at Borness (K2/4), Milton Loch 1 (K8/1) and Rispaun (W7/3); it has been suggested the use of colours other than red may indicate Roman influence but this is uncertain.³⁵

Novantian crannogs display the skills of Celtic carpenters. The skill of the Celtic smith is manifest in Iron Age hoards at Balmaclellan (NMS FA1-14; MacGregor 1976, 141 ff & 159 ff, nos 273 & 342-8, pl 4a; *DES* 1997, 117) and Carlingwark (native metalwork Piggott S, 1955, 11 ff, C1-6 and possibly C14, 17, 18, 26-35 and 42) and in the bronze triskèle plaque at Dowalton Loch (NMS HU62; Munro 1882, 49 f, fig 26; MacGregor 1976, 159, no 253; Bateson 1981, 10). It is evident in isolated Early Iron Age finds, the Dungyle torc (NMS FA96; MacGregor 1976, 96, no 195) and Torrs *chamfrein* now dated to the second century BC (NMS FA76; MacKenzie 1841, 72, no 20; Atkinson and Piggott 1955; Stevenson 1966, 24; MacGregor 1976, 23 f, & 177, no 1 & pl 1a; Megaw 1983; Jope 1983). It is evident in isolated Roman Iron Age finds in the Auchendolly enamelled terret (NMS FA40; MacGregor 1976, 43 & 186 f, no 62; Bateson 1981, 8 & 90), Plunton Castle armlet (NMS FA36; MacGregor 1976, 8, 108 and 157 ff, no 211, pl 2b) and the recently discovered Donside terrets from Wheatcroft (NX 750 632, SMK; *DES* 1999, 23, fig 5) and Cogarth farm, Parton (NX 725 685; currently being assessed at NMS; *DES* 2000, 22).³⁶ The bronze head of a 'war horse', claimed as Roman, may have been discovered near Glenlochar bridge (fn 82). The spiral finger rings from Castlehaven (K5) could be Iron Age or later. Bronze objects of Roman Iron Age date on native sites have been found at Borness (K2/3-5), Cruggleton (W4/1) and Rispaun (W7/3).³⁷ Bronze fragments at Dowalton Loch 3 (W5) and High Torrs (W6) and perhaps Brighthouse Bay (K4) may indicate on-site working in copper alloy, perhaps repairs, though those at Dowalton could be post Roman. This Iron Age metalwork has been imaginatively described as exhibiting the 'Galloway style' (Kilbride-Jones 1980, 73 ff) and the area around Castle Douglas has also been described as a 'paramount centre of power and wealth' (Jope 1983, 153). Such a power base could have been a threat to Rome or it could have been used by the Romans to facilitate conquest. The latter

35 On enamelling see Bateson 1981.

36 Donside terrets have been dated 2nd/3rd century AD (Leeds 1933, 123); it has been suggested those found outside north-east Scotland may represent intrusion by *Caledonii* and *Maeatae* but an increasing number of stray finds questions this hypothesis (MacGregor 1976, 47 ff, cf nos 113, 114, 118, 122 & 127).

37 For Iron Age copper alloy research see Tylecote 1976, 58 ff and Dungworth 1996 & 1997.

is more likely judging from the even spread of Roman and Romano-British material on local native sites which does not indicate anti-Roman sentiment.

Iron artefacts, either definitely or probably native, have been identified at Carlingwark (see below) but much Roman and native ironwork emanates from a common cultural milieu which may not permit identification of distinctive origin.³⁸ Iron working is suggested by nodules at Borness (K2) and slag at Dowalton Loch 3 (W5), High Torrs (W6) and Rispain (W7) but the slag from Lochrutton may be medieval (Barbour 1905, 135). Bog iron was discovered at Moss Raploch on a bloomery site (Condry and Ansell 1978, 112 f).³⁹ Metalworking is indicated by a crucible at High Torrs (W6/3) and tongs at Rispain (W7/5), but the evidence at Mote of Mark is post-Roman (Fowler 1964, 109 ff).⁴⁰ Iron had symbolic significance and metalwork hoards were probably ritual deposits (Hingley 1997; Hunter 1997).⁴¹

The media of Iron Age exchange was livestock, crop surplus and other commodities. It is uncertain whether the *Novantae* or *Damnonii* developed a monetary economy under Roman influence.

ROMANIZATION – The Artefactual Evidence

Coins

Few Roman coins are found on native sites in Galloway and none in the first two centuries AD.⁴² This may imply the *Novantae* like the *Damnonii* failed to adopt a monetary economy or it may indicate that money paid by the Romans for goods and services was returned in tax without effectively circulating.⁴³ Moulds for forging coins c 225 AD at Brighthouse (K4/1a-b) may reflect economic anxiety or opportunism or both following Roman withdrawal. A forgery of Gallienus and fourth century coins have been found at Botel Bailey (K3/1a-d). The fourth century *nummus* from Whithorn (W8/1), a later survival, could possibly, like isolated finds (W30/1-4), have originated in a local site. Roman coin hoards date to the late second century at Buittle Mill (K14) and fourth century at Balgreggan (W10) and possibly Corsock (K16) and Stranraer (W12). A scatter of coins dating from the first to the fourth century AD has been found at the Piltanton Burn (W11). There are at least thirty five isolated Roman coins found in Galloway not all probably genuine losses (K20-23, 25/1-2, 26, 28-30/1-5, 31/1-2, 32/1-2, 34, KW 1 & W13, 18-20/1-2, 25/1, 26, 27, 28/1-2, 30/1-5 & 31).

38 See iron artefacts under Romanization.

39 On bloom refining and iron artefact production see Sim 1998.

40 Sheet lead at Lochrutton may indicate lead working but possibly post Roman (Barbour 1906, 249).

41 On crafts and metalworking on Roman Iron Age sites in southern Strathclyde see Wilson, A 1997, 12.

42 Ten Roman coins of this date found in the bottom field south of Botel Bailey may come from a possible Roman military not native site (K3/1 & fn 68).

43 On Roman coins from native sites in southern Strathclyde see Wilson, A 1997, 14.

Pottery

Samian ware has been found on several native sites but only a cup, Dr 27, from Borness (K2/1) and bowl, Dr 37, from Dowalton Loch 3 (W5/1) are late first century AD. Second century Samian forms include Dr 18/31 at McCulloch's Castle (K7/1) and Whithorn (W8/2), Dr 30 at Whithorn (W8/2), Dr 37 at Castle Loch, Mochrum (W3/1), High Torrs (W6/1a), Torrs (K13/1) and Whithorn (W8/2) and Déchelette 72 at High Torrs (W6/1b). Samian sherds were also found at Botel Bailey (K3/2) and Mote of Mark (K10/1). The Samian ware on native sites is mainly second century, usually in good condition.⁴⁴

Sherds of Roman coarse ware datable to the first century AD have been found only at Castle Loch, Mochrum, considered to be among the earliest north of the Solway (W3/2a-b). Brighthouse Bay produced sherds of buff, brownish pink, pink and BB1 ware (K4/3). High Torrs produced scraps of late second/early third century coarse ware (W6/2) but a sherd from Kirkmirran (K11/1), if Roman, is a later survival. Botel Bailey produced black burnished, buff/cream, grey, white and fourth century Nene Valley ware (K3/3a-f). Whithorn produced sherds in later archaeological contexts including a second/third century Baetican amphora, probably Dressel 20, a counter, a Nene valley beaker dated second-fourth century and a rim sherd from a Roman or post Roman flanged bowl (W8/3a-f).⁴⁵

Glass and Paste

Roman glass has been discovered in native contexts. The Roman origin has been questioned of the glass sherd at Castle Loch, Mochrum (W3/3) though the sherd from Mote of Mark (K10/2) has been confirmed as from a late Roman vessel. Fragments of bottles/jars were found at Torrs Cave (K13/2) and Carlingwark (K15/1). Whithorn has produced, in later archaeological contexts, fragments of six vessels of the first two centuries AD, six fragments of window glass or prismatic vessels and a melted lump datable to the first three centuries AD, sherds of seven possible late Roman bowls, *tesserae* fragments and a Roman or post Roman stemmed glass cup or flask (W8/4a, d-f). Rispain produced two pieces of glass/enamel (W7/1-2).

The Romano-British glass bangle is represented on several sites (Kilbride-Jones 1938, types 1-3). Late first century type 1 bangle fragments survived in later contexts at Barhobble (W1/1) and Whithorn (W8/4b). Late first/second century type 2 bangle fragments have been found at Black Loch (W2/1), Borness (K2/2a), Threave (K12/1) and Whithorn (W8/4b), the latter two being later survivals. Type 3A bangle fragments have been identified at Borness (K2/2b), Dowalton Loch 2 (W5/2a) and Whithorn (W8/4b). Late first/second century Type 3B bangle fragments have been found at Borness (K2/2c) and Dowalton Loch 2 (W5/2b) which also produced a type 3C example, probably late first century AD (W5/2c). Fragments of two rings similar to bangles were found at Moss Raploch (K9/1a-b). Melon beads have been found at Botel Bailey (K3/4), Castle Loch, Mochrum (W3/4), Crossmichael

⁴⁴ Samian motifs may have inspired native metalworkers (MacGregor 1976, 186).

⁴⁵ The *mortarium* sherd from Mote of Mark (Curle 1914, 661) is Radford's class D Dark Age ware; for Roman pottery from native sites in southern Strathclyde see Wilson, A 1997, 14 f).

(K6/1), Dowalton Loch 3 (W5/3) and Torrs Cave (K13/3). A Roman biconical bead was found in a later context at Whithorn (W8/4c) and wave and other beads from different sites could be Roman. Cylinder, melon and segmented beads were Roman inspired (Guido 1978, 94 f & 100). Roman glass was probably obtained from local Roman military sites or through traders and recycled (Stevenson 1957, 215 ff).⁴⁶ Red enamel was used in the pre-Roman Iron Age and it has been suggested the use of other colours such as at Borness (K2/4), Milton Loch (K8/1) and Rispaïn (W7/3) could indicate Roman influence (Leeds 1933, 103; Bateson 1981, 120) but this is uncertain.

Metalwork

Roman or Romano-British copper alloy artefacts have been discovered in native contexts. These include a bowl from Carlingwark (K15/2), brooches from Borness (K2/3-4) and Cruggleton (W4/1), a casket mounting from Carlingwark (K15/3), cooking-pot from Barea Loch (K1/1), harness mounting from Borness (K2/5), dress fastener from Milton Loch 1 (K8/1), *ligulae* from Botel Bailey (K3/5), a nail cleaner and tweezers in a later archaeological context at Whithorn (W8/5a-b), a *patera* from Dowalton Loch (W5/4), strap junction (?) from Rispaïn (W7/3), tanged blades/chisels from Botel Bailey (K3) and a torc from Dowalton (W5/5). Fragments of copper alloy were recovered from Brighthouse Bay (K4), Dowalton Loch 3 (Stuart 1868, 121) and High Torrs (W6). The classic copper alloy of the Iron Age was tin bronze and the presence of zinc in copper alloys in the Roman Iron Age may be due to Roman influence not least in the reuse of Roman brass (Tylecote 1986, 35 ff; Dungworth 1996 and 1997). It has been suggested the production of copper-zinc alloy at Mote of Mark may indicate survival of Romano-British technology (Swindells and Laing 1977, 126 ff). A copper ingot from Carleton may be Roman (W15) suggesting the possibility of Roman mineral extraction in Galloway.⁴⁷ There may be Roman influence in a range of bronze ornaments such as bezelled finger rings, brooches, dress fasteners, pins, a nail cleaner and tweezers, in turn suggesting possible Roman influence on dress and toiletry (Kilbride-Jones 1937, 381; Fowler 1960, 167 ff and 1964, 101 ff; Longley 1975, 5 ff; Laing 1985, 261 ff).⁴⁸

A wide range of Roman and Romano-British iron artefacts have been discovered in native contexts. These include an adze from Carlingwark (K15/17), adze type hoe from Rispaïn (W7/4), anvil and awl from Carlingwark (K15/34 & 28), axe-heads from Carlingwark (K15/18) and Dowalton Loch 3 (W5/6-7) and a boot cleat and buckle from Carlingwark (K15/6 & 12). Chain-mail from Carlingwark (K15/33) and Castlehaven (K5/1) may be from a Roman *lorica hamata*. A chain-junction, circular mounting, clamp and draw knife were discovered at Carlingwark (K15/7, 14, 20 and 23). A dish was discovered at High Torrs (W6/5) and files at Carlingwark (K15/29). Square and circular grid-irons were discovered at Carlingwark (K15/31-32). Hammer-heads were discovered at Carlingwark (K15/16)

⁴⁶ For finds of glass and paste from Roman Iron Age sites in southern Strathclyde see Wilson, A 1997, 15.

⁴⁷ On the possibility of Roman mineral exploitation in the Leadhills see Wilson, A 1997, 18 & MO 55 f.

⁴⁸ It has also been suggested that Roman influence may be detected in the evolution of certain types of bone combs and pins (Stevenson 1955, 282 ff).

and Dowalton Loch 3 (W5/8), a hinge at Carlingwark (K15/35), holdfasts at Brighthouse (K4/5) and hooks at Carlingwark (K15/22). A joiner's dog, surgical/veterinary(?) knife blades, linch pins and loops were discovered at Carlingwark (K15/21, 15, 4-5 & 24-26), an L binding and nails at High Torrs (W6/6-7) and a padlock spring and punches at Carlingwark (K15/9 & 27). A balanced reaping-hook or sickle was discovered at Carlingwark (K15/13) and a finger ring at High Torrs (W6/4). A saw, scythe blades and a staple were discovered at Carlingwark (K15/10-11 & 19) and tongs at Rispaig (W7/5).

The Roman conquest created an increased demand for iron and lead (Tylecote 1976, 532). Attention has been drawn to the development of an extensive international trade in domestic tools and prestige weapons from Roman times onwards (Schubert 1957) and an increasing demand for hardened carbon steel. There is limited evidence for carburization of iron in the pre-Roman Iron Age (Scott 1977; Swindells and Laing 1977; Tylecote and Gilmour 1986, 93 ff). It has been recently suggested, however, that a draw knife from Carlingwark (K15/23) is native yet showed evidence of deliberate carburization by quench cooling (Hutcheson 1997, 70). This draw knife is Roman as acknowledged by Piggott (K15/23). Metallographic analysis of the knife revealed a failure to adopt slower Roman cooling techniques in the quench cooling process. The conclusion was drawn that there were two independent metalwork production systems, the Roman army and the native smith, with no transfer of technology between them (Hutcheson 1997, 71). Roman legionary metalwork is distinctive but such a rigid division in general between Roman and native is questionable. Other surveys of Roman metalwork indicate variability in quality (Lang 1988) and the conclusion has been drawn that the 'Romano-British customer was satisfied with poor quality' (Tylecote and Gilmour 1986, 94). It has also been suggested that deliberate carburization of iron at Mote of Mark may indicate survival of Romano-British technology (Swindells and Laing 1977, 126 ff).

Leather

A shoe from Dowalton (W5/9) has an Early Historic radiocarbon date but its form with two pairs of eyelets and ornate decoration is reminiscent of Roman *calcei*.

Lead

Spindle whorls discovered at Castlehaven (K5/2), Lochrutton and Whithorn (W8/6), could be Roman or later.

Bone

A spoon from Borness shows Roman influence (K2/6) and an Early Historic comb from Black Loch crannog has running wave ornamentation found on late Roman as well as Early Historic sites (W2/2).

Stone

Fragments of three or more Roman Iron Age querns/millstones were reused as building material at Whithorn, two possibly from a Roman mill (W8/7).⁴⁹

Slate

Two spindle whorls from Castle Loch, Mochrum (W3/5) originally identified as probably Roman Iron Age could be later.

Conclusions

It is not possible to sustain an earlier conclusion that the ‘scarcity’ of Roman material among the *Novantae* as compared with the *Damnonii* implies the former were probably anti-Roman (Gillam 1958, 75 f). Similarity of structures, not least crannogs, in the territory of these two tribes suggests they shared common elements (Hanson and Maxwell 1983, 10) and recent excavations in Galloway have produced more Roman and Romano-British material. A similar spread of this material on the same range of sites among the *Novantae* and *Damnonii* (Wilson, A 1997) suggests both tribes were probably pro-Roman.

Incorporation within the Roman empire had economic, political and social implications for the *Novantae*. Like the *Damnonii* they obtained high quality Roman and Romano-British objects, Samian and coarse ware, glass vessels, beads, bangles and metalwork, some artefacts exhibiting different colours in enamel. Roman influence may possibly be detected in agriculture in the presence of bread/club wheat at Fox Plantation and Rispaun and the scythe blades deposited in Carlingwark Loch (K13/11). The possibility cannot be excluded of Roman mineral extraction in Galloway. Cremation at Fox Plantation and High Torrs in the Roman Iron Age may also indicate Roman influence. This influence concerns areas such as craftsmanship and transport, food and drink, dress and toiletry. In the latter area attention has been drawn to a growing awareness of the body and individual identity at this time (Hill, J D 1997) and such awareness would have been heightened by new ideas spread throughout the Roman empire. Romanization thus probably affected the *Novantae* in different ways involving life style and possibly burial ritual.

49 It has been suggested a bead of Antrim bauxite from Rainton may indicate Roman influence or trade (K33).

ROMANIZATION – The Chronology

The First Century AD

The Roman conquest of Galloway is usually attributed to Agricola in 81/82 AD but southern Scotland may have been penetrated earlier by Quintus Petillius Cerialis (71-73 AD) and perhaps even Marcus Vettius Bolanus (69-71 AD)⁵⁰ pursuing the Brigantian rebel Venutius (Birley 1953, 39 ff and 1973; Hanson and Campbell 1986; RCAHMS 1997, 171; Wilson 1999, 17 f). It has been suggested the site of *Venutio* in the Ravenna Cosmography should be associated with Venutius and located in southern Scotland though this Venutius may not necessarily be the same person as the Brigantian rebel (Richmond and Crawford 1949, 48; Birley 1953, 45 f; Frere forthcoming, location 28). There is mounting archaeological evidence, however, for pre-Agricolan penetration in southern Scotland. The Cerialan fort at Carlisle dated 72/73 AD (Caruana 1992) was a campaigning base and recent assessment of temporary camps suggests possible campaigning in southern Scotland at this time. The south camp at Burnswark has multiple gates and traverses reminiscent of the Cerialan camp at Rey Cross (Frere and St Joseph 1983, 24, fig 2 & pl 13; Welfare and Swann 1995, 57 ff; RCAHMS 1997, 179 ff; Maxwell 1998, 49). Gordon Maxwell informs me outworks at Islafoot camp could be early or even pre-Flavian (Wilson 1999, 35) and the irregularity of a section of the defences of an unpublished camp at Bankhead, Lanarkshire, is reminiscent of the Cerialan camp at Plumpton Head (Welfare and Swann 1995, 43 f, fig 34). Attention has been drawn to pre-Agricolan Samian (Bushe-Fox 1913A; Caruana 1997) and coins (Shotter 2000) from Roman forts in southern Scotland. Cerialan occupation has been suggested at Dalswinton (Hanson 1987, 61 f; Daniels 1989, 31) where there were four Flavian periods (St Joseph 1976, 11; Frere and St Joseph 1983, 123 ff, fig 14, pl 74). The fort at Loudoun Hill had four Flavian phases (Wilson 1996, 25) and there may have been Cerialan occupation at Milton (Wilson 1998, 30). In Galloway one at least of the numerous camps at Glenlochar could be pre-Agricolan (Richmond and St Joseph 1953; Frere and St Joseph 1983, 127 ff, fig 3 & pls 15, 75 & 76) and very early Roman coarse ware was discovered further west at Castle Loch, Mochrum (W3/2).

Agricola would have completed the Roman conquest of Galloway in his third (79/80 AD) or fifth campaign (81/82 AD) when the Gatehouse fortlet was probably built (St Joseph 1983). Partial Roman withdrawal from Scotland occurred at the close of Flavian I (87/88 AD) when a new fort was built at Glenlochar (Richmond and St Joseph 1953, 13). Major rebuilding c 105 at Carlisle, Corbridge and Vindolanda (Bidwell 1999, 12 f, tab 1) probably coincided with Roman withdrawal from southern Scotland although tax collection may have continued in Annandale (Wilson, A 1997, 19)⁵¹ and even further north at Elginhaugh (Hanson 1997B, 373). It is possible *frumentarii* may have been responsible for requisitioning supplies beyond the frontier in the Trajanic period before their role was widened by Hadrian (Watson 1969, 146 ff; Webster 1969, 265; Austin and Rankov 1995, 136 f, 150 ff and 259).

50 There is reference to Bolanus operating on the 'plains of Caledonia' (Statius, *Silvae* 5, 2, 142-9).

51 Following recent discoveries at Vindolanda, it has been suggested that T Haterius Nepos was responsible for organizing conscription in Annandale c 112 AD or slightly earlier (Birley 1998, 303).

The *Novantae* would have been affected considerably by Roman conquest in the first century AD. Rome would have controlled land, introduced a monetary economy, imposed taxation, received hostages and conscripted natives.⁵² The native economy would have adapted to Roman requirements and would probably have been stimulated by a new market (Breeze 1984).⁵³ Native leaders chosen to facilitate Roman conquest probably continued to maintain the Novantian political infrastructure. Evidence of Romanization in Galloway in the Flavian period is very limited, as elsewhere in south west Scotland, apart from Hyndford crannog (Wilson, A 1997, MO 50-56),⁵⁴ suggesting Rome's unwillingness to proliferate essential points of contact. Flavian Samian has been found only at Borness (K2/1) and Dowalton Loch 3 (W5/1) and coarse ware only at Castle Loch, Mochrum (W3/2a-b). The *patera* found on the loch bed near Dowalton Crannog 3 (W5/4) is probably Flavian. A type 3C glass bangle from Dowalton Loch Crannog 2 (W5/2c) may be dated to the late first century AD but the late first century AD type 1 fragments from Barhobble (W1/1) and Whithorn (W8/4b) are survivals in later archaeological contexts.

The Second Century AD

On Hadrian's accession in 117 AD Britons were 'out of control' (*SHA, Hadrian*, 5, 2) and heavy Roman losses were probably sustained restoring order (Cornelius Fronto, *Letters* 2, 22); the recently discovered tombstone of Titus Annius at Vindolanda may date to this time (Birley 1998). Construction of Hadrian's Wall commenced in 122 AD on prime agricultural land (Bidwell 1999, 122). It isolated the northernmost *Brigantes* from their southern neighbours and this possibly contributed to further conflict in the mid 120's (Birley 1953, 28 f; Bidwell 1999, 20; Frere 2000). The occurrence or anticipation of trouble in the west is implied by the presence of a milliary *ala* at Stanwix, probably the *Ala Petriana* with its senior officer in charge of the Wall, and with cavalry capable of penetrating deep into southern Scotland (Birley 1961, 205). The extension of Hadrian's Wall down the Cumberland coast may have been designed to control Solway shipping (Johnson 1989, 62) not exclude the *Novantae* (Gillam 1958, 76). If exclusion was deliberate, it may have been to prevent the north west *Brigantes* outflanking the Wall as their movements were also monitored by outlier forts at Birrens, Netherby and Bewcastle. The Wall in effect, however, isolated the *Novantae* from the Roman province both by land and sea. Warfare is again recorded in Britain c 138 on the accession of Antoninus Pius (*SHA, Pius* 5,4; Eumenius, *Panegyric of Constantius*, 14,1). Southern Scotland was reoccupied and the Antonine Wall commenced in 142 though probably not completed until the end of the decade following revisions of plan and fluctuating troop levels (Swan 2000). The concentration of Roman military sites in Annandale, Nithsdale and upper Clydesdale suggests firm control of the north west *Brigantes* and *Selgovae* permitting Wall construction with minimum interference. Dalswinton was abandoned but not Glenlochar, strategically placed on the fringe of north west Brigantian territory (Richmond and St Joseph 1953, 12).

52 On the diet and provisioning requirements of the Roman army see Davies 1971 and Manning 1975, on the effect of the Roman army on the native population, Breeze 1990, Hanson and Macinnes 1991 and Hanson 1997B and on the effect of tax on a newly conquered area, Hopkins 1980.

53 It is uncertain whether this new market included slave trading which apparently declined during the Principate (Jones 1975, 128).

54 On Romanization on 1st century native sites in southern Strathclyde see Wilson, A 1997, 18.

Coins celebrate Roman victory in Britain in 154-5 (*RIC Pius* 930). The reference to Antoninus Pius depriving the *Brigantes* of most of their territory because they invaded the ‘Genounian district’ (Pausanias, *Descriptio Graeciae*, 8, 43, 3-4) may refer not to Britain but Raetia (most recently argued by Spaul 2000) but if Britain (Hanson and Maxwell 1983, 62 ff), it could refer to a possible attack on the *Novantae* (Maxwell 1973). Trouble does appear to have occurred in Britain around this time. It is possible Burnswark could have witnessed a brief siege involving the north west *Brigantes* some time in the second half of the second century (Frere and St Joseph 1983, 34; Keppie 1989, 67; Wilson, A 1997, 20; Maxwell 1998, 47). It has been suggested above that Burnswark may be Cerialan in origin. Fieldwork suggests there may have been a remodelling of the southern defences of the north camp and the northern defences of the south camp, the latter accommodating *ballistaria* but also overlying at its north angle a probable long axis Antonine fortlet (RCAHMS 1997, 181 f). The nearby Roman fort at Birrens was rebuilt c 158 following possible enemy destruction and the presence of lead *glandes* there suggests a link with Burnswark (Robertson 1975; Frere and St Joseph 1983, 123). Gordon Maxwell has suggested to me it is even possible that the architect Amandus who raised an altar to *Brigantia* at Birrens (*RIB* 2091 with amended date; *CSIR* 4, 12) might have been responsible for such a remodelling at Burnswark. Gnaeus Julius Verus was appointed governor c157 and a decision may have been taken to commence Roman withdrawal from Scotland possibly owing to pressures elsewhere in the Roman Empire. Many Roman sites were now abandoned but the rampart at Glenlochar was extended (Richmond and St Joseph 1953, 2 ff, fig 2) and occupation probably continued until c 161 when war threatened in Britain (*SHA, Marcus*, 8,7). The process of withdrawal may have been accelerated by the new governor in 162, Sextus Calpurnius Agricola. Further unrest occurred in 169 (*SHA, Marcus*, 22,1) and coins record victory over barbarians c 184. During this unsettled period the hoard at Buittle Mill (K14/1) was deposited. Unrest continued (*SHA Pertinax* 3, 5-10; Dio 72, 9) and the *Caledonii* and *Maetae* attacked the Roman province in 197. The second century Romanization of the *Novantae* therefore occurred during two decades of Antonine occupation followed by continuing unrest.

As in other areas of southern Scotland a wider range of Roman material is found on a larger number of native sites in the second century, though no Roman coins.⁵⁵ A greater range of Samian has been discovered including Dr 18/31 at McCulloch’s Castle (K7/1) and Whithorn (W8/2), the former Hadrianic/Antonine, the latter early Antonine. A Dr 30 sherd in the style of Doeccus i dated c 165-200 AD and two Dr 30/37 sherds dated Hadrianic/Antonine were also found at Whithorn (W8/2). Dr 37 sherds, Hadrianic Lezoux ware, have been found at Castle Loch, Mochrum, (W3/1) and East Gaulish ware dated 180-220 AD at High Torrs (W6/1a). Dr 37 sherds are Hadrianic at Torrs (K13/1a) and Hadrianic/Antonine at Whithorn (W8/2). Nine Central Gaulish Lezoux ware fragments, Déchelette 72 dated 150-200 AD, have been found at High Torrs (A/W6/1b). Undated Samian has been found at Botel Bailey (K3/2), Brighthouse Bay (K4/2), Mote of Mark (K10/1) and Torrs (K13/1b). Two Hadrianic/Antonine dish/bowl sherds have also been found at Whithorn (W8/2). The Samian from Whithorn was found in later archaeological deposits but probably originated locally.

55 The 1st and 2nd century AD coins found on the bottom field south of Botel bailey may have come from a Roman military site; see fns 42 & 68.

Roman coarse ware of definite or probable second century date has been found on several sites, sherds of black burnished, buff/cream, grey and white ware at Botel Bailey (K3/3a-c & f), four sherds of buff, brownish pink, pink and BB1 ware at Brighthouse Bay (K4/3), five tiny scraps at High Torrs (W6/2) and two sherds at McCulloch's Castle (K7/2). A possible sherd of this period survived in a later context at Kirkmirran (K11/1) as did four sherds including part of a Dressel 20 *amphora* dated second/third century at Whithorn (W8/3a, c-e).⁵⁶

Late first/second or second century Roman glass is found at contemporary and later sites. Roman bottle/vessel sherds were found at Carlingwark (K15/1), Torrs (K13/2) and Whithorn (W8/4a). Two glass/enamel finds from Rispaig (W7/1-2) could be Roman Iron Age and a molten lump of glass from Botel Bailey (K3/4) may be second century or later. Romano-British bangle fragments have been found, type 2 at Black Loch (W2/1), Borness (K2/2a), Threave (K12/1) and Whithorn (W8/4b), the latter two later survivals, type 3A at Borness (K2/2b), Dowalton (W5/2a) and Whithorn (W8/4b), type 3B at Borness (K2/2c) and Dowalton (W5/2b) and type 3C at Dowalton (W5/2c). Two ring fragments were found at Moss Raploch (K9/1a-b). Faience melon beads have been found at Botel Bailey (K3/4), Castle Loch, Mochrum (W3/4), Crossmichael (K6/1), Dowalton Loch (W5/3) and Torrs (K13/3) and a melon bead torc fragment at Dowalton (W5/5).⁵⁷

Late first/second or second century Roman or Romano-British copper alloy finds from native contexts include a bow brooch from Cruggleton (W4/1), bowl and casket mounting from Carlingwark (K15/2-3), cooking-pot from Barean Loch (K1/1), dragonesque *fibula* and disc brooch from Borness (K2/3-4), dress fastener from Milton Loch 1 (K8/1), harness mounting from Borness (K2/5), two *ligulae* from Botel Bailey of second/third century date (K3/5), a nail cleaner and tweezers of Roman or later date from a post Roman context at Whithorn (W8/5), a strap fastener from Rispaig (W7/3) and torc fragment from Dowalton (W5/5). A Roman bronze jug handle with a Medusa's head was deposited with other finds at Kirkmuir near Cairnholy (K17/1). The ironwork cannot be as closely dated as the bronze and is catalogued above under artefactual evidence for Romanization⁵⁸ as have two slate spindle whorls from Castle Loch, Mochrum (W3/5) five of lead from Lochrutton and two of lead from Whithorn (W8/6) though all these spindle whorls may be post-Roman. Roman millstones from Whithorn (W8/7) are undated.

The wider range of Roman and Romano-British material on Novantian sites in the second century AD indicates a willingness by Rome to increase its points of contact and a desire by the *Novantae*, like the *Damnonii*, to acquire high quality Roman objects.

The Third Century AD

Septimius Severus died in 211 and under Caracalla Rome withdrew from Scotland. The Caracallan settlement appears to have created stability in the north for most of the third

⁵⁶ On 2nd century AD Samian and Roman coarse ware from native sites in southern Strathclyde see Wilson, A 1997, 22.

⁵⁷ On 2nd century AD Roman and Romano-British glass and paste finds from native sites in southern Strathclyde see Wilson o.c.

⁵⁸ On Roman and Romano-British metalwork from native sites in southern Strathclyde see Wilson o.c.

century. Galloway lay outside the Roman province but probably still subject to military and naval patrols supported by Roman intelligence agents, *exploratores* (Austin and Rankov 1995, 41 ff, 193 and 213). The *Novantae* were now exempt from taxation and support of a standing army but would have lost local Roman markets. Decentralization may have suited Rome's strategy on conquest but centralization was probably preferable on withdrawal. Rome may thus have contributed to, if not set in motion, the incipient stages of morphological change from tribal confederacy to centralized Early Historic kingdom.

Roman material still occurs on Novantian sites but virtually disappears on Damnonian sites (Wilson, A 1997, 24 f). Forged *denarii* moulds (c 225 AD) at Brighthouse Bay (K4/1a-b) and a forgery of Gallienus (253-268 AD) at Botel Bailey (K3/1a) may indicate economic opportunism or trading anxiety or both. Coarse ware sherds including Nene valley ware have been found at Botel Bailey (K3/3) and Whithorn (W8/3) with Roman glass and a biconical bead (W8/4). The Whithorn finds from later archaeological contexts and coins of Julia Domna and Claudius II from village gardens (W30/3-4) may have originated in a local Romano-British site. Samian at High Torrs (W6/1a) and a possible Roman coarse ware sherd surviving in a later context at Kirkmirran (K11/1) could be third rather than second century.⁵⁹

The Fourth Century AD

In 306 Constantius I encountered the Picts (*Panegyric of Constantine*, 7, 1 -2; *Anonymous Valesianus*, 2, 4). His successor, Constantine I, replaced *exploratores* with *areani* or *arcani*, presumably more effective frontiersmen (Ammianus Marcellinus, 28, 3, 8; Austin and Rankov 1995, 237) and a period of stability followed in the first third of the fourth century. Further trouble is recorded c 343 (Libanus, *Oratio*, 59, 139-41) and in 353 Paulus 'Catena', the imperial notary of Constantius II, introduced a reign of terror in Roman Britain. Picts and *Scotti* caused unrest in 360 (Ammianus, 20,1) and were joined by Saxons and *Attecotti* in 364 (Ammianus 26, 4, 5). In 367 Valentinian I sent Theodosius to Britain to restore order. At this time Carlisle is likely to have been the centre of Roman administration in north west England with influence well beyond and may have been the capital of the new province of *Valentia* (Hassall 1976, 109 ff; Frere 1987, 200). The *areani* were disbanded (Ammianus, 28, 3, 8) and Theodosius may have converted 'friendly' tribes such as the *Novantae* into client kingdoms (Frere 1987, 341). Later genealogical lists cite rulers around this time with Roman names, eg Donatus possibly of the *Novantae* (Wilson, A 1997, 25 ff) who was given authority by Magnus Maximus according to Harleian MS 3859. Magnus Maximus defeated Picts and Scots in 382 according to the Gallic Chronicler of 452 (Miller 1978, 316) but they continued to attack Britain (Gildas, *De Excidio Britanniae*, 14-15). It has been suggested a Forth-Clyde line established against the Picts in 389 was pulled back to the Tyne-Solway under Stilicho in 395 (Miller 1975, 145) but there is no archaeological evidence for this.

The fourth century unrest in Roman Britain must have affected the *Novantae*. Roman material still occurs, however, on Novantian sites though on only one Damnonian site where it may not indicate contemporary occupation (Wilson, A 1997, 25 f). Coin hoards in Gallo-

59 On Romanization in southern Strathclyde after Roman occupation see Wilson, A 1997, 23 ff.

way date to the reign of terror under Constantius II at Balgreggan (W10/1), where the hoard was contained in a fourth century Castor ware beaker (W10/2), and possibly Corsock (K16/1) though another possible hoard from Stranraer (W12) cannot be precisely dated. A *nummus* found on the ninth century floor of the period II church at Whithorn (W8/1) may have been lost locally at this time. At Botel Bailey three fourth century coins were discovered outside the central building, the latest 378 AD (K3/1b-d). The latest possible date for the scatter of coins at the Piltanton Burn is also 378 AD (W11). Fourth century coarse ware has been found at Botel Bailey (K3/3) and in later contexts at Whithorn (W8/3b). Glass bowls found at Whithorn (W8/4e) and Mote of Mark (K10/2) may be fourth century as may some beads.

The Fifth Century AD and Beyond

Roman administration in Britain ended in 410 but there was still trouble in the north, the British leader Vortigern apparently 'driven by fear of Picts and Scots' (Nennius, *Historia Brittonum*, 33). Germanus, bishop of Auxerre, visited Britain in 429, defeating Picts and Scots in the 'Alleluia' victory (Constantius, *De Vita Germani*, 17-18). The Pictish threat, however, declined by the mid fifth century (Gildas, *De Excidio Britanniae*, 21).

Following this maelstrom of political unrest, Novantian identity appears to become submerged within the Early Historic kingdom of Rheged.⁶⁰ It has been suggested Rheged should be associated with the 'fort of Rheged' situated on the Motte of Dunragit (Watson 1926, 156). There is no archaeological evidence for this and a more likely site is the Round Dounan at Dunragit, (NX 1483 5795; Reid 1952, 155 ff; ASM 1987, 61, no 340). This, however, is unlikely to be the royal seat of Rheged (Alcock 1984, 4) which was probably Carlisle as suggested by twelfth century poets. During his visit there in 685 St Cuthbert observed a *praepositus civitatis* leading a fortified urban community apparently with a still functioning Roman water supply system (Bede, *Vita Sancti Cuthberti Prosaica* 27; *Vita Sancti Cuthberti Auctore Anonymo* 8).⁶¹ In *Taliesin*, poems in praise of Urien, late sixth century ruler of Rheged (Morris Jones 1948), two locations are mentioned, Catraeth and Llwynenydd, the former Catterick which had late Roman occupation (Burnham and Wachter 1990, 116 f; Wilson 2000) and the latter probably Lyvennet on the Eden (Higham and Jones 1985, 133). It has also been suggested that Rheged should be associated with Rochdale, Recedham in the Domesday Book (Chadwick 1949, 144), though this is considered unlikely (Higham and Jones 1985, 133). Rheged was therefore probably a confederation of tribal units covering an area southwards from Carlisle, eastwards across Stainmore to Catterick and northwards to Dumfries and Galloway.

A significant late aspect of Romanization in Galloway is Christianity, the official religion of Roman Britain from 313 AD. The undoubted cradle of Christianity in Galloway was Whithorn where the earliest structural evidence (period 1, stage 2) is a road in the southern sector leading towards the Isle of Whithorn. A fragmentary stake-walled structure (stage 1 or 2) produced Roman pottery (three sherds) and glass (six sherds) displaced in later contexts, possible evidence of earlier Roman settlement (Hill, P 1997, 121). Associated with stage 2 in the central sector was debris from a plastered/mortared building, con-

60 On suggested locations of Rheged see Morris Jones 1948, 64 ff.

61 A Roman aqueduct has recently been found in Botchergate (McCarthy 1999).

crete lumps of grey lime sometimes with an incomplete white calcium carbonate crust. This suggests an earlier building on the crown of the hill preceding stage 1 using Roman lime technology (Hill 1992, 4 ff and 1997, 80 f), a building perhaps meriting the epithet *candida casa*. Reused quern/millstone fragments may be Roman or Romano-British (Hill, P 1997, 460 f). In stage 3 Roman finds were discovered from the earliest strata south of the bedrock ridge, possibly from disturbed Roman deposits (Hill, P 1997, 121 f). Rubbish from stage 6 also produced Roman glass (Hill, P 1997, 125). Associated with stage 12, a melon bead was found in building 24 and Roman glass in a drain south of the building (Hill, P 1997, 132 f). The use of lime technology and the stones from a mechanical mill suggest ‘settlers with skills acquired within the Roman empire’ (Hill 1992, 7 f). Dendrochronological evidence from the southern sector produced a date 278-752 AD and wood samples from the floor of building 1/2 a radiocarbon date 222-446 AD at odds with the discovery of a *Bi amphora* sherd (Hill, P 1997, 596 f).

These discoveries suggest a Romano-British settlement at Whithorn but structural evidence is lacking. Much Roman material came from the partially excavated southern sector. Structural evidence may yet be discovered there or closer to the village but may have been totally destroyed by later builders as witnessed by building debris in stage 2. A date for period 1 is given as c 500-730 AD but this is preceded by phase 0 (Hill, P 1997, 74). The earliest inscribed stone is the Latinus stone (Hill, P 1997, 614 ff) recently dated c 420-450 AD and claimed to mark the foundation of the first stone church (Thomas 1992, 1997 and 1998) though this has been challenged (McQueen 1999). There could have been timber predecessors. It has been suggested the Latin inscribed stones are part of the wider context of an educated Latinate population in north west England and beyond (Thomas 1998; Todd 1999; McCarthy 1999).

Two separate models have been proposed for Christian origins at Whithorn, Irish monasticism as outlined in canons in *Synodus episcoporum* (Hill, P 1997, 12 f) and the Romano-British church, a bishopric created from a diocesan capital at Carlisle (Thomas 1981, 314 and 1992, 16). The case for Irish monastic origin appears to depend not on archaeological evidence but analogy from seventh century Irish documents whose authority for events in fifth century Britain must be questionable. There is, however, a mounting body of archaeological evidence for Christianity in late Roman military and civil sites in north west England thus giving substance to the suggestion of Carlisle as diocesan capital (McCarthy 1999; Todd 1999). The archaeological evidence suggests a Romano-British community probably existed in the vicinity of Whithorn. Whether or not Ninian or Nynia was trained at Rome and visited Martin at Tours (Bede, *Historia Ecclesiastica Gentis Anglorum*, 3, 4), there were undoubted political, religious and trading links between Roman Britain and Gaul, such trade continuing along the western seaboard in post-Roman times (Thomas 1986, 57 ff).⁶² Sulpicius Severus informs us Magnus Maximus met Martin (*De Vita Martini*, 20) and Victricius, bishop of Rouen, a disciple of Martin, visited Britain c 396 (*De Laude Sanctorum*, 1). Constantius informs us Germanus, bishop of Auxerre, visited Britain in 429 and 446 (*De Vita Germani*, 12 - 27). Germanus’ primary task was to combat the Pelagian heresy and in this capacity he may have visited the north British church. Bede portrays Nynia as an orthodox Roman bishop at a time of heresy. The Latinate church at Whithorn bears witness to the permanent legacy of Romanization in Galloway.

62 For a detailed account of links between the Romano-British Church and Gaul see Chadwick 1954.

INVENTORY

A Roman and Romano-British Finds from Native Sites in Galloway

Stewartry of Kirkcudbright

K1 **Barean Loch Crannog**, Colvend NX 861 555; discovered 1865; (Munro 1882, 37 f; RCAHMS 1914, 72, no 122; Curle 1932B, 307, 343 & 372, no 34 fig 55; Robertson 1970, 207)

1 **Bronze cooking-pot*** (fig 1), one of two found in piles enclosing timber floor (NMS HT95); wide convex body of Italian manufacture; late 1st/2nd century AD Roman military origin; cf close parallels from Bar Hill (Robertson, Scott and Keppie 1975, 94, fig 31/15), Newstead (Curle 1911, 274, pl 53/6), Nijmegen (Den Boesterd 1956, 42, pl 5/138, Östland type), Pannonia (Radnóti 1938, 105 ff, taf 9/48), Vangeda (Eggers 1951, 88 no 238, taf 6/40) and Wroxeter (Atkinson 1942, 209 & 213, pl 53)

Two piles produced pre-Roman Iron Age and 7th/8th century AD radiocarbon dates respectively (Barber and Crone 1993, 522, tab 1, nos 13 & 3)

K1/1 suggests the earlier occupation probably continued in the Roman Iron Age

K2 **Borness Cave**, Borgue NX 6208 4466; excavated 1872-78 (NMS HN1-179; Corrie, Clarke and Hunt 1875; Clarke 1876 and 1878; RCAHMS 1914, 50 f, no 68; Curle 1932B, 372 f, no 35; Robertson 1970, 212, table 5)

1 **Samian sherd*** (fig 2), wall and base sherd; Flavian cup, Dr 27; dark reddish-brown glaze (HN176; Clarke 1876, 308, no 179)

2 **Three glass bangle fragments**, late 1st/2nd century AD (HN172-4; Clarke, Corrie and Hunt 1875, 491 f, pl 22/62, 82, 93 & 153):

a) clear glass, cord mouldings, white and blue enamel spot; two fragments (Kilbride-Jones 1938, 374, type 2, fig 3/10)

b) opaque white (Kilbride-Jones 1938, 378, type 3A, fig 4/2)

c) opaque yellow (Kilbride-Jones 1938, 381, type 3B) ⁶³

3 **Dragonesque fibula*** (fig 2), bronze, two ear fragments, possibly Flavian (HN163; Corrie, Clarke and Hunt 1875, 492; Curle 1932B, 373, fig 56; Bulmer 1938, 153, C5; Feachem 1952, 43, fig 8/C5; MacGregor 1976, 127 ff, fig 8/19) ⁶⁴

4 **Disc brooch*** (fig 2), bronze, enamelled, late 1st/2nd century AD (HN162; Corrie, Clarke and Hunt 1875, 492, pl 17/134); Romano-British; cf Camelon (Christison and Buchanan 1901, 405, pl A2), Gadebridge (Neal 1974, 128, fig 55/28 and parallels), London (Wheeler 1930, 96, fig 29/36-38), Traprain Law (Burley 1958, 161, no 51) and Wroxeter (Bushe-Fox 1913B, 26, fig 10/9) ⁶⁵

5 **Harness mounting*** (fig 2), bronze, petal-headed, late 1st/2nd century AD (HN161; Corrie, Clarke and Hunt 1875, 492, pl 17/79); cf Newstead and York (MacGregor 1976, 134, fig 8/1 & 2) and Birrens (Robertson 1975, 120, no 109, fig 39/5) ⁶⁶

⁶³ On glass bangles in southern Strathclyde see Wilson, A 1997, 15 with bibliography, and MO 27, A/GOU10.

⁶⁴ On dragonesque *fibulae* see Hattatt 1985, 171 & Snape 1993, 26 ff.

⁶⁵ On disc brooches see Hattatt 1985, 140 ff & Snape 1993, 25 f.

⁶⁶ This is not a dress fastener as claimed (Gillam 1958, 80 f, fig 1 type B; Wild 1970A, 138 ff, fig 1 class III).

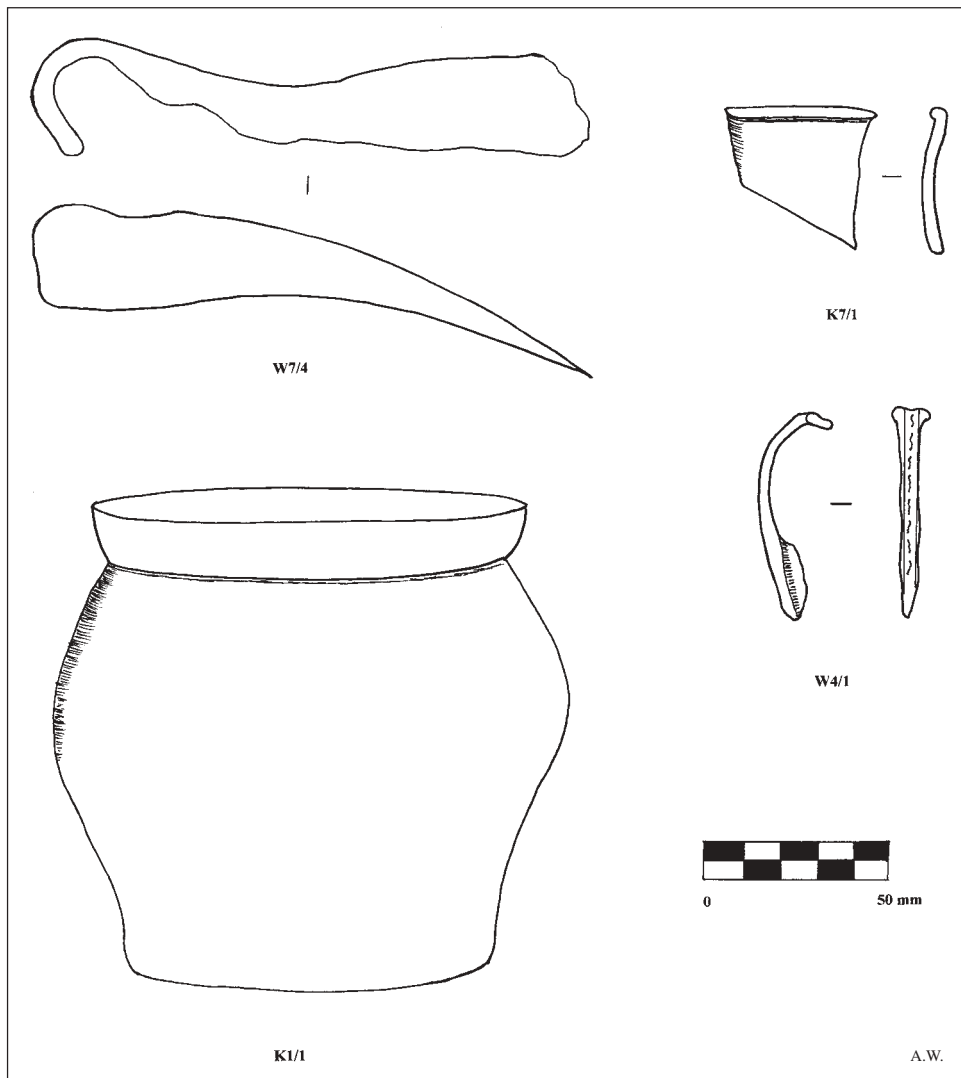


Figure 1 Finds from Native Sites

6 **Bone spoon*** (fig 2), decorated ring handle; copy of Roman bronze spoon (HN70; Corrie, Clarke and Hunt 1875, 494. pl 20/1); spatula type bowl paralleled at Leicester (Connor and Buckley 1999, 265, fig 127/119), London (MOLAS 18638; Wilmott 1991, 114, fig 78/276) and Nettleton (Wedlake 1982, 204, fig 84/11); on Romano-British bone spoons see MacGregor 1985, 44 ff, 284 f and 181 ff; cf Cleaves Cove, Strathclyde (Wilson, A 1997, MO 24, A/CLE8)

Additional finds include bone needles, pins, toggles⁶⁷ and weaving combs (HN37-160), corroded fragments of bronze (HN163-171) and iron (HN179) and a lump of vitreous slag

K2/1-5 and probably K2/6 indicate Roman Iron Age occupation

⁶⁷ For Early Iron Age parallels to the toggles see Linton (Fell 1953, 33, fig 2; Stevenson 1966, 26 & fn 63).

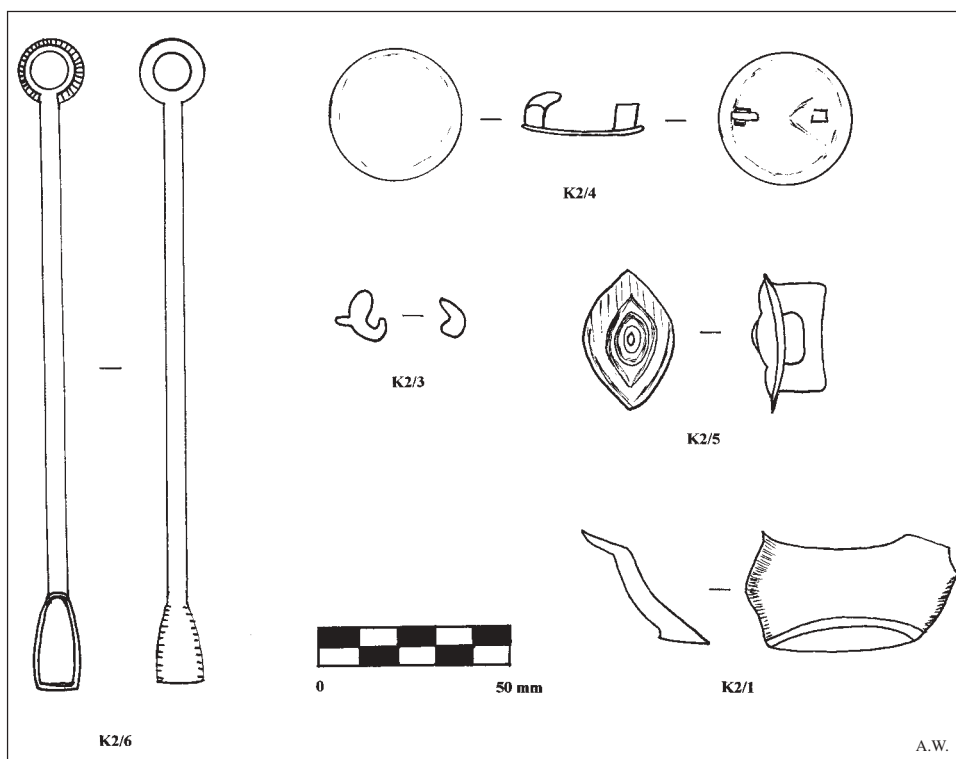


Figure 2 Romano-British Finds from Borness Cave

K3 Botel Bailey, Buittle NX 818 616; ongoing excavation (SMK; Penman 1997 & 1998)

1 **Roman coins**, identified by Nick Holmes⁶⁸: (a) found inside and (b-d) outside round house:

- a) forgery of Gallienus, 253-268 AD (BB96/124)
- b) *ae* of House of Constantine, 336-340 AD (BB97/427)
- c) *ae* of Constans or Constantius II, 347-8 AD (BB96/045)
- d) *ae* of Valens, 364-378 AD (BB98/315)

2 **Samian sherd**, probable rim of platter, possibly Pudding Pan Rock type 1, found outside round house; late 1st/2nd century AD (BB97/129)

3 **Coarse ware*** (fig 3), late 1st-4th century AD; finds a-d from within round house save BB00 sherds in (a):

- a) six sherds, buff/cream ware (BB95/651/1-2, 00/001 & 152/1-2 with probable face-pot markings)

⁶⁸ Ten more coins discovered on the bottom field south of the Bailey were identified by Nick Holmes as *denarii* of Mark Antony, Vespasian, Titus, Nerva, Trajan (2), Hadrian (2) and Antoninus Pius and a fairly worn *dupondius* of Antoninus Pius dated 154-5 AD; these coins may have come from a Roman military site and not be native losses.

- b) sherds, grey ware (BB95/055, 650/2& 651/1, 96/1036 & 97/051)
- c) white ware (BB97/131&153)
- d) Nene Valley beaker/cup sherd, mid-late 3rd century AD (BB96/1726)
- e) possible buff vessel lid discovered 10/9/2000 in area 3B, context 00360
- f) sherd of decorated BB ware discovered at close of 2000 excavations (sent to HM for evaluation)

Also Iron Age ware with blackened exterior and light grey interior, most recently BB00/080

4 **Melon Bead**, dark blue faience; external diameter 17 mm (BB95/612) ⁶⁹

Also a biconical amber bead (BB98/235), glass bead discovered on 16/6/2000, molten oxidised fragment of glass (BB97/083) and Roman glass sherd found at close of 2000 excavations (sent to HM for evaluation)

5 **Two bronze *ligulae**** (fig 3), 2nd/3rd century AD (BB96/1644 & 97/006); cf *ligulae* from Colchester (Crummy 1983, 60 f, fig 65/1927), South Shields (Allason-Jones and Milet 1984, 170, no 3.451 and parallels), Richborough (Cunliffe 1968, 100, pl 43/172) and Verulamium (Wheeler and Wheeler 1936, 212, fig 45/51); larger *ligula* reminiscent of Roman *cyathiscomeles*, surgical probes (Milne 1907, 61, pl 14/1; Riha 1986, 68, taf 39/414-5 and 87, taf 60/662)

6 **Decorated domed stud*** (fig 3), solid head, 17 mm wide, 10 mm deep, iron pin stump (BB00/093); cf similar decoration on studs from Birrens (Robertson 1975, 110, no 38, fig 31/4), Castledykes (Robertson 1964, 160, pl 7/8), and the Saalburg (Oldenstein 1976, 171 f, taf 48/528-530); form similar to Roman domed/fungiform studs (Manning 1985, 135, type 8, fig 32/8; Bishop and Coulston 1993, 152 f, fig 108/9-12), cf Brancaster (Hinchcliffe and Green 1985, 48, fig 31/29), Leicester (Kenyon 1948, 260, fig 88/7, types C2/3); Usk (Manning, Price and Webster 1995, 41, fig 15/13-16) and Wroxeter (Barker et al 1997, 252, fig 332/13)

Other copper alloy finds include an Iron Age coiled rod brooch (BB97/134), a faceted pin head (BB97/132), two tanged blades (BB98/225 & 230), a possible scalpel (BB96/195) and a corroded blade from 2000 excavations

K3/1-6 and possibly other finds indicate Roman Iron Age occupation continuing until the late 4th century AD on this medieval site

K4 **Brighthouse Bay Kitchen Middens**, NX 6378 4580; excavated 1992-93 (SMK; Maynard 1994)

1 **Coin moulds**, *denarii* forgeries (Maynard 1994, 21, fig 7; Bateson and Holmes 1998, 53):

- a) obverse, Elagabalus, AD 220-2
- b) reverse, Severus Alexander, AD 222-5

2 **Samian ware**, chip, Central Gaulish (?) pinkish ware (Maynard 1994, 23, SF35.1/1)

3 **Coarse ware**, sherds/chips, buff, brownish-pink, pink and BB1 ware (Maynard 1994, 23, SF4 & 7/1 & 3, 35.1/2 & 3)

Sherd SF7/2 probably Iron Age

⁶⁹ On melon beads in southern Strathclyde see Wilson, A 1997, 15 & MO 20, A/CAS6 with bibliography; many faience melon beads were found at Usk (Manning, Price and Webster 1995, 111 f, fig 31).

4 **Iron spearhead*** (fig 3), leaf-shaped, split socket; surface find from midden 8 (Maynard 1994, 22 f, SF1, fig 8); Roman Iron Age or later; cf Buiston (Wilson, A 1997, MO 8, A/BU114) and Traprain Law (Burley 1958, 201, no 385)

5 **Two iron holdfasts*** (fig 3), (Maynard 1994, 23, SF5); Romano-British; cf Brampton (Manning 1966, 43, no 50), Danebury (Cunliffe and Poole 1991, 353, fig 7.25/2,347-8), Fishbourne (Cunliffe 1971, 128, fig 55/6 & 7), Southwark (Manning 1985, 132 ff, pl 62/R74-81 and parallels from Roman Germany) and Traprain Law (Burley 1958, 217, no 531)

Also copper alloy tube fragment (Maynard 1994, 23, SF6)

K4/1-3 and possibly K4/4-5 indicate Roman Iron Age occupation continuing into the third century AD

K5 **Castlehaven Fort**, Borgue, NX5934 4827; excavated c 1905 (finds at Borgue; Barbour 1907; RCAHMS 1914, 46 ff, no 64)

1 **Chain mail**, partly-interlaced steel rings, possibly from Roman *lorica hamata* (Barbour 1907, 79; Cessford 1994, 73); see Carlingwark K15/33 ⁷⁰

2 **Undecorated spindle-whorl**, white lead, external diameter 25 mm, perforation diameter 6 mm; found outside fort, May 1996; possibly Roman

A blue wave bead (Guido 1978, 132, group 5A), ⁷¹ a circular amber bead fragment, ⁷² two bronze spiral finger rings ⁷³ and quern fragments (Barbour 1907, 78 f, fig 9) could be Iron Age; the post Roman penannular *fibula* (Fowler 1964, 113 & 146, type D7) is derived from type D6 found on Roman sites

K5/1-2 without structural evidence do not establish Roman Iron Age occupation at this Early Historic galleried fort

K6 **Crossmichael Grave Mound**, c NX 752 641; discovered c 1932 (*PSAS* 67, 1932-33, 314); my records indicate location at Greenlaw House (RCAHMS 1914, 81, no 144) ⁷⁴

1 **Melon bead**, light blue faience, external diameter, 22 mm (NMS FJ125)

2 **Annular bead**, cobalt blue glass; two imitation twisted yellow cables; maximum diameter 21.5 mm, probably Iron Age (NMS FJ124; Guido 1978, 186, class 9b, atypical)

K6/1-2 may have been deposited during the Roman Iron Age but these alone cannot date the site

K7 **McCulloch's Castle**, Arbigland NX 9962 5769; excavated 1962-63 (RCAHMS 1914, 106 f, no 210; Scott-Elliott 1964; Robertson 1970, 198, table 1, & 207)

1 **Samian sherd* (fig 1)**, soft orange Central Gaulish ware, Dr 18/31, found near bottom of hearth; 2nd century AD, probably Antonine (DM 1967/405; Scott-Elliott 1964, 123);

2 **Coarse ware**, lost; two fragments, one soft red ware, both possibly Roman

Other finds include corroded iron fragments (DM)

K7/1-2 suggest Roman Iron Age occupation of the semi-circular ditched enclosure

⁷⁰ On reused Roman chain mail see Czarnicka 1994.

⁷¹ Cf Roman examples from Colchester (Crummy 1983, 32, fig 33/546), Leicester (Kenyon 1948, 269, fig 93/3 type 3), Newstead (Curle 1911, 336, pl 91/17, 19, 23 & 26) and Richborough (Bushe-Fox 1932, 80, pl 11/25).

⁷² On amber beads see Hunter in Main 1999, 391.

⁷³ On spiral finger rings see Wilson, A 1997, MO 7, A/BU18-9.

⁷⁴ It is claimed ten tumuli were discovered locally (*NSA* 4, 195), one possibly the 'Roman cemetery' at Mill Hill marked on the 1st ed 6 inch OS map.

K8 **Milton Loch Crannog I**, Urr NX 8428 7120; excavated 1953 (Piggott, C M 1955; Guido 1974)

1 **Disc dress fastener**, bronze; red and yellow enamel; late 1st/2nd century AD (NMS HT175; Piggott, C M 1955, 144 ff, fig 9; Gillam 1958, 84 f, 90, no 21, type C; Wild 1970A, 155, no 157; MacGregor 1976, 1, 131, fig 7/14); described as Pannonian (Sellye 1939, pl 7/3-5) but its openwork design is much closer to mid 1st century British plate brooches from Roman sites at Longthorpe (Dannell and Wild 1987, 87, fig 21/11) and Colchester (Hawkes and Hull 1947, 326, pl 98/117); Pannonians served in the Roman army in Britain but so did Britons in Pannonia (Cheesman 1914, 59 fn 1, 69, 76, 148 & 170 ff) and British dress fasteners could have been carried there

A ritually deposited plough beneath the crannog foundations and three radiocarbon-dated piles are Early Iron Age (Guido 1974; Barber and Crone 1993, 522, tab 1, nos 12, 17 & 18)

K8/1 may indicate earlier occupation continuing into the Roman Iron Age

K9 **Moss Raploch Round House**, Clatteringshaws NX 553 776; two enclosures, one excavated 1974 (Condry and Ansell 1978)

1 **Two glass ring fragments**, found outside entrance (DM 1977/36/1 & 2; Condry and Ansell 1978, 108 f, pl 11):

a) blue

b) white streaked blue and green

K9/1 suggest Roman Iron Age occupation

K10 **Mote of Mark**, Dalbeattie NX 845 540; excavated 1913 and 1973 (NMS HH series; Curle 1914; RCAHMS 1914, 71, no 120; Curle 1932B, 374, no 38; Cotton 1955, 38, 44 and 69; Laing 1973)

1 **Samian sherd**, dark reddish-brown glaze; surface find (HH231; Curle 1914, 161 & 1932B, 284)

2 **Roman glass bowl fragment** (HH262); not window glass (Curle 1914, 156) but base of late Roman bowl (Harden 1956, 150 f, no 22)

K10/1-2 are probably Roman survivals at this Early Historic site

K11 **Kirkmirran**, Dalbeattie, NX 800 550

1 **Sherd of Roman (?) coarse ware**, thin light orange hard body, dark brown burnish (Crowe 1986, 60, fig 7, K85L7.105); cf Corbridge beaker, 180-220 AD (Gillam 1957, 18, no 169)

K11/1, if Roman, is a survival on a Dark Age/Medieval chapel site

K12 **Threave Castle**, Balmaghie, NX 739 622; excavated 1974-78 (Good and Tabraham 1981, 129, fig 20/207)

1 **Bangle fragment**, D section, turquoise blue glass, dark blue strip separated by angled white glass streaks applied to outer face (possibly Kilbride-Jones 1938 type 2)

K12/1 is a survival on a medieval site

K13 **Torrs Cave** (Dirk Hatteraick Cove not to be confused with Dirk Hatteraick Cave at Carsluith), Kirkcudbright NX 6767 4459; excavated 1934-36 (SMK 3987; Morris 1937; Robertson 1970, 212, table 5)

1 **Samian ware**, little sign of wear:

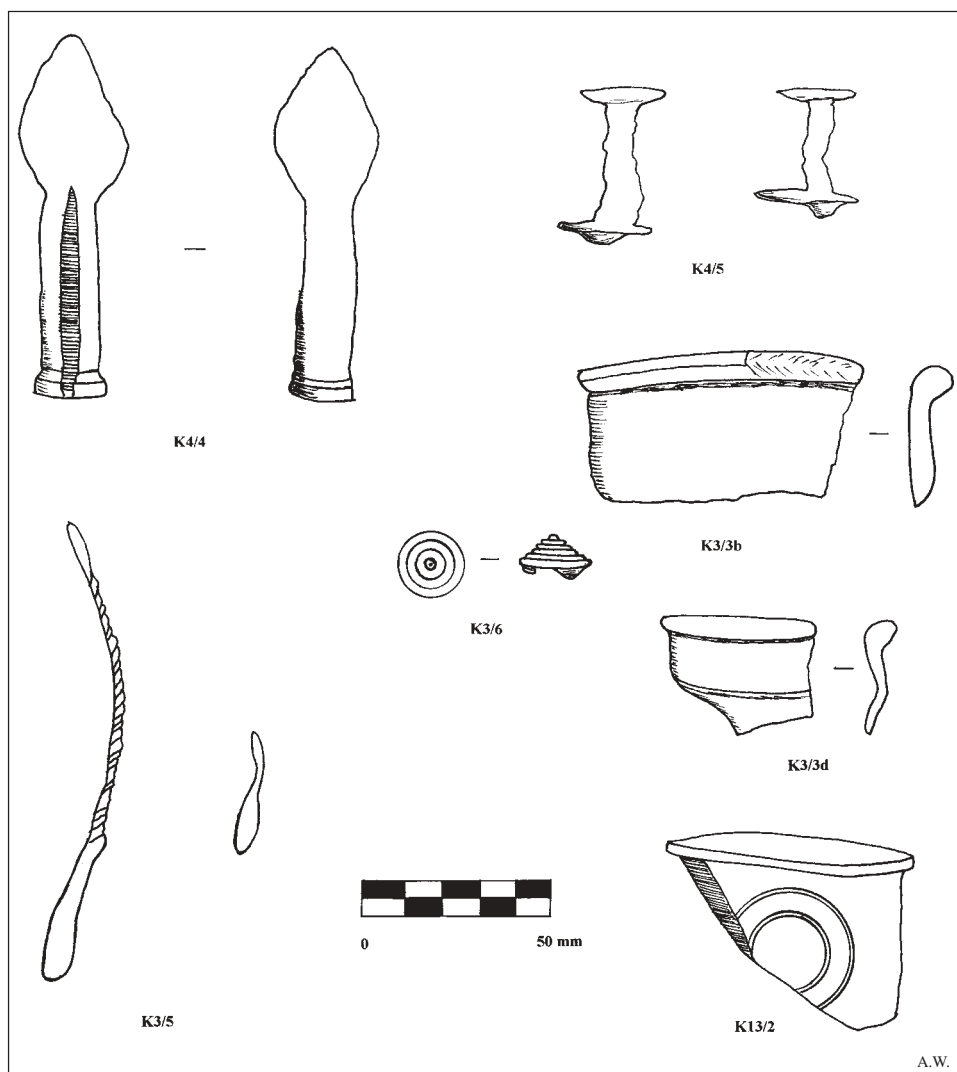


Figure 3 Finds from Native Sites

a) Dr 37 base sherd, probably 2nd century AD

b) chip

2 **Roman glass*** (fig 3), fragment, square blue bottle; cf Ward 1911, 181, fig 52C; Price and Cottam 1998, 194 ff, fig 89 & pl 3/4; cf Carlingwark (K15/1) ⁷⁵

3 **Melon bead**, blue faience, external diameter 21 mm (Morris 1937, 423, fig 6/1)

Many occupation levels were observed with finds dated pre-Roman to 17th century

K13/1-3 indicate Roman Iron Age occupation

⁷⁵ On Roman bottle glass from native sites in southern Strathclyde see Wilson, A 1997, MO 6, A/BU112.

*Wigtownshire***W1 Barhobble Church**, Mochrum, NX 310 494 (Cormack 1995)

1 **Bangle fragment**, light blue green translucent glass, cobalt blue band and yellow enamel with blue trails; Kilbride-Jones 1938, type 1 (WM BAR1; Cormack 1995, 72, fig 36/1)

W1/1 is a survival in grave S28

W2 Black Loch Crannog, Cryndil NX 1139 6118; examined c 1870 (NMS HT10-14; Dalrymple 1873; Munro 1885, 106-12; RCAHMS 1912, 24, no 32; *ASM* 1987, 56, no 304; Barber and Crone 1993, 524 f, fig 2 & tab 2a)

1 **Glass bangle fragment**, green, three cords of blue and white twisted ornament, Kilbride-Jones 1938, 372 ff, type 2 (HT12; Dalrymple 1873, 391; Stevenson 1957, 218)

2 **Composite bone comb**, double-sided, three iron rivets, dot and ring ornamentation with tangential running wave (HT10; Munro 1882, 57, fig 30); cf late Roman (Colchester, Gloucester, Langton and Richborough) and Early Historic running wave ornamentation (Hunter 1993, 323 ff, tab 1 & ill 1 & 3); on similar bone combs see MacGregor 1985, 78 and 94 ff ⁷⁶

Early 18th century soil deposition disturbed archaeological levels destratifying bronze finds (HT11 & 13; Dalrymple 1873, 391)

W2/1 is Roman Iron Age but W2/2 is Early Historic on a crannog probably also used in Covenanted times (HT14)

W3 Castle Loch Island, Mochrum NX 292 541; excavated 1912 and 1950 (finds, Old Place of Mochrum; Radford 1951)

1 **Decorated Samian**, very worn; Dr 37, Hadrianic Lezoux ware (Radford 1951, 60, D7)

2 **Coarse ware sherds**, 40-80 AD (Radford 1951, 60, D8, fig 7/1 & D9, fig 7/2):

a) part of shoulder and handle of flagon neck, light pinkish buff fabric with yellowish buff strip

b) shallow bowl; smooth brick red micaceous fabric

3 **Small glass vessel**, curved portion; Roman origin suggested by W A Thorpe (Radford 1951, 56, CI) but rejected by Dominic Ingemark, Lunds University

4 **Melon bead**, turquoise fragment, obliquely gadrooned sides (Radford 1951, 62, E2)

A translucent blue-green glass perforated bead with eight blue and white marvered spots is Iron Age (Radford 1951, 62, E1, fig 8/3; Stevenson 1957, 211, fig 1/5; Guido 1978, 124, group 2) as are two cobalt blue annular glass beads (Radford 1951, 62, E5 & 6; Guido 1978, 66 f & 161, group 6/IVB); other beads could be Iron Age (Radford 1951, 62)

5 **Slate spindle whorls**, could date to the Roman Iron Age as suggested (Radford 1951, 62 f, F1 & 2) or be later

W3/1-2 & 4 and perhaps W3/5 suggest Roman Iron Age occupation on this medieval site

W4 Cruggleton Castle, Sorbie NX 484 428; excavated 1978-81 (finds with HS; Ewart 1985)

1 **Bronze bow brooch*** (fig 1), zig-zag design on fore-edge (Ewart 1985, 64 ff, no 7, fig 31); Romano-British (Collingwood and Richmond 1969, 287 type H); cf bow brooches from Col-

76 For a review of similar bone combs including those from Buiston see Wilson, A 1997 MO 12 ff, A/BUI141-3.

chester (Hawkes and Hull 1947, 311 f, type V, pl 92/51 & Crummy 1983, 12, type 94, fig 6/60), Dragonby (May 1996, 253, fig 11.8/92) and Newstead (Curle 1911, 318, pl 85/5); a similar brooch was found in an Anglo-Saxon grave at Linton Heath (White 1988, 34 no 8, fig 18/2)

An iron bolt head (Ewart 1985, 66, fig 32/20) differs in profile from those at Buiston (Wilson, A 1997, 16, MO 8, A/BUI15 & 16) and is probably medieval (cf Wheeler 1940, 67, fig 16/8 & 9)

W4/1 suggests Roman Iron Age occupation of the promontory fort radiocarbon dated 50 AD \pm 70

W5 Dowalton Loch Crannogs, Glasserton, five crannogs NX 3976 4656-NX 4077 4694; excavated 1863-84 (NMS HU1-70; Stuart 1868; Munro 1882, 38 ff, and 1885; RCAHMS 1912, 146 ff, no 423; Curle 1932B, 374 f, no 39; Robertson 1970, 204, table 3; Hunter 1994); Stuart wrongly identified crannogs 2 and 3 in his text and finds are therefore reallocated to the sites as numbered on his map and followed by Hunter 1994

1 **Samian sherd*** (fig 4), crannog 3; Dr 37 wall sherd, soft pink ware, reddish-brown glaze; late 1st century AD; (HU67; Munro 1885, 102, fig 19; Curle 1932B, 284, fig 1/1)

2 **Three bangle fragments**, late 1st/2nd century AD:

a) white vitreous paste, two fragments, surface finds, crannog 2 (HU64; Stuart 1868, 119 ff; Kilbride-Jones 1938, 378, type 3A)

b) opaque yellow glass, crannog 2 (HU28; Stuart 1866, 119 ff; Kilbride-Jones 1938, 381, type 3B, fig 5/3)

c) half bangle, opaque white glass, blue inlay, surface find, crannog 2 (HU27; Stuart 1868, 120; Munro 1882, 48, fig 20; Kilbride-Jones 1938, 382, type 3C, fig 6/1)

3 **Three melon beads**, blue faience, external diameters 19-22.5 mm, crannog 3 (HU29, 30 & 63; Munro 1882, 48, fig 22)

Other native beads are probably Iron Age/Early Historic, a white glass bead with blue vertical lines and yellow blob at perforation (NMS HU33; Munro 1882, 48, fig 24; Guido 1978, 200), an opaque white bead decorated with three rows of red-wine blobs (HU31; Munro 1882, 42, fig 23), ⁷⁷ a fragment of a dark blue glass bead (HU34; Munro 1882, 49) and an annular amber bead (HU32; Munro, 1882, 48)

4 **Bronze patera**, found between crannog 3 and shore; inscribed *CIPIPOLIBI*; late 1st century AD (HU1; Stuart 1868, 119 ff, pl 10/1; Curle 1932B, 298 ff, figs 10 & 11; Robertson 1970, 202; Henderson 1972; *RIB* 2415.18); it has been suggested P C Polybius worked in Italy either under Claudius or Nero (Willers 1907, 78 & 85 ff with thirty six examples), or the Flavians (Radnóti 1938, 47 f, 53, 55 f & 61 f, taf 17/14-19) or AD 50-150 (Eggers 1950, 92, tabellen 2 & 1966, 96 & 109, no 68); on the function of *paterae* for measuring/serving grain or wine etc, see Tassinari 1975, 16 ff; the pristine condition of this quality *patera* suggests it was a gift

5 **Melon bead bronze torc**, blue glass melon bead fragment with inner bronze core, ornamented externally with three twisted bands of yellow (HU29; Stuart 1868, 124, pl 10/4); for parallels see MacGregor 1976, 98

⁷⁷ Cf similar bead of red vitreous paste with yellow blobs from the shore of Loch Ronald, Kirkcowan (NMS FJ96; Wilson 1880, 141, fig 20).

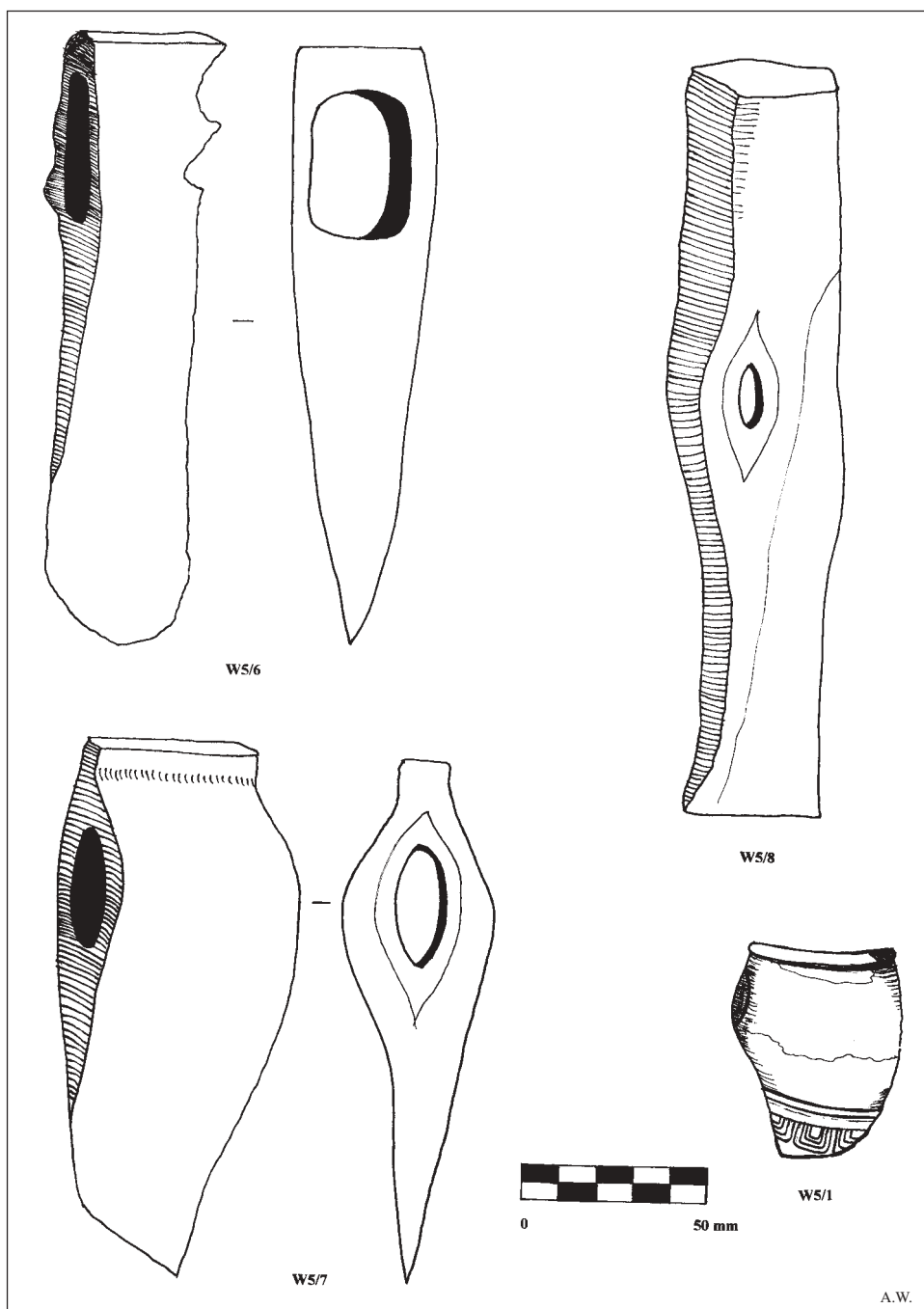


Figure 4 Finds from Dowalton Loch

A bronze linch pin (?) and open-work triskèle brooch are Iron Age (HU6 & 62; MacGregor 1976, nos 134 & 253) ⁷⁸ as possibly other copper alloy fragments (HU9 & 10; MacGregor 1976, no 335)

6 Iron axe-head* (fig 4), triangular section, squared butt tapers to sharp cutting edge; oval eye set close to poll; found near crannog 3 (HU11; Stuart 1868, 119; Munro 1882, 46 f, fig 17); cf 1st century AD parallels from Camerton (Jackson 1990, 57, pl 22/232), Pompeii (Petrie 1917, 11 ff, pl 13/032) and London (Manning 1985, 15, fig 3 type 1 with blade of uniform width, pl 7/B1)

7 Iron axe-head* (fig 4), narrow poll, slightly swollen round oval eye; crannog 3 (HU12; Stuart 1866, 119; Munro 1882, 46 f, fig 18); this type has native and Roman ancestry, cf La Tène and Pompeii (Petrie 1917, 11 ff, pl 9/027 & 029) and Camerton (Jackson 1990, 56, pl 20/229)

8 Iron hammer-head* (fig 4), oval shaft hole, squared butt tapers to blunt cutting edge; crannog 3, (HU13; Stuart 1868, 119; Munro 1882, 47, fig 19); cf set hammer from Newstead (Curle 1911, 286, pl 57/6) and straight pane hammer from Walling (Manning 1976, 24, fig 14/52)

Pieces of iron slag (HU40) and a crucible (HU36) may indicate on-site metalworking

9 Decorated leather shoe, crannog 3 (HU35; Munro 1882, 49 fig 25); identified as Roman (Curle 1932B, 375; Scott 1976, 37 ff, fig 3) but radiocarbon dated Early Historic (*DES* 1997, 117); style and decoration looks different from other Early Historic shoes, cf Dundurn (Alcock, Alcock and Driscoll 1989, 217, ill 16); its form with two pairs of eyelets and ornate decoration is reminiscent of Roman *calcei* from Bar Hill (Robertson, Scott and Keppie 1975, 72, type C, fig 13/30 & 31) and the Saalburg (Busch 1965, 208, nos 220-1, abb 3/10)

Other finds could be Roman Iron Age but the penannular *fibula* (HU7; Fowler 1960, 153 and 1964, 141, type G4) is Early Historic; there is also medieval pottery

W5/1-8 indicate Roman Iron Age occupation on crannogs 2 and 3 and the dragonsque *fibula* from Boreland of Longcastle (W14) may indicate a wider spread of such occupation

W6 High Torrs, Luce Sands NX 141 556; cairn two hundred yards west of Horse Hill, excavated 1931 (KAGMA 1955.96, some finds lost; Curle 1932B, 375 f, no 40; Mann 1933; Breeze and Ritchie 1980)

1 Samian ware sherds:

a) rim and ovolo, Dr 37 bowl, hard pinkish ware, dull red glaze; East Gaulish, AD 180-220 (Curle 1932B, 284; Mann 1933, 151; Breeze and Ritchie 1980, 81, no 11)

b) nine Déchelette 72 bowl sherds; soft orange ware, dull red glaze with diamond-shaped incisions; Lezoux ware, 2nd half of 2nd century AD (Curle 1932B, 376; Mann 1933, 151; Breeze and Ritchie 1980, 81, no 10)

2 **Coarse ware**, five tiny scraps (Breeze and Ritchie 1980, 80, no 9)

3 **Crucible rim** fragment, white fabric (Breeze and Ritchie 1980, 80 & fig 1/8)

78 Cf similar triskèle design from Verulamium (Wheeler and Wheeler 1936, 216, fig 48).

4 **Iron finger ring**, pale green chalcedony onyx of Mercury set into bezel (Mann 1933, 150; Henig 1969, 104 ff and parallels and 1974, 48, type 5 finger ring, no 235; Breeze and Ritchie 1980, 78 f, no 1); cf ring from Colchester (Crummy 1983, 80, fig 52/1793)

5 **Fragments of iron dish**, (Breeze and Ritchie 1980, 80, no 3, fig 1/3 and Roman parallels)

6 **L binding**, (Breeze and Ritchie 1980, 80, no 4, fig 1/4); possible chest corner-binding; cf Manning 1985, 125, type 1b door hinge

7 **Iron nails**, (Breeze and Ritchie 1980, 80, nos 5 and 6)

Also bronze fragments (Mann 1933, 147) and iron slag used in smelting (Breeze and Ritchie 1980, 80, no 7)

W6/1-7 date the cremation of possibly a local Romanized smith to the later 2nd/early 3rd century AD

W7 **Rispain Camp**, Glasserton NX 429 399 excavated 1901 & 1978-81 (finds with HS; Barbour 1902; Haggarty and Haggarty 1983)

1 **Glass/enamel**, blue triangular-shaped piece (Haggarty and Haggarty 1983, 45 ff, no 9)

2 **Opaque glass**, pale blue irregular-shaped piece (Haggarty and Haggarty 1983, 45, no 10)

3 **Bronze strap junction** (?), enamelled in yellow, blue and red or brown or orange (Haggarty and Haggarty 1983, 47 ff, fig 13/7); Joanne Close-Brooks compared the enamelling to that on objects of the late 1st/2nd century AD; this type of enamelling occurs frequently on Roman sites, eg High Rochester, Inchtuthil, York, Balmuildy and Birrens (MacGregor 1976, 35 ff, nos 31, 32, 37 & 64-66); the triangular panels in particular occur on Romano-British objects such as brooches and dress-fasteners found on native sites, eg Castlehill, Ayrshire (Wilson, A 1997, MO 20, CAS9, fig 3) and Traprain Law (Burley 1958, 180, no 230, fig 4)

4 **Iron adze type hoe*** (fig 1), badly corroded (Haggarty and Haggarty 1983, 49 & fig 13/3); this type occurs on native and also Roman and Romano-British sites, eg Ardoch (Ward 1911, 198, fig 56A), Bampton (Manning 1966, 8 ff, no 2 and parallels from Roman Britain and Germany), Camerton (Jackson 1990, 58, pl 22/233), Hod Hill (Manning 1985, 16, pl 8/B7-8) and Loudoun Hill (Rees 1979, 309 & 406, fig 81b)

5 **Metalworker's iron tongs**, incomplete large pair, 755 mm long (Haggarty and Haggarty 1983, 45 ff, fig 13/8); this type has native and Roman ancestry, cf La Tène and Heathery Burn (Petrie 1917, 41, pl 45/M132-3) and Roman London (MOLAS accession nos, 16241, 19168-9 (Wilmott 1991, 128, fig 88/454, iron worker's tongs), 21007, A 6349 (associated with glass working), 87.152 & MGT 87R 887.1103)

Also iron slag (Haggarty and Haggarty 1983, 49 f)

The ditch and banks of the enclosure have been radiocarbon dated 40±80 BC but the finds cannot be so precisely dated; W7/3 is probably Romano-British as may be W7/4-5 and possibly W7/1-2 suggesting the first period of occupation may have extended into the Roman Iron Age

W8 **Whithorn Priory**, NX 4445 4033; excavated 1949 onwards (SM; Hill, P 1997)

1 **Nummus**, Constans/Constantius II, minted Trier AD 347-8; mid 9th century AD survival in period II church floor debris (Hill, P 1997, 296, CNO1.1) ⁷⁹

79 On isolated Roman coin finds from the Whithorn area see W30/1-5.

2 **Samian ware**, Lezoux sherds, Dr 18/31, 30 and 37 as well as other dishes or bowls, all Hadrianic/Antonine or Antonine (Hill, P 1997, 293, PYO1/1-7; SM 89/ 9927 & 10587, 90/ 12333, 91/13419 & 14174-6); PYO1/2 & 7 suggested as displaced from 2nd century deposits and PYO1/1, 3 & 6 from 2nd century debris

Brenda Dickinson suggested these vessels may have originated in a 2nd century local Romano-British site (Hill, P 1997, 293)

3 **Coarse ware** (Hill, P 1997, 293 f, PYO2/ 1-5; SM):

- a) probable Dressel 20 *amphora*, 2nd/3rd century AD (PYO2/1; SM 89/11054)
- b) Nene Valley beaker, 2nd-4th century AD (PYO2/2; SM 91/14155)
- c) wheel-thrown body sherd, fine oxidised fabric (PYO2/3)
- d) wheel-thrown body sherd, fine slight micaceous fabric (PYO2/4)
- e) counter, wheel thrown, fine oxidised fabric (PYO2/5)
- f) rim, small bowl with exterior flange; Romano-British or 6th century African Red Slipware (Hill, P 1997, 322, PYO7.2; SM 89/10696)

Martin Millett suggested sherds a-e could have originated in a local Romano-British settlement (Hill, P 1997, 293)

4 **Roman glass**, (Hill, P 1997, 294 ff):

- a) at least 12 pieces including window glass/vessel fragments, 1st-3rd century AD (GSO1/1-11/13)
- b) bangle fragments, Kilbride-Jones 1938 types 1, 2 and 3A, late 1st/2nd century AD (GSO1/1-4)
- c) biconical bead (GSO3/1)
- d) stemmed glass cup/beaker fragment; Roman or post Roman (Hill, P 1997, 314 f, GSO2.82)
- e) sherds, possible late Roman bowls (Hill, P 1997, 300 f, A2-8)
- f) *tesserae* fragments found in later contexts (Hill, P 1997, 296, GSO5/1-13)
- g) melted lump (Hill, P 1997, 295, GSO1B)

Jennifer Price suggested Roman glass was collected from abandoned Roman forts in southern Scotland (Hill, P 1997, 294) but like the pottery its distribution may have been local

5 **Toilet instruments**, copper alloy:

- a) nail cleaner (Hill, P 1997, 293, 377 f, BZ24/11, fig 10.64/11); possibly Roman or Romano-British (Ward 1911, 247, fig 70K); cf Fishbourne (Cunliffe 1971, 110 fig 42/69-71), King Harry Lane (Stead and Rigby 1992, 25, fig 14/91), Nettleton (Wedlake 1982, 219, fig 94/5 & 6) and Traprain Law (Burley 1958, 182, nos 247-9); Irish examples differ (Bateson 1973, 80 f, fig 3; Laing 1985, 266)
- b) tweezers (Hill, P 1997, 377, BZ24/2 & 3); could be Roman; on the first cf Bignor (Frere 1982, 179, fig 26/10) and Newstead (Curle 1911, 307, pl 92/6 & 8) and the second Traprain Law (Burley 1958, 181 f, fig 4/242)

6 **Lead spindle whorls**, possibly Roman (Hill, P 1997, 293, 391 f & 395, LDO3/1 & LD09/12)

7 **Quern/millstone fragments**, three and perhaps more reused stones from a possible Romano-British settlement, two possibly from a Roman mill (Hill, P 1997, 293 & 459 ff. SE43/13 & 44/3 & 4)

On early Christian Latin inscribed stones see Thomas 1992 and 1998 and Hill, P 1997, 614 ff

Although finds W8/1-7 were found in later archaeological contexts, a significant number may have originated in a local Romano-British community whose existence has not as yet been confirmed by structural evidence

B Hoards/Scatters

Stewartry of Kirkcudbright

K14 **Buittle Mill**, Urr NX 813 644 (Macdonald 1918, 243)

1 **Denarii**, one each of Tiberius, Hadrian and Commodus; late second century AD deposit at Buittle Mill (*OSA* 11, 1794, 70, fn 3) not Mote of Urr (Robertson 1984, 410)

K15 **Carlingwark Loch**, Castle Douglas NX 763 609; hoard discovered near Fir Island c 1866; finds iron unless otherwise stated (NMS DW1-86; Piggott S, 1955, C refs)

1 **Roman glass sherds**, lost; thick blue green bottle, one sherd had letters A, I and possibly M (Curle 1932B. 374; *RIB* 2419.82); cf Torrs Cave (K13/2)

2 **Bronze bowl**, C16 (DW3); fragmentary; cf similar 1st century BC Roman bowls from Egypt (Hayes 1984, 108, nos 170 & 171)

3 **Bronze casket-mounting**, fragmentary, C19 (DW16); possibly for wooden chest

4 **Spatulate-headed lynch-pin**, fragmentary, C8 (DW63); Romano-British; cf Manning 1985, 74, type 2B and parallels to which many more could be added including those from civil sites such as Dragonby (May 1996, 297, fig 11.35/44) and Antonine Verulamium (Frere 1972, 174, type 2b, fig 64/33-5, and parallels); see also Piggott S, 1955, 41/B4 and parallels, MacGregor 1976, 76 and Wilson, A 1997, MO 22, A/CAS17

5 **Spatulate open-headed lynch-pin**, fragmentary, C7 (DW85b); rare open-headed version of K15/4; cf Antonine Winterton (Stead 1976, 222, fig 120/191)

6 **Large boot cleat**, C9 (DW49); Roman; cf Maiden Castle (Wheeler 1943, 284, fig 94/3), Rushall Down (Manning 1985, 131, pl 61/R54-64) and Vindolanda (Bidwell 1985, 150, fig 55/120); it is not strapping (Robertson, Scott and Keppie 1975, 106)

7 **Chain-junction fragment**, C10 (DW85c); incised diagonal lines; probably part of a Great Chesterford cauldron-chain (Piggott S, 1955, 43 ff, B18; MacGregor 1976 152; Manning 1983, 142 ff, fig 7/1 and 1985, 101 f, pl 46/P10)

8 **Handle-loops**, C11/12 (DW67/66/85i); Roman; cf C11 with Castledykes (Robertson 1964, 163, pl 9/6) and Corbridge (Piggott S, 1955, C11) and C12 with Vindolanda (Bidwell 1985, 145, fig 53/91) and Verulamium (Frere 1984, 95, fig 41/77)

9 **Padlock-spring**, fragmentary, C13 (DW85a); Roman; cf London (Manning 1985, 96, pl 43/O70 and parallels)

10 **Saw**, single-edged, teeth too worn to detect any pronounced slope, C20 (DW17); Romano-British; this type has native and Roman ancestry (Wilson, A 1997, MO 34, A/LOL33 and

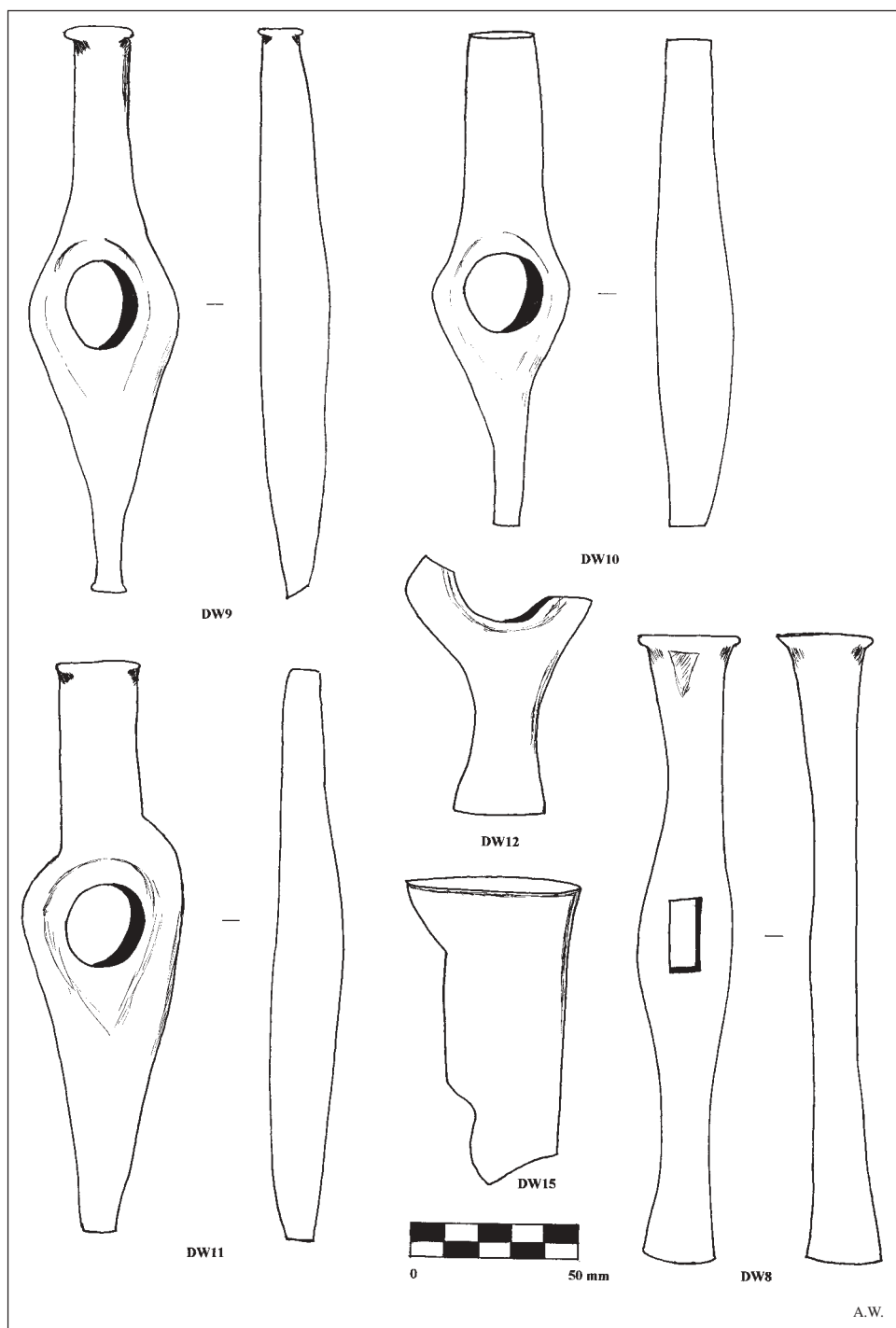


Figure 5 Finds from Carlingwark Loch (K15/6 and K15/34: refs)

K15 Carlingwark Loch (Cont.)

parallels); to Piggott's parallels add Danebury (Cunliffe and Poole 1991, 342, fig 7.12/2.239-241), Gadebridge (Neal 1974, 162 f, fig 70/356-360) and Hambledon Hill (Manning 1985, 19 f; pl 9/B21 and parallels)

11 **Scythe-blade fragments**, C21-23 (DW29. 30 & 32); scythes were probably a Roman introduction to Britain (Piggott S, 1955, 9; Rees 1979, 595 ff & 722, fig 241C and parallels from Bar Hill, Castledykes and Loudoun Hill)

12 **D-shaped buckle**, C36 (DW85f); Romano-British, cf Bar Hill (Robertson, Scott and Keppie 1975, 112, fig 39/69) and Vindolanda (Bidwell 1985, 147, fig 53/100)

13 **Balanced reaping-hook/sickle**, tanged, broken, C37 (DW35); Romano-British (Rees 1979, 458, type 2b, 655 and parallels); this type has Roman and native ancestry; cf Albie Hill (Strachan 1999, 13, fig 4), Danebury (Cunliffe and Poole 1991, 340, fig 7.9/2.212), London (Ward 1911, 201, fig 56E), Newstead (Curle 1911, 283 f, pl 61/2 & 5), Risingham (Manning 1976, 30, fig 19/85) and Stantonbury Hill (Jackson 1990, 68, fig 8/2, pl 32/309)

14 **Circular mounting**, broken, C38 (DW85h); Romano-British; cf Portchester (Cunliffe 1975, 244, fig 130/241 & 247, fig 131/253) and Verulamium (Frere 1972, 192, fig 71/148)

15 **Double-edged tanged blades**, C39/40 (DW26/27); possible Roman surgical/veterinary blades

16 **Hammer-heads*** (fig 5), some fragmentary, C42-48 (DW8-14, wrongly numbered DW8-15 by Piggott); C42 may be native but the rest Roman/Romano-British; cf Bar Hill (Robertson, Scott and Keppie 1975, 100, fig 33/22), Beadlam (Neal 1996, 58, fig 40/97), Great Chesterford (Neville 1856, 6, pl 1/3-7), Newstead (Curle 1911, 285, pl 63/3 & 5), Pakenham (Manning 1985, 51, pl 1/A5 and Roman parallels from Pompeii and Germany), Richborough (Cunliffe 1968, 109, pl 54/270), Silchester (Evans 1895, 145 f, figs 8 & 9) and Vindolanda (Bidwell 1985, 139, fig 50/52 and parallels)

17 **Adze-hammer**, C50 (DW4); Roman; cf Bar Hill (Robertson, Scott and Keppie 1975, 100, fig 33/21 and parallels), Camerton (Jackson 1990, 58, pl 22/233 and parallels), Kingsholm (Manning 1985, 17 f, pl 9/B16 and parallels including Loudoun Hill) and Pompeii (Petrie 1917, 18, pl 18/Z138)

18 **Axe-head**, lugged, C51 (DW5); Roman (Manning 1985, 16, fig 3, type 2); cf Blackburn Mill (Piggott S, 1955, 45, B28), Brampton (Manning 1966, 12 ff, no 6 and lugged parallels), Housesteads (Manning 1976, 24, fig 15/54 and parallels including Loudoun Hill), Newstead (Curle 1911, 282 f, pl 61/1 & 4) and Richborough (Bushe-Fox 1928, 52, pl 24/71)

19 **L-shaped staple**, C52 (DW47); Romano-British, cf Bar Hill (Robertson, Scott and Keppie 1975, 96, fig 31/2 and parallels), Beadlam (Neal 1996, 58, figs 40/98 & 41/106), Chesters (Manning 1976, 44, fig 26/196), Lullingstone (Meates 1987, 109, fig 52/320-1), Sibson (Manning 1998, 292, fig 8/53 & 54) and Traprain Law (Burley 1958, 213, no 496)

20 **Clamp**, C53 (DW61a); probably Roman; cf Castledykes (Robertson 1964, 163, pl 9/6), Risingham (Manning 1985, 132, pl 62/R73 and parallels) and Traprain Law (Burley 1958, 208, fig 7/445)

21 **Joiner's dog**, C54 (DW61); Romano-British; cf Bar Hill (Robertson, Scott and Keppie 1975, 111, fig 37/56), Beadlam (Neal 1996, 58, fig 41/107), Castledykes (Robertson 1964, 1263, pl 9/3), Colchester (Crummy 1983, 120, fig 127/4072), Dragonby (May 1996, 305, fig 11.41/106-9), Usk (Manning, Price and Webster 1995, 289 ff, fig 93/54-70), Vindolanda (Bidwell 1985, 150, figs 55/121) and Winterton (Stead 1976, 219, fig 117/171)

K15 Carlingwark Loch (Cont.)

22 **Hooks**, C55-59/86/91 (DW54, 55, 59, 60 & 81), the latter bronze; Romano-British (Piggott S, 1955, 38); C55 and 58 may be meat-hooks cf Beadlam (Neal 1996, 58, fig 40/103), Castledykes (Robertson 1964, 163, pl 9/8), Lullingstone (Meates 1987, 102, figs 47/284 & 48/306), Newstead (Curle 1911, 287, pl 64/3), and Portchester (Cunliffe 1975, 242, fig 130/231), or perhaps parts of a steelyard (Manning 1985, 106 f, pl 52/P40-42); C57 is paralleled at Lullingstone (Meates 1987 107, fig 48/306) and Maiden Castle (Wheeler 1943, 284, fig 94/5)

23 **Draw knife**, C60 (DW36); metallurgical analysis revealed deliberate carburization and quench cooling in manufacture (Hutcheson 1997, 70); Roman as acknowledged by Piggott contra Hutcheson; cf Portchester (Cunliffe 1975, 240, fig 128/214), Silchester (Evans 1895, 150 f, fig 17) and Vindolanda (Bidwell 1985, 139, fig 49/43)

24 **Bent double spiked-loop**, C61 (DW68); Romano-British; cf Bar Hill (Roberston, Scott and Keppie 1975, 96, no 1, not illustrated but exhibited in HM)

25 **Split spiked-loop**, C62 (DW71); Romano-British; cf Colchester (Crummy 1983, 119 f, fig 125/4061 & fig 126/4069), Gorhambury (Neal, Wardle and Hunt 1990, 150, fig 136/640) and Antonine Verulamium (Frere 1984, 101, fig 44/121)

26 **Double spiked-loop**, C63 (DW69) and C92-94; Romano-British (Manning 185, 130 f); cf Beadlam (Neal 1996, 58, fig 40/101), Colchester (Crummy 1983, 120, fig 126/4066), Fishbourne, (Cunliffe 1971, 128, fig 55/10), Gorhambury, (Neal, Wardle and Hunn 1990, 150, fig 136/638-9), Newstead (Curle 1911, 289, pl 67/6 & 10-13), Portchester (Cunliffe 1975, 242, fig 129/223) and Richborough (Cunliffe 1968, 109, pl 56/279)

27 **Punches**, round section, C64/67 (DW 41/42); this type has native and Roman ancestry (Manning 1985, 10; Wilson, A 1997, 16, MO 34, A/LOL30; cf C64 with Hod Hill (Manning 1985, pl 6/A29 pl 6/A29) and C67 with Dragonby (May 1996, 293, fig 11.33/24), Hod Hill (Manning 1985, pl 5/A23 & pl 6/A31-2) and Usk (Manning, Price and Webster 1996, 247, fig 75/5 and parallels)

28 **Tanged awl**, C66 (DW40); this type has native and Roman ancestry; cf Buiston Crannog, Castlehill Dun and Lochlee Crannog in Ayrshire and close parallels from Bar Hill (Wilson, A 1997, 16, MO 9, A/BUI18-20, MO 22, A/CAS13 & MO 32, A/LOL23) and Dragonby (May 1996, 295, fig 11.33/30)

29 **Files**, C68/69 (DW46a/46); these have native and Roman ancestry; cf Buiston Crannog (Wilson, A 1997, 16, MO 10, A/BUI 25-27); on C68 see Silchester (Evans 1895, 152, fig 19) and Traprain Law (Burley 1958, 213, no 494)

30 **Bar**, rectangular section, C70 (DW83); Romano-British (Piggott S, 1955, 38)

31 **Gridiron**, square-shaped, C71 (DW86); Roman; cf Colchester (Crummy 1983, 73, fig 77/2052), Icklingham (Manning 1985, 100, pl 45/P8 & pl 13 and parallels), Newstead (Curle 1911, 274, pl 53/2) and Silchester (Evans 1895, 153 f, fig 21)

32 **Gridiron**, circular-shaped, C73 (DW53); Roman, cf Sibson (Manning 1998, 286, fig 4/17 and parallels)

33 **Chain-mail**, C74 (DW2 & DM 1965.108; Piggott S, 1955, pl 2; Curle 1932B, 321); probably from a Roman *lorica hamata* (Robinson 1975, 484 no 483) cf Newstead (Curle 1911, 161, pl 38/10) and Usk (Manning, Price and Webster 1996, 12 ff and parallels from Roman forts in Britain and Germany); the Carlingwark rings are of two types, *kattenpanzer* with shoulder guards but no sleeves and *keltenhemd* with sleeves but no shoulder guards (Sanden 1993, 4 ff & fig 9); on Roman stamped ring mail see Bishop and Coulston 1993, 190; see also Castlehaven (K5/1)

K15 Carlingwark Loch (Cont.)

34 **Block anvil**, C49 (DW15; Curle 1932B, 318, fig 23/24; inaccurately recorded by Piggott as a hammer-head); round section for light metalworking; Romano-British (Manning 1985, 1, type 2 Romano-British anvils); cf Sutton Walls (Tylecote 1986, 167, fig 111), Waltham Abbey (Manning 1985, 3, pl 1/A1) and a similar square anvil from Pompeii (Petrie 1917, 40, pl 43/M43)

35 **Hinge**, C84/85 (DW62; Curle 1932B, 319, fig 23/89); fragments possibly of door hinge; Romano-British; cf Castledykes (Robertson 1964, 163, pl 9/9 and Roman parallels from Britain and Germany)

Some finds are definitely or probably native (C1-6, 17-18, 20?, 24-35 and 42; MacGregor 1976, 213); other smaller finds include awls, bars, blades, chisels, handles, hooks, loops and a ring (C75-83, 87-90 & 95-100; DW33-34, 37-39, 43-45, 48, 50-52, 56-58, 65, 72, 75, 77-82; Curle 1932B, 319, fig 23)

It has been suggested this is a Roman deposit (Manning 1972, 242 & fn 117 and 1981, 57) but it is more likely to be a late 1st/2nd century AD native deposit (Hunter 1994, 64) of Roman, Romano-British and native objects

K16 Halcroft Farm, Corsock NX 763 744 (Robertson 1963, 151 & 1978, 210, no 34)

1 **Roman coin hoard**, at least 20, discovered in pot c 1918; only two survived for examination, a fairly worn Urbs Roma coin and a worn *ae* of Constantius II

A possible mid 4th century AD date is suggested

K17 Kirkmuir, hoard unearthed in a drained meadow c 1865 on the farm of Kirkmuir 1¼ miles from Kirkdale Old Churchyard (c NX 5123 5405; Jardine 1865, 10 f)

1 **Roman bronze jug handle** (c NX 520 540; NMS FR224); previously ascribed to Cairnholly (Curle 1905, 230 and 1932B, 298, fig 8 and 373, no 36; Robertson 1970, 221, fig 8); for a detailed description of the heterogeneous assortment of motifs associated with the Medusa head on the handle see Toynbee 1964, 326 where the artwork is described as religious, possibly partly Bacchic; for a jug with a similar Medusa handle from Caves Santenay see Tassinari 1975, 60, pl 152

2 **Four axe-heads**, lost

The jug handle suggests a date for deposition during the Roman occupation of Galloway at a location not far from the probable Roman road over the Corse of Slakes (Wilson 1989, 9 f)

*Wigtownshire***W9 Aird's Farm**, Stranraer NX 095 601 (Robertson 1974, 128)

1 **Roman coin hoard** discovered during World War II near army transit camp; sole survivor a bronze probably of the Ptolemies; is this part of hoard W12 below? ⁸⁰

W10 Balgreggan Quarry, Stoneykirk NX 090 506 (Macdonald 1914 & 1918, 272; Robertson 1952, 151 & 1978, 210, no 35)

⁸⁰ Recent aerial photographs suggest the South Galloway Roman trunk road heading towards Stranraer via higher ground near Aird's Farm (RCAHMS 1996, 25).

1 **Roman bronze coin hoard** discovered 29th October 1913, (NMS HC15426-15444); originally 125 but only 119 examined, 1951: Helena (1), Constantine I (2), Constans (24), Constantius II (31), Magnentius (64), Decentius (2) and 2 unidentified; KAGM coin currently displaced but SM received a *centionalis* of Magnentius from the hoard c 1965 (SM 1986.235; Robertson 1974, 130)

2 **Castor ware narrow-mouthed beaker**, contained hoard; small white-bodied pot, darkish grey exterior with zone of trailed white slip decoration, glazed brown internally (NMS FRA566); cf beakers from Birdoswald and Carlisle, 300-400 AD (Gillam 1957, 9, nos 55 & 57)

A date c 354 AD is suggested for deposition

W11 **Piltanton Burn** (DES 1998, 130, 1999, 116 and 2000, 129)

1 **Roman coin scatter**, c 1000 coins from the 1st to the 4th century AD unearthed in 3 groups by metal detection; groups 1 & 2 identified by Nick Holmes (SM 1998.24 and 2000.6) and group 3 by Donal Bateson (SM awaiting accession numbers); the significance of this discovery is not yet apparent

W12 **Stranraer** (Robertson 1952, 151 & 1978, 209 f, no 33)

1 **Roman coin hoard**, reported May 1949; only an *ae* of Constantine I examined, one of a soldier's share of 50 from a large hoard found during World War II while drain digging at an army camp near Stranraer; probably hoard W9 ⁸¹

C Native Finds from Roman Sites

Stewartry of Kirkcudbright

K18 **Gatehouse of Fleet Roman Fortlet**, NX 595 576 (St Joseph 1983)

1 **Querns**, three lower and four upper bun, two with horizontal handle holes (DM 1961.116.1-6 & 1962.67; St Joseph 1983, 228 ff, figs 4 & 5); cf native Roman Iron Age querns at Lochlee crannog (Wilson, A 1997, 10, fig 5, MO 35 f, A/LOL 37-41)

K19 **Glenlochar Fort**, NX 735 645 (DM 1952.23 & 733 and 1955. 101 & 2145; SMK 2357 & 1979/18/1; Richmond and St Joseph 1953) ⁸²

1 **Stone palette**, (DM 1967.604); light reddish-brown stone with flat underside, 132 x 125 x 18 mm

81 There is an unprovenanced collection of twenty one coins in the Anderson Collection (SM) probably dating to before 1939; some material in the collection is local but the coins may be a comparative collection, possibly of two groups: a) Philip I (2), Trebonius Gallus (1), Valerian (1), Postumus (5), Victorinus (4), Claudius II (2) and Tetricus I (2) and b) Constantine II, Constans, Constantius II and Valentinian (1 each).

82 The bronze head of a 'war horse', claimed as Roman, is reported to have been found near Glenlochar bridge and deposited at Culvennan (MacKenzie 1841, 72, no 20); this is reminiscent of the Torrs *chamfrein* discovered before 1820 but could be another find.

D Isolated Roman and Romano-British Finds*Stewartry of Kirkcudbright*

K20 **Balmaghie, *ae* of Constantius Gallus**, found c 1954, garden of Shankfoot (NX 7205 6629; Robertson 1963, 142)

K21 **Barlochan, coin of Constantine** found 1841 (NX 819 571; *NSA* 4, 209)

K22 **Borgue, *ae* of Aurelian**, found by Jim Kirk 1981 (NX 6305 4855; SMK 1992/09/01)

K23 **Borness Batteries, *denarius* of Vespasian** found by Jim Kirk 1995 (NX 621 447)

K24 **Carlingwark*** (fig 6), **Roman grey clay lamp** (NX 76 61; SMK but no record); cf lamps from Ephesus (Bailey 1988, 418, pl 125/Q3338), London (Wheeler 1930, 68 f, type 4, pl 29/5), Newstead (Curle 1911, 306, pl 79/8) and Verulamium (Wheeler and Wheeler 1936, 201, fig 40/3)

K 25 Dalry

1 ***As* of Faustina**, white metal forgery discovered before 1983, banks of Ken (c NX 613 812; DM 78.110; Robertson 1984, 413)

2 ***Follis* of Maximian**, found in garden, 45 Kirkland Street c 1971 (NX 622 881; SMK 1991/47/01)

K26 **Drumcoltran, Kirkgunzeon, *denarius* of Hadrian** found before 1880 with medieval brooch and ring 3 feet below surface near Drumcoltran Tower (NX 865 685; Robertson 1984, 411)

K27 **Glenkiln Reservoir, fragment of marvered glass bangle**, yellow, red and blue found c 1973 in reservoir mud (NX 843 783; *DES* 1973, 30)

K28 **Glenlochar House, *denarius* of Vespasian** found c 1956, one of several dug up in garden c 1/4 km north of Roman fort (NX 734 647; Robertson 1963, 135)⁸³

K29 **Kirkandrews, *denarius* of Hadrian** found recently by Jim Kirk at Meggerland Point (c NX 597 476)

K30 Kirkcudbright

1 ***Denarius* of Vespasian** found in burgh 'roods' (Macdonald 1924, 328)

2 ***Denarius* of Nerva** found by metal detector in the Dee (c NX 682 512; SMK 1999/24; *RIC* 3, 15 or 27)

3 ***Antonianus* of Numerian Caesar** dug up in garden, 2 Castle Gardens; examined 7 June 1951 but not in NMS as claimed (Robertson 1963, 142 f); possibly with owner (NX 6820 5107)

4 ***Ae* of Constantius II**, found in 1926 in garden, Greengate (NX 683 508; Macdonald 1934B, 30)

K31 **Lochside**, reported April 1967, coins dug up in gardens;⁸⁴ probably not original losses (NX 959 775; Robertson 1974, 121):

1 ***Antonianus* of Probus**

2 **Small *ae* of Constantius II**

⁸³ This may be near the undiscovered Flavian I fort.

⁸⁴ One garden, 34 Lewars Avenue.

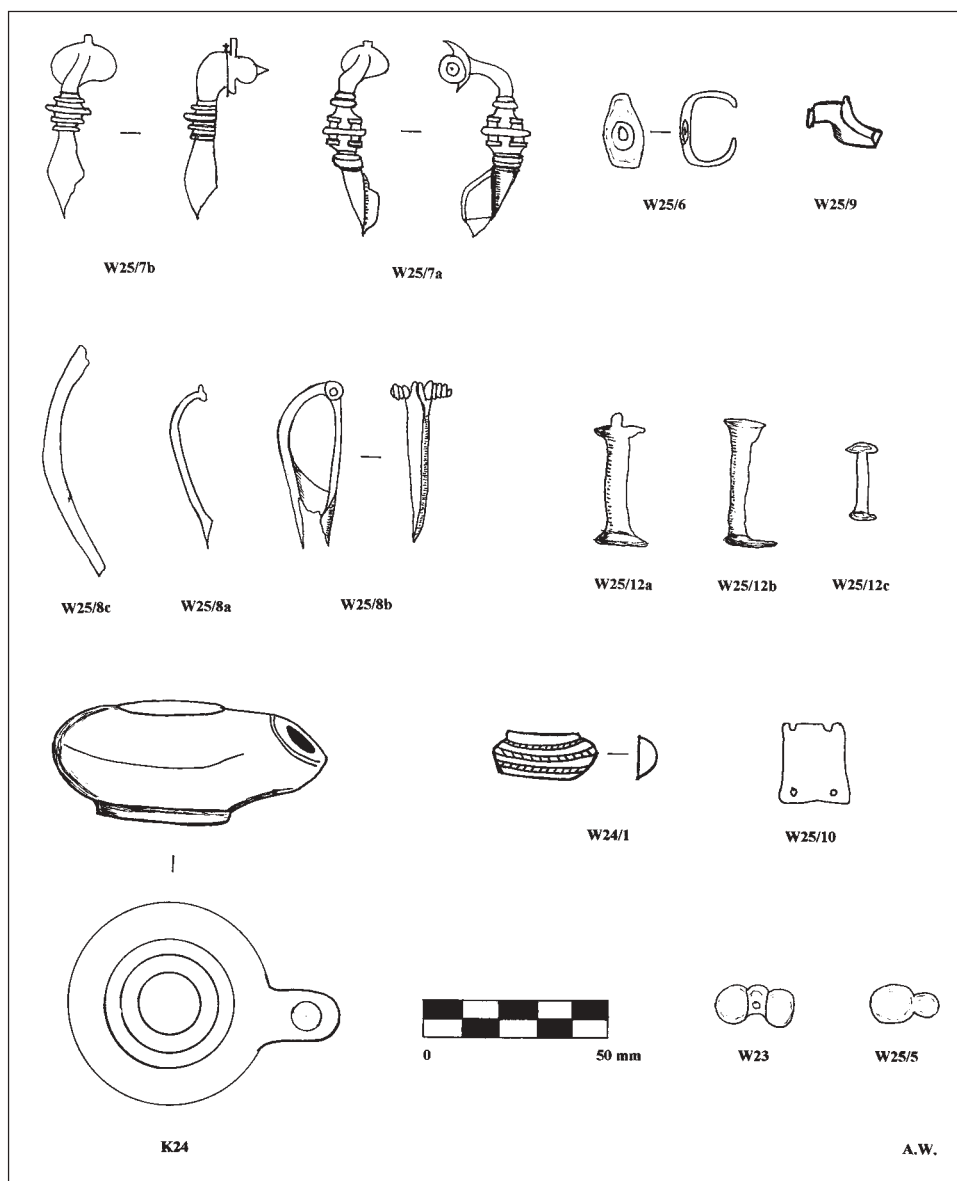


Figure 6 Isolated Finds

K32 **Minigaff**, found in cairns well before 1887 ⁸⁵ (KAGM; letter of George Wilson, 6 January, 1887; Robertson 1974, 123); see W30/5:

1 **Coin of Gallienus**

2 **Coin of Tetricus**

K33 **Rainton, Antrim bauxite bead** (NX 601 510; DM 1955.28); Roman origin suggested (Birley 1965, 207, fig 11/12 and parallels from Roman sites; Stevenson and Collins 1976; Guido 1978, 189) though questioned (Williams and Cormack 1995, 108)

K34 **Twynholm, quadrans of Crispus** found c 1865 (c NX 665 545; Macdonald 1918, 243)

Kirkcudbrightshire/Wigtownshire Border

KW1 **Denarius of Vespasian**, found before 1977 (Robertson 1984, 411)

Wigtownshire

W13 **Auchenree, Portpatrick, ae of house of Augustus** (NX 00 55; Williams 1975, 39, no 30)

W14 **Boreland of Longcastle, dragonesque fibula** found by Jim Kirk 1989 (NX 395 470; SM 1993.1); possibly remelted from Roman brass (Hunter 1994, 55 ff, fig 2)

W15 **Carleton, Glasserton, plano-convex copper ingot** ploughed up c 1880 (NX 392 379; NMS DT1; Curle 1932B, 343 & 374, no 38A, fig 37; *RIB* 2403); chemical and metallurgical analysis indicated remelting and alloying with 1% tin and 4% lead; similar to Roman copper ingots from north Wales, suggested as its origin (Whittick and Smythe 1937); other suggested origins are local or Cornwall (Tylecote 1986, 16 ff); although Roman origin has been questioned (Hunter in Dunwell 2000, 340) it could be Roman implying possible local Roman mineral extraction ⁸⁶

W16 **Clayshant, Stoneykirk, melon bead**, blue-green faience (c NX 11 52; Penney 1975, 16, fig 1c) ⁸⁷

W17 **Dally Bay, Kirkcolm, irregular melon bead**, turquoise faience, surface find c 1968 on track off bay adjoining Dally Bay (NX 968 687; *DES* 1972, 45 f)

W18 **Dhuloch, small ae of Gallienus** found before 1929 (NW 990 662; SM 1985.67; Macdonald 1934B, 30 f)

W19 **'Drumbuoy', Kirkinner, ae probably of Antoninus Pius** found 1870 (c NX 42 51; Williams 1975, 39, no 29)

W20 **Drumdoch**, found before 1955 in farmhouse though possibly originally on farmland (NX 096 574; SM 1985.30 & 31; Robertson 1963, 150):

1 **As of Drusus**

2 **Sestertius of Gordian III**

⁸⁵ Some cairns were opened up c 1754 (*OSA* 7, 60).

⁸⁶ On local copper extraction see Scott 1951, 37 ff; see also fn 47.

⁸⁷ A bronze bell fragment of unidentified origin was found one mile east of Clayshant church (NMS KA24; Wilson 1880, 141 no 11).

W21 **Dunragit Sands, glass bangle fragment**, opaque white glass, D section, found before 1954 (SM 1987.826; Kilbride-Jones 1938 type 3B)

W22 **Galdenoch Farm, New Luce, melon bead**, blue faience (NX 174 618; NMS FJ110; Curle 1932B, 296)

W23 **High Torrs*** (fig 6), **bronze dumb-bell pendant**, found before 1880 (NMS BHB15; Wilson 1880, 140, fig 20, no 8); cf Newstead (Curle 1911, 150, pl 82/6 & 8) and Traprain Law (Burley 1958, 177, nos 208-9); on dumb-bell buttons see MacGregor 1976, 137, fig 8⁸⁸

W24 **Kirkmaiden**

1 **Glass bangle fragment*** (fig 6), clear glass, blue at edges, three cables, central brown and white, outer blue and white; D section; surface find 1982 at Portankill by Bill Cormack (NX 138 324; DM 1983.16.2; *DES* 1982, 9; Kilbride-Jones 1938 type 2 bangle)

2 **Melon bead**, green glaze (Dr Trotter's Collection; Maxwell 1885, 46, fig 46)⁸⁹

W25 **Luce Sands**

1 ***Ae* of Magnentius**, found early 1930's in sand dunes (Robertson 1963, 150)

2 **Coarse ware**, fragment, soft pink ware, remains of pink slip; found by Bill Cormack c 1962 (DM 1962.131)

3 **Two glass bangle fragments:**

a) opaque white, D section (NMS BHB68, presumably NMA 1892, no 8464; Kilbride-Jones 1938, 378, fig 4/5, type 3A; Scott 1976, 42)

b) green glass (NMA 1892, no 8465)

4 **Six melon beads:**

a) four donated 1870's including two from Knockdoon and one of green faience discovered 1879 (NMA 1892, 90 nos 8436-9; *PSAS* 9, 1873, 356 f & 11, 1874-76, 587, fig 7; NMS FJ49; Wilson 1880, 141, fig 20)

b) fifth, blue glass currently misplaced (KAGM Mann Collection LA5719; Robertson 1970, 224; Scott 1976, 42)

c) sixth, blue glass (Hemstead Collection; Penney 1975, 16, fig 1c)

5 **Dumb-bell bead*** (fig 6), blue glass, 16 mm wide (NMS BHB15; presumably Wilson 1880, 142); cf Burnswark (Jobey 1978, 94, fig 15/5) and Lochlee Crannog (Wilson, A 1997, MO 29, A/LOL6)⁹⁰

6 **Silver finger ring*** (fig 6), intaglio missing from bezel (NMS BHB; XRF analysis by Dr Katherine Eremin); probably Henig 1974, 47 f, type 2, with narrow rounded hoop, parallels 1st/2nd century AD

88 A pair of zoomorphic penannular *fibulae* from High Torrs (Wilson 1880, 140, fig 19, presumably NMA 1892, 90, nos 8560-1) like that from Barhullion Fell (NMS DO28; Maxwell 1885, 43, fig 39) belongs to Fowler 1964, 99 & 139, fig 2/11, type F3, 5th/6th century AD, while a similar dated brooch from the Sands (Rynne 1965) belongs to her type H3, a mould of which was discovered at Mote of Mark (Fowler 1964, 112 & 144).

89 Also from Kirkmaiden is a native cobalt blue glass bead with yellow criss-cross decoration, possibly continental origin or inspiration (NMS Gemmell Collection FJ24; Maxwell 1885, 46; Guido 1978, 118, class 7A).

90 A small blue glass bead (DM 1962.75.11) found on the Sands by Bill Cormack, may, like the two beads from Castle Loch, Mochrum (W3/5), be Iron Age (possibly Guido 1978, 161, group 6ivb); the distinctive *millefiori* glass rod from the Sands is probably 7th century AD (NMS BHB75; Cramp 1970, 333).

7 **Bronze trumpet *fibulae**** (fig 6) ⁹¹:

a) acanthus bow only (NMS Glenluce Collection; Curle 1932B, 376, fig 57/1; Collingwood and Richmond 1969, 297, type Rii)

b) bow only (NMS Glenluce Collection; Curle 1932B, 376, fig 57/2; Collingwood and Richmond 1969, 297 f, type Si)

8 **Bow *fibulae**** (fig 6), a) SM 1987, 852, b & c) NMA 1892, 90, nos 8570-1; Glenluce Collection BHB:

a) fragment, bronze bow found before 1945 (Collingwood and Richmond 1969, 297 fig 102, type E); Polden Hill type, cf Newstead (Curle 1911, 319, pl 85/4)

b) *fibula* with false spring (Curle 1932B, 376, fig 57/3; Robertson 1970, 222; Hattatt 1985, 14, fig 4/227D)

c) fragment

9 **Buckle*** (fig 6), Low Torrs, fragmentary, found by Bill Cormack c 1963 (NX 140 555; DM 1963.71.74; *DES* 1963, 52; Robertson 1970, 223); Romano-British; cf similar larger buckle from the Saalburg (Oldenstein 1976, 216, taf 77/1038) and possibly also South Shields (Allason-Jones and Miket 1984, 194 no 3.627) ⁹²

10 **Hinge plate*** (fig 6), 18 x 12.5 mm, two rivet holes at opposite end to hinge (NMS BHB); reminiscent of Roman military hinged buckle or strap fitting; cf similar plate from Winchester (Bishop and Coulston 1993, 173 ff, ill 126/4) but may be later

11 **Decorated mounting**, five fragments with running scroll design (NMS BHB 1892, 8572?; Maxwell 1885, 44, fig 44); cf 'chip carving' style on Coleraine hoard (Brailsford 1958, 41, pl 9.46) ⁹³ and similar plates from Newstead (Curle 1911, 304, pl 76/19) and Wroxeter (Bushe-Fox 1916, 26, pl 16/17); could be Roman buckle belt plate but may be later

The Roman origin of other copper alloy finds lacking secure archaeological contexts is less certain:

a) Three rotary lever keys; (KAGM A.1955.96.zv.5; NMA 1892, BHB 8574-5); Romano-British origin (Robertson 1970, 223) claimed for (a); there were Roman rotary lever keys (Wilson, A 1997, MO 41, A/LOS9) but these may be medieval (cf Egan 1998, 112 ff, fig 86/294)

b) Two small knife blades, 56 & 56.5 mm long with curving tangs (NMS BHB); Romano-British or later

c) Plate, 23 x 10 mm, ridged at one end and rounded at the other (NMS BHB); could be Roman strap fitting, cf Colchester (Hawkes and Hull 1947, 339 f, pl 103/5) but may be later

d) Perforated ball-headed pin, found before 1945 (SM 1987.846); possibly Roman, cf Roman London (Wheeler 1930, pl 42/10), but like many similar pins from the Sands (DM, KAGM, NMS, SM) is not chronologically diagnostic

91 On trumpet *fibulae* see Wilson, A 1997, MO 29 f, A/LOL7.

92 There are numerous other buckles from the Sands but none can be positively identified as Roman; Bill Cormack informs me the bronze needle fragment (DM 1963.71.75) may not have been found with W25/9.

93 On late Roman buckle plate chip carving see Hawkes and Dunning 1961, 11.

12 **Iron holdfasts*** (fig 6) (KAGM A 1955.96.abw 1); cf Romano-British holdfasts from Brighthouse Bay (K4/5):

(a) 37 mm long

(b) 34 mm long

(c) 22 mm long

Other finds from the Sands (DM 1962.75, 85 & 131, 1963.9, 47 & 71 and 1965.51; KAGM A.1955.96.aaa.(9), aag.(1 & 6), aap.(2 & 4), aay, abc.(4), abs, abw.(1), ace, lk.(1), zm, zv.(3,5 & 6), zx.(3 & 6); NMS BHB1-76) could be pre-Roman, Romano-British or post-Roman

W26 **New Luce, small *ae* of Constantius II** found c 1936 in the bed of the Luce (c NX 174 648; Macdonald 1939, 243)

W27 **Newton Stewart, *as* of Trajan** found 1951, garden of Douglas House (NX 4087 6637; Robertson 1963, 150)⁹⁴

W28 **Skyre Burn**, c NX 551 581⁹⁵:

1 ***Ae* of Constans**

2 **Barbarous radiate** of 4th/5th century AD

W29 **Stellock, Monreith**⁹⁶, **copper alloy figurine of Mercury**, ploughed up 1871 at Stellock not Blairbuy as subsequently stated (NX 371 411; NMS FR226; Curle 1932B, 376 f, no 41, fig 58; Green 1978, 64 & 72); Mercury has a winged *petasos* and is clad with a *chlamys* over the left shoulder and a purse dangling from the outstretched right hand but the feet are missing as also possibly a *caduceus* attached to the *chlamys*; there are close parallels in the Louvre (De Ridder 1913, 79 f, pl 40/539-40); cf also similar figurines of Mercury from Lyon and Rouen (Boucher 1976, 102, 107 f, 116 fig & pl 40/179-180), the Netherlands (Zadoks-Josephus Jitta, Peters and van Es 1969, 74 ff, nos 31-33) and Uley (Woodward and Leach 1993, 98 ff, figs 84-6); on such figurines see Lindgren 1980, 40 ff, particularly fig 2

⁹⁴ It is likely the Roman road westward from Glenlochar crossed the Cree at Newton Stewart near the Machermore ford (Wilson 1989, 11); in the dry summer of 1819 many substantial oak trunks were discovered in the bed of the Cree near Machermore (Mackenzie 1841, 65), perhaps Roman bridge foundations?

⁹⁵ Alastair Penman informs me these were found near the Skyre Burn crossing of the probable south Galloway Roman trunk road (Wilson 1989, 9).

⁹⁶ Raleigh Radford pointed out to me a reputed Roman milestone from Monreith is 17th century (*TDGNHAS* 34, 1955-56, 204).

Key to Figure 7

1 Barburgh Mill;	2 Dalswinton;	3 Carzield;	4 McCulloch's Castle
5 Kirkland;	6 Milton Loch;	7 Botel Bailey;	8 Barean Loch;
9 Mote of Mark;	10 Kirkmirran	11 Glenlochar;	12 Crossmichael;
13 Threave Castle;	14 Moss Raploch;	15 Torrs Cave;	16 Gatehouse;
17 Brighthouse Bay;	18 Borness Cave;	19 Castlehaven;	20 Craggleton;
21 Whithorn;	22 Rispaing;	23 Dowalton Loch;	24 Barhobble;
25 Castle Loch;	26 High Torrs;	27 Black Loch	

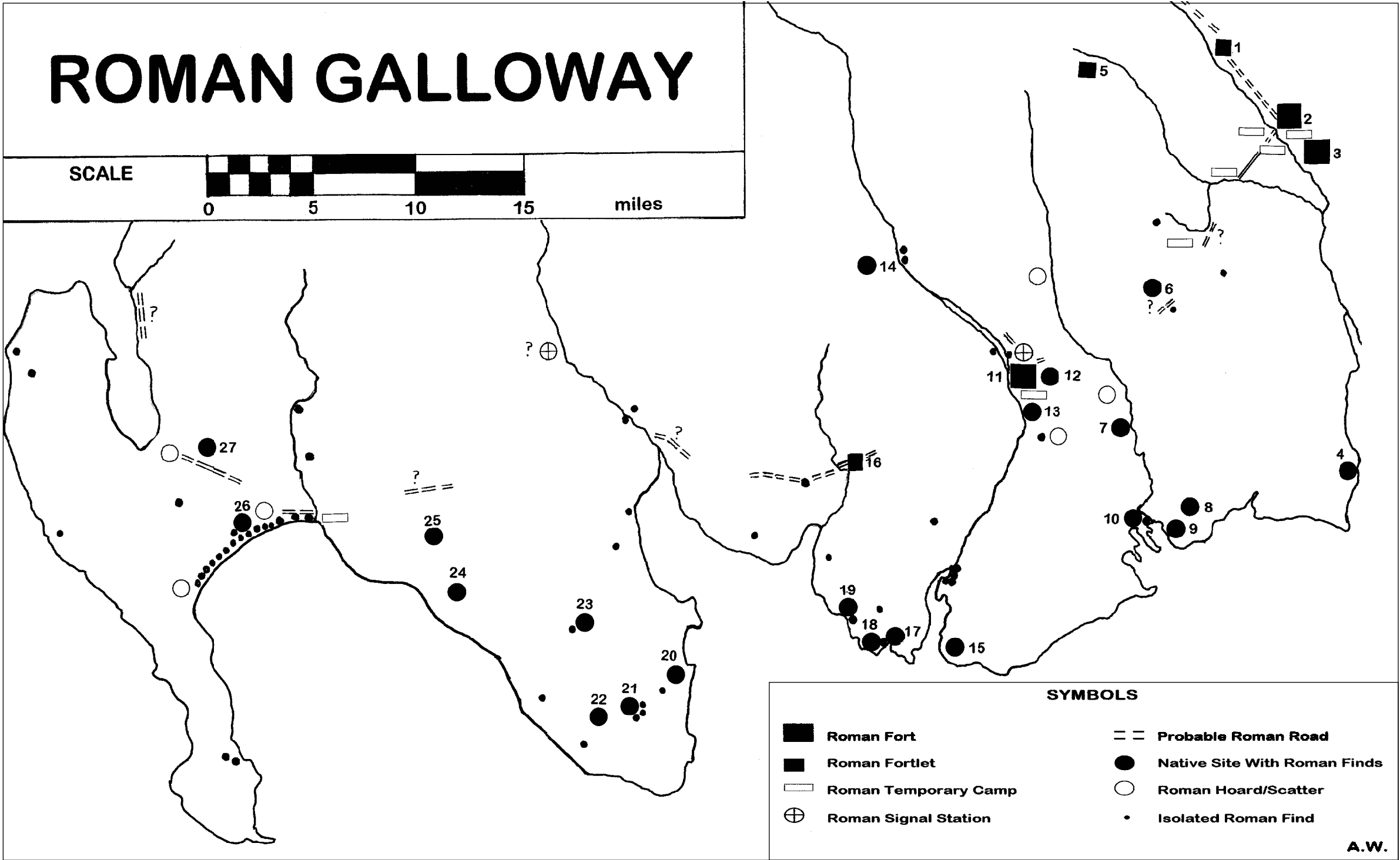


Figure 7 For Key, see facing page

W30 Whithorn

- 1 **Roman coins** found frequently near the Priory (*NSA* **4**, 55)
 - 2 **Sestertius of Faustina I**, found c 1953, Chapelheron farm (NX 455 415; SM 1985.48; Robertson 1963, 150)
 - 3 **Ae of Julia Domna** found 1922, garden of police station (Macdonald 1924, 328)
 - 4 **Ae of Claudius II** dug up in Whithorn garden before 1934 (Macdonald 1934B, 30)
 - 5 **Aes of Gallienus and Tetricus II** claimed to have been found at Slateheugh Farm c 1964 (KAGM A.1955.96.lu & lv; Robertson 1974, 128); these may be the coins from Minigaff (K32)
- W31 **Wigtown, as of Hadrian** found c 1967, garden of 3 South Main Street (NX 4348 5532; Robertson 1974, 128)

Abbreviations

AHCAW *Archaeological and Historical Collections Relating to Ayrshire and Wigtownshire*

ASM *The Archaeological Sites and Monuments*, RCAHMS, Edinburgh

BAR *British Archaeological Reports*

BB *Black burnished ware*

BM *British Museum*

CBARR *Council for British Archaeology Research Report*

CSIR Keppie, L J F and Arnold, B J 1984 *Corpus Signorum Imperii Romani* **1**, fascicule **4**

DAJ *Durham Archaeological Journal*

DES *Discovery and Excavation in Scotland*

DM *Dumfries Museum*

Dr Dragendorff, H 1896 *Terra Sigillata*, *Bonner Jahrbücher* **96**, 18-155 and **97**, 137-69

EHAR *English Heritage Archaeological Report*

GAJ *Glasgow Archaeological Journal*

GUARD *Glasgow University Archaeological Research Division*

HM *Hunterian Museum*

HS *Historic Scotland*

JRMES *Journal of Roman Military Equipment Studies*

JRS *Journal of Roman Studies*

KAGM *Glasgow Art Gallery and Museum, Kelvingrove*

MA *Medieval Archaeology*

MO *Microfiche*

MOLAS *Museum of London Archaeology Service*

NMA 1892 *Catalogue of the National Museum of Antiquities*, 2nd ed, Edinburgh

NMS *National Museum of Scotland, Edinburgh*

NSA 1845 *New Statistical Account of Scotland*, 15 vols, Edinburgh and London

OSA Sinclair, J (ed) 1791-99 *Old Statistical Account of Scotland*, 21 vols, Edinburgh

PPS *Proceedings of the Prehistoric Society*

PRIA *Proceedings of the Royal Irish Academy*

PSAS *Proceedings of the Society of Antiquaries of Scotland*

RCAHMS Royal Commission on Ancient and Historical Monuments of Scotland

RIB Collingwood, R G, Frere, S S, Tomlin, R S O and Wright, R P (eds) *The Roman Inscriptions of Britain* **1** *Inscriptions on Stone*, 1965 rev 1995, Oxford and **2**, *Instrumentum domesticum*, fascicule **1**, 1990, Gloucester and **2**, 1991, Stroud

RIC Mattingly, H and Sydenham, E A 1923-67 *Roman Imperial Coinage*, 9 vols, London

RNFS Roman Northern Frontier Seminar

RRCSAL Research Report of the Committee of the Society of Antiquaries of London

SAR *Scottish Archaeological Review*

SHA *Scriptores Historiae Augustae*

SM Stranraer Museum

SMK Stewartry Museum, Kirkcudbright

TCWAAS *Transactions of the Cumberland and Westmoreland Antiquarian and Archaeological Society*

TDGNHAS *Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society*

TGAS *Transactions of the Glasgow Archaeological Society*

TJPDGSNHAS *The Transactions and Journal of the Proceedings of the Dumfriesshire and Galloway Scientific, Natural History and Antiquarian Society*

TRAC *Proceedings of the Theoretical Roman Archaeology Conference*

WM Whithorn Museum

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WILLIAM GALLOWAY'S EXCAVATIONS AT WHITHORN, 1886-1897

Selections from Unpublished Correspondence in the Bute Muniments

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Introduction

The important excavations at Whithorn, carried out during the 1880's and 1890's under the patronage of the Third Marquess of Bute, were unpublished at the time of the death, in 1897, of the architect in charge, William Galloway. The only published record of the excavation, written by MacGibbon and Ross and based on Galloway's plan and notes, appears in the 10th volume of the *Ayrshire and Galloway Archaeological Collections*. Galloway's own article and only published reference to Whithorn, 'St Ninian and the Early Christianisation of Scotland' (*Transactions of the Stirling and Natural History and Archaeological Society*, 1889-90), is unrevealing, as far as the archaeology of Whithorn is concerned.

The discovery at Mount Stuart, Rothesay, during recent reorganisation of the archive, of uncatalogued and unpublished correspondence between Galloway and Lord Bute therefore has a particular significance, in the absence of any other first-hand account of the excavations which brought to light the majority of the important collection of Christian stones in the Whithorn museum. The correspondence is incomplete, with large gaps between 1890 and 1895 and the letters which scholars might have been waiting for with the greatest anticipation – those detailing the discovery and find-spot of the Latinus stone in particular – are, sadly, absent from the series.

Nonetheless, the material which does survive will help to supplement the important researches by Derek Craig (in Hill 1997, Appendix 1) into the find-spots of the Whithorn Christian stones and may help to clarify some difficulties with the dating and description of Galloway's discoveries. The MacGibbon and Ross plan and accompanying list of structures (*Collections*, as above, and *Ecclesiastical Architecture*, volume II, 1896), based on Galloway's sketch plan (recently published in Hill, 1997, Appendix 1) are occasionally cryptic, and descriptions such as 'fragment of cross' and 'pillar' have, in the absence of further explanation, led to the supposition that these might describe the Latinus stone itself (see Hill, 1997, Appendix 1). Fortunately, these particular descriptions can now be elucidated by reference to the Galloway-Bute letters, which are especially revealing about the discoveries in the area under the path in front of the parish church, identified by Galloway as the Cathedral chapter house: they make it clear that none of the features labelled by Galloway and reproduced by MacGibbon and Ross refer to the Latinus stone and that the locus, as the exact date, of its discovery remains unknown. The absence of any mention of the Latinus stone in the correspondence, despite its regularity during the latter months of 1888 and first half of 1889, does, however, support Derek Craig's argument (in Hill, Appendix 1) that the dating of the find of the Latinus stone to 1888, on the strength of an entry in the 1891 Deed of Nomination, places it too early and that it would have been unusual for Galloway to wait two years (his letter of November 1890, quoted by Craig) before inform-

ing Pitt Rivers, a regular correspondent, of his discovery. It seems most likely that the Latinus find was made in late 1889 or just possibly in 1890, at some point prior to the November letter, during periods for which the Bute correspondence is missing.

The letters are also of interest in casting some light on the troubled relations between one archaeologist and the surrounding community at the end of the nineteenth century. Something of Galloway's character is revealed in the correspondence, but much remains to be explored with regard to his career. Since he has remained a largely anonymous figure, it may be of some interest to preface the extracts from the correspondence with a short summary of the facts of his career, so far as they are known.

He was born in 1832 in Edinburgh to parents in prosperous circumstances and was educated at the High School there. Despite parental pressure to enter medicine or the church as a profession, he showed an early interest in drawing, painting and architecture, particularly of ecclesiastical buildings. Lithographs of his drawings of artefacts and buildings in articles for the Ayrshire and Galloway Archaeological Association – notably, those illustrating his articles on Kilwinning Abbey and Dean Castle – show the quality of what we have missed in the case of Whithorn's remains. He became apprenticed to Patrick Wilson, architect in Queen Street, Edinburgh, but it is not known at what point he began his long connection with the 3rd Marquess of Bute. He was apparently well-fitted for the decipherment of Christian epigraphy, being versed in Hebrew, Greek and Latin, and also published works of his own, including a poem 'The Twa Auld Whinstanes', and 'The Battle of Drofell' and 'St Augustine's City of God'. The index detailing articles by him in the Proceedings of the Society of Antiquaries of Scotland includes work on other Bute projects, such as St Blane's Chapel on Bute. He died at Whithorn, at 87 George Street, after a more or less continuous residence there of thirteen years.

Letters from the Bute archive relating to Whithorn

All letters are addressed to the Third Marquess of Bute, unless otherwise stated; the responses from Lord Bute were not found with the bundle. Where archive classification numbers existed at the time of viewing the documents, these have been inserted above each letter; since classification was incomplete at that time, sequential numbers were given to the letters which were unclassified at the time of reading, according to their order in the bundle; these numbers all appear in square brackets. The letters were not bundled in chronological order, but, for ease of use, the following set of extracts follows chronology and I have therefore also given the letters a number in this order without brackets. 'WG' is the abbreviation used for William Galloway. Numbers and comments in square brackets have been added; original comments are either quoted in full, within quotation marks, or are summarised in reported speech.

Letter 1 [BU/21/214 (75) in Bundle 1]

Monreith, from Sir Herbert Maxwell, 11th August, 1885

[The following letter is of interest in charting the origin of the Marquess of Bute's involvement at Whithorn and shows that excavations, at least on a minor scale, were already under way in 1885, prior to WG's arrival].

'You said that you were willing to defray the cost of certain explorations at Whithorn in order that a paper might be prepared for the Ayrshire and Galloway Archaeological Association Collections and you asked me how much I thought was required'. Maxwell comments on the difficulty of excavating amongst the interments, but he thinks the crypt may be cleared for £20.

'We have laid bare the foundations of the West Tower still standing in Simpson's [i.e. Andrew Symson's] day and cleared two tombs on interior of North wall with C13th arches. We found a rock-hewn grave under each arch containing a perfect skeleton in excellent preservation [a drawing by Maxwell is inserted at this point]. The slabs covering these have been relaid and cemented'. Maxwell's question is as to whether they were two Priors.

Also discovered at this time [i.e. presumably in the churchyard and vicinity of the Priory] are 'a number of crosses, carved stones and mouldings'. [Photographs purport to be enclosed - but these are no longer with the letter - illustrating the South Door and capitals and one of the crosses]. On another cross, there are some Runes.[The date and place of this latter discovery seems to fit the description of a runic cross fragment by Sir Herbert Maxwell in the *PSAS* of 1886-7, 'Notice of further excavations of St Ninian's Cave, parish of Glasserton, Wigtownshire' XXI, 137-41, when he speaks of a runic inscription 'found during 1885 on the side of a disc-headed cross in the churchyard of the Priory of Whithorn .. Unfortunately it is also mutilated .. by the design of a blundering stone hewer, who is said to have tooled off the greater part of the inscription in shaping the cross to the decorous proportions of a modern headstone'. The cross described in the *PSAS* article, after analysis by Professor Stephens, had been found to be inscribed with the fragment of a dedication and name '(Becun Don) ferths'. Thus, it would seem, we have a first-hand and presumably nearly contemporary account of the discovery of the Donferths stone in this letter from the Bute archive. Several confusions, however, remain to be cleared up: in the catalogue of stones in the Whithorn museum, where the 'Donferths' stone is classed as number 10, it is said to have come from a house in Whithorn. There is only one detailed account of the find of a defaced runic stone in the courtyard of a house in the 'main street' of Whithorn, in a letter addressed to Professor Stephens and written by William Galloway, dated April 1893 relating to a stone which he says was found in 1884; the letter is quoted in Stephens, 1901, 36-7. The confusion mounts, however, because the stone featured by Stephens (his entry includes two illustrations of the front and rear faces) and thus described by Galloway, however, is not the 'Donferths' stone, but clearly (from the illustrations and Galloway's meticulous description) that which is described in Sir Herbert's *PSAS* notice as having been discovered in a deposit in St. Ninian's Cave, during Sir Herbert's March 1886 excavation. According to Sir Herbert's testimony, the damage to this stone was caused by the fall of rock above it, which left only a fragmentary inscription reading '..wrote'. Stephens quotes Galloway's long description of the find of this runic stone at Whithorn, without commenting on the discrepancy between this account and that of Sir Herbert, whom he also quotes, but himself classes the stone as coming from St. Ninian's Cave. Sir Herbert leaves us in no doubt, however, of the relative sequence and places of his finds, since he takes trouble to state that the 'Donferths' stone was 'the first inscription in runes recorded from Galloway, that exhumed from the cave (the "... wrote" stone) the second'. One wonders whether, since Galloway was writing to Stephens at a considerable distance in time, there had been a confusion between the several runic stones found at Whithorn and whether his detailed

account of the discovery of a runic stone in 1884 (removed to the Priory, according to Galloway, at the instance of Sir Herbert on 26th December of that year, for the safekeeping of H.M. Board of Works) may relate neither to the 'Donferths' stone, nor to the '...wrote' stone, but to the find-spot of another stone with a runic inscription, such as no. 36 in the Whithorn catalogue, said to have been defaced when reused as a paving stone. That thesis, however, would not of course be reconcilable with Sir Herbert's statement that the Priory stone ('Donferths') was the first runic stone to be discovered in Galloway, a curious fact if he had already and relatively recently been directly responsible for the removal of a runic stone in 1884 to the Priory.]

Maxwell asks Lord Bute to write a paper on Whithorn for the *Ayrshire and Galloway Archaeological Collections* and suggests that £100 would cover illustrations.

The postscript contains a drawing of a double base and double capital from the cloister.

Letter 2 [BU/21/214 (125) in Bundle 1]

21/XII/85 Monreith, from R Cochran Patrick

The letter refers to the clearing of the crypt and remains of an earlier building. Cochran Patrick quotes a letter from WG to Sir Herbert Maxwell, which states that the vaulting [of the crypts] is demolished and the soil above poses difficulties – 'at the same time, we have got to the most promising bits of the excavations'. The aim is to restore the vaulting of the passage, so as to support the graves. Finance is difficult and the cost so far has been £35, in addition to which there is the cost of the architect's plans. There is a need to re-point the foundation walls, which are now laid bare.

Cochran Patrick continues: 'Every carved fragment has been preserved with the utmost care. There has also been found the fragment of an inscription in Runes (w. cannot be later than the C7th). A copy of this has been sent to Professor Stephens in Copenhagen to decipher.' [By 1886, Professor Stephens had presumably sent Sir Herbert Maxwell the translation of the runes, for publication in the article in *PSAS*; see discussion above].

He comments that 'the people in the place are now most interested in the works' and refers to a lecture he is giving at Whithorn on St. Ninian.

Letter 3 [Number 3 in Bundle 1]

July 7th 1888, from W Galloway, Churchill, Duddingstone, Edinburgh

[This letter is the first which survives from the series of letters from William Galloway to Lord Bute and documents the intention of WG to excavate the area in front of the Priory Church, where his main discoveries took place]

WG comments that nothing has been done to excavate the area in front of the Priory church. The Kirk Session had laid gravel recently and had objected to excavation there. The gravel, however, has now settled. He comments: 'His Lordship's desire will of course go a great way in inducing the Kirk Session to allow excavations'.

Letter 4 [Number 4 in Bundle 1]

July 14th 1888, from WG , as above, to CG Shaw, Factor, Ayr

WG promises to send a statement [of accounts]. He refers to a letter to the *Herald* on Clyde defences.

Letter 5 [Number 5 in Bundle 1]

December 7th 1888, to Dumfries House, from WG at Whithorn

[Since July, clearly, agreement has been reached to allow extensive excavation in the area in front of the Priory Church. The 'pillar' referred to in the following paragraphs is shown as feature number 11 on the MacGibbon and Ross plans] WG writes that 'in the excavation next to the Parish Church there has just been completely uncovered the lower portion of a very important pillar just discovered this morning *in situ*'.

A description of the pillar follows : on a circular base of 'white freestone four feet in diameter, stands the moulded base and one course of an octagonal column formed of red freestone, two foot three inches in diameter, the entire remains of being about two feet four inches in height'. Also , close by, the capital of the column. WG speculates that it was perhaps the central pillar carrying the roof of the Chapter House.

The floor level is about 3 foot 6' below the roadway. The question is whether he should encase the pillar or lower the road to its original level . In the latter case, it would require steps to the church and extension of the parapet on either side of the path leading to the church.

Letter 6 [Number 6 in Bundle 1]

December 27th 1888, from WG, Duddingstone.

[WG amplifies his account, above, of the discoveries beneath the pathway in front of the parish church. The walls referred to appear as figures 8 and 9 on the MacGibbon and Ross plans , but the drawings accompanying the letter give much greater detail – see below fig. 1. It is clear from the descriptions of the finds that there is at this point no question of the discovery of the Latinus stone.]

'As we had free use of the place for some days, on the Monday I opened up the entire roadway immediately in front of the Parish Church with most interesting results'.

The discoveries included a 2 foot 6 inch wall in front of the Church , which he believes to be the North wall of the slype. About 5 foot 3 inches from this, a second wall only 18 inches thick, terminating in the side of a doorway. Going eastward, a large flag, with (on the East) two curb stones set on edge and beyond, a large stretch of well-formed causeway. This was about two foot below the present surface. It was, he says, part of the principal roadway to the monastery from the East. There was a carefully formed curvature on the causeway towards the North. The entrance to the slype has apparently been demolished. The slype and passage have been flagged. .

Continuing southwards, there was discovered a still heavier wall, 3 foot 4 inches thick, dividing the slype and the Chapter House. In this wall, there was a recess with moulded red freestone still in situ: it was, he states, the remains of an arch forming the *sedilia*. It was also broken off eastwards. Within this wall, the lower part of a shaft of 'what must have been one of the largest crosses of which we have any trace'. [This cross does not appear at all on the MacGibbon and Ross plans, but is shown on WG's original sketch plan in Hill, 1997, as 'frag of cross'. It is not entirely clear to which cross fragment in the existing collection at Whithorn museum such a description might apply, although there are several possible candidates. The fact that this letter dates the discovery of the cross to 1888 shows that the sketch plan must have been compiled over some years, as discoveries came to light, and that the date of July 1886, inscribed on the lower right of the sketch plan, relates only to the drawing of the outlines of the buildings. See fig 12.2 in Hill, 1997, Appendix 1]. Immediately south of the recess, there is part of the Chapter House.

These remains consisted of a pillar in partly white, partly red freestone [the discovery of this is described in Letter 5 above]. The base is white, 4 foot in diameter, only 5½ inches thick, which is the lower part of a round C12th pillar. Later when it became dangerous in the C14th, a red freestone one was put in place, but off-centre to give balance. In the area round about it, there were discovered fragments of the capital.

On Lord Bute's instructions [presumably in response to Letter 5], the walls next to the Church and the large block of masonry discovered on the Tuesday were built up to the surface. A line of white brick was inserted to mark the wall. The roadway was made good.

On Friday, WG viewed a grave near the corner of the large vault where the excavations [of the crypt] took place. Three foot below grass, the sexton, on excavating for the grave, had found a solid block of masonry and with original red freestone wall-facing, quite perfect and deep. The wall-face was at an angle of 60 degrees with the South transept. WG remonstrated with the sexton [William Black] not to deepen the grave, so as to save the wall. [see Fig. 2, *below*]

There is also mention of Mr. Wilson and his volume of law-pleading [? unclear in the original] between the Earls of Orkney and Wigton, relative to the possession of Priory lands: it seems to have been lost.

Letter 7 [Number 8 in Bundle 1]

February 14th 1889 J Raine, York, to Bute

Reference is made to documents at York relating to the diocese of Whithorn.

Letter 8 [Number 9 in Bundle 1]

February 15th 1889, from WG, Whithorn

[This letter includes reference to various plans now lost. The letter indicates that Lord Bute was now actively involved in the restoration of Cruggleton church. It is also interesting in showing that WG was concerned with the excavations at Kirkmadrine (Stoneykirk), although the indications are that some work had already been started]

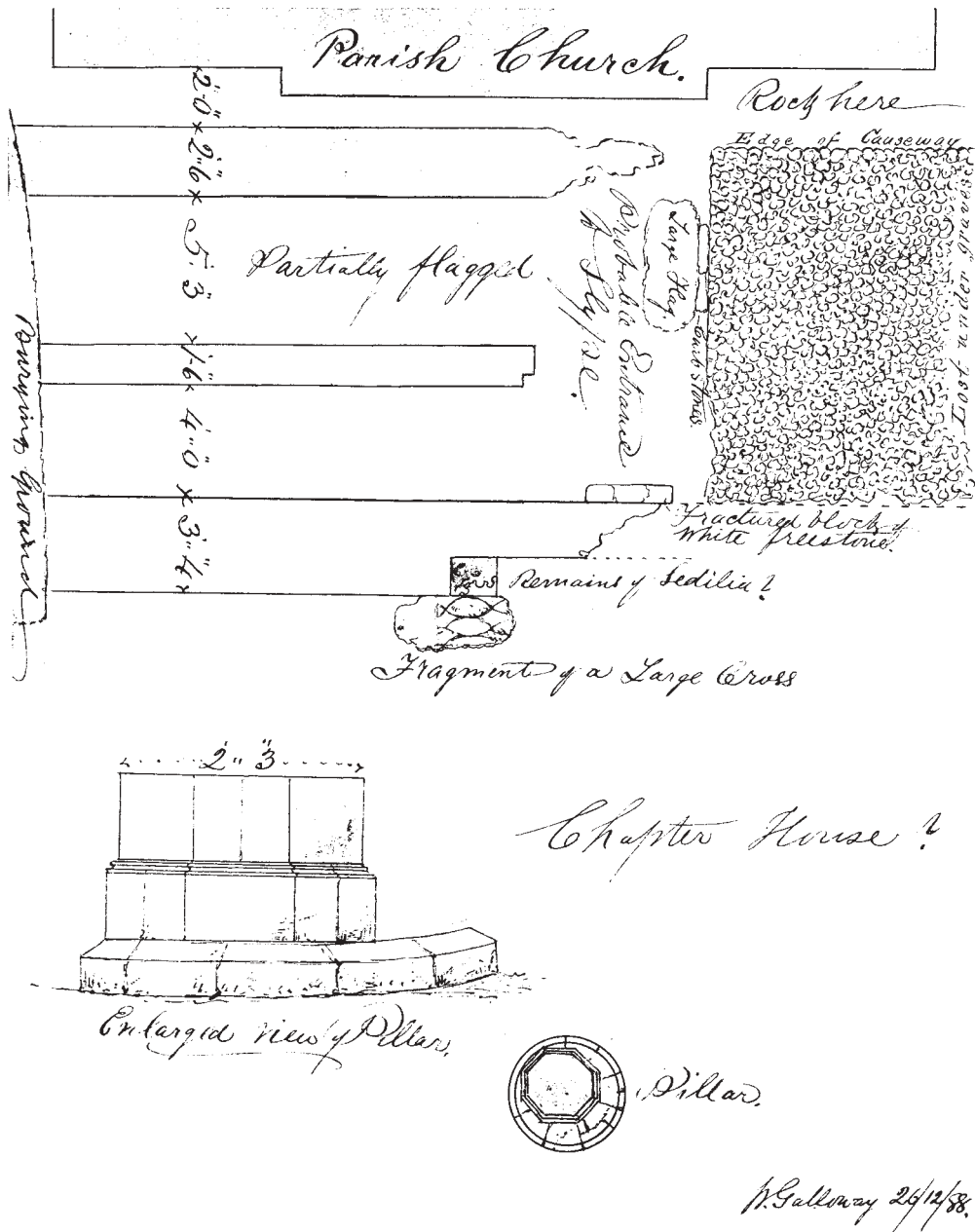


Figure 1 : Sketch plan enclosed with Letter 6, dated 26/12/88.

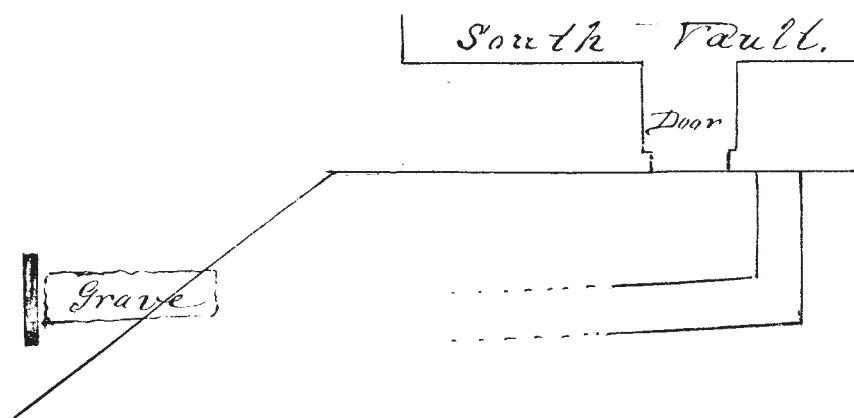


Figure 2: Sketch appearing in Letter 6, illustrating the comment that 'Three foot below the grass, the sexton...had found a solid block of masonry and with original red freestone wall-facing...'

For Mr. Shaw [Factor to Lord Bute], WG encloses a plan of the South elevation of Cruggleton Chapel, which is early Romanesque. WG has heard from Sir Herbert Maxwell, who suggests that the consent of Sir Andrew Agnew, the current owner of the land, should be obtained for works.

Also for Mr. Shaw, a plan is enclosed of the Priory, which is up to date.

As regards excavations at Whithorn, there were some 'curious discoveries' after removing interments in front of the South gable of the large vault. The doorway seems to have been closed in with thick walls. WG comments that there will need to be negotiations with parties interested in the burial place over the stair [from the crypts] and also perhaps to the north in order to clear the North transept.

WG concludes: 'I have just received a note from Mr. Mark Stewart MP asking me to go over to Ardwell to complete previous excavations at the old chapel at Kirkmadrine.'

Letter 9 [Number 10 in Bundle 1]

February 18th 1889 from WG, Ardwell, by Stranraer

Upon examination, it seems to WG that Kirkmadrine is 'pretty much the same period as Cruggleton'.

As regards Whithorn, WG stresses the need to keep on good terms with the sexton. The latest interment brought to light a wall running due south from the gable of the crypt [presumably the interment referred to in Letter 6].

The most interesting site, according to WG, is under the present Parish Church. In 1822, Mr. McHaffie, representing the heritors, selected current site of the Church from 'motives of economy'. There were substantial demolitions, but much remains to be discovered.

Excavations are still hampered because of modern burials: WG cannot carry on to expose the western extremities of the new walls, because of burials. On the eastern side, there are poorer burials and the relatives are more willing to treat. Progress on the line of the slanting wall is barred by the burial of December 21st, but WG hopes to remove it.

Letter 10 [Number 11 in Bundle 1]

March 12th 1889 WG to Bute at Falkland House

WG offers to send photographs of Priory and Isle Chapel, but he has none of St Ninian's Cave. He plans a trip to Souleseat. Sir Herbert has loaned him legal documents [presumably relating to the Priory].

He has arranged for soil and stone from the field east of the churchyard [known as Bruce Ha'] to be removed.

Within the Old Parish Church [inside the nave of the cathedral], there is a [modern] burial into solid rock. This inhibits the clearing of layers to the original level.

In another new grave, to the west of the Church, and at a depth of 3 foot, large blocks of stone were found. Of the sexton, William Black, he writes that 'when his 'earthworks' are productive as they have been of late, it is a strong temptation to him to indulge'.

He has by now bared the foundations of Kirkmadrine and finds it similar to Cruggleton. A *piscina* bowl remains. He concludes: 'I hope to have the Chapel restored this season and the ancient stones placed in security'.

Letter 11 [Number 12 in Bundle 1]

March 19th 1889 from WG, Duddingstone

[The first indications that all is not always harmonious in WG's relations with the local congregation and community are present in this letter]

Owing to bad weather, he has made no progress. If the grass is cut up by the excavation, 'people complain most viciously'. In the vicinity of the vaults, some masonry has been discovered. WG is attempting to move the human burial on slanting wall [first referred to in Letter 6], but is hampered by local opposition to the removal of burials.

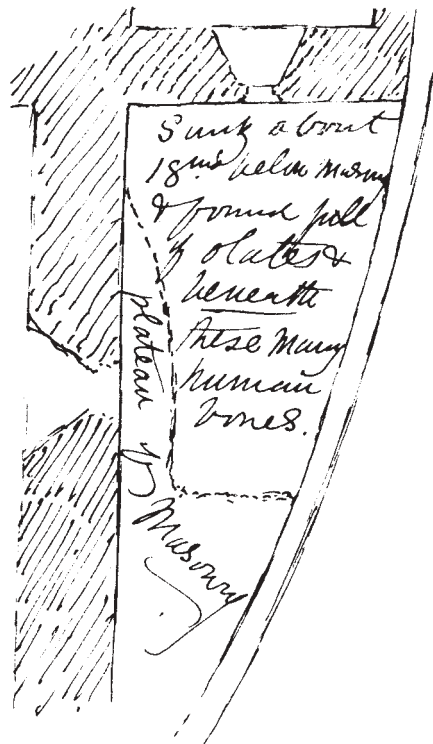


Figure 3 : Sketch plan accompanying Letter 11: 'In the vicinity of the vaults, some masonry has been discovered'.

Letter 12 [Number 13 in Bundle 1]

25th March 1889 Donald Henry, The Manse, Whithorn

[Donald Henry was Minister at Whithorn Priory Church from 1886-1920]

The letter refers to the life of Adam, 1st Prior of Whithorn

Henry also refers to hearsay that in former excavations, two skulls were found in stone coffins lying in the base of the archway, which is on the right of the door which leads into the Priory nave [presumably those discovered by Sir Herbert Maxwell's excavations referred to in BU/21/214 (75)] .

Letter 13 [Number 14 in Bundle 1]

From ? Shaw, Wellington House, Ayr

[This letter refers to Lord Bute's purchase of land at High Mains, Whithorn, where he was ultimately to found a new Priory of Premonstratensian canons] The letter refers to the desirability of obtaining land at the Kevan Braes, 'along with Lord Galloway's farm of the Mains and a field near the Kevan Braes at present for sale at £1200'. Shaw mentions awkwardness of excavating in the vicinity of graves and stresses the need not to 'forget' the sexton.

Letter 14 [Number 15 in Bundle 1]

20th April 1889 to ? Shaw from WG, Whithorn

[This letter is of interest in indicating the involvement of Sir Herbert Maxwell and others with the Wells of the Rees. See Cormack and Muir Watt, 'Wells of the Rees and Stones of Laggangarn : some unpublished references', *TDGNHAS*, Vol 74, 111. It also gives warning of a gradual crescendo of discontent with the excavations from the burgh and its officers, which was to reach a crisis in the 1890's]

WG reports that he met Sir Herbert Maxwell at Kirkmaiden. The result of the meeting is that the restoration of Cruggleton church is assented to by Sir Andrew Agnew, thanks to Sir Herbert's influence. Sir Herbert has been visiting the Wells of the Rees and has written to Lord Bute, to see if something can be done to stop further dilapidation.

The letter includes a statement of outlays from November 1888: this has been about £19, without any payment to Galloway. The history of the financial situation has been that in Spring 1885, work at Whithorn was first spoken of. At that point, Mr. Cochran Patrick made WG write a letter agreeing to superintend excavations, if expenses were met. None of this has been realised and he has paid his own outlays. Nothing can be done on credit (for example, at the quarries) 'for the simple reason that the people cannot afford it'.

Last week, he reports that he opened ground 'where the reported apartment is said to have been' [possibly the Bruce Ha']. But he has found important C12th walling running

north and south, which is 18 inches below the surface: this is a transeptal building [this discovery appears to be feature 12 on the MacGibbon and Ross plans].

The Sheriff Clerk, John Smith, has called for a meeting of heritors via Mr. Lawrie, clerk to the Heritors, to consider the grievances.

Letter 15 [Enclosed with previous letter. Number 16 in Bundle 1]

Statement of Expenses incurred on Excavations at Whithorn Priory, November 1888

Tradesmen James McTaggart and Andrew Christie, for planks for benchings in armoury, 24s.

Gratuities to sexton and others 13s

Andrew Christie carting sand from 'Cunan' [Isle of Whithorn]

Lime to Cruggleton

Jan, Feb and March 1889, Removing soil from 'Bruce Ha' at the request of the parochial Board [see Letter 11]

David Rodger, Station

John Martin, Postmaster

Hugh Duffie, Carter

Jas M'Taggart

W Conning

W McMaster

1½ gallons of beer for farmer's men carting gratuitously 3/-

Replacing Hugh McCutcheon in new Burial Ground [this burial was referred to in Letter 6]

Jan 30 to Ex Provost McKeand for building seat for headstone, removing and setting it up, 9/5

To Wm Black, Sexton, for digging a grave and assisting at removal 12/6

'To said Wm Black at request and ostensibly on loan? 12/-'

James Bell, digging 'apartment' 3 1/2 days 7/-

Total £30 /19 /1½

Letter 16 [Number 17 in Bundle 1]

24th April 1889, WG, Whithorn

The piece of wall [presumably the C12th walling] discovered last week has been brought up to the surface and concreted on top, for a length of 9 feet.

WG received a warning from the sexton 'no to howk ony mair', but he feels he must persist so that works can be permanently recorded. His Lordship's wishes with regard to the Eastern wall have been intimated to the Heritors. He comments that he is well down to the bottom of the Base, which must have gone round all the main buildings.

Letter 17 [Number 18 in Bundle 1]

Wigtown, 6th May 1889 from Jas McLean to CG Shaw

A petition has been presented to the meeting of parish Heritors to have excavations stopped.

Galloway has agreed to excavate under supervision of a small committee and not to interfere with any graves.

Letter 18 [Number 19 in Bundle 1]

7th May 1889, Shaw, Co. Buildings Ayr

Shaw advises Lord Bute to keep aloof from Heritors' meeting: 'I daresay the sexton has been rather a 'jack in office'.

Letter 19 [Number 7 in Bundle 1]

May? 28th 1889, Donald Henry to Bute, The Manse, Whithorn

[The letter relates to information about original documents relating to Whithorn which Lord Bute was attempting to collect]

The letter refers to a 'spiritual volume' by a monk of Candida Casa.

Letter 20 [Number 20 in Bundle 1]

May 30th 1889, from WG Whithorn

Refers to 'mischievous interference' [presumably from Galloway's opponents in the town] and to a visit by Shaw. He has received help from Mr. Drew [factor to the Galloway estates].

He is to commence restoration of the exterior wall faces on East. Received cheque for £100.

Letter 21 [Number 21 in Bundle 1]

June 24th 1889, WG Whithorn

He reports that work at Kilgallioch [reconstruction work at the Wells of the Rees] is complete for under £3. He recommends excavation in central ring at Laggangarn [standing stones].

Letter 22 [Number 29 in Bundle 1]

July 12th 1889, JG Godwin

The letter relates to enclosures of historical documents relating to Whithorn from Mount Stuart [no longer with the letter].

Letter 23 [Number 22 in Bundle 1]

July 17th 1889, WG Whithorn

WG showed a visiting Prior and Superior [the Prior was possibly Father Louis Gonzaga, who became principal of the priory of Premonstratensians, established by Lord Bute at High Mains Farm, Whithorn] the general site and collection [of artefacts] in the Old Town Hall. Bute had assured the Prior 'all was now quiet in the Town', but the visit was not without embarrassment, because the Town Officer was tipsy and demanded possession of keys.

WG recommends the house at the head of the Pend [which became Whithorn Museum] for safe deposit.

He comments that there is a new burial at Cruggleton.

Mr. Drew granted permission for quarrying at Bishopton for Priory restoration.

WG refers to a visit to Mochrum [possibly in connection with Lord Bute's project for a Catholic orphanage at Craigeach].

Letter 24 [BU/21/275 no. 2]

Jan 14th 1890, WG, Whithorn to ? Shaw

[From 1890 onwards, much of the correspondence, and certainly some of the bad feeling between WG and the burgh council relates to the land to the east of the crypts, known as the Bruce Ha', where the council wished to extend the cemetery, while WG wished to protect the archaeological site and extend his excavations.]

Mr. Lawrie has asked Mr. MacFie, chairman of Parish Board, for a meeting on the same day as a Heritors' meeting and has asked to have placed on agenda the sale of the Bruce Hall Park. MacFie declines, owing to an election in February of four new members. MacFie seems to oppose the sale. As the excavations progress, it becomes more clear how desirable the purchase of the Park is, especially since it adjoins the Churchyard.

'The fact is it would be another act of vandalism of the first order to allow a road to be formed where it is proposed'. An extension to the excavations, on the other hand, would lead 'to the most important developments, amongst others, massive buttresses of which only the lowermost foundations now remain, having extended beyond the line of the churchyard wall'. A price for the purchase is to be fixed, beyond which it will not be negotiable.

WG wishes the 'restorations' to be as advanced as possible before Heritors' meeting Monday fortnight. Another truckload of lime is ordered. Wages are running at 5 guineas a week 'and I would willingly employ more. I have four masons and two labourers'.

Letter 25 [Number 23 in Bundle 1]

April 12th 1890 from WG Whithorn

WG requests an interview with Lord Bute, regarding the attitude of Parochial Board.

Letter 26 [Number 24 in Bundle 1]

29th April 1890, from Shaw, County Buildings, Ayr

Shaw reports a troublesome Parochial Board meeting.

Shaw agreed with Mr. MacFie regarding diverting the road 'along your garden wall and then across the lower portion of the Bruce Ha' probably 30 yards from the Priory east wall'. [This is presumably the first proposal of the access road which was constructed to lead into the new cemetery and which is still used] .

Letter 27 [Number 25 in Bundle 1]

6th June 1890, Shaw, Co Buildings, Ayr

Shaw reports an unpleasant meeting at Whithorn on 12th May 1890. A Minute of the meeting was enclosed [but does not survive]. Lord Bute has offered land to the burgh for a new roadway [into the Bruce Ha' Park] .

Shaw mentions restoration at Cruggleton.

Letter 28 [BU/21/274 (30) from Bundle 2]

June 16th 1890 WG Whithorn

WG reports a meeting of a committee to inspect titles and look into the question of servitude [for the new road]. Attending it are Mr. Drew, Chas. McLean, Mr. Lawrie, John Smith, and Henderson. Smith and Henderson are there as a 'sop to the irreconcilables'. WG reports that the bitter dispute began in April 1889 [Letter 15] 'upon the discovery of the C12th South Transept wall, the most important and significant thing which has been discovered and the most bitterly opposed. It shows that below the ground there still exist most extensive remains of the original and untampered with work of Fergus, such as appears nowhere else'. Smith was the prime agent in getting up the petition; Henderson was the law agent who examined witnesses and, according to Galloway, fomented public unrest. Both opposed the deviation [of the road, away from the east wall of the crypts], but both are now

on the committee. Mr. Lawrie intends applying to Mr. Shaw for the titles of the tenement [presumably, one which was to be demolished to create the new road access] through Mr. McVea, new inspector and clerk to the Board.

The history of the dispute over access is, according to WG, that about 100 years ago, the Heritors as owners of the Old School House [presumably the building now the Museum] and attached ground conceded a right of way for purely agricultural purposes to the farming owners of the Bruce Ha'. This is now the basis for a claim to build a road. WG recommends letting a Court decide on alternative road.

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[A large chronological gap exists in the archive at this point; when it resumes, the correspondence plunges straight into a new controversy]

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Letter 29 [Number 1 in Bundle 1]

March 5th 1895 Donald Henry, the Manse, Whithorn

The letter details the erection of a wooden shed by the Parish Council – there has been a protest to the Burial Ground Committee and a dispute with the convenor, since it was on the Heritors' ground. The problem with the shed from the archaeological point of view is that it obstructs the access to the main archaeological site [which in Galloway's view was beneath the floor of the current parish church].

Letter 30 [Number 27 in Bundle 1]

15th March 1895 P MacGregor Chalmers, 176 1/2 Hope Street, Glasgow

[MacGregor Chalmers was the architect who ultimately remodelled part of the front porch at the Priory Church, Whithorn] He comments on an effigy at St Mary's Church, Rothesay.

He reports that he has visited Whithorn and suggests digging at West end for the Anglo-Saxon church.

Letter 31 [Number 26 in Bundle 1]

July 3rd 1896 WG, 87 George Street, Whithorn

WG announces the discovery of a seal at Tonderghie of Chapel Royal [Stirling].

Letter 32 [Number 28 in Bundle 1]

September 26th 1896 WG, Whithorn

Drawings of the seal [referred to in Letter 26 above] are enclosed.

[WG returns to the question of remains beneath the Parish Church, now threatened by the action of the Parish Council – see Letter 29]. In 1822, the arches of the refectory were demolished [to make way for the current Parish Church]. ‘The Porch or entrance gateway to this great unexplored substructure still exists at the north east angle projecting over ten feet from the general (eastern) line of the building and is 25 foot in total breadth’. [The ‘Porch’ referred to appears as feature no. 7 on the MacGibbon and Ross plan; it has now apparently disappeared]. There is also a bank with retaining wall.

The current impasse relates to the fact that the Parish Council now claims the *solum* of porch and bank. A shed is to be put inside the old porch. WG has retaliated by putting up a barricade inside porch. Mr. MacFie [Town Clerk and local solicitor] and the Provost insist that the ground is theirs. Previously the staircase [from the upper graveyard down to the new cemetery] was on this bank until the Church tower was built in 1876.

Letter 33 [Letter 2 in Bundle 1]

March 24th 1897, WG, Whithorn

[Despite the continuing controversy about the right to erect a toolshed in the porch, it is clear from this letter, that even so late as 1897 – the year of Galloway’s death – he was continuing actively to excavate and to make discoveries].

WG refers to the protest about the toolshed in the churchyard; those who have erected it are those with whom the disagreement arose over the new access road into the cemetery [see Letter BU/21/274 (30)]. WG states the objection to the blocking of the porch by the new shed: ‘By far the most important [objection] is the fact that at this point only, and by means of the porch, has access been obtained or is it now obtainable, to the entire ground floor of the Domestic buildings of the Priory, and which must have been quite open and accessible down to 1822 when the 12 feet stretch of party wall was built’.

WG expects that there will be important finds in the ground storey. In 1822, the Heritors shut themselves out of their own property [presumably by building the party wall], so that now the porch is claimed by another party, together with the connected rocky banks.

Hew Dalrymple has been writing an article for Ayr and Galloway Archaeological Association.

WG is topping off Priory walls with large flat stones from Mains quarry; this work has led to discoveries from the tops of the walls. Recent finds include, from inside the windows, a memorial slab of C14/15th, consisting of a Latin cross, inscribed I H S [This stone is not numbered in Whithorn Museum, but is labelled ‘Incomplete gravestone with stepped cross and the symbol I H S. 15th Century’]. It has been fitted to the shape of the window [a photograph was enclosed – which is not extant]. It has now been placed under the protection of the Board of Works.

Other fragments of tombstones have been recovered from the tops of the walls: a cross-head with fleur-de-lis terminations [Again, this is not in the numbered catalogue of stones at Whithorn Museum, but is probably the stone included amongst the collection labelled 'Fragments of Gravestone of 15th Century date']. Two further memorials have been found: one with shears and one with a sword [These stones are not currently found in the Whithorn collection] .

WG excavated the South side of the nave to see if there was a base : it is ' the same style of base as occurs at the Transitional extension to the east and proves that the 12th century nave of Fergus must have been taken down and destroyed before the great fire, the existing wall above that base being part of the 14th century reconstruction after the fire'. This [base] is about 4 foot down.

WG pleads for investigation of the 'ground story (sic) of the Domestic buildings of the Priory', which could be achieved by making an opening in the party wall. This could be more easily achieved since Lord Bute is now a full Heritor of the parish.

Acknowledgements

The editor of these letters is greatly indebted to the Mount Stuart Trust for permission to publish them and also to Andrew McLean, Mount Stuart archivist, for affording facilities and help.

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BRITTONIC PLACE-NAMES from SOUTH-WEST SCOTLAND, Part 2:

Ptolemy's Abravannus, 'Locatrebe', Cumnock, Irvine and Water of Milk

by Andrew Breeze

University of Navarre, Pamplona

The Celtic place-names of south-west Scotland are a subject repaying investigation.¹ This paper discusses five such names: Ptolemy's Abravannus, meaning 'very feeble one' and referring to Piltanton Burn, near Stranraer; a possible link between the Ravenna Cosmography's Locatrebe and Threave Island; and Cumnock, Irvine, and Water of Milk, which seem respectively to mean 'cutting (stream), hewing (stream)', '(river of) wild turnips', and 'honey river, river where honey is found'.

Abravannus

One of the Scottish place-names mentioned by the Alexandrian astronomer and geographer Ptolemy (fl. 121-48) is that of the river Abravannus. Its meaning has been unknown. Henry Bradley derived it from Welsh *aber-afon* 'river mouth', but this cannot be right, and nothing better has been suggested.² Yet we do have an idea of the river's whereabouts. Ptolemy places it west of the Iena, Deva, and Novius; since the Deva (British *deua* 'goddess') is the river Dee in Galloway and the Novius is the Nith, the Iena is probably the Water of Fleet or river Cree (<Gaelic *criche* 'boundary'), and the Abravannus has been taken as probably the Water of Luce, entering the sea near Glenluce, Galloway (NX 1957).³

However, what follows challenges this, setting out a new etymology and identification. First the etymology. According to the rules of Celtic philology, the initial element of British *Abravannus* would give Welsh *af-*. This exists. The University of Wales Dictionary records it as an obsolete prefix meaning 'very, exceedingly', occurring in the archaic words *afrdwyth* 'hardship', *afreddwl* 'sad, joyless; unfortunate; horrible, fearful', and (with a change due to what linguists call *i*-affection) *efrllid* 'merit, desert'.⁴ Welsh *af-* also has a Middle Irish cognate *abar-*, as in *abar-dall* 'very dark', both deriving from Common Celtic **abro-*.⁵ This tallies neatly with the *Abra-* of *Abravannus*. The second element of the name is simpler. It would give the common Welsh word *gwan* 'weak, feeble, lacking in strength', which derives from Common Celtic **uanno-*.⁶ The meaning of *Abravannus* is, therefore, 'extremely weak one, very feeble one'.

1 Cf. A C Breeze, 'Four Brittonic Place-Names from South-West Scotland: Tradunnock, Trailflat, Troqueer and Troax', *Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society* 74 (2000), 55-60 [The paper referred to in this note forms in effect Part 1 of a series of papers by this writer on Brittonic place-names, of which the present instalment is Part 2 - Editors]

2 W J Watson, *The Celtic Place-Names of Scotland*, Edinburgh (1926), 55; A L F Rivet and Colin Smith, *The Place-Names of Roman Britain*, London (1979), 240

3 Rivet and Smith, 133, 135, 240

4 *Geiriadur Prifysgol Cymru*, Caerdydd (1950-), 44, 1172

5 *Geiriadur*, 1172; Joseph Vendryes, *Lexique étymologique de l'irlandais ancien: Lettre A*, Paris (1959), 6-7

6 *Geiriadur*, 1571

This etymology indicates where the river was. It cannot possibly have been the Water of Luce (<Gaelic *lus* 'herb, plant'), which is a powerful river rushing down from the moors east of Stranraer. The Abravannus must rather have been its neighbour Piltanton Burn, a brook creeping through flatlands south-east of Stranraer. Although Piltanton Burn is smaller than the Water of Luce, it has a larger estuary, and was therefore more conspicuous to the seafarers who provided Ptolemy with information. Ptolemy's *Abraouannou potamou ekbolai* 'the mouth of the river Abravannus' refers, then, to the mouth of Piltanton Burn.

The Abravannus 'very weak one' is thus surely Piltanton Burn, Galloway, which rises in the hills some three miles west of Stranraer (NX 0060), and flows south-east and then eastwards to enter the sea at Luce Sands (NX 1656), a mile from the Water of Luce. Its name is a British one, which if it had survived would have given Welsh *Afrwan*. It may seem strange that a small Scottish stream should be known to Ptolemy in Alexandria nearly two millennia ago. But this is less surprising in the light of (unpublished) archaeological finds, of which the editors of this journal informed the writer in letters of 2 October and 9 November 2000. (The writer here thanks Dr John Pickin, museums curator for Wigtownshire, for permission to refer to these coin finds before publication.) Since 1997, great numbers of Roman coins have been found close to the mouth of Piltanton Burn. Most date from 250 x 350, but some twenty are of the first and second centuries. These coins (now in Stranraer Museum) cannot be a dispersed hoard. They suggest rather that Piltanton Burn's estuary was the site of a Roman beach-market. If so, this would explain why Ptolemy knew the name of this far-away burn in Scotland so accurately.

Locatrebe

Locatrebe is referred to as *Locatreve* in the Ravenna Cosmography. The first element here corresponds to Welsh *llwch* 'lake, pool, stagnant water, bog, swamp, marsh; mud, mire, grime, filth'; the second to Welsh *tref* 'homestead, settlement; home; town'. The sense has thus been taken as 'lake village' or even 'pool-dwellers', as if referring to folk living in crannogs, though with the rider that the name might have been given to a Roman fort near a crannog. The exact location of Locatrebe has been unknown, though it was surely in Scotland south of the Antonine Wall, and quite possibly in south-west Scotland, where all Scottish crannogs of the Roman period are to be found.⁷

In a letter of 24 August 2000, the editors of this journal have thus asked the writer whether Locatrebe might be identified as Threave (NX 7362), where the great castle of the Douglas family stands on an island in the Dee. Locatrebe is likely to have been in Galloway and was possibly a tribal centre; of the numerous 'trefs' in south-west Scotland, the only one pre-eminent in the middle ages was Threave, which is just a mile downstream from Glenlochar, site of a Roman fort perhaps sited to overawe a nearby native stronghold; the neighbourhood of Threave has produced fine metalwork, such as the Torrs chamfrein, and ritual ironwork in a bronze bucket from Carlingwark Loch (NX 7661); though the island itself has produced only a fragment of a (perhaps Romano-British) glass bangle, might not the name of Threave derive from *Locatrebe*?

7 Rivet and Smith, 394-5

There is certainly a case for taking Threave as Locatrebe. The element *-treb* is familiar in Celtic, as in *Atrebates* ‘settlers’, a tribe with their capital at Silchester in Hampshire (the name of Arras in northern France also derives from *Atrebates*).⁸ ‘Lake village’ or ‘pool dwellers’ is also an apt description of a people living on Threave Island, an obvious defensive site. The name of Threave, being Brittonic, must predate the death of Cumbric in about 1100; so there would have been a Celtic settlement on the island long predating the castle of 1360-70. The sole difficulty is archaeological, not linguistic, in the lack of pre-medieval finds from Threave Island itself. Research may change this. If it does, then there might be strong grounds for identifying Locatrebe with Threave Island or (more probably) the nearby Roman fort of Glenlochar.

Cumnock

Cumnock is a working town in East Ayrshire (NS 5720), on the main Dumfries-Kilmarnock railway line; until 1650 its parish included New Cumnock, five miles south-east, where there are the remains of a castle guarding upper Nithsdale. Though guidebooks say little of these places, those who live there feel warmly towards them, one aspect of which is a web site (<http://www.new-cumnock.co.uk>) on local place-names. Yet the name of Cumnock has been obscure. A fresh look at the problem may thus offer a solution.

The parish is earliest recorded as *Comnocke* (1297); *Comenok* (1298); *Cumnock* (1300); and *Cumnok* (1368-9).⁹ This is usually thought to be Gaelic. Room mentions a link with Gaelic *cumhann* ‘strait’; other proposals are with supposed Common Gaelic *cuman* ‘shrine’ (cf. Old Irish *cumtach* ‘covering; shrine?’); *cumar* ‘confluence’ plus *oích* ‘water’; and *cumannach* ‘place of the confluence’.¹⁰ But these inspire no confidence. Nicolaisen stated in 1970 that the name ‘has never been explained satisfactorily’ and this still seems the case.

Given the difficulties of explaining *Cumnock* from Gaelic, it is worth seeing if it might be Brittonic, like the name of Ochiltree ‘upper settlement’ (Welsh *ucheldre*) four miles west of Old Cumnock. If we do this, we find the Middle Welsh form *cymynog* ‘hewing, cutting; slaying; hewer; slayer’. This is related to Modern Welsh *cymynaf* ‘I cut down, fell, hew’, *cymynai* ‘woodman’s axe’, Breton *kemener* ‘tailor’, and Old Irish *con-ben* ‘smites, hacks, cuts off’.¹¹

Welsh *cymynog* resembles our early forms *Comnocke*, *Comenok*, and so on. If they really are the same, this can be so only because at Cumnock a settlement has been named after a river, as was certainly the case at Irvine, Ayr, and Girvan (on which last cf. Welsh *Gerwin* ‘rough, harsh’, a stream in Dyfed).¹² If this was the case, a name meaning ‘hewer, cutter’ would make good sense, as it could be compared with those of many Welsh rivers called

8 Rivet and Smith, 259-60

9 W F H Nicolaisen, ‘Cumnock’, in his *The Names of Towns and Cities in Britain*, London (1970), 80

10 Adrian Room, *Dictionary of Place-Names in the British Isles*, London (1988), 106; Bob Guthrie, ‘Place-Names of the Parish of New Cumnock’, *Scottish Place-Name News* 9 (2000), 5-6

11 *Geiriadur*, 774, 775; Joseph Vendryes, *Lexique étymologique de l’irlandais ancien: Lettre B*, Paris (1981), 34

12 A C Breeze, ‘Some Celtic Place-Names of Scotland, including *Dalriada*, *Kincardine*, *Abercorn*, *Coldingham* and *Girvan*’, *Scottish Language* 18 (1999), 34-51

after tools or weapons. One example is at Abergele, on the North Wales coast. This means ‘mouth of the river Gele’, *Gele* being a dialect form of *gelau* ‘blade, spear’. Other Welsh rivers are called *Cyllell* ‘knife’, *Cleddau* ‘sword’, *Nodwydd* ‘needle’, and so on, either because of the straightness of their course, the flashing of their water, or because they cut or slice through land.¹³ *Aberdaugleddyf*, the Welsh name of Milford Haven in Pembrokeshire, means ‘the mouth of the two rivers Cleddyf’, where *Cleddyf* means ‘sword’.¹⁴ An anecdote recorded by the Tudor antiquary John Leland may be quoted here. ‘Betwixt the ii Gleves [‘swords’ = the two rivers Cleddyf] by Harford West is a litle ryveret caullid in Walsch [Kyllell] in Englisch Knife. One beyng requirid wher he lay al night answerid that he lay having a swerd on eche side of hym, and a knife at his hart, alluding to the iii rivers in the midle of whom he lay al night.’¹⁵ Other Welsh or Anglo-Welsh rivers with metallic names are the *Aradr* ‘plough’, *Gefel* ‘tongs’, *Gwachell* ‘skewer’, and *Trosol* ‘crowbar’ in Carmarthenshire, the *Mynawyd* ‘awl’ in south Gwynedd, the *Oge* ‘harrow’ in Denbighshire, and the *Taradr* ‘auger’ just south of Hereford.¹⁶ To these can be added the Rhymney of industrial South Wales, from Welsh *rhwmp* ‘auger’.¹⁷

Given the evidence of these Welsh rivers, we might thus see Cumnock as called after a river known as ‘hewing one, cutting one’. But which river would be meant? It can hardly have been Lugar Water (on Cumnock’s north side) as this already has a Cumbric name, meaning ‘shining one, resplendent one’ (cf. Welsh *llug* ‘light, radiance, lustre, brightness’).¹⁸ The answer is more likely to be Carsgailoch Runner, the stream flowing through and under Old Cumnock to join Lugar Water. Though a small stream, this gains erosive power just before it reaches Cumnock, where it is joined by two other streams. So it might once have been called ‘hewing one, cutting one’ as it flowed through its valley by Cumnock to meet Lugar Water.

As regards the phonology of *Comnocke* and other early forms, we know that Welsh short *o* in original *com-* or *con-* regularly gave the vague sound represented by *y*, as in *cymannaf* ‘I commend’, *cymun* ‘communion’, *cymell* ‘compulsion’. But in Cornish and Breton *o* remained when the meaning of the prefix was not clearly felt: thus Cornish *compys* ‘straight’ and Breton *kompoez* ‘smooth’ against Welsh *cymwys* ‘fitting’.¹⁹ The forms *Comnocke* and *Comenok* suggest that Cumbric (the Brittonic language of Southern Scotland and Cumbria) was conservative on this point. The form *Comenok* of 1298 is also of interest, as it may show a trace of an original second syllable (preserved in Welsh *cymynog*). Finally, it seems that the name was borrowed when Cumbric words were still stressed on the last syllable. Jackson thought the shift from ultimate to penultimate took place in Welsh, Cornish, and Breton (except in the dialect of Vannes, where stress is still on the last syllable) in the eleventh century.²⁰ We might have expected Cumbric to change at the same time. Whether

13 Melville Richard, ‘Abergele’, in Nicolaisen, 36

14 Richards, ‘Milford Haven’, in Nicolaisen, 135-6

15 *The Itinerary of John Leland*, ed. Lucy Toulmin Smith, London (1907-10), iii. 63-4

16 R J Thomas, *Enwau Afonydd a Nentydd Cymru*, Caerdydd (1938), 98-100

17 Richards, ‘Rhymni’, in Nicolaisen, 160-1

18 Watson, 433

19 Henry Lewis and Holger Pedersen, *A Concise Comparative Celtic Grammar*, Göttingen (1937), 78-9; Henry Lewis, *Yr Elfen Ladin yn yr Iaith Gymraeg*, Caerdydd (1943), 4; K H Jackson, *Language and History in Early Britain*, Edinburgh (1953), 659

20 Jackson, *Language*, 684-9

it did or not, the fact that we do not have a form 'Cumunnock', with stress on second syllable, suggests the name was taken into English before any change in Cumbric. The modern pronunciation, with stress on first syllable, would be due to changes in English, where this is natural.

If, then, the above reasoning is correct, and Cumnock really is called after a stream known as 'cutting one, hewing one', this solves a long-standing problem, and suggests that Cumnock was originally a British settlement, not a Gaelic one.

Irvine

Irvine (NS 3239) is an ancient royal burgh and twentieth-century 'New Town' on the North Ayrshire coast. Its name is Celtic one, deriving from that of the river Irvine, which flows westwards past Darvel, Galston, and Kilmarnock to enter the sea at Irvine Bay.²¹ But the actual meaning of *Irvine* has been obscure. Watson gave the forms *Yrewyn* (1258) and *Irwyn* (1296) and saw a link with the river Irfon (which joins the Wye at Builth Wells, Powys).²² Nicolaisen agrees with this, but describes the meaning as 'obscure'.²³ Room helpfully gives the form *Strathyrewen in Galwegia* 'the valley of the Irvine in Galloway' of c. 1130, though his popular etymology 'green river' (cf. Welsh *ir* 'fresh, green' and *afon* 'river') must be rejected on phonological and semantic grounds.²⁴

Against this can be set out a new etymology. A link with *afon* or the Irfon of Powys can be rejected, since there is no trace of *o* in *-yrewen*, *Yrewyn*, *Irwyn*. The correct answer seems quite different. In Welsh we have the common noun *erfin* 'wild turnips, rape' (singular *erfinen*), the exact cognate of Breton *irvin* 'turnips'. The Welsh word, first attested in the fourteenth century (in medical texts and poetry), derives from British **arbino-*, probably representing **rabino-* (with metathesis) from the root **rap-*, **rep-*, as in Latin *rapa* 'turnip'.²⁵

Erfin 'wild turnips, rape' is discussed in the standard book on Welsh hydronyms, as there is a brook called Erfin at Cwmerfin (SN 6983) in the hills east of Aberystwyth. The stream, first documented in the eighteenth century, has been considered named after a man called Erfin (there are people called this in early Welsh sources, including a bishop of St Davids). A link with turnips has been ruled out.²⁶ Yet a derivation from *erfin* 'wild turnips' can hardly be excluded here, since in early times they were an important food.

In any case, there can be no doubt that Welsh *erfin* and Breton *irvin* allow an explanation of *Irvine* as a Cumbric name meaning '(river of) wild turnips, rape'. Botany confirms this.

21 G W S Barrow, *The Anglo-Norman Era in Scottish History*, Oxford (1980), 49 n. 87

22 Watson, 430

23 Nicolaisen, 'Irvine', in Nicolaisen, 113 [The editors of this journal inform that the postulated former parish of Irving or Irvine, now part of Kirkpatrick Fleming near Gretna, which is discussed by H G Slade in R J Mercer et al., *Kirkpatrick Fleming, Dumfriesshire - An Anatomy of a Parish in South West Scotland*, Dumfries (1997), may or may not have had a name of different origin, but is in any case not considered here]

24 Room, 186

25 *Geiriadur*, 1231-2

26 Thomas, 205

Rape (*Brassica napus*) and the very similar wild turnip (*Brassica rapa*) belong to the cabbage family. They are conspicuous plants, growing up to three feet high and producing golden yellow flowers. Rape, a traditional oil-producing fodder plant and vegetable, is now found naturalized by roads and in waste places; wild turnip has been cultivated since the New Stone Age as an oil-rich fodder plant and vegetable.²⁷ As regards habitat, rape is described as perhaps introduced to Britain, and ‘often found on the banks of streams and rivers’; the wild turnip as ‘probably introduced’ and common in Britain, where its two chief habitats are stream banks and arable or waste ground.²⁸ Butcher similarly calls wild turnip a ‘rather common plant of river banks’.²⁹

Since wild turnips and rape often grow by rivers, there is excellent reason to take *Irvine* as meaning ‘(river of) wild turnips’ (or perhaps ‘rape’). Wild turnips have been eaten by men and women since the Stone Age, and are thus a plant which would readily be noticed by our ancestors. It seems, then, that the river and town of Irvine in Ayrshire (but formerly in Galloway) are named after the humble but important wild turnip, or perhaps rape; plants perhaps still both to be found growing on the banks of the Irvine.

Water of Milk

Thousands of years ago, before the Esk captured its headwaters (the present Black Esk and White Esk), the Water of Milk was a major river. In its upper course it is now a mere stream, rising by a windgap south of Eskdale (NY 2690), and flowing south-west through a high moorland valley. On reaching low ground it passes the eighteenth-century mansion of Castlemilk (built from a fortune in China tea) and the farms of Milkbank and Milkvale before joining the Annan near Hoddum Castle (NY 1473), five miles south of Lockerbie.

Its name is recorded about 1124 in *Abermelc* ‘Abermilk’, the old name of the parish of St Mungo. Watson thought the original Abermilk was the confluence (Brittonic *aber*) of the rivers Milk and Annan, two miles from the modern kirk of St Mungo.³⁰ He described the meaning of *Melc* or *Milk* as obscure, but suggested a link with a Celtic root meaning ‘rot, putrefy’.³¹ This explanation of *Milk* is dubious, since evidence for a Celtic root meaning ‘rot’ here is weak.³² But it is preferable to that of recent popular scholarship. Discussing Castlemilk in Rutherglen (NS 6058), Adrian Room derives its name from nearby Milk Water, which he thinks was called after its ‘milky’ water. He believes the Water of Milk near Lockerbie was also named from its ‘milky’ water.³³

Here we discuss the Water of Milk and not Milk Water, as the latter is a late form (see below). Room’s implication that the second part of *Abermelc* represents English ‘milk’ is

27 Thomas Schauer, *A Field Guide to the Wild Flowers of Britain and Europe*, London (1982), 72

28 A R Clapham et al., *Flora of the British Isles*, 2nd edn, Cambridge (1962), 123

29 R W Butcher, *A New Illustrated British Flora*, London (1961), i. 265

30 Cf. K H Jackson, ‘The Sources for the Life of St Kentigern’, in *Studies in the Early British Church*, ed. Nora Chadwick, Cambridge (1958), 273–357, at 320–1

31 Watson, 460

32 D Ellis Evans, *Gaulish Personal Names*, Oxford (1967), 458

33 Room, 76–7

hard to credit. No English river is called 'Milk'; a combination with Cumbric *aber* is unlikely for an English form; and in former Northumbrian territory we should in any case expect the Anglian form *milc*, not the *melc* of southern English dialects, as the *Oxford English Dictionary* entry for 'milk' makes clear. Another interpretation is thus preferable.

The ancient language of Southern Scotland was Cumbric, which resembled Welsh. This helps us with Water of Milk, since the early form *Melc* is paralleled by the Meloch of North Wales (SH 9638), flowing into the Dee two miles east of Bala. *Meloch* is attested as such in a ninth-century Welsh poem, which speaks of the monastery of Llanfawr or Llanfor (near Bala), on the river Traweryn or Treweryn.

Seek the Dee and go along its length
From Meloch as far as Traweryn.
Herdsman of calves, they lead to Llanfawr.³⁴

Meloch was discussed by R. J. Thomas.³⁵ He related it to Welsh *mêl* 'honey', comparing the names of Honeybourne and Honey Brook in Worcestershire. This is surely right. It is far more convincing than his alternative link with Welsh *melyn* 'yellow', because early people would have more interest in a valley as a source of food than for the colour of its river. The lower reaches of the Water of Milk are still thick with woods, and seem a good area for bee-keeping. The name of Honeybourne, near Evesham, strengthens this link with bees. It is accepted as meaning '(place on) the stream where honey is found', and is paralleled by that of Honiley 'woodland clearing where honey is found', near Kenilworth, Warwickshire.³⁶ The upshot of this is that the Water of Milk was probably known to the Celts as an area where honey was to be had.

If correct, this argument solves a linguistic problem, and provides information on the economy of the Lockerbie area in pre-Norman days. It is difficult for us to grasp the importance of honey in early times, when sugar was unknown, and honey was the only source of sweetness. Mixed with ale, it produced bragget; it was also the source of mead, the drink of heroes in early Celtic society.³⁷ The evidence of Celtic texts (narratives, laws, poetry, saints' lives, legal deeds) underlines the significance of honey. Typical is a reference in the twelfth-century *Four Branches of the Mabinogi* to the abundance of the valley of the Teifi (Dyfed) in honey and fish.³⁸ A legal text of similar date is more specific, stating that the height of the tub of honey to be paid in a king's foodrent shall be 'nine hand-breadths when measured diagonally from the farther bottom groove to the near rim', and that the vat of mead supplied to the king 'ought to be capacious enough for the king and his adult companion to bathe in it'. As for the wax, a third is the king's, a third the brewer's, and a third the steward's.³⁹ There is evidence that Cumbric law resembled Welsh law.⁴⁰ We may thus imagine honey and its products as having a similar importance in both Wales and the kingdom of Strathclyde.

34 *Early Welsh Saga Poetry*, ed. Jenny Rowland, Cambridge (1990), 474

35 Thomas, 28

36 A D Mills, *A Dictionary of English Place-Names*, Oxford (1991), 177

37 K H Jackson, *The Gododdin: The Oldest Scottish Poem*, Edinburgh (1969), 35-7

38 Wendy Davies, *Wales in the Early Middle Ages*, Leicester (1982), 34

39 *The Laws of Hywel Dda*, tr. Melville Richards, Liverpool (1954), 72

40 Jackson, *Language*, 9-10

If, then, the Water of Milk is correctly understood as meaning ‘stream where honey was found’, it provides new historical evidence on Celtic Scotland. As information on economic activity, it may be compared with interpretation of *Leverith*, once the name of Cramond Island in the Firth of Forth (NT 1978), as meaning ‘New Milk Island’ (cf. Welsh *llefrith* ‘new milk’).⁴¹ Another instance is still closer to Lockerbie, at Trailtrow (NY 1471), less than a mile from Hoddam Castle. The twelfth-century form *Trevertrold* suggests a meaning here of ‘homestead of the butler, settlement of the steward’ (cf. Welsh *trulliad* ‘cup-bearer, butler’).⁴² Given the importance of mead and bragget amongst the North Britons, the stewards here may even have supervised the products of the nearby Water of Milk ‘stream where honey was produced’. The name of Water of Milk may thus be taken as a Celtic one referring to honey, and not an English one alluding to any milkiness of its water.

As for Castlemilk near Rutherglen, the origin of the name was explained to the writer by the editors of this journal in a letter of 25 August 2000. The name is borrowed from that in Dumfriesshire. The lands at Castlemilk there were granted before 1388 by Robert II to John Stewart, eldest son of Sir Alex Stewart of Darnley. The former later feued Castlemilk to William Stewart, to whose heirs it descended, but having himself succeeded to Darnley, he and his own heirs there retained the superiority of Castlemilk. When the Stewarts in 1578 feued Castlemilk to the Maxwells, they retired to ‘Cassiltoun’ in Lanarkshire, their main seat, which they renamed ‘Castlemilk’.⁴³ The stream in Lanarkshire would thus be called after the nearby castle, itself called after Castlemilk in Dumfriesshire. Hence there is no basis for Room’s suggestions on this point.

41 A C Breeze, ‘*Insula Leverith*, the Old Name of Cramond Island’, *Scottish Language* 18 (1999), 43-4

42 A C Breeze, ‘The Name of Trailtrow, near Lockerbie, Scotland’, *Northern History* 35 (1999), 205-7

43 Cf. A M T Maxwell-Irving, *The Border Towers of Scotland - Their History and Architecture: The West March*, Dumfries (2000), 96

DUNDRENNAN ABBEY

(Summary Report)

Archaeological investigation within the south range of a Cistercian house in Kirkcudbrightshire

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“These broken arches and tottering columns - these deserted cells and weed-grown aisles - these neglected monuments of belted Knights and mitred Abbots”

(Thomson 1845; *New Statistical Account of Scotland* 358)

Abstract

The remains of the south-west corner of the 12th-century Cistercian abbey cloister at Dundrennan (NX 7492 4750) were cleared of rubble and 19th-century landscaping infill over four seasons of fieldwork. Elements of the Warming House, Novice's Day Room, Great Drain and Reredorter Undercroft were revealed, and coupled with a short programme of geophysical survey and test-trenching, new evidence of the sequence of building for this House was revealed. The excavations were funded by Historic Scotland.

This report represents a summary account of the results of the excavations. The full report can be found on the Scottish Archaeological Internet Reports website, at www.sair.org.uk.

Introduction

The ruins of Dundrennan Abbey lie to the east of Dundrennan village. The village and Abbey occupy the steep-sided valley of the Abbey Burn. Much of the Cloister survives alongside the Abbey Church, although many of the stone buildings have been robbed for local building. However, prior to the excavations the South Range was virtually hidden, with only the doors to the Refectory, Kitchen, Warming Room etc. (Illus 1, Illus 2) being visible within an area defined on the south side by a boundary wall, separating the 19th-century Manse from the ruined Abbey (Illus 7).

The Church and Cloister occupy an artificially enhanced terrace to the north and east of a pronounced bend in the Abbey Burn. The site exploited the naturally rising profile of the west side of the valley, on the lowest well-drained area within the valley. The village lies on a terrace up-slope from the Abbey, and indicates the likely extent of the entire Abbey area. The building of the 19th-century Manse saw the clearance of the Abbey ranges towards the south-west of the complex. However, the post-medieval buildings towards this end of the Abbey terrace tend to confirm the viable extent of ground suitable for building, and probably echo closely the limits of the Abbey ancillary structures to the south of the Cloister itself.

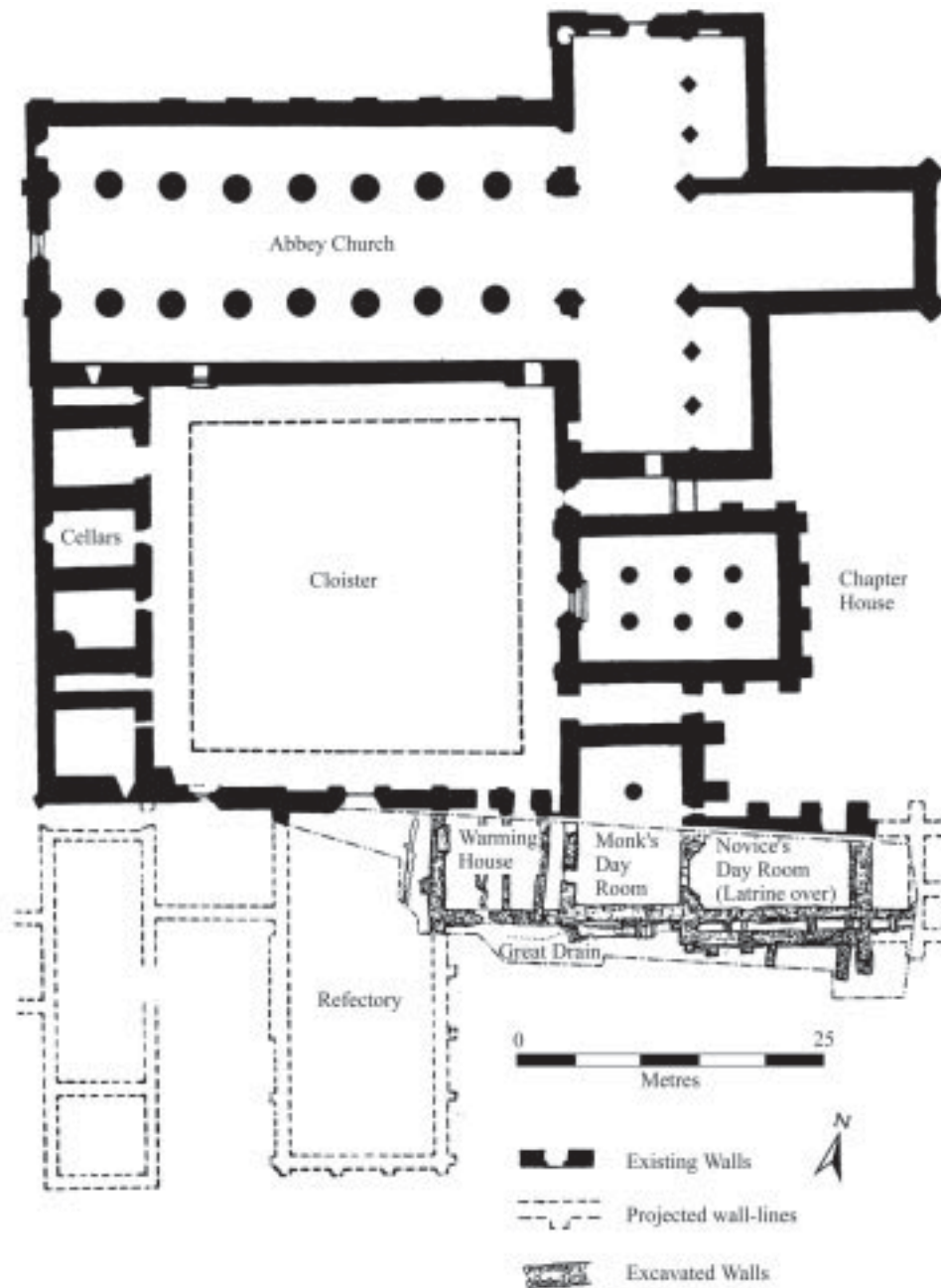


Illustration 1: The principal rooms in the Abbey and the area of excavation

Historical Background to the Abbey

The Abbey was founded by Fergus, Lord of Galloway in 1142, probably being colonised by monks from Rievaulx in North Yorkshire. Archbishop Malachy, papal legate to Ireland, may well have influenced Fergus to found the House during his visit to Galloway in 1139, but details, as with much of the Abbey's history, are obscure. Dundrennan was the mother house of Glenluce and Sweetheart (founded in 1191 and 1273 respectively), and an indication of the mixed fortunes of the Abbey during the 13th century survives in the form of petitions to the English Crown. In 1299 the community applied for compensation from Edward I after damage inflicted at the start of the Wars of Independence, and later in 1328 for the restoration of Abbey lands in Ireland. Evidence suggests that the community of Brethren was relatively small by the mid 16th century, numbering only a prior and nine monks in 1545. With the appointment of Abbot James Hay to the bishopric of Ross in 1523, the commendatorship was successfully held by a series of primarily lay lords, culminating in 1562 with the appointment of Edward Maxwell, son of Sir John Maxwell of Terregles, 4th Lord Herries. With the Maxwells of the later 16th century, the House at Dundrennan still served as the administrative centre for the old Abbey estate, and was as such still maintained, although some of the buildings are recorded as being in a poor state. Edward Maxwell, a staunch ally and Catholic activist, was in due course able to receive Mary, Queen of Scots in May 1568 at Dundrennan before her departure to England. With the death of Maxwell, the commendatorship passed in 1599 to John Murray, ultimately Earl of Annandale, when the Abbey was erected to a temporal lordship in 1606. The Abbey and lands were eventually annexed to the deanery of the Chapel Royal, Stirling in 1621. Part of the Abbey church was used by the parish up until 1742 when it was abandoned, heralding the wholesale demolition and robbing of the Abbey buildings, many of which were already ruinous.

The Archaeological Account

Introduction

The results of the excavations indicated 6 periods of construction, occupation and abandonment of a series of claustral structures within the Abbey, from the mid 12th century to the present.

<i>Period I</i>	c1170-c1230	Colonisation and establishment of full claustral circuit in stone.
<i>Period II</i>	c1230-c1320	The house at its peak of prosperity - extension and elaboration of Period I buildings. War damage.
<i>Period III</i>	c1320-c1450	Repairs and conversion due to war damage and reduction in community size.
<i>Period IV</i>	c1450-c1520	Further conversion for more private accommodation and extra service space.
<i>Period V</i>	c1520-c1600	Abbey used for storage in association with increasingly secular occupation.
<i>Period VI</i>	c1600-present	Abbey abandoned and ruinous, a focus for antiquarian investigation up to Guardianship period.

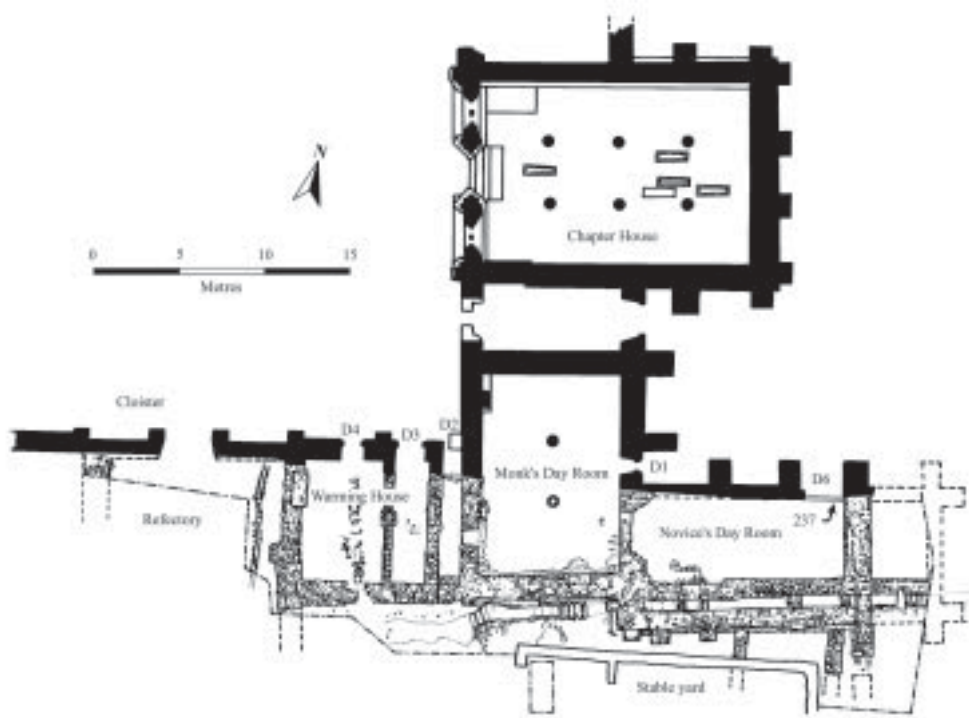


Illustration 2: Detail of the area of excavation

The Excavation Results

The excavations concentrated entirely on the South Range of the Cloister, investigating a series of discrete chambers. These underwent conversion and alteration from the earliest occupation in the 12th century through to abandonment in the late 16th century.

The results of the excavation are presented as an account of the evolution of this series of chambers, and their changing role through the site's history.

The importance of the establishment of the South Range in stone was twofold: -

1. To complete the necessary offices for the rigid daily routine of the community
2. To complete the complex of Church and Cloister as a single structural edifice

Evidence was revealed for the use of temporary timber buildings during the lengthy construction period for the South Range.

The Refectory (Room 11)

The Refectory appears originally to have been quite small; the evidence of a surviving 12th-century wall (F024) suggests that the room dimensions were constrained within the overall width of the South Range. It was built on an artificial terrace, had a flagged stone floor, and was accessed from the Cloister via a doorway in the north wall (Illus 2). During the later 13th century (Period II) the Refectory was significantly extended. The remains of the new Refectory were revealed in the early 20th

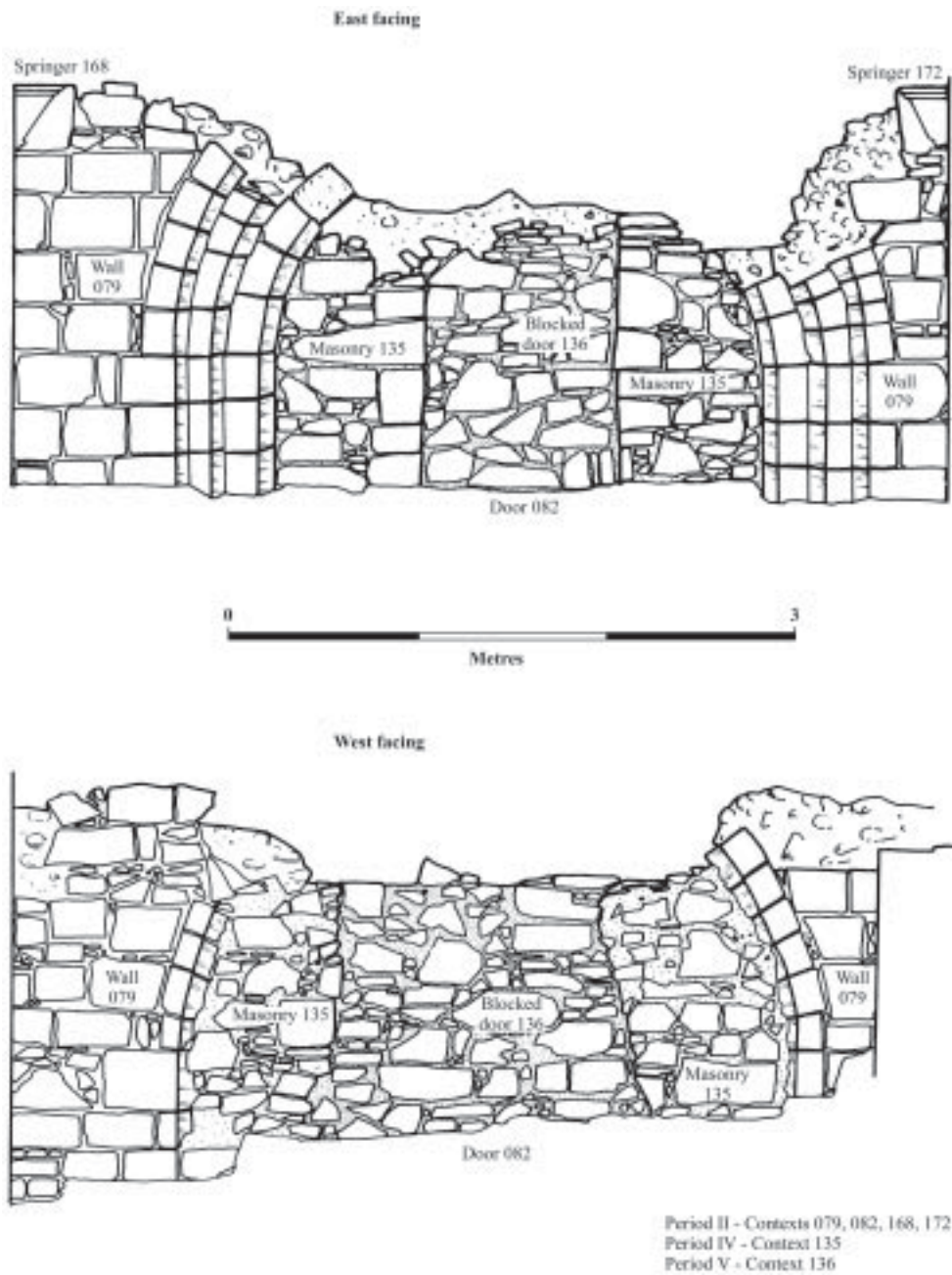


Illustration 3: Elevations of the west door, Rooms 5 and 6

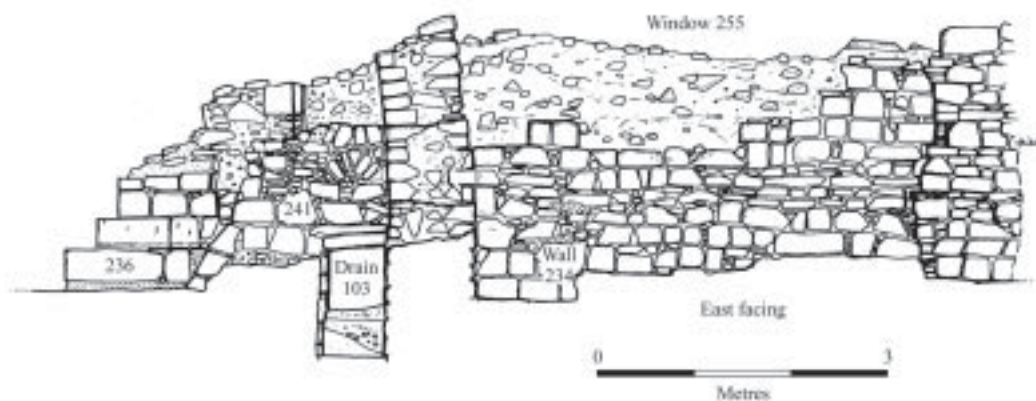


Illustration 4: The east limits of Room 6, from the east

century by the then Minister, the Rev. A. Christie (Christie 1914). It is likely that remodelling of the Chapter House, with the addition of an elaborate west façade, was completed as part of these improvements, which reflect the increased wealth of the Cistercian Order at this time.

The Warming House (Calefactory – Rooms 1,2,3,8,9 & 10)

The Warming House revealed the most complex changes of all excavated structures, from its crucial social and domestic role for the 12th- and 13th-century community (Periods I & II) through to its conversion to individual cells for the last members of the House in the later 16th century (Periods IV & V).

In its earliest form the Warming House lay immediately east of the Refectory, with a prominent fireplace and hearth (F057 & F043) located centrally in the west wall (F004). The building measured 6.6m east-west x 7.75m north-south internally, and was accessed from the Cloister via a door towards the northeast corner (Illus 2). By the later 13th century (Period II), the Warming House had been enlarged (in line with the Refectory and Chapter House) to create a new room (Room 9), measuring 9.83m north-south x 6.66m east-west, with a new south wall (F050) and a four-bayed roof, supported on a roughly central octagonal pillar (F040).

Following damage inflicted during the Wars of Independence (during Period III) the Warming House, as with the Reredorter to the east, was again remodelled. The 13th-century Warming House was subdivided by a new cross-wall (F011) creating two smaller rooms - a reduced Warming House (Room 10) and a narrow chamber (Room 3) where the Day Stair was now located. Both Rooms 10 and 3 were provided with new doorways leading to the Cloister, with a doorway also provided between them. Traces of plaster within rooms 10 and 3 suggest that their interior walls were rendered. A new window was inserted in the south wall of Room 3.

At some time towards the end of the 15th century or early in the 16th century (Period IV), the reduced Warming House (Room 10) was further sub-divided north-south, creating two narrow rooms (Rooms 1 & 2), with Room 1 measuring 4.76m wide, and Room 2 measuring 1.90m wide. These rooms were accessed directly from the Cloister, but were not interconnected internally. This configuration of rooms remained over the final occupation of the Abbey, until its ultimate abandonment (Period VI), with the only addition being earthen banks laid against the long walls of Room 1 to receive timber floor joists.

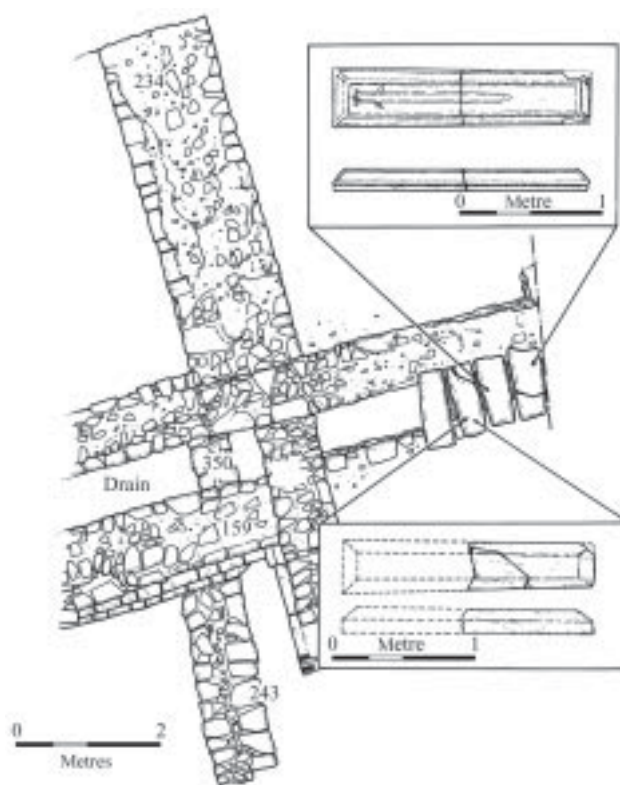


Illustration 5: Re-used grave slabs over the Great Drain

The Novice's Day Room (Room 4)

The Novice's Day Room linked the east and south ranges of the Cloister, and was aligned north-south (Illus 2). It was accessed directly from the Warming House, with a further door leading out eastwards, beyond the Cloister. The room measured 12.5m north-south x 8.33m east-west internally, with a six-bayed, vaulted roof, supported on two octagonal pillars. The south wall probably featured two windows, only one of which was revealed in the excavations (F081), with an external buttress between them (F088). The south end of the east wall featured an elaborate, arched opening (F082), leading into the Reredorter Undercroft (Room 5).

The Novice's Day Room remained virtually unchanged, despite the alterations to the adjacent Reredorter and Warming House. Only during the 16th century was there any repair, in the form of low earthen banks (F064), similar to those noted in the Warming House, where the original floor was raised to receive timber joists.



Illustration 6: The Great Drain, with fills, looking east

The Reredorter Undercroft (Rooms 5 and 6)

The Reredorter, or latrine block, was located at the extreme south-east corner of the Cloister, to exploit the route of the Great Drain as it ran eastwards towards the Abbey Burn. The latrines themselves were located at first floor, over a deep channel which ran immediately south of the Undercroft (Rooms 5 & 6), the south wall of which also formed the south wall of the upper floor. The south wall of the Undercroft (F169) formed the north side of the latrine channel, and separated the drain from the ground floor space, which featured high-quality masonry. Covering the Reredorter Undercroft were four bays of quadripartite rib vaulting, springing from the corners of the room and from the wall faces. The masonry details (springers, vault ribs, window and doorway surrounds) were finely moulded, in contrast to the majority of the exposed internal wall faces within the room. The latter walls were relatively crude, and were probably plastered over.

Once cleared of rubble, the 12th- and 13th-century chamber was found to measure 17.40m east-west x 4.76m north-south internally, with evidence of two windows and a doorway (F237) in the north wall. A further internal refinement comprised a well-constructed arched recess or aumbry (F163) towards the west end of the south wall. The archway (F082) between the Novice's Day Room and the Undercroft was of very high-quality construction. The sides were of finely moulded, stepped masonry and the opening originally measured 2.6m wide (on the east side), widening to 3.2m on the west, the Novice's Day Room side. Although the upper parts of the archway were absent, it appeared to have been rounded at the apex, standing to a maximum height of 1.6m above the floor.

In the early years of the 14th century (Period III) the block was reduced by 3.5m at its east end, and a new east wall (F234), with a central window was built, creating a new room measuring 12.38m long east-west (Room 6). In addition, the aumbry was blocked and a crude drain inserted (F280), emptying into the latrine channel to the south. Externally the south façade of the Reredorter was stabilised with a new buttress (F170), and a new, separate building (Structure 12) was erected against the south



Illustration 7: The Monk's Day Room under excavation, bisected by the Manse wall

wall. Towards the end of the active life of the Abbey (Period IV), the archway between the Novice's Day Room and Reredorter was partially blocked to form a small doorway (F136), ultimately blocked entirely during the 16th century (Period V).

Other Buildings (Structures 12 and 7)

The fragmentary remains of a crude stone building (Structure 12) were traced, built against the south wall of the Reredorter block, running on a slightly north-east to south-west alignment. Little survived of this building to suggest how, if at all, it was linked to the Reredorter, but the building can be seen as part of the stabilisation works on the south wall of the Reredorter during the later 14th century (Period III).

During the later 15th century (Period IV), a further simple structure (Structure 7) was constructed at the east end of the south range, built over the newly-capped east end of the original latrine channel, where it emerged beyond the east wall of the Reredorter Undercroft. This building was a timber, lean-to construction, and was defined by a series of floor deposits and the remains of a doorway and threshold (F236).

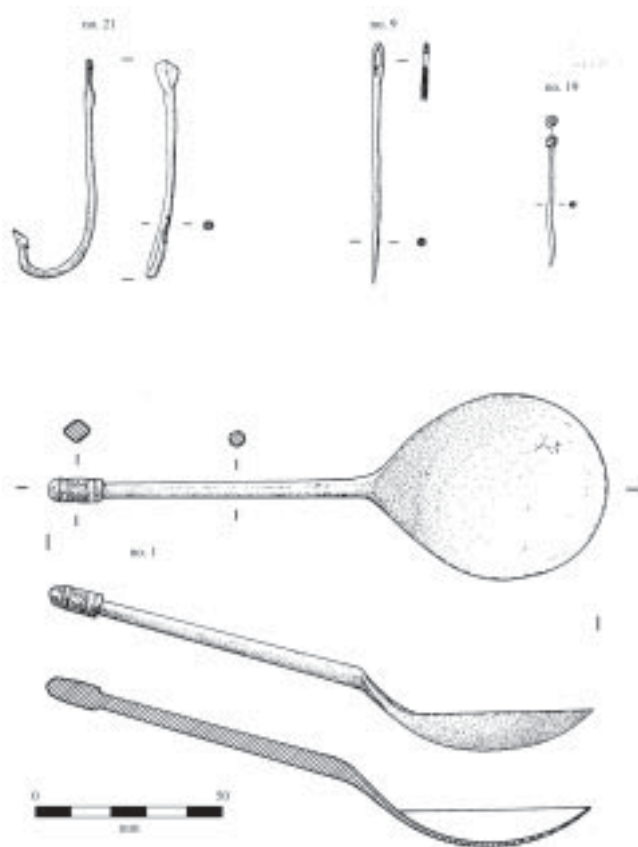


Illustration 8: Silver spoon (16th century?), copper-alloy fish-hook, needle and pin

The Great Drain and Latrines

It is likely that the Great Drain (F103, Illus 2&6), as laid-out in the 12th century, followed an almost direct west-east route, running immediately south of the Novice's Day Room and some 2m south of the early Refectory (Room 8) and Warming House (Room 11). The drain was originally an open, stone-lined channel running beneath the Reredorter block. Within the Reredorter, the sides of the drain (F159/169) projected upwards to form a deep channel to first floor level, for the use of latrines at this level. The floor of the channel sloped gently to the east, and survived to a maximum depth of 2.8m. The sides were braced internally by three cross-walls, probably corresponding to four separate latrine chutes at first floor. Beyond the reredorter to the east, the channel resumed its course to the Abbey Burn as an uncapped channel. With the increase in the Lay Brothers accommodation in the West Range during the 13th century (Period II), the Great Drain was capped and sealed to the west of its route along the South Range. The repairs to the damaged Reredorter block after the Wars of Independence saw further bracing of the latrine channel. However, it was not until the later 15th-early 16th centuries (Period IV) that the drain was capped and covered where it emerged to the east of the reduced latrine block. The capstones themselves mainly comprised re-used broken grave slabs, probably robbed from the Abbey Church, one of which featured a finely carved sword motif (Illus 5). This activity probably occurred when the original first floor latrine arrangements were replaced by two external garderobes (F089, F090), with chutes emptying into the Great Drain at the foot of the south wall, the Great Drain by this time being much reduced in flow, necessitating the periodic digging-out of the channel.

The Artefacts and Ecofacts

The excavation revealed good assemblages of ceramics, metal objects (Illus 8) and faunal remains, all discarded or lost during the active life of the Abbey. In addition there was considerable evidence of the post-abandonment use of the site (Period VI), in terms of domestic and horticultural remains associated with the Manse. All this evidence aided in the placing of the sequence of construction and conversion in its historic context, and shed light on the diet and lifestyle of the occupants of the site over this period.

Inevitably most of the material retrieved reflected the final occupation of the site, when the Manse gardens and stables encroached over ruined Abbey buildings. Inkpots, boot polish, hair-restorer, ceramic hot-water bottles and general household crockery all bore testimony to life in the late 19th-century Manse. However, crucial evidence of the earliest occupation was revealed in the form of 13th-century Scottish East Coast White Gritty wares, which were found sealing deposits associated with the initial construction of the South Range. Several examples of Italian, Iberian and French imported wares were found over the full lifespan of the Monastic community, demonstrating the European dimension of the Cistercian Order, and trade links between Scotland and Europe at this time.

Artefacts recovered included coins, broken window glass, and iron spearhead (SF 034), a copper alloy ingot (SF 023) and a large silver spoon (SF 001, Illus 8), all of medieval date. Within the fills of drains and garderobes, indications of the diet of the house were revealed, with the discovery of remains of figs, raspberries, elderberries, and cereals, as well as evidence of colonisation by natural heathers, sedges and wild flowers after abandonment. Poultry, sheep, pigs and fish (both fresh-water and marine) were also consumed by the House over its entire history, often with evidence of food remains being cast to domestic pets, the bones having been gnawed by dogs. A cross fragment (SF031, Illus 9) was found among Period V demolition material in Room 5. The finds are now in the Stewartry Museum, Kirkcudbright.

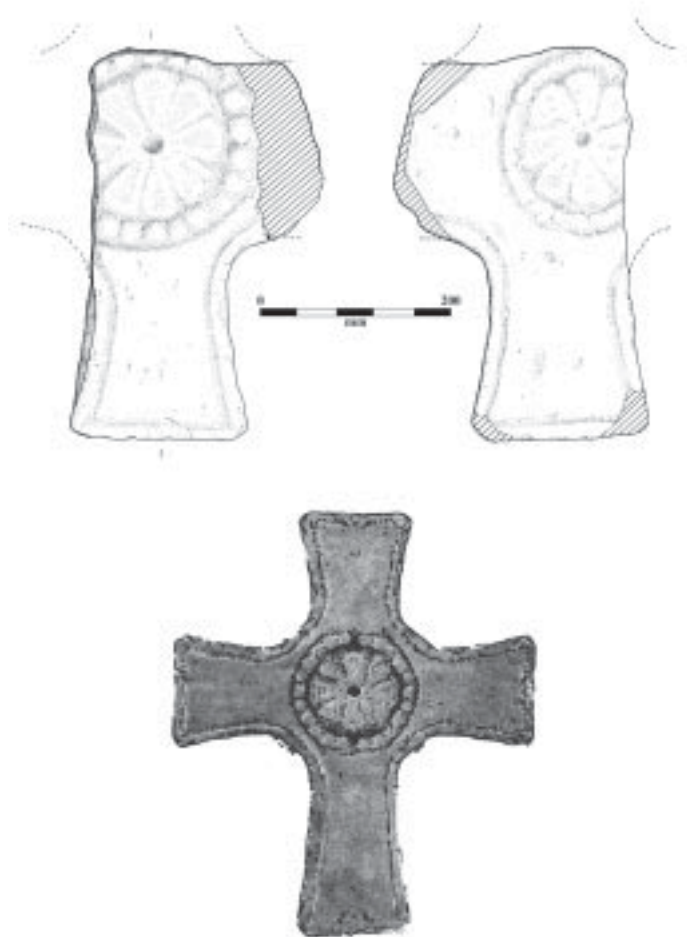


Illustration 9: Stone cross fragment, decorated on both sides, with an artist's impression of the complete cross (reconstruction not to scale).

Discussion

The excavation and research at Dundrennan confirms the importance and eventful history of this, the most important Cistercian foundation in south-west Scotland. The combined rise in fortunes of the early Lords of Galloway and of the Cistercian Order, in the later 13th century, is evidenced by the very scale of the Abbey, and the subsequent extension of its buildings at this time. The alliance between Fergus of Galloway and the Cistercian Order around 1142, perhaps as a result of contact with Archbishop Malachy in 1139, suited the needs of both parties well. The extension of Cistercian influence via a strategic mainland site in south-west Scotland, under the patronage and protection of a dynamic and powerful family, was realised by the foundation at Dundrennan, while for his part, Fergus was

also able to demonstrate his piety and nobility through his commitment to the most successful, holy and revered monastic movement in 12th-century Europe.

The decline in affluence and power for both the early Lordship and the Cistercian Order is graphically reflected by the transition between Periods III and IV, which heralded the gradual but irrevocable decline of the House. From the early years of the 14th century, building work on the South Range occurred in response to necessary repairs on the one hand, and in response to the need for conversion of existing chambers to meet the demands of a smaller and more insular community on the other.

The role of Dundrennan Abbey in the politics of the day is echoed at the very end of its active life, when the later commendators, as supporters of the Catholic cause in the 16th century, re-defined the abbey as a defensible House, protecting their interests.

The South Range of the Abbey does not reflect directly the ritual and wealth of the community, in terms of fine architecture and artefactual wealth, but the evidence revealed during the excavations offers a human context to the fortunes of this great monument, and those who erected and supported it.

Acknowledgements

The author would like to thank all those who participated in the fieldwork and production of this report, with special thanks to Jon Triscott, Paul Sharman, David Stewart, Andrew Dunn and Andrew Hollinrake. The illustrations are by David Connolly. Finally, special thanks should go to those members of Historic Scotland, and the many specialists who assisted in the project.

The Society is indebted to Historic Scotland for a substantial grant towards the publication costs of this report.

SOME 17th CENTURY CUSTOM AND EXCISE RECORDS
FOR DUMFRIES & KIRKCUDBRIGHT
by A.E.Truckell

Early in the autumn of 1999 Marion Stewart the Archivist gave me the microfilm of a group of documents from the Scottish Record Office¹, relating to the custom and excise of Dumfries and Kirkcudbright from the end of December 1672 to late December 1691 – not a continuous run but with gaps: however, enough to give a vivid picture of the trade and products – and imports of the two burghs, Dumfries considerably the larger of the two, and with cattle-droving and linen and woollen cloth production very prominent in the case of Dumfries. I will concentrate in this article on the shipping and sea trade, and the changes in the pattern over time.

Most prominent through most of the 1680s was the ‘Adventure’, the ship of the Company of Merchants Adventuring from Dumfries, and her master John Alexander, bringing, often near Yule, cargoes of wine (taxed), brandy (not taxed), vinegar, walnuts, chestnuts, prunes, hats and writing paper from Bordeaux, and from Danzig iron, steel, glass, rough lint, hemp, iron pots and the like, the merchants being James Muirhead, Thomas Irvine and partners. The ‘Three Brothers’ of Dumfries, John Philipson master, and the ‘Lyon’ of Whitehaven, John Powie master, also brought cargoes from Bordeaux. The ‘Swan’ of Belfast, ‘cast in by stress’ to Kirkcudbright on her way back from Bordeaux, John Davison master, brought in four tuns of wine.

The most varied were cargoes from Holland: mum-beer, iron pots, starch, barrels of soap, linseed, cordage, writing paper, drinking glasses, sugar, Barbados ginger, hemp, dyestuffs and mordants for textiles, galls, liquorice, ballast shovels, turpentine,... One ship took a cargo out to Campheire (Veere, the Scottish Staple) in Holland. Timber came from Phaeton in Norway, timber and iron from Gothenburg in Sweden.

Besides Bordeaux, St Anthony and Amiens were French destinations. Cargoes outwards were wool, some cloth, hides, dogskins, otterskins, hareskins, fumart-skins, beeswax and resin (resin was also imported), mostly in small quantities.

So much for foreign trade. Whitehaven was the main partner for local trade with Workington, Flimby and Allonby (very frequently), Isle of Man – Ramsay mainly – Donaghadee, Larne, Abbey Holme water foot, Belfast, Bristol (good sized mixed cargoes), Chester, Greenock, Campbeltown, Cumbræ – Campbeltown and Cumbræ bring local produce - oats, bere (barley), plaiding, and from each the first mention of acquavitie.

Tobacco, not prominent in the earlier years, becomes more and more dominant, with creels or barrels of pipes to accompany it: salt is a major feature of the imports from England – remember, England was still another country, and duty had to be paid on imports into Scotland.

Although Dumfries and Kirkcudbright still relied heavily on peats and whin, coal, by the boll, was a constant import from Cumberland, as was lime. Glenstocken quernstones and millstones figure in the exports from Kirkcudbright: Kirkcudbright customs accounts include Water of Urr, Minnigaff and Whithorn.

Politics are visible at one point in 1690-1691 – household plenishings coming with Protestants, out of Ireland, and a ship being ‘listed’ - enlisted – ‘for their majesties’ service.’

1 The original documents being part of the *Exchequer Records* (E72/6/1-27) held in the Scottish Record Office (National Archives of Scotland).

Ships' names are varied and interesting – though without the religious connotation so common in the previous century: the Anne, John & Hopewell of Kirkcudbright, the Fairweather of Bomby, the Jennet of Irvine, the Margaret of Saltcoats, the Jean of ?Abank, from Coleraine, the Catherine of Donochadee, the Deliverance of Wyerwater, the Jean of Saltcoats, the James of Donachadee, the Blessing of Kirkcudbright, the Good Fortune of Kirkcudbright, the Swan of Belfast (from St Martin in France). These are all into Kirkcudbright. Also coming there is the Anne of Piltoun in Ireland, the Grace of Flimby, the Margaret of Leith from Cockenzie, the Love's Increase of Whitehaven.

From Dumfries we have the Three Brothers of Dumfries, the Lyon of Whitehaven, the Adventure of course, the Marion of Allonby: from Kirkcudbright again the Betty of Ayr: from Dumfries the Marie of Allonby (but I think she's the Marion) – it was the Anne of Campbelltown went from Dumfries to Camphire: there is a Marion of Sillloth and a Marion of Flimby, the Elizabeth of Newport, Glasgow (from Phaethon in Norway), the Speedwell of Ramsay, Isle of Man (master Martin Cultrop, goods one horse and five tons coals): a Dumfries ship had to declare nothing but the empty barrels it had taken to Man for herring – Man being our usual source of herring – as the herring season had been a failure. The Friendship of Allonby, the Elizabeth of Allonby: the Loyalty of Whitehaven – oh, I could go on for ever – these are but a fraction. The Margaret of Dumfries dominates the later years.

I mentioned politics earlier – though not from this source, Grierson of Lagg wrote the supervisor in Dumfries in 1685 ordering him to have all ships leaving the port of Dumfries searched for Covenanters.

Foreign trade dropped off completely at the end of the period: cargoes were local and very small: coals, salt, tobacco – and smallish quantities of food began to come in – by 1691 we were approaching King William's Years – Prophet Peden's time of clean teeth and black pale faces, when the living were too weak to bury the dead (Denmark thought it would have to evacuate Iceland). – 2 sacks of oatmeal and so on: this was the Little Ice Age. The Fortune in 1696, bringing in bulk food supplies – subscribed for by the people of Dumfries from Ulster against the ban of the Government, stopped off at Carsethorn for the master to have ale at the click-mill – now known as the 'Noggy' – there. Shipping from and to Dumfries would use Carsethorn – the wagon road from town had been built in the 1660s – for the big ships such as the 'Adventure' and Kelton for the smaller ones.

The 'Adventure' vanished from the port in the late 1680s but a Dumfries merchant Walter Thomson, on the 4th August 1691, brings in tobacco in the Sara of Lancaster 'which comes from Virginia upon the proper rifle & sea hazard of Walter Thomson merchant in the 'Adventure' of Lancaster' – has she been transferred to Lancaster for the Transatlantic trade? Transatlantic links become important for Dumfries – it was in the 1690s that the Rev. Veitch of St Michael's, inspired by his correspondence with friends at Harvard, began to campaign for a University at Dumfries. This strong transatlantic link grew during the 18th century: Dr James Craik in whose arms George Washington died – Craik had been the Washington family doctor since the 1750s – was the natural son of William Craik of Arbigland by a Shambellie Stewart – and Shambellie was involved in the Virginia trade.

But all this is just an indication of the riches to be found in this group of documents. My transcript is there at the Archive Room², with the index I have made on the computer compatible cards designed by James Williams our co-editor – so that everything can be broken down into headings.³ The pack and drove trade – with local landowners often mentioned – could be dealt with separately.

2 Transcription by A.E.Truckell, Carsethorn, of *Customs and Excise Records relating to Dumfries, Kirkcudbright, Ferrytown and Minnigaff for the period 1673-1691* - Dumfries Archive Centre reference TE40.

3 See note below.

Custom Location	Direction	Group (% of 'From' or 'To')	Port	No.
Dumfries Total number of Entries = 221	From 186 entries i.e. 84.2% of total	Solway 71.0%	Abbey Holme	1
			Allonby & Allonbyfoot	63
			Bowness	1
			Canonbie Beck Foot	1
			Flimby	3
			Silloth	4
			Whitehaven	54
			Workington	5
		Irish Sea 8.6%	Donaghadee	1
			Isle of Man	8
			Isle of Man (Douglas)	1
			Isle of Man (Ramsay)	4
			Lancaster	2
		Firth of Clyde 2.7%	Ayr	1
			Campbeltown	1
			Greenock	1
			Irvine	1
			Little Cumbrae	1
		British (other) 5.4%	Bristol	4
			England (unspecified)	5
			Ravensbank in England ⁴	1
		Europe 11.8%	Bordeaux	10
			Gothenburg	1
			Danzig	4
			France (unspecified)	2
			Holland unspecified)	3
			Phaeton in Norway	1
			St Martins in France	1
		Un-located 0.5%	Port Deferi	1
	To 35 entries i.e. 15.8% of total	Solway 37.1%	Allonby	3
			Silloth	1
			Whitehaven	9
		Irish Sea 28.6%	Belfast	3
			Donaghadee	3
			Ireland (unspecified)	3
			Isle of Man (unspecified)	1
		British (other) 8.6%	England (unspecified)	2
			Ravensbank in England	1
		Europe 25.7%	Bordeaux	3
			Campheire [Veere]	1
			Danzig	1
			France (unspecified)	2
			Nantes	1
			St Martins in France	1

Table 1: Ships entering and leaving Dumfries

4 Possibly Ravensmeols in Lancashire - the *meols* element being the Old Norse for 'a sandbank'.

Note on the indexing of the ‘Customs’ transcript. [J.W.]

Following upon Mr Truckell’s preparation of the transcription and the initial index cards for the shipping elements of the material all the additional information, i.e. that on the pack trade (principally dealing with textiles) and the drove trade has all been converted into an *Access* database and made available within the Archive Centre. The relative numbers of records are as follows.-

Topic	Dumfries	Kirkcudbright	Ferrytown	Minnigaff	Totals
Shipping	330	117	1	1	449
Livestock	1072	1	0	0	1073
Textiles	217	1	0	0	218
Others	35	0	0	0	35
Totals	1654	119	1	1	1775

The database has been organised identifying the type of record entry (Shipping, Textiles, Livestock or ‘Others’); the page in the transcript; the Custom location (Dumfries, Kirkcudbright, Ferrytown and Minnigaff); the date of the entry; the ship, whether bound ‘to’ or ‘from’ and the port in question; the Master; the Merchant upon whose behalf the goods were being transported; a list of the commodities involved and finally, a ‘Comments’ box for the recording of additional information such as the custom duty, the excise duty, Clerk involved, etc. Because the records include what must effectively be duplicate, draft or rough-working versions of the final record there are sometimes multiple records for the same Customs &/or excise entry. This, on the one hand, makes it difficult to quantify absolutely the details as they particularly refer to the goods in question, but, on the other, often allows difficult readings and omissions to be rectified.

Notwithstanding the normal search processes available within *Access* a number of pre-prepared ‘Index’ outputs have been made available for the shipping entries: List of Ships; Ships listed by page, date, port and masters; Ports sailed from and to; Masters in list format and Merchants in list format. Whilst some of the Merchants engaged in all the various trades the database does make it possible to segregate them on a ‘commodities’ base. With personal names all variants have been recorded, e.g. Mason [Masson, Mayson, Meason] and Preacher [Preachard, Pritchard]. The ability to record such variants has relied upon the presence of the various versions of each document/entry and the ability to cross correlate entries with, for example the same ship, master or date. There is clearly insufficient space to reproduce such lists and analyses here within the present format. However, the Table (1) of the information which may be derived from the ships entering and leaving Dumfries may suffice to give a feel for the quality and quantity of data available.

THE DUMFRIES SILLAR GUN

by K.H.Dobie

*For loyal feats, and trophies won,
Dumfries shall live till time be done!
As simmer's morning, wi' the sun,
The Seven Trades there,
Forgather'd, for their Siller Gun
To shoot ance mair!...*

John Mayne, 1777



Fig. 1 Engraving on the barrel of the gun. The initials **IM** are possibly seventeenth century: the inscription may have been engraved by Bryce Gillies in 1821 (J Williams).

The Burgh Museum of Dumfries has in its possession a miniature silver gun in the form of a flintlock (Figs. 1 and 2, lower). It originally belonged to the Incorporated Trades of Dumfries and was the gift of James VI of Scotland and I of England. It seems to have been gifted in 1617 when the king spent some days in the Royal Burgh during which he was the chief guest at a banquet given by the Trades. On the barrel, which appears to be original, is engraved 'Presented by King James VI of Scotland to the Seven Incorporated Trades of Dumfries MDXCVIII'. (Fig. 1) The style of the engraving however, indicates that it was done at a much later date. The king did pass through Dumfries in 1598 but was engaged in subduing the neighbourhood and not likely to be presenting gifts to anyone. Also engraved are the initials 'IM' in a more contemporary manner. It is assumed, as there appears to be no record, that the letters are initials of the convener of the Incorporated Trades to whom it was given. There are no contemporary descriptions of what the gun was like when gifted, but we do know that James gifted a 'Siller' gun to the Incorporated Trades of Kirkcudbright in 1587 and that this is in the form of a silver tube 7 inches long, like a miniature hackbut (Fig. 2, upper).

A poem 'The Siller Gun' which consisted of 12 stanzas and written by John Mayne, was published in 1777, when as a youngster he witnessed the competition. In 1780 it appeared in the *Edinburgh, Ruddimans Weekly* having been expanded to 3 cantos and in 1836 it was published as a volume of 5 cantos or 170 pages. John Mayne was educated at the Grammar School in Dumfries, he settled in

London in 1787 and was co-founder and editor of the *Star and Evening Adviser* in 1788. He died in 1836 the same year as his poetry was published in book form.

In all these editions the Dumfries gun is described as 'a silver tube like the barrel of a pistol about 10 inches long which has standard marks on it'. Due to subsequent alterations these 'standard marks' are no longer visible, while from McDowall's *History of Dumfries* and other sources, presumably quoting from each other, we learn that the gun was 'mounted on a carriage with wheels, all of silver, but of these no vestige remains'.

The Trades held a royal licence or injunction, to assemble in military array and shoot for the gun once a year. The winner wearing it on a hat and processing at the head of the Seven Incorporated Trades back to the Trades Hall in Dumfries a distance of about a mile. The gun was then placed in the care of the Incorporated Trades and the winner given an engraved medallion. Only the freemen of the Incorporated Trades could shoot for the gun, the apprentices and journeymen competing for a prize of another medallion. Although initially on an annual basis, usually on the King's birthday, the frequency was reduced to between 2 and 6 years due to the cost of holding the competition. On becoming a Burgess in Dumfries part of the oath of allegiance required one to promise to keep a sword and gun for the defence of the burgh, hence the prize to improve their 'wapinschaw' or skill at arms.

During the competition on the 4th June 1808, a blacksmith, Alexander Kirkpatrick under the influence of alcohol and thinking that a Hammerman had won, seized the gun which promptly broke in pieces. He was dealt with by his guild and fined £3.6.8 sterling, the equivalent of £40 Scotch, 'and lay him aside from all the privileges of the trade, and from meeting and associating with them on any occasion whatever for the space of twenty one years from this date and thereafter until the aforesaid fine is paid.'

An entry in the account book of the Incorporated Trades shows that on the 3rd June 1808 F.Crosbie was paid £3.6.- for the silver gun. This is the only entry at this time relating to the silver gun and if the date is incorrect it may have been for the repair. It is disappointing that the entry, like so many others, is brief. It is the only reference we have to F.Crosbie and there is no record of a silversmith of that name working in Dumfries. Around this time the gun was converted into a miniature flintlock by



Fig. 2 Top, The Kirkcudbright gun, presented by James VI of Scotland in 1587; below, 'The silver gun' altered circa 1813-17 by David Gray of Dumfries. (Photos, J Williams).

David Gray, a Dumfries silversmith, by the addition of a stock, a flintlock complete with silver flint, trigger mechanism, ramrod and holder. (Fig. 2, lower) The butt of the stock has the maker's mark of **DG** for David Gray. There is no reference to him in the Hammermen's records as a member which seems surprising but in the Statistical Account of 1791-97 Dumfries silversmiths are specifically stated to be excluded from membership! The gun was next shot for in 1813 and then again in 1817 and we know that David Gray opened his first shop in 1814 at 44 High Street, which would indicate that the gun was remade sometime between 1813 and 1817. There is however an entry in the Valuation Roll of 1810, '.... Gray silversmith with Pearson'. Joseph Pearson had been in business in Dumfries since 1794 but in 1814 he sold off his stock of silver items, presumably because he lost his partner. William McDowall in his *History of Dumfries* published in 1867 states that 'the gun was altered about 50 years ago'. In the *Trades account book* Bryce Gillies, an engraver who was a member of the Hammermen's Guild was paid on 15th August 1821 5 shillings for finishing the gun and on 17th April 1828 13 shillings for engraving the medals and silver gun.



Fig 3 The Kirkcudbright gun, detail.

The winner of the gun, certainly on some occasions, received a medallion in commemoration of his feat. A medallion by David Gray dated 1828 is illustrated in the National Rifle Association's *Journal and Shooting News*, Vol.31, July 1952, page 105. This is mentioned in the account book of the Incorporated Trades where Gray was paid £1.5.- for two medallions. The whereabouts of this medallion is unknown. However in June 2000 another similar medallion, also made by David Gray was sold at auction in Bury St. Edmunds (Fig. 4). It is dated 1831 and was the last presented as the competition was suspended until the twentieth century. There are two names on the medallion, the winner, Alexander Johnston who was deacon of the Tailors' Guild who also carried the gun in the great Dumfries procession of Robert Burns' centenary in 1859. The other name, that of the Convener of the Incorporated Trades, is James Thomson an architect, the last convener under the old system. He died in 1832 aged 49, one of the first victims of an outbreak of cholera in the town. The second medallion in 1828 was the prize for the best apprentice or journeyman who shot in a separate competition. As well as the medallions the winners received a hat, probably straw, (at a cost to the Guild of £1-1-0 each) with ribbons for the medallions and crown (costing 3 shillings and 6 pence).



Fig. 4 Engraved medallion, David Gray of Dumfries, dated 1831, probably engraved by Bryce Gillies (Privately owned).

After the demise of the Incorporated Trades in 1852 the gun was given to the Dumfries Town Council who placed it in the Burgh Museum where it is now on display. An annual competition for the gun was started some years ago thus reverting to the initial custom of the 17th century.

Acknowledgements

The photographs of the guns are by James Williams, by kind permission of the Dumfries and Kirkcudbright Museums. My thanks for help are due to the staff of the Ewart Library and especially to the staff of the Dumfries Museum.

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THE STEWARTRIE of KIRKCUDBRIGHT COURT MINUTES 1670 and 1684
edited by A.E.Truckell

In Summer 2000 Mr James Williams, looking through his Lochrutton material, came upon a few sheets of Stewart Court minutes¹. Few Stewart Court documents survive in S.W. Scotland - though the Record Office in Edinburgh is known to have some² - so these are of particular interest.

The first is a single sheet, written upon both sides. It is entitled 'The Stewart Court of the Stewartrie of Kirkcudbright halden at dalbetie the tenth day off March 1670.' It relates to an area from the western side of Kirkbean parish (Torrerie), Preston, Mersehead in Southwick, Edingham, Dalbeattie, Firthhead, etc. - the east side of the lower reaches of the Urr - and gives us many names of people. The charges are of cutting wood on various estates without permission and of 'killing or slaying' of a red fish (salmon) or smolts - those charged with this are women - Agnes Wright and Agnes Duncan. William Mackie in Torrorie is fined for 'the violent dispossessing and putting out off Janet clungzeand in Torrorie out of hir lyffrent right & Conjunctfie', threshing her corn, breaking her doors, etc. - Clingan is still a personal name in the area.

The other two documents relate to meetings at Lochfoot in May - June 1684: one is on the two sides of a single sheet 16 by 13 1/8 inches, the other on two sides of a single sheet 8 x 13 1/8 inches: there is an assault and battery case and an admission by James Callan that he has taken away doors, lintels, etc. Agnes Maxwell in Hills has clipped a sheep which Robert Grier in Arnmannoch had earlier bought from her and which had strayed off his ground. Various witnesses are called, with much information about farms and their tenants in the area (another sheep-clipping at another farm is mentioned) - all good social information.

While the Dalbeattie area document does seem to be a court minute the Lochfoot papers appear to be first drafts - with spaces left for additional information to follow - although it is interesting to note that the depositions have actually been signed in some instances. Both sets of papers give us detailed local information long before we have much else.

Records for meetings held at Dalbeattie.

Written upon two sides of a single sheet of paper 7 1/2 inches x 11 3/4 inches.

The document has been folded and inscribed 'The decrites of the Stewart Court 20 March 1670 No. 25'

The Stewart Court of the Stewartrie of Kirkcudbright haldin at
dalbetie the tenth day off march 1670 Be George maxwell or
?muntheid and Johne maxwell of breckensyde ordinar stewart
depute of the stewartrie of Kirkcudbright ~~hat~~ Suits callit with all
members requisite as vse is

assolizes Robert blackstock in merseheid fra Cuting of anie of auchinhays wod.
assolizes Jon ewart elder & younger fra Cuting of anie of auchinhaes wod.
assolizes William and James andersone fra wod cutting sicut antea.
assolizes Robert Costine in prestoune ffra cutting the foirds wod.
assolizes Jon cl_ngzeane fra the sd wod Cutting
assolizes Wm m_ray Idem assolizes gavin costine Idem
assolizes Wm martine inde Idem assolizes John osburne ?inde
assolizes harbert clerk Idem sicut antea

1 These documents are now within the Dumfries Archive Centre, Burns Street, Dumfries. Ref. GGD456/1-4.

2 See *Guide to the National Archives of Scotland*, p. 180.

assolizes harbert newall Idem sicut antea
 assolizes Robert Williamsone Idem assolizes dawid churrie Idem
 assolizes adam ~~clungzeand~~ clungzeand assolizes James clungzeand
 assolizes John gibson in glen wado
 assolizes Robert clerk
 assolizes John merchell Idem asolizes W^m dicksone fra the sd wod assolizes W^m blackstock fra the sd wod
 cuting
 assolizes thomas blaiklock yrfra Idem
 asslizes John young yrfra wod cuting
 assolizes agnes wright fra killing & slaying of an rid fishe or smolts
 assolizes agnes doncan fra killing or slaying of ane rid fishe or smolts
 assolizes John mcname fra Cuting of anie of adinghames wood
 assolizes John wilson milnar att dabbetie fra cuting of anie of adinghames wod
 johne mcjoir in dallmonisyde cumes in will for cutting off ~~ane~~ Twa staiks w^t in adinghames wod
 assolizes Jon broune of furtheid fra cuting of anie of adinghames wod
 Thomas walker cumes in will for ane nolt staik of adinghames
 assolizes Jane Roberson good wyffe of blaiket & alexander grahame her servand cumes in will ffor allexander
 maxwell wod of park
 assolizes Ro' & James walkers fra cuting of anie of the park wod [?]pteining
~~assolizes~~ assolizes Jon Bro_{ne} in furtheid
 assolizes thomas walker yrfra
 assolizes W^m softlaw in furtheid
 Johne mcjoir in dalmoniesyde cumes in will
 Assolizes Jon garmorie david moorheid and thomas mcjoir
 Robert mcguhen in watersyde fra the parkwod
 Continews Robert wilson anent the parkwod
 assolizes w^m mcmillane Ro' meik there Jon tod in redcastell fra the park wod
 assolizes Rodger clachrie in meikle culloch fra wod cuting
~~assolizes~~ Johne Coltart in c_{ulloch} ~~fra anie wod cuting~~ cumes in will
 James [?]deilskie cumes in will for cutting twa dossane wands in the wod of park
 assolizes Jon blaiklock in meikle dalbetie fra cuting of anie wod
 Decernes William makie in the sowme of fyftie pund scotts money and that ffor blouding of Janet clungzeand
 in prestoune
 The Quhilk day Janet cl_{ngzeand} in Torrorie hes fund Johne maxwell of furtheid cautioner & sowertie for hir
 that shoe sall not trouble or molest W^m mackie thair his wyffe bairnes famailies na_{thir} ways nor accords of
 law & Justice and shoe for hir cautioneris releiffe under the paine of fyve hundreth marks conforme to act of
 parliament

[signed] Johne Maxwell

[signed] ?Jaltounes notar at comand of
 the said Janet clungzeand

The Qlk day William makie in Torrorie was decernit in the sowme of [blank] scotts money for the violent
 dispossessing and putting out off Janet clungzeand in Torrorie out of hir lyffrent right and Conjunctfie pertaining
 to hir within the sd Lands and siclyke ffor threshing of hir Corne and Intruding of hir [?]Po_{nd} contain the act
 of pliamet and breaking off hir hands doores breve man_{qrin} shoe was in peacable po'oune off and vther
 Intrusiones comitted be him

[signed] Geo Maxwell

[signed] J.Maxwell

Records for Meetings at Lochfoot.

Both items appear to represent rough documents as the prime recording of information for the preparation of a subsequent formal minute - there are gaps left where subsequent information was intended to be recorded.

1. Written upon two sides of one half of a single sheet of paper 16 inches x 13 1/8th inches. One side shows a centrally placed ligatured L and H watermark - the other side is also watermarked - the design is not fully recognisable but may represent a leafed plant with central stem surmounted with a triple ?balled head.

Lochfitt 16 maij 1684

Jon Good Servitor to Richard Willsone in Whytyeard

amerciat

Barbara Hervie

Lochfitt 23 maij 1684

decernit Walter Stewart contra Jon Hamiltoun conform to the lybell Jannat McJore spouse to Jon Roriesone in Kirkpatrick in ten pund scotts for not compeirance being personally summondit to this day

The sd day W^m Neillsone at Kirkpatrick mylne amerciat in ten merks scotts for notbcompeirance being personaly sumondit at the [?]party [?]foirsaid's instance [Signed][?]P. [?]Rome

Lochfitt 30 maij 1684

John Willsone in Dalbaity callit Whyt John and Charles McKie in holme youngerand ilk ane of thame are indyted and accused at the instance of procurator fiscall for falling vpon the persons of vthers vpon the [?]24 day of maij instant and cruely baiting and stryking vtheris to the effusione of vthers bloods in grit quantity [?]quhairthrow

30 maij 1684

Wilsone present refusit tp depone vpon the battrie

[?]The [?]Sweirare

6 Junij 1684 repr.
To James
to anssr

Assignit to Robert Guthrie procurator for James Callan of Brockloche to defend [?]in peremptorie against the nixt curt. Day in the actione persewit be Jon Hamiltoun and to present James [?]Caill that day to depone Whae received ticket lybellit with ane missive letter vnder James Callans hand acknowledging the away takeing of the doores Lintels & vthers lybellit at the lybell itself & executione
Assignit to Guthrie procurator for mershells to defend in the actione persewit be Gregane in Drumwhad received clame & executione

avisand

Re: to petytione
for anssr

Assignit to Herreis procurator for Auchinreoch to defend in the actione persewit be Brockloche against the nixt court day

6 lib payit in full
3 lib yrof given to
Jon maxwell

Compeirit John Willsone & came will for a battrie bot denyes the blood

[signed] John Wilsone

Amercials John M'coukrie in thrie merkland in ten pund scotts for not compeirance this day being personally summondit at the procurator fiscals instance be Robert Callan officer

6 Junij 1684

Assignit to [?]thomas procurator for Cairne to defend in the actione persewit be Clerk against him whae received clame & executione

Compeirit Charles M'kie & refusit to depone vpon the battrie quhairvpon the Judge holds him as confest & admitts the blood to probatione

Item receavit be Jon Maxwell frae Charles M'Kie 30s scotts thrie pund being receavit in haill

Lochfitt 20 July 1684

Item Jon Maxwell receavit frae James Callan of Brockloche fur pund scotts

Item receavit be him frae John Willsone thrie pound scotts in pairt of payment of a fyne imposit vpon him this day

Charles Tailfeir of Linkeins you are indyted & [?]accoused at the instance of [blank] procurator fiscal for blooding and stryking of Mareon donaldson spous to James lynttne in [?]killhill vpon the [blank] dy of maij 1684

4 July 1684

Item received be John Maxwell tua leg dollars for Jon Caers fyne

25 July 1684

Item received be Jon Maxwell ane leg dollare of Jon Andersone in Shalloche his americiament

1 August 1684

Item received be Jon Maxwell 10s for andrew gibsons fyne

Item the said day receavit be him 40s for Jon Rorriesons wyffes fyne

2. Written upon two sides of a single sheet of paper 8 inches x 13 1/8th inches. Centrally placed ligatured L and H watermark.

Lochfitt 20 Junij 1684

Witness examined against Agnes Maxwell in Hills

thrie uyr sheip Robert Greir in Arnmannoche aged 36 ot yrby suorne & examined deponed that about Hallowmess last or yrby he bocht ane whyt hog with thrie vther sheip from the said agnes Maxuell and sensyne the hog went aff the ground possess be him and was clipped bot knows not nane hes done the same And fardir depones that since the hog was clipped Agnes Maxuell awned the same and desyrit the deponent to take it bak quhich he refusit in regaird the same was clipped without his knouledge and this is treuth as I sall ansr to God and cannot wryt

John Welsh in Holme aged 30 or yrby suorne & examined deponed as Robert Grier in omnibus except as to the desyre to take the hog back And this is trewth as I shall ansr to God [signed] John Welsh

27 Junij 1684

Comperit Smert in Lochsyd aged 40 or yrby depones as followes that going to barfill he met with william Miller who told him that he was going to clip ane hog of Johnne Mcclauchlines in deadsyd the cause was the sd John had cliped ane hog of [blank] mcjoares senior [or sone] in Kirkland meitting with mcclauchline desyreit him to shew him whair barfil was & that after meitting they refeit the seasion of the hoges & pley of lau yrof to John Maxwell in Lochfit who was to deside the samen vpon the 28 day of being the morrou & this is truth as he shall ansr to God

his letter

William X S Smert

& mark

Eduard McKie in drugans depones nihill novit

Eduard Welshe aged 16 or yrby depones that Agnes Maxuell in hills came to him and causit him to fetch the hog frae the holme loan and clipp the same And eftirwards told the deponent that shoe was sory shoe causit him clipp ane vthir mans sheip and this is treuth as I sall ansr to God and fardir depones that Agnes Maxwell [?]marked the same eftir clipping [signed] Edward Welsh

Jon Robsone in ffellsyde aged 34 or yrby suorne depones that Agnes maxuell confest 2[?] times that shoe had [?]lup to clipp ane vthir mans sheip and mark it and this is trewth as I sall ansr to god and cannot wryt

John Hamiltoun of auchinreoch and James Callan of Brockloche younger and ilk ane of thame are indyted and accused at the instance of [blank] procurator fescall for blooding and striking vtheris upon the [blank] day lastbypast [?]qrvpon [?]rist

Agnes Maxuell in hills

[?]margaret smith in thridneuck & Jon Hallane [or ?Wallace] for fraud

20 Junij 1684

Drengs and Thegns Again

The above title was given by Martin Syrett to a paper published by him in the *Saga Book of the Viking Society* for 2000. The paper is immensely learned, strongly philological, and so thickly crammed with evidence and references that it is difficult to see the wood for the trees. The reason for reviewing it in the *TDGNHAS* is that in two recent volumes (72, 74) scholars who have been regular contributors (W.F. Cormack and the late J.G. Scott)¹ have argued that at the turn of the eleventh and twelfth centuries a colony of drengs – originally young unmarried warriors in the service of a king or magnate – was planted across southern Annandale, and round about Carlisle, by Ivo Taillebois and Ranulf ‘le meschin’. Ranulf, nephew and cousin of two earls of Chester before succeeding as the earl himself, was married to the mysterious Lucy of Bolingbroke, a wealthy Lincolnshire heiress. Scott suggested that her wealth and origins allowed Ranulf to bring his new settlers, of less than knightly rank, from Lincolnshire to the lands around the upper Solway, where their settlements were distinguished by the Danish suffix *bý* (*byr*), ‘homestead’. Conventional English and Scots spelling renders this as ‘-by’, ‘-bie’ respectively. Scott was blessed with a lively imagination, to which, in his paper on the partition of Strathclyde, he gave free rein. Guess is piled upon guess, hypothesis upon hypothesis, so that one is left full of admiration – but bewildered.

The difficulty in accepting Scott’s interpretation stems from two pieces of hard evidence. The Anglo-Saxon Chronicle (version E)² says that after King William Rufus seized Carlisle in 1092 and threw out its lord, Dolfin, he built a castle and ordered that ‘churlish folk’ should be brought into the Carlisle district from the south with their wives and their cattle. These new settlers were to till the soil. *Pace* Scott, drengs were not ‘churlish folk’ and they did not usually have wives. Secondly, and in my opinion decisively, the personal names joined to the suffix ‘-by (bie)’ to indicate new settlements are not those to be expected of the Lincolnshire peasantry. Thanks to Sir Frank Stenton’s Lund lecture of 1926, we have easily available in print a remarkably full vocabulary of the free peasantry of the northern Danelaw in the earlier twelfth century.³ It abounds in Orms, Grimketils, Thoralds, Siwards and Ulfs. Even if some of the Lincolnshire sokemen with whom Stenton was concerned were in fact drengs, only here and there is it their names that we find in north Cumberland or east Dumfriesshire. Beside Cumberland’s Arkleby, Ormsby, Ousby and Thursby and Dumfriesshire’s Denbie and (lost) Ouseby we have to set Aglionby, Allonby, Botcherby, Ellonby, Etterby, Harraby, Isaacby, Johnby, Lamony, Moresby, Parsonby, Ponsonby, Rickerby, Skitby, Tarraby, Upmanby, Wiggonby, Wormanby (Cumberland) and Gimmenbie, Gotterbie, Lamonie, Lockerbie, Pearsby, Rickerby, ‘Roberdesbi’, Sibbaldbie, Warmanbie, ‘Willambi,’ Wyseby (Dumfriesshire).⁴ There is no need to connect any of these settler place-names with Lincolnshire or to suppose that the men whose names are preserved in them were drengs. They were much more likely to have been adventurers from England, Normandy, Brittany and especially Flanders, who could turn their hands to anything from cavalry warfare, castle building and garrisoning to overseeing agricultural activities and holding courts. What must be accepted is that, from a period not yet ascertained, a Scandinavian-speaking community had settled widely across much of modern Cumbria and at least lower Annandale, Eskdale and Liddesdale. The ‘by’ place-names of relatively late formation were the result of a dominant though not exclusive

1. W.F. Cormack, ‘Drengs and Drings’, *TDGNHAS*, 3rd ser., 74, pp. 61-67; J.G. Scott, ‘The Partition of a Kingdom: Strathclyde 1092-1153’, *TDGNHAS*, 3rd ser., 72, pp. 11-40.

2. *The Anglo-Saxon Chronicle: a revised translation*, ed. D. Whitelock with D.C. Douglas and S.I. Tucker (1961), 169.

3. F.M. Stenton, *The Free Peasantry of the Northern Danelaw* (Oxford, 1969). Since most of the documents calendared in this work are of mid-twelfth to early-thirteenth century date, one must gather the Scandinavian personal names from the fathers and grandfathers named.

4. With the exception of Wyseby, Dumfriesshire, at NY 242725, the names are from G. Fellows-Jensen, *Scandinavian Settlement Names in the North-West* (Copenhagen, 1985), 25-43. Wyseby appears in Scott, *art. cit.*, p. 20, Fig. 3, spelled Wysebie. See also G. Fellows-Jensen, ‘Scandinavian settlement in Cumbria and Dumfriesshire: the place-name evidence’, in *The Scandinavians in Cumbria*, ed. J.R. Baldwin and I.D. Whyte (Edinburgh, 1985), 65-82.

Scandinavian vocabulary which lingered till the later twelfth century. There is surely no need to accept Gillian Fellows-Jensen's suggestion that place-names consisting of Norman (or other continental) personal name plus 'by' have been altered or adapted from earlier compounds of Scandinavian personal name plus 'by'.⁵

Martin Syrett's paper on drengs and thegns in Scandinavia is not much help for those of us who would like to penetrate behind the beginnings of the Bruce era in Annandale. Dreng is in origin a Scandinavian word which would surely have been part of the common vocabulary already referred to. If we do not find it in Annandale charters or place-names it is tempting to say that local estate customs had no need of the word.

The famous but sadly undatable writ of Cospatrick of Allerdale⁶ was addressed to free(men) and drengs, implying that the former were superior, the latter merely the *ministri* of the lordship. If Annandale was similar to Allerdale we could imagine a pre-Bruce lord addressing his freemen and drengs – but that is doubly hypothetical.

Syrett reminds us that originally dreng indicated a 'likely lad', a young unmarried man with prospects, possibly the son of a thegn.⁷ 'Thegn' was borrowed by the Scandinavians from England where its range of meaning was wide, although the thegn was always free and, if a dependant and officer of the king (*minister*), would rank as aristocratic. Just as a *ceorl* (free peasant) could so thrive as to become a thegn, so a thegn could become an earl. In Scandinavian countries it seems to have been normal for a dreng to become a thegn; in Northumbria this transition was rather rare. As a Scottish phenomenon, the dreng seems to belong to former Northumbria, and it is perhaps significant that the only Scottish place-name to embody the word, Drengysland (near Dundee)⁸ occurs on the eastern side of the country.

Nevertheless, a word of caution may be uttered. Historians have not entirely grown out of the habit of taking the past usage of words too strictly and precisely, of assuming that words now very unfamiliar must have been technical terms which retained an agreed meaning over a long period of time. Words such as thegn (thane) and dreng might undergo more or less subtle changes of meaning not only as between British and Scandinavian usage but within Britain, as between one region and another or between one century and another. One must try to strike a balance between believing that everything in the past went according to the rules (which one has only to learn) and, on the other hand, denying that in the past there were any rules at all.

G.W.S.Barrow

5. Fellows-Jensen, *Scandinavian Settlement Names in the North-West*, 22-24. A closely comparable example of settlement name formation is to be found in mid-twelfth century County Durham. See University of London Library, Fuller Collection, 22/16, a charter issued on 23 October 1183 by Race Engainne granting to the lepers of Sherburn Hospital the ploughgate in Kelloe called 'Racebi', represented by Low Raisby at NZ 349360. There is no reason to believe that any earlier name in -by preceded Raisby.

6. This document survives only in a comparatively late copy, and has been frequently printed. Here I have used the edition of C. Phythian-Adams, *Land of the Cumbrians: a study in British provincial origins, A.D. 400-1120* (Aldershot, 1996), 173. Phythian-Adams (pp. 174-81) argues for a date of 1067-69.

7. M. Syrett, 'Drengs and Thegns again', *Saga Book of the Viking Society*, xxv, part 3 (2000), 247-8, 254-5, 268.

8. 'Drengysland' in Fowlis Easter, now apparently lost, appears in a charter of 1261: National Archives of Scotland, RH6.51^B.

Autism in History: the Case of Hugh Blair of Borgue by Rab Houston and Una Frith. Blackwell, Oxford, 2000. 1x + 224pp, soft cover, price £13.99.

The main source for this book is the voluminous evidence of a cross-section of folk around Borgue who were cited to help a jury decide whether Hugh Blair of Borgue was mentally incapable of giving informed assent to his marriage to the daughter of a Kirkcudbright surgeon at the end of 1746, Hugh's younger brother, John, obviously apprehensive that the family inheritance was slipping from his grasp, sought annulment of the marriage; their mother, who had promoted it, joined Hugh in defence. The marriage was annulled but Hugh and his wife stayed together, irregularly married, and produced two children.

At root, the convoluted story of a family quarrel but, in the hands of two distinguished scholars, something much more. They use the same evidence to give the reader both an historical insight into what was deemed to be signs of mental illness in Galloway in the 1740s and a modern clinical assessment of Hugh's condition. This co-operative enterprise succeeds. However, of greatest interest to members of the Society, is the insight into social attitudes to mental abnormalities at the time. Unlike today, the witnesses and the jury were non-medical and judged Hugh's behaviour against their common-sense expectations of what was thought normal behaviour for a small laird. The care taken by all is impressive. Hugh was clearly a 'minor oddity' rather than a 'major curiosity'; he was never violent but the key issue was his ability to make life's decisions, of which marriage was obviously critically important.

The evidence allows Professor Houston to apply the wider analysis he has pioneered in *Madness and Society in Eighteenth-Century Scotland* to conditions around the Old Place of Borgue. Hugh's aberrations - his ability to recite large chunks of the Catechism without the remotest idea of their meaning, his attachment to routine, his assiduous attendance at parish funerals, his inability to distinguish what was his and what was not, and so on - are considered by Professor Frith to be as consistent and factual as those in a modern published case-study enabling her to offer an unequivocal diagnosis of Hugh's condition as autism, though the condition was specifically recognised only recently. The most striking aspect of Professor Frith's contribution is her assessment that Hugh's treatment was enlightened by modern standards, not, of course, by design but by chance. He was teased and bullied by children and servants but his own family and neighbours allowed him to do largely as he pleased, even when his behaviour was distinctly odd, as in paying nocturnal social calls on neighbours and by, prior to his marriage at least, failing to meet even the primitive standards of contemporary hygiene. The impression that comes across the centuries is that, unwittingly no doubt, the inhabitants of Kirkcudbrightshire were tolerant and civilised in their approach to the mentally ill.

This is a fascinating book to be read by anyone with an interest in the social history of the south-west. Any who think from the somewhat unusual title that it is not for them could not be more mistaken.

R H Campbell

The Bell Family in Dumfriesshire by James Steuart, W.S. (Volume 2 of the *Records of the Western Marches* series of the Dumfriesshire & Galloway Natural History & Antiquarian Society). Re-printed, 1984, 112pp with soft cover. ISBN 0-912951-26-5. Published by Scotpress, Morgantown, WV 26505, United States of America and available from Unicorn Limited, Inc., P.O.Box 397, Sandy Acres Road, Bruceton Mills, WV 26525, United States of America. It is also available from Unicorn via the Internet at <http://www.scotpress.com>. Price \$9.95+ airmail postage of \$8.00 - members should be aware that Unicorn will look favourably on the potential for reduced postages on 'consolidated' bulk orders.

The original object of James Steuart's researches was to record the pedigree of his maternal ancestors, the Bells of Crurie in the parish of Eskdalemuir, offshoots of the Bells of Crowdieknowe. Starting from a body of family papers Mr Steuart eventually gathered data from a variety of other sources to the extent that it would appear that he had been asked by our late President and Editor R.C.Reid to prepare a paper for publication in these *Transactions* - in the event the task outgrew that request and it was eventually published in 1932 as Volume 2 of the *Records of the Western Marches* series - which had been initiated in 1915 by R.C.Reid's own editorship of *Edgar's History of Dumfries*. The original volume was printed in a 6½ x 9½ inch format by Robert Dinwiddie of Dumfries - there were only 150 copies. It may be of interest to members to know that the Reference Department at the Ewart Library possesses a pasted up and bound copy of Steuart's page proofs - which contains numerous corrections, additions and a small number of subsequent annotations. Also held at the Ewart is a box-file containing much of Steuart's original correspondence relating to his researches into the Bell family - this correspondence includes that to R.C.Reid into whose hands the file eventually came before final donation to the Reference Department. As in so many other instances of local genealogical publishing the hand of Dr Reid can clearly be seen working in the background.

The reprint is a reduced size (6 x 9 inches) facsimile of the original volume and provides an introduction to the family, the sources of information, early history and traditions of the 'Clan'. The main body of the book, pages 12 - 86, is a family by family account of the Bells as they are known from the Dumfriesshire parishes of Half-Morton, Pennersax, Hutton & Corrie, Wamphray, Ecclefechan, Kirkpatrick Fleming, Middlebie, Carruthers, Eskdalemuir, St Mungo, Tundergarth and Dalton. The volume is fully indexed for both persons and places. There is a foreword to the 1984 edition by William H.Bell the then President of the Clan Bell Descendants. The rear cover bears an abbreviated account of the life and interests of the Author.

Of the volumes published under the auspices of this Society that on the Bells has hitherto been one of the most difficult to obtain on the second-hand market. The 1984 reprint by Scotpress of Morgantown, West Virginia, resolved that problem and its now wider availability via the Internet will make it potentially easier to fill the gap on the shelves of all those interested in Dumfriesshire genealogy.

James Williams.

Galloway - A Land Apart by Andrew McCulloch. Birlinn, Edinburgh 2000. ix + 531 pp, 40 ½-tone plates, 16 genealogical tables, 10 maps, hard back, price £25. ISBN 1 84158 027 9.

It is now over a century since P H M'Kerlie produced his 5 volume *History of the Lands and their Owners in Galloway* and Sir Herbert Maxwell his *History of Dumfries and Galloway*. The former's contribution is maddeningly deficient in citation of authorities for his great mass of information, while both of these valuable works were compiled at a time when a highly stratified society of lairds, tenants and cottars was the norm in Galloway and these authors would not be expected to question this *status quo*. In contrast, this new work not only reassesses much the same wide field through the fresh and unrestrained eyes of a historian at the end of the turbulent 20th century but is by one who gives full documentation throughout. Furthermore, unlike many historians, Andrew McCulloch is prepared to use extracts from archaeological data to supplement or explain meagre historical record. Thus the Whithorn dig figures as a source while the current work at Buittle is also referred to along with others.

The book's large theme is developed in 33 titled chapters. These contain several sub-chapters each with an informative sub-title. The text has numbered notes, grouped at the end of each chapter, not only to a bibliography of some 1300 works but often with useful supplementary comments by the author. There is also a good index at the end of the volume.

The first few chapters deal with prehistory and the Roman period. This condensation and generalisation of somewhat patchy and sometimes shaky evidence might perhaps have been omitted. However when the author comes to post-Roman and early Medieval times he brings together all the known research on the subject in attractive narrative. When alternative interpretations of the scanty evidence exist he gives both views then offers the reader his own personal preference. He is not afraid to mention an unpopular view - thus (at p. 47) he reminds us that St Ninian has been held by some to be a British cult-figure promoted by the Northumbrian Angles at Whithorn to rally their British subjects in Galloway against Scotto-Irish influences from Iona. This theme of the civil power calling on the assistance of the Church is a recurrent one in later chapters.

The Lordship of Galloway under Fergus and his descendants is well written up and some valuable new slants are aired. Thus he stresses the close connection with the Isle of Man at this time - a lingering trace perhaps of an erstwhile wider Kingdom of Man and the Isles? He also advances (p. 97) a most interesting explanation of the bitter enmity between Fergus's two sons viz, that Uchtred was not in fact the elder but had been born of a regular canonical marriage while Gilbert, although the elder, had been born from a union not recognised by the Church. Thus Gilbert might well have been considered the true heir to the Lordship by the mass of the people while his brother had the powerful backing of the Church as the lawful heir.

The body of the book then deals in detail with the fragmentation of the Lordship land between the heirs of Alan, aggravated later by the bitterness resulting from the Wars of Independence when the Comyns, the Balliols and the Bruces in effect tore the province apart as each strove for mastery. This in-fighting continued from generation to generation for centuries partly due to the weakness of the Crown. What this reviewer finds remarkable is how, in spite of shifting allegiances, treason and forfeitures, time and time again the heirs or family of the worst delinquents or even the forgiven delinquents themselves are reinstated in the lands of their ancestors. This was particularly true of the McDowalls. It seems that in some way the family was seen as belonging to the land rather than the land belonging to the family?

The author deplores the feuding between the successors to the Douglasses after the fall of the latter, in a typical passage, as follows (p. 230):- 'Although these inter-family disputes were later romanticised in ballads, they were in reality squalid and unedifying disputes where the participants were primarily motivated by a hankering to settle old scores and the prospect of booty'. Nor does the author whitewash the unseemly rush of the leading families to grab church land at the Reformation. Furthermore, after giving a reasoned and objective account of the religious troubles of the 17th century, he makes his view clear that it was mainly bigotry and entrenched attitudes which themselves created, then aggravated, the troubles,

The latest chapters of the book deal with the agricultural improvements of the 18th century and the problems and changes of the 19th and 20th caused by the influx of food imports from abroad.

It must not be thought however that the volume deals only with the vicissitudes of the laird - much of the author's research covers, sympathetically, the diet, housing, health and well-being of the people of Galloway at the foot of the social scale. For example, his discussion of the Levellers' revolt shows a readiness to look at topics from a viewpoint other than that of the 'improving' landlord.

This reviewer thoroughly recommends this volume as a major addition to the bibliography of Galloway.

W F Cormack

Proceedings 1999-2000

15th October 1999

Annual General Meeting

Speaker: Professor Rex Taylor - 'The Crichton College Development'

29th October

Speaker: Dr Doreen Grove - 'Caerlaverock Castle: Recent Excavations'

12th November

Speaker: M/s Jackie Galley - 'Plant Patterns from the Air, in Dumfries and Galloway'

26th November

Speaker: Dr Jane Murray - 'Stone Axeheads and Society in Neolithic Dumfries and Galloway'

10th December

Speaker: Mr Peter Westwood - 'The Robert Burns Manuscript Inventory'

7th January 2000

Speaker: Mr Brian Arneill - 'A Naturalist's View of the Olympic Peninsula Washington State'

21st January

Speaker: Mrs Helen Bell - 'History of Buittle Parish, Kirkcudbrightshire'

4th February

Speaker: Mr John Pickin - 'Bingsteads and Knocking Places: In Search of Galloway's Old Metal Mines'

18th February

Speakers: Mr R Toolis - 'The Solway Heritage Archaeosights Project'

Mr A Anderson - 'Road, Drain and Bridge Curiosities'

Mr P Crichton - 'Kirkgunzeon Parish'

3rd March

Special General Meeting

Speaker: Professor Geoffrey Barrow - 'The Pattern of Place-Names in Dumfriesshire in the Middle Ages'

18th March

Speaker: Dr David Longley - 'Excavations at Mote of Mark, Kirkcudbrightshire'

This meeting was held in Kirkcudbright

Publications funded by the Ann Hill Research Bequest

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- No. 3* Kirkpatrick-Fleming Miscellany (1987)
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Records of the Western Marches, Vol II, 'The Bell Family in Dumfriesshire', by James Steuart, W.S., 1932.* (for reprint see Reviews in Vol 75)

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* Indicates out of print, but see Editorial.

Reprints

The Early Crosses of Galloway by W.G.Collingwood from Vol. x (1922-3), 37pp text, 49 crosses illustrated and discussed, £1.00 plus post to Members.

Flowering Plants etc. of Kirkcudbrightshire by Olga Stewart, from vol. lxxv (1990), 68pp, Price on application to Hon. Librarian.

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