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Prehistoric settlement in northern Cumbria

Mike McCarthy

Background

One of the dominant themes in the archaeological investigation of Cumbria over more than a century has been the Roman frontier system, exemplified by Hadrian's Wall and the hinterland forts. To prehistorians, it is the Langdale axe factory and its products, and such fine monuments as the stone circles of Castlerigg and Long Meg and her Daughters, the impressive henge complex at Eamont Bridge, or the enclosure on Carrock Fell, for which the county is well known. Alongside this, discoveries of lithics, Bronze Age pottery and metalwork have consistently featured in the local *Transactions* for some considerable time, and scholars such as Clare Fell and Colin Richardson have worked hard to maintain a profile for prehistory. There have also been a number of site- or subject-specific studies such as fieldwork on the limestone uplands (Cherry & Cherry 1987; 1995), the Langdale axe factories (Claris & Quatermaine 1989; Bradley and Suthren 1990), and Bradley's assessment of Bersu's work at King Arthur's Round Table (1994), while there have been general surveys of northern prehistory (Higham 1986) in which Cumbria features. Notwithstanding this, it remains the case that prehistoric studies have lagged behind other parts of Britain. There has been little tradition of fieldwalking, field survey and excavation in the county until comparatively recently, and the predominantly pastoral agricultural regime has not been as conducive to casual discovery as agricultural systems in other parts of Britain. Yet, as recent and ongoing work is demonstrating, this vast region, the second largest county in England, has much to contribute.

The purpose of this contribution is not to present a 'prehistory of Cumbria', but to draw together various strands of research into pre-Roman land-use and settlement archaeology in the northern part of the county, in order to highlight similarities and differences with adjacent areas, and to draw attention to some recent work. Because of the limited amount of excavated, and hence datable, material, and the absence of systematic surveys across the North Cumberland Plain, it is convenient to follow a format broadly in line with that adopted in recent volumes of the Royal Commission on the Ancient and Historical Monuments of Scotland.

The landscape

It is axiomatic that one of the key factors determining

settlement location and the manner and extent of land-use in the past is physical geography, and the range of resources potentially available to our ancestors. Cumbria embraces enormous differences in terrain, from the mountains of the Lake District, the upland fells bordering the central massif, the Pennine uplands, numerous river valleys, especially the fertile valley of the River Eden, the undulating North Cumberland/Solway Plain, the coastal margins of the Irish Sea, and the estuarine environment of the Solway Firth. It is a heavily glaciated landscape, bearing the signs of the retreating ice sheets at the end of the late Devensian 12-14,000 years ago. This is particularly apparent in the Eden valley and the Cumberland Plain, where there are many fields of eskers, tarns and mosses, and raised beaches.

The soils in northern Cumbria have, with the exception of river terraces, mostly developed on glacial deposits. They include light, well-drained soils of the Newport Association found extensively on fluvio-glacial sands and gravels to the west and south-west of Carlisle, around Burgh-by-Sands and Aspatria, and in the Eden catchment as far as Brampton and Penrith. However, the dominant soil type in the north of the county is the Clifton Association, a seasonally waterlogged soil developing on glacial till, widely distributed along the Solway coast, fringing the Eden valley, the northern and western fringes of the Lake District, and extending in a great sheet to the Scottish border at Longtown and the Liddel Water. Agricultural improvements instigated by prominent landowners such as John Christian Curwen at Workington and Sir James Graham on his estates around Longtown, together with land enclosures, did much to turn previously poor land into a more productive and cost-effective resource, especially in the period from the 1790s to the 1820s. Between them, Curwen, Graham and William Blamire led the way in changing the agricultural landscape in northern Cumbria by draining poor land, improving soil fertility, rationalising the patterns of holdings and landownership, as well as improving the quality of stock.

Palaeoclimatic and palynological studies in Cumbria, building on the work of Pennington (1970) and Walker (1966), have been largely confined to the work of Barber and the North West Wetlands Survey at Bolton Fell Moss (Barber *et al* 1994), Wedholme Flow and other mosses. This research, combined with studies in Dumfriesshire by Tipping, following the earlier work of Lamb (1977; 1981), point to a close correlation between peat stratigraphy in 'raised bogs' and climate. It is possible to show that in the 4th millennium BC, vegetation changes were probably

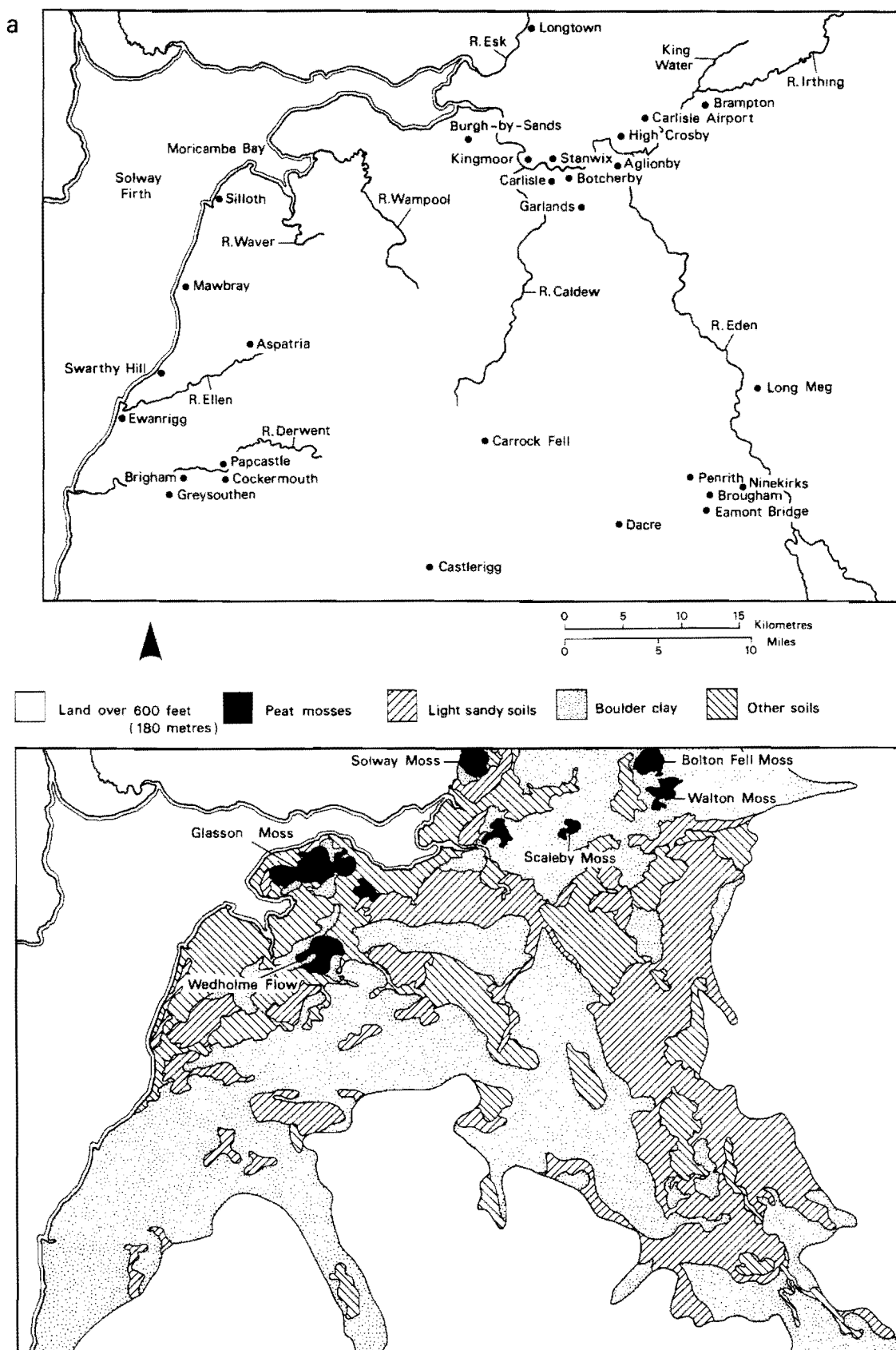


Figure 1. The distribution of sites (a) and soil types (b) in northern Cumbria

brought about by increased grazing, which was followed by a period of forest regeneration for which climatic explanations might be sought. Renewed clearances took place late in the 3rd millennium BC, but this was accompanied by a gradual deterioration in the climate. This deterioration increased in intensity in the latter half of the first millennium BC, but this is also a period from which the pollen record shows that major woodland clearances were taking place. Such changes demonstrate that the relationship between climate and settlement is complex. Amelioration of the climate seems to have recommenced around 50 BC and continued for a century or more (Tipping 1997, 17), ending up with a Roman period in which the climate was substantially the same as the present day.

There have been a number of studies concerning aspects of the physical geography and the potential for understanding settlement through examination of the landscape. First, Bewley (1994, 65-81) put to one side the standard Land Classification Grades and built on the work of soil scientists, especially with regard to field capacity, and applied the concept of site catchment or territorial exploitation analysis to parts of the North Cumberland Plain. His work shows what the physical *potential* of different landscapes may have been in terms of soil workability, and the numbers of autumn and spring days each soil type would have been workable. The value of this exercise is that it codes the soils according to their physical properties and meteorological data, and therefore provides a more objective assessment of the landscape's agricultural potential. It provides a better assessment of land that prehistoric and Romano-British farmers *could* have exploited for different purposes. Although no detailed analysis of soil types linked to settlement morphology is presented, the sites known from aerial photography thought to include prehistoric and Romano-British 'farmsteads' are heavily concentrated on the lighter free-draining soils of the Newport Association. It is also the case that the majority of known settlements are located within a relatively short distance of several soil types, showing that many of the farmers theoretically had access to a variety of resources, such that they could have supported a mixed economy. In parts of Ireland, on the other hand, including south-east Ulster and Meath, ringforts are often found heavily concentrated on heavier gleyed soils, whilst the lighter brown-earths not too far distant have far fewer examples. This is especially evident in the Morgallion barony, Meath (Stout 1997, 77-80, fig. 21), and this, together with work such as that by Tipping in the Borders (1997, 23), shows that the correlation of climatic records, deduced from pollen, with settlement morphology, land-utilisation and soils, is very complex and not yet sufficiently far advanced to model the changes convincingly.

Geomorphological work in the Tyne Valley, Annandale, and the valley of the Kirtle Water in Dumfriesshire by Macklin, Passmore and others (Macklin *et al.* 1992; 1994;

Tipping 1997) has contributed substantially to an understanding of settlement and land-use through studies of river terraces and buried peat deposits. The broad outlines of the main river systems in Cumbria are known, and localised studies have been undertaken, as in the Howgills. Little work comparable to that of Macklin and Passmore has been undertaken in the Eden valley, yet its physical characteristics, as well as its many catchment systems, show that there is much potential for shedding light on valley floor and terrace formation, rates of incision, hillslope gullying, and the dates at which these occurred. The extent to which the geomorphology of rivers reflects vegetation and anthropogenic change in the Holocene is another question entirely, and requires extensive field survey and archaeological investigation of the kind instigated in the Bowmont valley in the eastern Cheviots (Mercer & Tipping 1994). Sub-alluvial settlement remains have yet to be located, but recently, peat deposits have been identified by Cotton and Passmore (*pers. comm.*) on terraces of the Eden, Irthing and Kingwater, and this will eventually feed into, and inform, an understanding of the archaeological record, especially for the region around Carlisle, for which there is a massive Roman database.

The importance of these physical characteristics is that they framed the responses of society at different points in time, not only in the manner in which the landscape was exploited, but also in the density of settlement. In all parts of Cumbria there are sufficient variations in terrain and soils to give rise to variations in social structure and territorial growth. The best example is the Lake District, where the mountainous landscape provides natural routeways and formidable divisions between one valley and the next. Even with the more subtle features in the lowlands of northern Cumbria, the landscape is divided by rivers such as the Wampool, the Waver, the Ellen, the Caldew, and numerous minor becks. The mosses, especially those either side of Moricambe Bay, formed major barriers to human contact. The differences in this landscape are barely noticeable to today's motorist, but in the days before land reclamation schemes and agricultural improvements, it is possible that both rivers and mosses formed territorial boundaries as well as giving emphasis to a level of sub-regional diversity difficult to discern today. Such divisions are rarely evident in archaeology, but the historical and monastic records contain some hints. By a judicious use of place-name evidence and historical sources, Phythian-Adams (1996) has shown that it may just be possible to glimpse aspects of this diversity in the mosaic of British and Anglian groupings in this area. Clusters of British names have been identified in some of the more marginal parts of northern and north-eastern Cumbria, and these, it is suggested, may point to a surviving British presence in periods of increasing Anglian and Anglo-Scandinavian influence (*ibid.*, 83). Place-names of this and later periods also reflect the topography, as is the case with the two-mile long Wedholme Flow peat moss, the name meaning 'a patch of high ground surrounded by water'.

Mesolithic to Early Bronze Age

Much fieldwork has taken place, especially on the west coast and the limestone uplands, revealing lithic scatters comprising cores, debitage, microliths, blades, scrapers and arrowheads (Cherry & Cherry 1987; 1995), as well as pottery. At present there are no assemblages of early Mesolithic type, but the absence may be more apparent than real (Cherry & Cherry 1995, 12). Much of the lithic material is of late Mesolithic/early Neolithic type, and demonstrates the widespread utilisation of the landscape at that time.

There have been few excavations on these early sites. Bonsall's work at Eskmeals is well known, but more recently Bewley has undertaken work at Plasketlands, near Mawbray on the west coast (Bewley 1993). A sub-rectangular ditched enclosure was located, with another rectilinear area defined by post-pits up to 0.75m deep on its south-eastern side. Radiocarbon dates from charcoal in the pits yielded dates from 3970-3610 ± 90 BC (GU 2573) to 3420-3380 ± 60 (GU 2571). Although Bewley regards the ditched enclosure and the post-pit enclosure as being contemporary (*ibid*, 1), and suggests that they may represent "the earliest known defended settlement in northern Cumbria" (*ibid*, 15), examination of the aerial photograph suggests that this is unlikely, at least in the present writer's opinion. The two enclosures are almost certainly of quite different and unrelated phases, the later ditched enclosure perhaps belonging to the pre-Roman or Roman Iron Age, whilst the post-pits could be related to a Neolithic mortuary or ritual structure. The excavation was carried out on too small a scale to provide useful data, and without the wider view, the radiocarbon dates, interesting and broadly consistent though they are, should be regarded with some circumspection.

Excavations by the Carlisle Archaeological Unit in and around Carlisle have expanded knowledge of these early periods a little. There have been numerous finds of lithics and several stone axes, three of which were from Carlisle (Fell 1990; Richardson in press). Apart from the axes, the range of lithics is characteristic of both off-site activities, as might be implied by a fine barbed-and-tanged arrowhead from The Lanes, and on-site activities. The majority appear to be of Mesolithic or Neolithic date, the earlier including microliths of Arran pitchstone (Fell 1990) and a small number of other tools, such as a backed blade from Brampton (Zant in press).

Outside Carlisle city centre, Neolithic and Bronze Age activity is also attested by excavation at High Crosby, where there were scoops and other features associated with Grimston ware. At Scotby Road, pits also yielded Grimston and Peterborough wares, Grooved Ware and probable Beaker and other early Bronze Age pottery (Vyner in prep.).

Ritual and funerary sites

The most well known sites in northern Cumbria are the stone circles at Castlerigg, near Keswick, Long Meg and her Daughters near Salkeld in the Eden Valley, and the cluster of henge-like monuments at Eamont Bridge, near Penrith. Excavation in 1997 at Botcherby, Carlisle, revealed a small timber pit-circle 9.5m in diameter with a porch-like structure to one side, associated with pottery of Bronze Age type. The interpretation of this feature as a ritual monument is open to question, for it could be a round-house, but a shallow pit slightly off-centre yielded fragments of cremated bone, and this, together with the assumed Bronze Age date indicated by pottery, might tend to favour a non-domestic function (Barkle 1998). The nearest excavated timber circle is at Oddendale near Shap (Turnbull & Walsh 1997), where the inner ring is slightly larger than that at Botcherby, but the small stone circles provide a possible parallel. In Perthshire, most of the known examples range from 6-8.8m in internal diameter (RCAHMS 1994, 30-3).

Some 8km north-east of Carlisle, at Carlisle Airport, excavations in 1996 uncovered traces of another possible ritual monument. In this case an arc formed of large stones buried in pits was found, along with traces of other structures which were not necessarily related. A general date range in the early Neolithic to early Bronze Age seems to be indicated from a single radiocarbon determination (4645 ± 60 bp: OxA 6180) and fragments of pottery (Flynn 1998).

Other ritual monuments, flat cemeteries and barrows, have been identified recently. At Ewanrigg, Maryport, Bewley excavated two inhumations, one being in a cist with a Food Vessel and the other accompanied by a Beaker, and some 26 cremations in Collared Urns (Bewley *et al.* 1992). Radiocarbon dates gave a date range for the urns of 2640-1520 BC. This is a major discovery for Cumbria in terms of the range of vessels and affinities represented, as well as the number discovered, and it is of comparable importance to the cemeteries known from nineteenth-century finds at Garlands Hospital and Aglionby on the outskirts of Carlisle (Hodgson 1956).

Aerial photography west of Carlisle has revealed two circles, approximately 110m and 55-60m in diameter, close to which are a number of ring ditches, perhaps ploughed-out barrows. Nearby a possible causewayed camp has been identified on a hilltop at Kingmoor. Close to Garlands Hospital, aerial photography has located a number of ring ditches close to the cluster of urns discovered in 1861 (*ibid*). Close by, but perhaps not of ritual significance, a burnt mound was excavated in 1997 by the Centre for Field Archaeology, Edinburgh (Neighbour 1997).

Cultivation remains

There are two key sources for understanding land-use, the pollen record contained in peat, and the archaeological record. Work by Dumayne and Tipping illustrates that for much of the Mesolithic, Neolithic and Bronze Age, settlement appears to have been on a small scale in a forested landscape. In Annandale and Eskdale, and in the lower reaches of the Kirtle Water, significant clearances commenced in the late Neolithic, around 2300 BC (Tipping 1997, 19-20; Dumayne & Barber 1994, 167; Dumayne 1995, 25). This is also the picture obtained at the Scaleby and Bolton Fell mosses, north-east of Carlisle.

The largest clearances, however, took place during the Iron Age in south-west Scotland and Cumbria, from around 500 BC. At Walton Moss, arboreal species decline, and grasses, together with cereal pollen and taxa indicative of open ground, appear for the first time since the late Bronze Age, and this is dated to 165 BC to AD 75 at the 2-sigma level. At Glasson Moss, on the north Solway plain, the clearances begin slightly earlier (Dumayne and Barber 1994, 167), suggesting that the timing of the assault on the forests varied from place to place. Dumayne and Barber have also identified substantial changes in the vegetation record during the period of the Roman occupation. Attempts to correlate such data with historical events are fraught with problems and should be treated with great caution, and have been roundly criticised (McCarthy 1995; Hanson 1996).

The actual remains of cultivation are not apparent as earthwork features on the North Cumberland Plain, having been removed by later agricultural improvements. Excavation, however, demonstrates that the truncated remains survive as sub-surface features. In Carlisle pre-Roman agricultural activity, in the form of narrow grooves scored into the natural subsoil, is attested in many places. At Blackfriars Street, at least two phases of ploughing were recognised, separated by a standstill phase (McCarthy 1990). Similar marks have been recorded at Annetwell Street and The Lanes, but no field boundaries have been identified under the city centre. A metalled trackway was found in The Lanes on the same alignment as vestigial plough marks, and oriented differently to the later Roman alignments.

Outside the city centre, extensive areas of field system have been located through aerial photography (Higham & Jones 1975) and by excavation. In 1976 at Tarraby Lane, Stanwix, a pattern of field boundaries and some cultivation marks were revealed in a programme of trial trenching (Smith 1978, 21-3). Further work in the 1990s by Carlisle Archaeological Unit extended this, and uncovered a total of about 1,000 sq m of ard marks in two locations (Esmonde-Cleary 1997, 415).

The manner of cultivation in Carlisle and at Tarraby Lane is not certain, but the marks are included as examples of

cord-rig cultivation (Topping 1989, 161-79). Although this is the simplest explanation on present evidence, it should be noted that at all three sites the pattern was one of a palimpsest of uni-axial furrows that are spaced at varied intervals, often less than 20 cm, and in some instances run into each other. For these complex patterns to be remnants of cord-rig, therefore, one would have to suppose phases of splitting and relaying ridges (ibid, 167), which implies a prolonged period of use for the fields in question.

The dating of the Carlisle and the Tarraby Lane plough marks is problematic. At Blackfriars Street, Fell suggested that they could be Neolithic in date in view of the associated lithics and axes (Fell 1990, 97), but if cord-rig is largely an artefact of the pre-Roman Iron Age, and this seems to be the case, the associated finds should be regarded as being residual.

The two main exposures at Tarraby Lane have a relationship with Hadrian's Wall. A *terminus ante quem* in the second quarter of the second century AD, or at the very latest the 160s AD, can be suggested for the marks sealed below the counterscarp bank of the Wall ditch, and below the clay parade ground outside the Wall fort of *Petriana*. The ard marks, moreover, are also aligned at approximately 45° to the Wall, as are the numerous field boundaries.

Amongst several explanations for the cultivation marks at Tarraby Lane is the possibility that it reflects pre-Roman Iron Age settlement in the vicinity, perhaps in an adjacent field where undated structural features, timber slots and postholes have been recovered on a hilltop overlooking the River Eden. Alternatively, it may represent the opening up of the landscape for cereal production in response to the increased food requirements of a garrison of soldiers with their attendant horses arriving at Carlisle in AD 72-3 with the governor Q. Petillius Cerialis.

Other direct evidence for cultivation exists in macrofossil form, specifically waterlogged and carbonised grain and seeds from weeds of cultivation. Much of the soil in Cumbria is inimical to the survival of seeds, but work in Carlisle has produced a number of examples in Roman contexts dating from the early 70s AD. Whilst the source of the grain is unknown, there is a presumption that much of the needs of the Roman army was met from local supplies, and the present writer has argued (1995) that the arrival of the Romans created significant demands on the landscape, and hence on existing local communities. The precise scale of, and the long-term effect of, the arrival of the Romans is difficult to gauge, but the measures of grain allocated to individual *turmae* in cavalry regiments every three days, as shown by discoveries of ink writing tablets in Carlisle (Tomlin 1998), suggests that it was considerable, even allowing for the difficulties in estimating harvest yields from such records. Even in the earliest years of occupation in the 70s and 80s AD, the dominant cereals at the Annetwell Street fort site were spelt wheat and barley, the former presumably for the soldiers, and the latter for the horses of the regiment. Emmer wheat was also present, but

in such small quantities as to suggest that it had become a weed of cultivation by the time the Romans arrived.

Excavation of a Romano-British farmstead at the Cumberland Infirmary, outside Carlisle city centre, has revealed the products of primary processing of grain, whilst work in Carlisle itself yielded the products of secondary processing. It is possible, if not highly likely, that farmsteads in the immediate vicinity of Carlisle were engaged in the supply of grain to the town and its garrison.

Unenclosed settlements

Unenclosed settlements are extremely difficult to identify on the North Cumberland Plain, partly because without enclosure ditches the remains of round-houses would be very difficult to detect from the air, and slight earthworks, which might occur as shallow scoops with low banks, may not have survived agricultural improvements in the last 200 years or so. Given this, it would be perverse to argue that there are no unenclosed sites on the North Cumberland Plain. One excavated example, in the northern part of The Lanes, Carlisle, suggests that they are present, but that their discovery will be by chance. Here part of a round-house with a single stone-packed wall slot was excavated, whilst sufficient work around the building was undertaken to indicate that there was no enclosure ditch. Despite the presence of an early Bronze Age barbed-and-tanged arrowhead nearby, the present writer has argued that on stratigraphic grounds this round-house is probably dated to the early Roman period, perhaps during the late first century AD (McCarthy in prep.), rather than earlier in the Iron Age.

Another possible example was located at the Cumberland Infirmary, where a multi-phase Roman farmstead with traces of second-century rectilinear structures set within enclosures was preceded by a number of round-houses for which there is no evidence of enclosure. Although the dating of the round-houses is problematical, the spatial patterning of ditches and gullies suggests that they may immediately antedate the second-century Roman layout, perhaps in the first century AD. If detailed analysis confirms this, the sequence would be of interest in demonstrating the move from unenclosed to enclosed settlement, as well as the change of architectural style from circular to rectilinear buildings.

Enclosed settlements, forts and round-houses

Settlements enclosed by one or more ditches are well represented in northern Cumbria. Bewley (1994, 24-5) grouped them into circular, D-shaped, oval, polygonal, rectangular, sub-rectangular and square. No analysis was undertaken with a view to determining whether specific shapes cluster, or whether the morphological differences were significant in any way. It was established, not

surprisingly, that the majority of all shapes tend to be located on light well-drained soils.

The assertion that these enclosures are mostly Roman (Jones & Walker 1983), and the belief that square or rectilinear enclosures in particular are Roman (Bewley 1994), not only lacks foundation but it has long been known that they antedate the arrival of the Romans, as can be seen at West Brandon and other sites in Northumberland (Jobey 1970; Maxwell 1970). There can be no doubt, however, that some enclosures in northern Cumbria belong to the period of Roman occupation, as at Penrith and Silloth (Higham & Jones 1983), and the Cumberland Infirmary (Flynn in prep.).

Other sites probably have chronologies extending into the pre-Roman period. The excavations at Scotby Road, which have yielded Neolithic and early Bronze Age pottery (see above), also produced ovoid palisaded enclosures. Although these are not yet dated, the possibility that they are Late Bronze Age or Iron Age cannot be ruled out. A similar hilltop site, but without associated finds, was excavated immediately north of Hadrian's Wall at Burghby-Sands. At neither of these sites were buildings found, but other features suggest that they are present, beyond the limits of the excavation; in both cases the interior of the enclosure was only partially excavated. If these sites prove to be pre-Roman Iron Age in date, they will lend further support to work in the Scottish Borders (RCAHMS 1997) demonstrating that palisades, curvilinear, rectilinear or square enclosures have very long chronologies, extending throughout the first millennium BC in Scotland to at least as late as the second or third centuries AD in Scotland and Cumbria.

In northern Cumbria, no hillforts belonging to the pre-Roman Iron Age have been positively identified, although there are a small number of multivallate enclosure sites. One such is at Kingmoor, Carlisle. No excavation has taken place on this site, which is ploughed out and now survives only as a cropmark. Another potential site is at Carlisle Castle, which occupies a promontory at the confluence of the Rivers Eden and Caldew. Such a location might be expected to have been exploited in the pre-Roman Iron Age, as it was in the Roman period when the fort was sited there. Ground-penetrating radar survey undertaken on the green in front of the castle revealed two substantial ditches which probably antedate other remains thought to be Roman in date. At Swarthy Hill, near Mawbray, Bewley excavated a single trench 1-1.25m wide across the ditches of a multivallate enclosure (Bewley 1992, 37-42). There were no finds, but charcoal from the upper fill of the inner ditch yielded a date of 450 ± 50 BC (GU 2657), although Bewley advises caution in accepting the determination because of the difficulties in calibrating Iron Age dates.

Like Carlisle Castle, other Norman castles sometimes contain hints of earlier activity. At Liddel Strength near the confluence of the River Esk and Liddel Water, the motte's

relationship with the bailey bank suggests that the latter is probably an earlier feature within which the motte was inserted some centuries later. Whether this is a defended site of the pre-Roman, as opposed to the sub- or post-Roman Iron Age, is not clear.

The function of the enclosed sites is far from clear, as there has been too little excavation to enable the nature of the ditches, associated features and internal arrangements to be defined. Neither is it certain that all enclosures contain buildings. Some may simply be corrals for cattle, and the purpose of others might be to provide a safe haven at night for cattle, accommodated next to the main dwelling house. This suggestion has been advanced for some of the Irish ringforts (McCormick 1995), in a society where cattle represented wealth. It is certainly the case that where ditches have been excavated, as at the Cumberland Infirmary, Penrith Farm and Swarthy Hill, amongst others, they are rarely more than a metre deep and 2m wide at the lip. At Plasketlands, the excavation revealed a ditch 6m wide but only 0.8m deep (Bewley 1993), perhaps recut. Although such enclosures hardly merit the term 'defence', and are far removed from the much larger scale of true hillfort defences such as those in Dumfries and Galloway or the Borders, the relationship of ditch dimensions to the size of the bank may not be straightforward. Most of the enclosed settlements in the North Cumberland Plain have no surviving banks, but at Boonies, Dumfriesshire, Jobey's excavations showed that whilst the ditch was only 1.25m deep, the bank survives to a width of 5-6m at the base and 2m in height (Jobey 1975). Clearly, in this instance, a relatively shallow ditch does not mean a relatively slight bank. Although it might appear that banks of that size had a defensive function, the absence of a parapet at Boonies is significant, and McCormick (1995, 34), in discussing the possible function of ringforts in Ireland where parapets are also frequently absent, considers such enclosures to be of very limited military use.

Palisades without the accompaniment of substantial banks and ditches, such as those at Scotby Road, may similarly be questioned as defensive in nature. They may simply represent an alternative solution to the same problem, that of providing a degree of protection against raiding or wild animals marauding at night.

Finally, it is worth asking whether there are linkages between enclosed sites and forts in Cumbria and settlement in Ireland. The question of Irish settlement in Wales and the transmission of ideas between Wales and Ireland has long been acknowledged, as have the linkages between Ireland and western Scotland (Thomas 1981; Mytum 1995), but the epigraphic evidence, on which much of the argument is based, is less apparent in Cumbria. Such stones as the Brigomaglos inscription at Vindolanda (*RIB* 1722) suggest that these links may have existed, but more research, including detailed morphological analyses,

comparative studies and above all excavation, is needed.

The prehistoric round-house persists as an architectural form into the Roman period in south-west Scotland, as at Boonies (Jobey 1975) or at Uppercleuch, Annandale (Terry 1993). Round-houses in rectilinear enclosures- as for example at Middle Gunnar Peak, North Tynedale (Jobey 1981), and Rispain Camp in the far south-west of Scotland, as well as in Wales- are known to date into the early centuries AD. In Ireland, less directly affected by Romanisation, the tradition continued into the early Historic period. Indeed, there is a case for believing that round-houses may persist into the sub-Roman period at high-status sites such as Castle O'er and Bailiehill, Dumfriesshire (RCAHMS 1997, 79-82). It is possible that in the Borders the round-house was not finally supplanted as the dominant architectural form until the Anglian period, when much of the area came under Northumbrian hegemony. Where rectangular buildings in the Cheviots, the Borders, Cumbria and Wales have been dated, on the other hand, they seem to belong to the period of Roman occupation or later.

Casual finds

Although opportunities for casual discovery are relatively rare in Cumbria, museum staff, especially Colin Richardson in recent years, assiduously report finds in the *Transactions* of the county society. The majority of the prehistoric items are stone axes, principally the finished or rough-out products of the Langdale axe factories, but occasionally more exotic items such as axe hammers or a mace are discovered. Many such finds do not, in themselves, add significantly to the overall picture, but the cumulative effect over time may be to require fundamental reappraisals of the extent of Neolithic settlement and impact on the landscape in the North Cumberland Plain.

Amongst the most significant recent discoveries is a fragment of a Bronze Age gold neck ring found in 1991 at Greysouthen, on the southern side of the Derwent valley near Brigham (Needham & Richardson 1991). The dating of this item is difficult, but it is thought to lie within the period 1200-900 BC, and its affinities are largely with Irish goldwork, specifically items in the Downpatrick hoard. It is an important addition to the three, or possibly four, known discoveries of Bronze Age gold from Cumbria.

Equally interesting is Turnbull's recent discussion of a now lost late Bronze Age Halstatt bucket found in 1774 'in peats' at Ravenstonedale (Turnbull 1995). The description clearly shows this to be a bucket of Irish-British type, very similar to one from Heathery Burn Cave in Weardale, and another recent find at Gilmonby, Teesdale. It too is part of a small, but important, concentration of similar vessels from the northern Pennines.

Summary

The dominant feature of the north Cumberland landscape is undoubtedly the valley of the River Eden extending from the Pennines around Brough on Stainmore, to Carlisle and the Solway Firth near Burgh-by-Sands. In this corridor, especially from the region around Brougham northwards to Burgh-by-Sands, there are significant tracts of well-drained sandy soils. Two areas stand out as of especial interest. In the vicinity of Eamont Bridge/Brougham is a major concentration of monuments, including the Mayburgh henge and the two King Arthur's Round Table henge-like sites, as well as the Clifton Dykes and the Roman fort of *Brocavum*. This area, at the western end of the ancient trans-Pennine routeway across Stainmore, was clearly a very important focal point for prehistoric as well as later societies. The exact nature and function of the henge-complex is unclear, but parallels have been drawn with Thornborough, in Yorkshire, the Milfield Basin in Northumberland, and aspects of the Boyne valley complex around Newgrange and Knowth (Topping 1992, 260-3). Moreover, although they are not strictly prehistoric, the early Christian sites at Ninekirks and Dacre a short distance away give further emphasis to the pivotal role of the Brougham area. In later centuries the area witnessed the establishment of an important seigneurial castle, and the growth of Penrith.

It is a fair assumption that the Eden Valley was a major cultural routeway in the past, with peoples from Ireland and Scotland being funnelled into England, and equally, peoples moving northwards travelling by that route from Stainmore. There are hints that this may have been the case with the distribution of Bronze Age metalwork, which is heavily concentrated in the Eden Valley (Clough 1969), and rather later, in the distribution of both Anglo-Saxon place-name elements (*-ingtun* and *-tun*) and the Scandinavian *-bys* (Fellows-Jensen 1985).

The other key focus is that of Carlisle. This site, known to the Romans as *Luguvalium*—an interesting name commemorating the pan-Celtic deity *Lug*—was probably the administrative hub of the Carvetii, whose territory probably extended for some distance along the Eden valley. A short distance to the west, in a natural amphitheatre formed by a bend in the Eden, lies a major complex of monuments identified from aerial photography, including some almost certainly of ritual origin; a possible causewayed camp is known at Kingmoor, whilst close by there are at least two probable henges or large timber circles, and other circular ditched enclosures that may be barrows. The chronology of all these features is not yet clear, but it seems likely that amongst the latest is a multivallate enclosure, a possible hillfort.

Further west, other key areas almost certainly include Burgh-by-Sands, at the southern end of a wath, or ford, crossing the upper reaches of the Solway, the region around Moricambe Bay, and the Derwent valley in the

vicinity of Cockermouth, Papcastle and Brigham. The importance of these areas in prehistoric times has yet to be demonstrated conclusively, although the Derwent and Ellen valleys have produced small concentrations of Bronze Age metalwork. The combination here of Roman sites with evidence of sub-Roman and/or Anglian ecclesiastical features highlights this as an area of potential importance to prehistoric settlers.

Whilst not all major prehistoric sites automatically became important foci in later centuries, some areas certainly did. The Eamont Bridge/Brougham and Carlisle areas fall into this category. The common features include locations of considerable strategic significance, major Neolithic/early Bronze Age ritual landscapes, important early Christian associations, and major settlement foci under the Romans. There are important chronological gaps in these linkages, but in both instances the juxtaposition of major prehistoric, Roman, and early Christian/sub-Roman and Anglian sites is marked. In south-west Scotland, major prehistoric monuments exist close by important estate centres of the Medieval period, especially that of the Brus family around Lochmaben, and at Castle O'er, for example. The chronological gaps in the linkages are filled, to some extent, by the finds of metalwork. Although not as numerous as elsewhere in Britain, the fine quality of early, middle and late Bronze Age metalwork, together with the isolated finds of buckets, clearly show that Cumbria was far from being a backwater. The linkages in Cumbria and Scotland also call to mind the spectacular concentration of Iron Age and early Christian remains in Ireland, as around Armagh and the valleys of the Boyne and Blackwater, and the Irish affinities of some items, such as the Greysouthen neckring, are notable.

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