

EARLY MEDIEVAL WALES: AN UPDATED FRAMEWORK FOR ARCHAEOLOGICAL RESEARCH

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INTRODUCTION

The early middle ages (*c* AD 400–1070), which span the centuries between the end of Roman rule and the coming of the Normans, is perceived as iconic in the formation of Wales, its language and identity. And yet this period remains one of the most difficult to understand. Although the body of archaeological evidence is steadily growing, we are still unable to answer many fundamental questions about people’s lives, what shaped them and how they changed during this quite lengthy period. Developments in our understanding of the archaeology should be seen as a vibrant part of a wider interactive multidisciplinary approach which also incorporates research on the history, language, literature and natural environment of the period (White 2005, 1; Edwards 2009c).

A framework for archaeological research on the early medieval period in Wales was published in 2005 as part of the establishment of Cadw’s archaeological Research Framework for Wales (Edwards *et al* 2005) and the content and recommendations put forward in that article remain more-or-less unaltered. The primary aims of this paper are firstly to highlight recent archaeological research on early medieval Wales demonstrating how it ties in with the established Research Framework and secondly to put forward some amendments to the research questions set out in 2005 (Edwards *et al* 2005, 42–3).

SETTLEMENT

In 2005 it was noted that 'It is difficult to talk in terms of strengths regarding the settlement archaeology of early medieval Wales. The number of dated sites remains tiny' (Edwards *et al* 2005, 33). There has been little change. At the upper end of the scale post-excavation research continues on the pre-Viking and Viking Age high status settlement at Llanbedrgoch (Anglesey) (Redknap 2005, 2007b, 2009b) and the late eighth- and early ninth-century royal crannog at Llan-gors (Powys) (Redknap 2004) and their final publication will be a landmark. However, there has been little identifiable new research on other elite settlements, notably hillforts. Recognition and follow-up excavation of specifically early medieval sites has not been part of the remit of the Cadw pan-Wales *Defended Enclosures Project* and the ongoing assessments of multi-period sites which include hill-fort occupation in the post-Roman period at Degannwy (Aberconwy) (Kenney 2009) and Dinas Emrys (Gwynedd), as part the Cadw *Welsh Cultural Heritage Initiative*, have not been primarily designed to break fresh ground. This is also true of the work undertaken as part of the same scheme at the site of the *llys* ('court') of the rulers of Gwynedd at Rhosyr (Anglesey), the origins of which must lie in the eleventh century or perhaps earlier. However, the ongoing excavation at Nevern Castle (Pembrokeshire) funded by the same scheme does have the potential to throw light on the origins of the *llys* which may have preceded the castle structures (Caple and Davies 2008, 39), though work to date (July 2010) has failed to locate any pre-twelfth century material or structures (pers comm. Chris Caple). Another community-funded project is that on the cropmark site beside the Forden Gaer Roman fort where research excavation is being

undertaken (August 2010) on the possible early medieval hall structure identified by CPAT in 1987 (pers. comm. Mark Houlston).

Nevertheless, it is at the other end of the social scale that chance new discoveries have mainly, but not exclusively, been made in the course of developer-funded programmes of excavation, still largely unpublished. The most significant of these are in Pembrokeshire. Firstly, at South Hook, Herbranston, several somewhat ephemeral domestic wooden structures, two with bow sides, and with sunken floors, stone paving and post and stake-holes were recovered together with corn-dryers which relate to a small nucleated settlement with evidence of crop-processing and iron-working. Radiocarbon dates suggest the site was occupied from the late eighth to the mid-twelfth century (Crane and Murphy forthcoming). Secondly, at Maenclochog a 'community excavation', underneath the later medieval castle, evidence has been uncovered for a defended settlement enclosed by a bank and outer ditch containing a stake-and-wattle round house with a hearth (Schlee 2007). A radiocarbon sample from underneath the bank provided a date of cal. AD 880–1020 and another of AD 980–1160 (2 sigma), as well as twelfth-century pottery, suggests that the settlement may span the cusp between the earlier and later medieval periods. The continuing use of round houses, if confirmed by further dating evidence, at this very late date would undoubtedly be significant (Edwards 1997, 4). Two other sites – Newton (Llanstadwell) and Ty Isaf (Llanwnda) (Crane 2004, 11–18, 2006b) – where corn-dryers with early medieval radiocarbon dates have been excavated should also be noted since these are most likely to have been on the fringes of settlements which were not otherwise investigated. A fire-reddened pit with an early medieval radiocarbon date from

Tanyeglwys (Ceredigion) is a further possible example (Crane 2006a).

The identification of clusters of early medieval metalwork as a result of the notification of finds through the *Portable Antiquities Scheme* continues to offer considerable potential for the discovery of new sites, including settlements. In addition to the metalwork from St Arvans (Monmouthshire) (Redknap and Lewis 2007, 581–2), Vinegar Hill, near Undy (Monmouthshire) and Sully and Llandow (Vale of Glamorgan) have all produced a number of finds (Redknap in prep.). The quantity remains small, but some of these sites will merit follow-up investigations to establish their archaeological context.

ECONOMY, LAND-USE AND THE EXPLOITATION OF LANDSCAPES AND NATURAL RESOURCES

In 2005 a range of basic research questions were identified:

What was the wider environmental context of the early medieval landscape? What was the detail and nature of early medieval patterns of industrial activity, exchange and trade? How were local systems of agricultural production organised, and what did they consist of? What use – for both subsistence and other aspects of economic production – was made of the range of different environments across Wales? (Edwards *et al* 2005, 38).

Limited progress has been made towards the elucidation of these questions over the last five years. Draft reports on the significant artefactual and environmental assemblages from Llan-gors still crannog await final publication and the large quantity of data recovered from the Llanbedrgoch excavations will likewise take time

to process and analyse, but both sites offer a significant resource with which to address such research questions. In addition some new discoveries have added brief snap-shots in specific localities and the re-evaluation of older material, together demonstrate considerable potential for research in the future which may ultimately help to paint a broader picture.

Firstly, the discovery of corn-dryers with early medieval radiocarbon dates has contributed to the growing number of early medieval examples excavated in Wales which can throw valuable light on the crops grown, their ratio to each other and how they were processed. South Hook (Herbranston) is a particularly important site since several corn-dryers were excavated together with rotary quern-stones and a significant assemblage of charred grain samples. Two types of oats (bristle oats and common oats) as well as hulled six-row barley grains were the main crops grown. These would have been well-suited to the poor acidic soils of the region. It was also argued that bristle oats and barley were grown together in order to provide a failsafe crop on marginal land and that some of the barley was malted for beer. Wheat grains, which would have required better soils, were present but rare. Flax seeds and hazelnut shells were also recovered (Carruthers forthcoming). In contrast at the slightly later site of Maenclochog the sample from a hearth produced mainly oats and rye (Carruthers forthcoming), but a very similar picture is presented by the evidence from Newton (Llanstadwell), where two corn-dryers were excavated together with the upper stone of a rotary quern. Carbonised grain from the base of one dryer provided a radiocarbon date of cal AD 720–960 (2 sigma). Analysis of the charred grain has indicated that barley (six-row and two-row) was being grown probably alongside oats (bristle oat?) and in all likelihood wheat was also being cultivated. The

weeds discovered were also consistent with those found in corn fields and charcoal samples suggest that oak, hazel and cherry/blackthorn were growing in the vicinity (Crane 2004, 11–18). In the north-west soil samples analysed from a ditch at Cefn Graianog (Gwynedd) revealed the presence of oak and hazel, with occasional birch, alder and willow and trees of the apple family. Radiocarbon dating suggested clearance of secondary woodland between the late seventh and late ninth centuries AD (Kenney and Roberts 2008).

Secondly, more examples of the analysis of pollen samples derived from peat cores, both for projects related to archaeological research and others without any specific archaeological agenda, have the potential to add to our knowledge and understanding of changes in the early medieval landscape and how it was exploited. The clearest relevant example of this is the work by Rippon *et al* (2006) in north Devon who sampled lowland upland fringe mires deliberately to target early medieval/medieval landscape changes and have indicated landscape continuity till an eighth-century increase in cereal cultivation (Fyfe and Rippon 2004). Such an approach with an early medieval agenda in different parts of Wales would enable comparative data to be collected and a better understanding of regional similarities and differences over time. To date there continues to be only very brief snap-shots of early medieval vegetation history provided by pollen-cores analysed as part of more general research. For example, at Wentwood, between Caerleon and Caerwent (Monmouthshire), following deforestation during the earlier Roman period there was woodland re-generation in the third to fifth centuries (Brown 2010), while at Moel Llys y Coed in the Clwydian Hills (Denbighshire), there was evidence of a significant climatic downturn in the mid-first millennium AD,

replicating evidence from elsewhere in Britain, though there continued to be some cereal cultivation in this upland area (Grant 2008, 11).

Turning to evidence for the exploitation of natural resources for craft-working, the analysis of the worked timber from Llan-gors crannog is significant, especially since waterlogged sites are so rare. It has provided valuable new data on early medieval carpentry and the structural use of timber in the late ninth century (Redknapp and Lane in prep.).

A growing number of sites with early medieval iron-working have recently come to light, and their analysis using modern scientific techniques demonstrates considerable potential for informing us about iron technology in the period. For example, at South Hook (Herbranston), one of several sites in the south-west, specialist analysis by Tim Youngs (forthcoming) of the excavated structures and their debris and large quantities of slag has demonstrated that both iron-smelting using two slag-tapping furnaces and some smithing of raw blooms was being carried out. Gorse or broom charcoal was the main fuel (Challinor forthcoming). In the north-west at Parc Bryn Cegin, Llandygai (Gwynedd) a major multi-period excavation funded by the WDA, isolated smithing debris and the probable remains of a smithing hearth were identified together with cereal grains and charred hazelnuts which were radiocarbon dated to between cal. AD 480–650 and 600–760 (modelled using Bayesian statistics) (Kenney 2008, 106–8, 131–2). Evidence for probable early medieval smithing has also recently been recognised at Parc Cybi, Holyhead (Anglesey) (pers. comm. Jane Kenney). Experimental archaeology at St Fagans: National History Museum has also been conducted on the technology of making and brazing

early medieval iron bells and strap slides (Youngs, Murphy and Redknap in prep.; see also <http://www.geoarch.co.uk/>).

Research on sources of stone by Jana Horák and Heather Jackson of Amgueddfa Cymru – National Museum Wales for the *Corpus of Early Medieval Inscribed Stones and Stone Sculpture in Wales* project has shown that, although local stone was normally exploited for carving in the earlier part of the period, from the ninth century onwards the stone for ambitious monuments, such as the crosses at Carew (Pembrokeshire), Llanbadarn Fawr (Ceredigion) and Bardsey Island (Gwynedd), could be transported long distances by sea demonstrating the power and wealth of the patrons who commissioned them (Horák 2007; Jackson 2007; Edwards forthcoming a).

Concerning the artefacts themselves, Ewan Campbell's long-awaited publication (2007) and catalogue of imported pottery and glass AD 400–800 is of considerable significance. This sets the evidence for Continental and Mediterranean imports found in Wales against the broader backdrop of discoveries elsewhere in Atlantic Britain and Ireland and opens windows not only on elite life-styles on sites such as Dinas Powys (Vale of Glamorgan), but also on trade, gift-giving and reciprocity which throw valuable light on both the economy and the social processes which lay behind it in the period. Imported pottery and glass continue to come to light, most recently a sherd of E ware from Porth Clew cemetery, Freshwater East (Pembrokeshire) (pers. comm. Ken Murphy). Particularly notable is the recognition of Mediterranean and Continental pottery and Continental glass at New Pieces (Montgomeryshire) and imported glass nearby at Much Wenlock (Shropshire) thus filling in the striking distributional gap between south and north Wales with

important implications for presence and absence on other sites (Campbell 2007).

The continuing publication of isolated examples of early medieval metalwork reported through the *Portable Antiquities Scheme* and the requirements of the *Treasure Act 1996* have illuminated the degree of regionalisation around Wales and have contributed to our understanding of acculturation and contact between Wales and its neighbours, though the extent of the hybridisation of Welsh-Irish and Welsh-English metalworking traditions remains poorly understood (Redknap 2009a, 308). New research has significantly helped to define native metalwork in Wales and beyond, such as penannular brooches with spatulate terminals (including examples from Kenfig (Bridgend), Much Dewchurch (Herefordshire), Shavington (Cheshire), Pentraeth (Anglesey) and St Arvans (Monmouthshire) (Youngs 2007; Edwards 2008).

The changing nature of commerce in early medieval Wales has been highlighted by a re-assessment of Viking-age hack-silver and coins in the light of recent finds (Redknap 2009b). This has shown how the Viking-age silver economy in coastal Wales mirrors the progression in Ireland and elsewhere – a transformation from a late ninth/early tenth-century bullion economy to a more sophisticated one in which coin began to be retained. Besly (2006) has also summarized all single Anglo-Saxon coins from Wales, as part of a wider survey down to the thirteenth century.

ECCLESIASTICAL SITES, CEMETERIES AND SCULPTURE

As noted previously, the identification of a hierarchy of Christian sites across Wales was greatly facilitated by the completion of the Cadw pan-Wales *Early Medieval Ecclesiastical Sites Project* (Edwards

et al 2005, 38), the major results of which have now been published as part of a broader overview of early church archaeology in Celtic Britain and Ireland (Edwards 2009b). Nevertheless, the major research questions set out in 2005 still remain to be answered:

Firstly, what are the origins, patterns of development and chronology of early medieval ecclesiastical sites in Wales and how do these relate to the emergence of the parish system? Secondly, what can archaeological excavation tell us about structures and other features associated with individual early medieval ecclesiastical sites in Wales, their layout, spatial patterning and associated functions? Thirdly, how do individual sites fit into the broader picture – not only ecclesiastical hierarchies and landscapes, including estates, but also the relationship between church sites and the pattern of secular settlement? (Edwards *et al* 2005, 39).

The lack of large-scale excavations of ecclesiastical sites with known early medieval origins, particularly those which by the end of the period had developed into regional centres, continues to be a major *lacuna*. It is sobering to note that excavations on the fringes of Clynnog Fawr (Gwynedd) in advance of the building of a by-pass, a site singled out for investigation in 2005, failed to produce any evidence of early medieval activity.

In contrast, over the last five years work on burial and cemeteries has continued apace. An overview of early medieval burial in Wales was published as part of the *Early Medieval Ecclesiastical Sites Project* (Longley 2009), though a more systematic study with the compilation of a pan-Wales database along the lines of the ongoing research for the *Mapping Death* project in Ireland (<http://www.mappingdeath.ie/>) would undoubtedly be beneficial in order to increase our understanding of some of the broader trends

and facilitate comparison beyond Wales. Cadw-funded post-excavation and publication of the mixed cemetery at the monastic site of Llandough (Vale of Glamorgan), where comparatively well-preserved skeletal material enabled demographic and palaeopathological analysis, should likewise be regarded as a milestone (Holbrook and Thomas 2005). However, recent excavations have again been concentrated in the south-west and north-west, where burials have frequently proved easier to locate because of the presence of long-cists, and our knowledge of burial in these regions remains much greater than elsewhere in Wales. In Pembrokeshire small publicly funded excavations of a range of developed and undeveloped cemeteries dated to the early medieval period by radiocarbon have proceeded at Longoar Bay (St Ishmaels), West Angle Bay (Angle) and Porth Clew, Freshwater East (Lamphey) with a more extensive investigation at Brownslade Barrow (Ludlow 2004a; Schlee 2006; 2008). This last site is of particular significance because skeletal material is well preserved and (in line with the 2005 Research Framework) it has been analysed by Ros Coard and Valerie Davis revealing some very interesting results suggesting that the muscle formation of the upper arms of some individuals, both adults and children, had been affected by some constant repetitive occupational activity, possibly flat fishing using a drag net in shallow water (Hughes *et al* 2006; pers. comm. Ros Coard). In north-west Wales small cemeteries of probable early medieval date have been excavated as part of developer-funded projects at Parc Cybi, Holyhead and Tregarnedd, Llangefni (Anglesey) and at Llandygai (Gwynedd) an extension of the cemetery partially excavated in 1966–7 has also been uncovered (pers. comm. Andrew Davidson, Jane Kenney; Lynch and Musson 2001, 106–15). The recent discovery of as yet undated

inhumations, some of which are set in square-ditched enclosures, associated with corn-dryers, near the Roman fort at Segontium (Caernarfon) is significant, especially if forthcoming radiocarbon dates suggest occupation in the vicinity of the fort continued beyond the Roman period (pers. comm. David Longley, John Roberts).

In 2009 Amgueddfa Cymru – National Museum Wales created a dedicated Human Remains Store for skeletal material held in the national collections that is over 100 years old (post-mortem), in accordance with DCMS guidelines for the care of human remains in museum collections. Over the last five years a number of research projects have significantly increased our understanding of the health, diet and diversity within the early medieval population, as well as the frequencies of trauma and muscle stress markers and degenerative joint disease (Blake 2005; Roberts 2007; Hemer in prep.). Radiocarbon dating and analysis of skeletal remains from Lesser Garth Cave (Rhondda Cynon Taf) have established that two individuals are early medieval (2 sigma cal AD 425–544 and AD 572–655), and are significant for our understanding of cave use, particularly in view of a comparable date for human remains from Cefn Cave (Denbighshire) (Redknap *et al* 2008, 75–7).

Long-term research on the *Corpus of Early Medieval Inscribed Stones and Stone Sculpture in Wales* project, financed by both academic and public (NMW, RCAHMW) funding streams, has also reached fruition. The volumes on south-east Wales and the English Border and south-west Wales have both been published and the final volume on the north is in the final stages of writing up (Redknap and Lewis 2007; Edwards 2007; forthcoming b). Important research on the palaeography of the inscriptions has also been completed (Tedeschi 2005; Charles-Edwards 2006) which,

together with research on the Celtic languages (Sims-Williams 2003), offer the prospect of a better dating sequence. It is important that these publications do not discourage new research – indeed it is imperative that new research questions be formulated to build on the work of the *Corpus*. New discoveries continue, as, for example, the early inscribed stone and Viking-age cross found during an archaeological watching brief at Llandanwg Church (Gwynedd) (Davidson 2008), a cross-carved stone revealed during the conversion of a redundant church at Cilgwyn, Nevern (Pembrokeshire) and a free-standing cross at Llanfihangel Tre'r Beirdd (Anglesey) during fieldwork for the *Corpus*. As indicated in 2005, the investigation of the broader archaeological context of monuments has considerable potential. For example, multi-disciplinary research on the context of the Pillar of Eliseg (Denbighshire), which has suggested that this might be the site of the inauguration of the rulers of Powys in the earlier ninth century (Edwards 2009a, 168–9), has led to an academic and Cadw-funded excavation (July 2010) at this guardianship monument with the involvement of the local community prior to conservation and better presentation to the public (<http://projecteliseg.org/>). Most important, however, through the *National Committee for the Recording and Protection of Early Medieval Inscribed Stones and Stone Sculpture in Wales* (Edwards and Hall 2003–5), the *Corpus* project has provided data on the condition of and threats to these unique monuments which has already resulted in the conservation and redisplay of several with the aid of Cadw funding as, for example, at St Arvans (Monmouthshire) and Llangyfelach (Swansea).

SOCIAL AND CULTURAL CONTINUITY, CHANGE AND CONFLICT

In 2005 two basic research questions were put forward:

What was the pattern of relationship and interaction between different political and cultural groups in the early medieval period and what was the extent and influence of incursion and/or settlement by incoming Irish, Scandinavians and Anglo-Saxons? At the end of the period what was the nature of the transition to Norman administration? (Edwards *et al* 2005, 40).

These questions remain central but we should also add a third. What was the nature of the transition from Roman control to the emergence of early medieval kingdoms of Wales, not just in political terms but culturally as well. A vibrant debate is currently underway at a UK level between those advocating relatively smooth transitions from Imperial possession to post-Roman polities – the Late Antiquity model (e.g. Dark 2000, Collins and Gerrard 2004) – and those who envisage a more cataclysmic end as an explanation for cultural and material discontinuities (e.g. Faulkner 2000). Wales figures heavily in this debate, which has a Europe-wide resonance (Wickham 2005), and in one version a contrast is drawn between ‘Celts’ in Wales and the south-west and ‘Romans’ on the Marches (White 2007).

In 2005 reference was also made to the impact of Irish settlement and cultural contact on early medieval Wales, particularly in Dyfed, and to a lesser extent in Brycheiniog (Edwards *et al* 2005, 41). Multi-disciplinary research for the *Corpus* volume on north Wales has highlighted the number of early inscribed stones with a definite Irish connection – either Irish personal names or an ogam

inscription – in Anglesey and Caernarfonshire (Sims-Williams 2002, 28–9), and a new ogam inscription has recently been identified on the MAILISI stone from Llanfaelog (Anglesey) (Edwards forthcoming b). These monuments contrast with a second group of more complex Christian Latin inscriptions suggesting the presence of different elites in the region.

Research on the nature and extent of the Viking impact on Wales has continued, especially in the north-west as a result of the excavations at Llanbedrgoch and the discovery over the last five years of more metalwork from the site (see Redknap 2009b for a summary of silver). However, investigations at Buttington (Powys) in advance of development to test for evidence of the English/Welsh victory over the Danish army in 893 have drawn a blank (Smith 2008).

Significant advances have, however, been made in the analysis of archaeological evidence in order better to understand the changing political and cultural relationships between the Anglo-Saxons and the Welsh. Of particular importance is the recent developer-funded excavation of a 40m length of Wat's Dyke at Gobowen (Shropshire). This was accompanied by the dating of buried soil layers in the ditch using optically simulated luminescence (OSL) which demonstrated that it had been constructed and was in use in the early ninth century during the reigns of the Mercian kings Cenwulf and Ceolwulf (796–823), Offa's successors, or Wiglaf in the 830s (Malim and Hayes 2008). This would coincide with the erection of the Pillar of Eliseg by Cyngen, the ruler of Powys (d. 854/5) (Edwards 2009a), and with the reign of Merfyn Frych in Gwynedd (d. 846). This pioneering technique should also be applied elsewhere, including along Offa's Dyke to check the veracity of its historical dating. In

addition, Cadw-funded sampling of some of the 'Short Dykes' in Powys for radiocarbon dating has indicated that five of them seem to have early medieval origins and it has been suggested that they, like Offa's and Wat's Dykes, were erected as territorial boundary markers (Hankinson and Caseldine 2006). Although these pieces of work have done much to answer the questions of dating and chronology outlined in 2005, more still needs to be done. In particular, harnessing cross-border co-operation, the many unpublished excavations along Offa's and Wat's Dykes should be re-evaluated and properly published and, in order to further elucidate their functions, the various dyke systems need to be set into their broader landscape and archaeological contexts using GIS and other relevant techniques.

Early Anglo-Saxon metalwork reported under the *Portable Antiquities Scheme* has helped to clarify the nature of the British contact zone in Wales, and the wider context of the ornamental metalwork from Dinas Powys (Redknap 2009a, 290–7). Items declared Treasure under the *Treasure Act* 1996 include a garnet-inlaid silver Anglo-Saxon pommel from Gresford (Wrexham) (*Treasure Annual Report* 2005/6, no. 1226) that reflects contact with Mercia in the seventh century (a close contemporary of the Staffordshire hoard). A silver-gilt scabbard fitting in the form of a stylized animal head from Goldcliff (Monmouthshire) is Anglo-Saxon work of the late eighth or ninth century. This prestigious mount is a significant illustration of cultural contact in south-east Wales at this period (*Treasure Annual Report* 2005/6, no. 1227).

Wendy Davies's (2004) review of Welsh early medieval historiography drew attention to the likely small size of the population of Wales at the time. This, coupled with relative

economic simplicity (no towns, no native coinage or pottery), a sparse durable material culture and the non-enclosure of most settlement sites (in contrast with early medieval Ireland) means that locating the archaeology of Wales 400–1100 is likely to continue to be difficult.

AN EMAP FOR EARLY MEDIEVAL WALES

In his summing up of the early middle ages in the 2005 Research Framework Peter White said,

An interdisciplinary effort is required to collate and reassess information from existing sources, and to validate it on the ground using fieldwork, including excavation, in order to achieve some characterisation of sites against known types. Concurrently, artefacts, human remains and environmental evidence from known sites in the period, and multi-period sites, must be reworked, to begin to give some understanding of settlement patterns, land use and site hierarchy.

Such a programme would be incredibly ambitious. However, an *Early Medieval Archaeology Project* (EMAP) for Wales modelled on that currently being funded by the Heritage Council in Ireland would be a welcome first step (<http://www.emap.ie/>). Its main aims would be an evaluation of the history, character and results of early medieval archaeological excavations in Wales, including those in the 'grey literature', and an analysis and synthesis of the results. The data would then provide a better informed foundation for future work including research incorporating a multi-disciplinary approach.

SCIENTIFIC DATING AND OTHER TECHNIQUES

The importance of radiocarbon dating has been emphasised by continuing discoveries. In the absence or rarity of diagnostic early medieval artefacts, sites such as South Hook, with its ephemeral domestic structures, corn-dryers and iron furnaces, have only been dated by radiocarbon. Refined dating sequences are now possible using small samples but multiple dates from secure contexts are desirable, even if Bayesian techniques are becoming mainstream.

The value of stable isotope analysis has been confirmed by an existing research programme on skeletal collections from western Britain, including burials from Llandough, Brownslade Burrows, West Angle, Porthclew and Llanbedrgoch (Hemer in prep).

Supporting programmes of radiocarbon dating are essential if the full implications for population change in Wales are to be understood.

RECOMMENDATIONS AND CONCLUSIONS

Although advances have been made over the last five years in our understanding of the archaeology of this iconic period in Wales, these have been modest. The greatest gap in our knowledge continues to be the small number of identifiable secular settlement sites. The recent tantalising discoveries made at sites such as South Hook and Maenclochog have been made by chance and as a result of developer funding and community initiative and not as a result of the Research Framework. Nevertheless, the use of community engagement projects such as Nevern Castle and Forden Gaer to follow up research targets of early medieval interest is an encouraging development.

The fact that evidence for the economy and land-use is increasing should be welcomed but the snap-shots currently emerging, again mainly as a result of developer funded excavations, make it difficult to understand regional differences or detect changes over time. However, in other areas, such as stone sculpture, burial and work on the 'Short Dykes', modest investment from Cadw and other public bodies in line with the Research Framework has continued to produce results. Even so all advances are welcome, but we are too often chipping away at the edges rather than making more dramatic breakthroughs. Indeed, it would be naïve to think that the long list of research priorities identified for the early medieval period in 2005 could be substantially revised in the light of major advances after only five years. Archaeological research and excavation take time to analyse, write up, publish and disseminate and the increase in 'grey literature' sometimes results in important leads not being followed up. Nevertheless we should undoubtedly be looking at a much longer time-span and the lack of financial resources in the current economic climate will make major advances in the short term much more difficult.

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