Exploring the Kingdom of Brycheiniog:

An Integrated Archaeological Approach in an Early Medieval Landscape

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A dissertation submitted in partial fulfilment of the requirements for the degree of Master of Science in Applied Landscape Archaeology

Michaelmas 2018

Candidate number: 1012656

Word count: 16,425

ABSTRACT

Research into the formation and growth of early medieval kingdoms in Wales is limited by a considerable paucity of archaeological and documentary evidence. Compounded by a bias of 'high status' sites within the Historic Environment Record and the literature, the scholarly tradition has remained focussed on the scant material remains and intermittent historical sources. In contrast, this thesis argues that for a new perspective on the socio-economic environment of these polities, research using a suite of relevant and bespoke landscape archaeology tools, particularly with the aim of understanding the natural environment affordance, be elevated in priority.

Guided by archaeological and theoretical frameworks which anchor the research, an innovative, 'bottom-up' methodological approach is advocated and applied to one such early medieval kingdom, the Kingdom of Brycheiniog, in mid-Wales (*c.* AD 500-1066). To ascertain the extent to which Brycheiniog has an expression in the landscape, a suite of early medieval indicators are identified, cross-examined and contextualised against the affordance of the natural environment. These indicators form the basis for establishing characteristics of the Kingdom such as activity hubs, networks and economy.

The results of this analysis reveal attributes of a kingdom with inherently Irish characteristics in the early medieval period. Activity hubs, indicated by early ecclesiastical sites, ogam stones, the Llangorse Lake crannog and pre-AD 1200 place-names, are centred along riverways and Roman roads, particularly around Llangorse Lake and the River Llynfi catchment in the upper Usk valley. Emerging from the research is a region rich in economic potential and natural resource, well connected to the Irish-sea trading-sphere, via its rivers, which flow into the Severn Estuary.

Keywords: Brycheiniog; early medieval Wales; kingdoms; landscape archaeology; environmental affordance.

ACKNOWLEDGEMENTS

I would like to thank my supervisor, Dr David Griffiths, for setting me off on this journey and for providing support, encouragement and guidance along the way. I would also like to thank Tony Johnson for words of advice and encouragement throughout and to Roger Pye for providing a wealth of local knowledge and wisdom.

Thank you also to: John Pouncett for providing considerable GIS support and guidance throughout the process; Bill and Jenny Britnell for providing invaluable advice and guidance; Gary Dockers, and CPAT, for providing the data so quickly and in such a user-friendly form. I am also indebted to Rhiannon Comeau and Andy Seaman, not only for sharing research and providing guidance, but also for their encouragement and support throughout. Thank you to Simon Rodway at the University of Aberystwyth, for guidance regarding one particularly tricky place-name.

The research has been as much an exploration of an early medieval landscape as it has been a return to my childhood – therefore this dissertation is dedicated to my family: Robin, Gail and Colin. “I’ve been here before” was uttered numerous times throughout the fieldwork as memories of seemingly endless visits to “yet another church” returned to the forefront of my mind (now much appreciated!). A special thank you to my Dad for his endless support and for making all of this possible. Thank you also to James (and to Lily) for being by my side, and for all the support, throughout this process.

“So glad you've got away for a few weeks to tranquil Brycheiniog. Where the spirit of Brychan haunts the damp woods and moonless meadows by night in the shape of a badger. Few can see him...only those who look.”

Robin Cain [by email], April 2018

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CHAPTER ONE

Introduction

Figure 1.1: Llangorse Lake from Mynydd Llangorse.

Having spent almost twenty-five years living in mid-Wales, it has felt on occasion like this thesis has been in development for most of my life. As a child I ran along the Roman roads and played on the hill forts; I swam in the cold rivers and walked the buzzing hedgerows. When I am not in Wales, I experience a deep nostalgia and longing to return - *hiraeth*.

Many aspects of my childhood and adolescence in mid-Wales (before the boom of the digital age) seemed to be have been shaped by deeply engrained ideas of social identity and culture. How we lived and moved in this landscape, engaged with each other and with our environment, was informed by whispers from a deep history. A boundary was a feeling, not a road sign; the folklore dispelled feelings of unease when swimming in lakes or pools; the mountains remained ever watchful.

My perception of this landscape informs this thesis. The landscape particularly is rich in archaeological resource, and serves as a record of human-environment interactions within this special place. It is in the marriage of landscape and archaeology that this research is anchored.

1.1 Introduction – Early Medieval Kingdoms in Wales

The aim of this thesis is to establish a methodology using applied landscape archaeology techniques to suggest characteristics of the early medieval Kingdom of Brycheiniog *c.* AD 500 – 1066. The Kingdom of Brycheiniog has a story to tell, but can be likened only to a picture puzzle with innumerable pieces – many of them missing. With some of the pieces now in place, parts of the story can be told.

The early medieval period opens in Wales as Roman administration is in an advanced state of collapse, leaving behind a legacy of language, beliefs and infrastructure which have been permanently imprinted upon the landscape (Burnham and Davies, 2010). Following this collapse, small kingdoms appear to emerge in response to new uncertainties. These kingdoms are characterised by fundamental shifts in economic, political and societal organisation. In this new world it seems possible to recognise the beginnings of Wales (Edwards *et al.*, 2005).

The social, political and economic environment in which these kingdoms arose in Wales has been the subject of much debate by scholars. It has been proposed, for example, that these polities are based on Roman *civitates* (Chadwick, 1959; Davies, W., 1982). Other scholars subscribe to the view that following the end of Roman imperial rule, the local elite were in a position to seize regional control and place it under the power of a king (Brun, 1995).

Traditional research approaches into understanding these kingdoms have tended to focus on the classifications of material culture (e.g. inscribed stones), the social, ideological and political framework legacies of Roman administration (Dark, 1994), and the evidence within historical documentary sources (often written centuries later). Social and political perspectives of kingdom formation, and collapse, have continued to expand and contract in relation to the scholarly interpretation of the source material (Stokes, 2004).

What is fascinating and distinctive about the kingdoms of south Wales, Cornwall and south-west Scotland, is that the material evidence suggests Irish influence. This was interpreted by Thomas (1994) as resulting from a mass migration from Ireland to mainland Britain. Irish internal politics is a suggestion for the 'migration' idea (Dark, 1994) which may have arisen due to the existing organisation and prevalence of ruling single dynasties within the individual territories of Ireland around *c.* AD 500 (Haywood, 2001: 97).

One such kingdom, the Kingdom of Brycheiniog in south-east Wales, has been selected for this study (Fig. 1.1). The kingdom is thought to be named after Prince Brychan (variant Irish *broccán,* or 'little badger') who lived in the 5th century. This research selection is based on three factors: (1) it is an area familiar to the researcher; (2) studying the formation and growth of the Kingdom from a landscape archaeology perspective has not been undertaken before; (3) Brycheiniog presents an opportunity in which to develop an innovative and context-specific methodology through which to establish kingdom characteristics.

It is generally asserted that Brycheiniog lay within the mountainous region of the Brecon Beacons, inclusive of the valley of the River Usk and lands along the western bank of the River Wye, as far north as the River Elan and the River Wye at Rhayader (Fig. 1.2) (Richards, 1960). However, the boundaries are not clear and the territorial delineation of early medieval kingdoms remains problematic (Stokes, 2004).

Figure 1.2: Early medieval kingdoms of Wales in the 5th century, after Richards (1960).

Brycheiniog has formed only a part of broader discussions concerning the early medieval period in Wales (e.g. see Davies, W., 1982; Charles-Edwards, 1993; 2013; Thomas, 1994). While these existing bodies of research are invaluable, this dissertation develops a framework in which to consider the Kingdom of Brycheiniog from a landscape archaeology perspective. This framework relies upon both the identification and analysis of relevant early medieval indicators within the archaeological record, and their contextualisation against the rich morphology and affordance of the natural landscape.

1.2 Research Questions (RQs)

This research will be guided by the following four questions:

1) What is understood about the Kingdom of Brycheiniog in the early medieval period?

2) Does the Kingdom of Brycheiniog have any expression within the landscape?

3) Does the affordance of the natural environment offer any clues regarding Kingdom characteristics?

4) To what extent has the methodological framework been successful in addressing the overall aim of this research, and how might it be improved for future research?

To ensure ongoing accountability to these questions, each chapter will state the research question(s) which it addresses, and how this will be accomplished.

1.3 Study Area

This research is focussed on the upper River Usk valley (Fig. 1.3). The justifications for this decision are as follows:

- It represents a manageable and feasible, although ambitious, geographical area given the limitations in scope/length of an MSc thesis;

- This region is proposed to be the “central plain” or “heartland” (Thomas, 1994) of Brycheiniog;

- At this scale, there is scope to examine a suite of documentary and archaeological evidence within different environmental contexts;

- The area is not an anthropogenic unit, therefore any bias that may be placed on the varying datasets with regards to boundaries is mitigated.

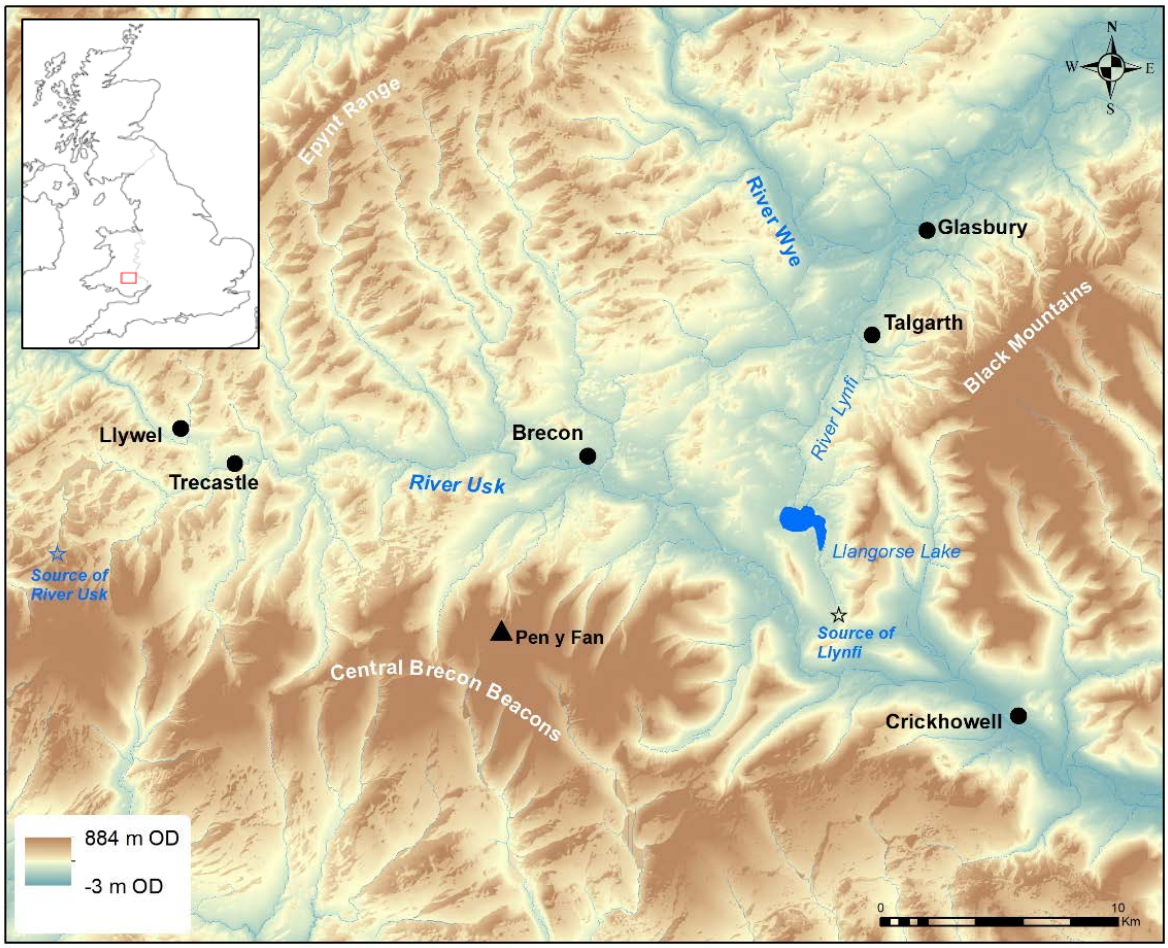


Figure 1.3: Study area - the proposed 'heartland' (Thomas, 1994) of Brycheiniog.

CHAPTER TWO

Brycheiniog – The Context

2.1 Introduction

This Chapter addresses RQ 1, and RQ 2 in part, by critically reviewing the existing evidence associated with the Kingdom of Brycheiniog. The archaeological context is presented followed by a discussion concerning the identification and application of early medieval indicators through which the characteristics of the Kingdom may be expressed.

2.2 The Realm of the Irish Sea

Before commencing with the literature review, it is important to emphasise that Irish contact with Wales did not begin in the early medieval period. There is evidence of peaceful trade contacts between Ireland and Roman Britain since the 1st century AD (Arnold and Davies, 2000; Haywood 2001) and looking deeper into prehistory, a suite of commonalities between Ireland and Britain is evident in the archaeological record (Raferty, 1994; Edwards, 2013a).

The evidence suggests that the Irish Sea had long formed a natural conduit for sea routes by which trade, migration and the exchange of ideas and culture could occur (Cunliffe 2001; Hemer *et al.*, 2013) - uniting, not dividing landscapes (Davies, M., 1946). The idea that these contacts produced a "mutual Celticity" (Waddell, 1993), as a result of persistent interaction is an attractive although generalised idea. However it is an important point to make when considering the extent to which Roman occupation in Wales may have disrupted an evolving social continuity (Anderson, 2013).

2.3 Archaeological Background: Roman Occupation

Notionally, it is possible that an Irish presence existed in mid-Wales long before AD 48, and indeed that this increased during Roman occupation. Rance (2001) presents evidence for the Déisi settling as *Attacotti* within the Roman Diocese (Dyfed) which is party attested to by the 8th century Old Irish work *The Expulsion of the Déisi* (Bartrum, 1966). These inhabitants may have been incorporated into Roman administration as *foederati* or indeed settled as *laeti* following the Barbarian Conspiracy of AD 367 (Rance, 2001).

Figure 2.1: Roman road at Y Pigwyn

By *c.* AD 400 Roman administration had left a significant imprint upon the landscape of mid-Wales at varying scales (Figs. 2.1 - 2.3). The archaeological record contains a range of material evidence ranging from large forts to Latin-inscribed memorial stones. Over the 400 years under Roman administration, questions of social identity, shifts in spiritual or religious beliefs, and changes in language, settlement, trade and movement arose (Davies, W., 1982).

The politics of sub-Roman Wales are a time of tussle and transition between the legacy of the Roman *civitas* and the *pagus* (regions or territories) (Dark, 1994; Charles-Edwards, 2013). At the heart of this issue was the way in which divisions of land occurred, and who would rule. This may have offered significant opportunity for socio-economic restructuring (Charles-Edwards, 2013).

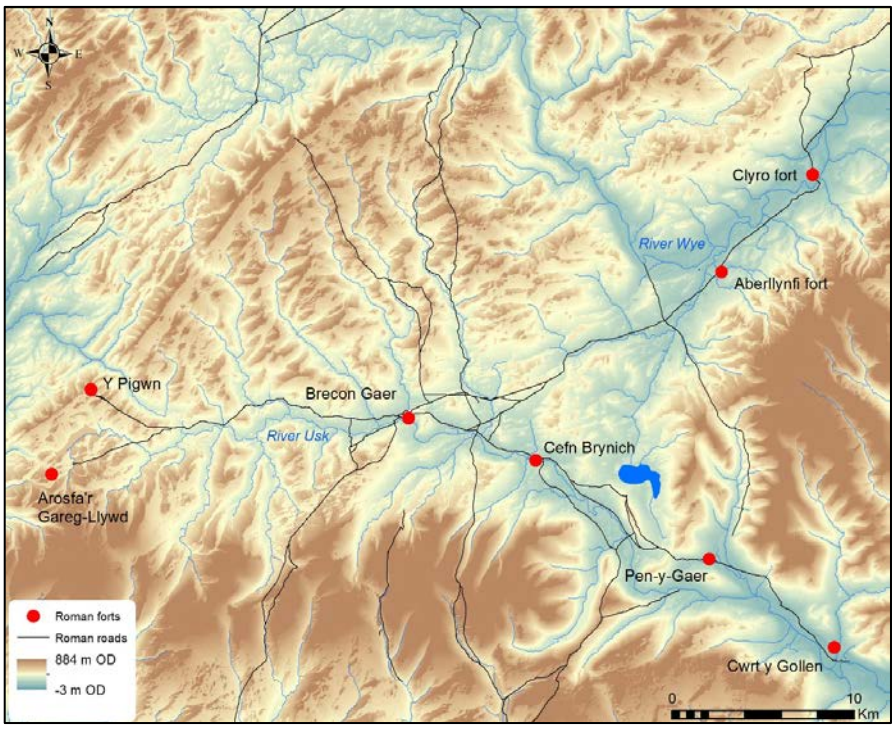


Figure 2.2: Roman infrastructure within the study area.

Figure 2.3: Brecon Gaer fort, summer 1996. © RCAHMW

By the time Gildas was writing *De Exidio Britonum* (*c.* AD 540), kingdoms had formed in Western Britain within the Severn Valley and into Gwynedd. By the 7th century a series of distinct and substantial kingdoms had formed across the whole of Britain (Davies, W., 1982). More specifically though in Wales, the situation was probably much the same however, Stokes (2004) argues such kingships were likely to have been as diverse as the lands that were governed.

2.4 Brycheiniog – Documentary Evidence

There is a paucity of documentary evidence concerning the Kingdom of Brycheiniog, and the origins and political alignment of kingship is obscure. However, two important (but late) Medieval Latin texts exist: *De Situ Brecheniauc* 'About the Circumstances of Brycheiniog' (DSB) and *Cognacio Brychan* 'The Kin of Brychan' (CB). The former is part of a larger manuscript which may have been created in *c.* AD 1200 at Monmouth Priory, and the latter was transcribed from an earlier document in Brecon (*c.* AD 1502-1555) by Sir John Price (Hughes 1980; Thomas, 1994).

DSB speaks of 'Garth Matrun' as being the district occupied by Brychan's grandfather, Teuderic. This place-name may originate in the 4th century or earlier and Thomas (1994) speculates that the 'Garth' may be representative of Mynydd Troed (a large mountain overlooking Talgarth). Thomas (1994) suggests that this small kingdom of Garth Matrun may have been situated within the Llynfi basin (Fig. 1.3) however there is little evidence to prove this theory is conclusive.

The *Book of Llandaff*, *The Life of Saint Cadoc* and the *Lichfield Gospels* together with Welsh law books provide resources to scholars studying early medieval Wales (Charles-Edwards, 2013). For instance, in the *Book of Llandaff*, a 12th century compilation of documents pertaining to the history of the diocese of Llandaff, Wendy Davies (1978) established that in the 8th century *reges Brecheiniauc* (kings of Brycheiniog), were listed as making land-grants and competing with each other; illustrating the Kingdom identified by name at this early date in the sources. It should be noted that Brycheiniog is only identified as an independent kingdom intermittently within the written sources (Seaman, forthcoming a).

Early county maps of Brecknockshire (e.g. Christopher Saxton, AD 1578) impart information about the potential extent of the Kingdom. Historic map regression in addition to the application of the psychology of boundaries (Higuchi, 1988) will be discussed in Chapter 4. It is at this juncture that attention turns to other forms of evidence of early medieval activity. The following sections will explore what these indicators may be, as identified through a review of the literature, and how they may be relevant to Brycheiniog.

2.5 Brycheiniog – Primary Early Medieval Indicators

The principal limitation of a study into the formation and growth of the Kingdom of Brycheiniog is that there is little archaeological evidence dated to the early medieval period. It is therefore unrealistic to attempt to understand the Kingdom wholly in terms of expression through material culture. Despite the limitations, there are several strong candidates for indicators of early medieval activity.

2.5.1 Early Ecclesiastical Sites (*Llanau*)

In 1971, Charles Thomas characterised the sub-Roman period by the following: diversity of the spoken and written languages; migrations and settlements; and the rise of Christianity. Therefore, early ecclesiastical sites represent a fundamental component of early medieval society, and as such are an indicator of activity within this category. The origins of Christianity in Wales are generally agreed to lie in the Roman period, however the extent to which it was effectively integrated into society is unclear (Edwards *et al*., 2005).

The completion in 2004 of the pan-Wales Cadw *Early Medieval Ecclesiastical Sites Project* was an important landmark work, and presents for the first time a systematic compilation of sites. However, the complexities associated with understanding and contextualising early medieval ecclesiastical sites cannot be overstated. For instance, the first documentary reference to a site is

often centuries after its likely foundation (Edwards, 2009). Furthermore, with only a few exceptions (e.g. Capel Maelog, an abandoned early medieval chapel site near Llandrindod Wells; Britnell, 1990), little excavation work has be carried out to establish the chronology of site use.

In the absence of firm dating evidence, a broader suite of considerations is required. A set of seventeen criteria was developed by the Welsh Archaeological Trusts to identify early ecclesiastical sites; these criteria are outlined in Evans (2003) and are graded according to weighting from: Grade A (e.g. Documented pre-Conquest church); Grade B (e.g. Inscribed stones *in situ*); Grade C (e.g. churchyard morphology). Given the limitations of this present study, three criteria will be considered within this review: saint dedications; siting; churchyard morphology. These mirror the criteria used by Brook (1988) in establishing early medieval ecclesiastical sites in Gwent.

Within the study area there is also evidence of a potential *clas*, indicated principally in the place-name Glasbury, which is located on the south bank of the River Wye (Fig. 1.3) (Silvester and Martin, 2011). The *clas* is defined by Davies, W. (1982) as 'the hereditary property-holding religious community'. Early pre-conquest monastic sites are also relevant for a brief introduction as documentary evidence would suggest that an early Christian monastery is likely to have existed somewhere in the vicinity of the church at Llangasty-tal-y-llyn, on the shore of Llangorse Lake yet there is little evidence in the landscape to support this (Silvester and Hankinson, 2004). A hermitage is another type site which has a connection to the fundamental concepts of Celtic Christianity and is of relevance to this research (Silvester and Hankinson, 2003a).

2.5.2 Inscribed Stones

The early medieval inscribed stones in south Wales have been the subject of considerable scholarship for many decades (see Nash-Williams, 1950; Thomas, 1994; Edwards, 2013b). While it is unnecessary to present the work in detail, it is important to highlight the contribution these monuments make to the characterisation of Brycheiniog, and in particular, its Irish influence.

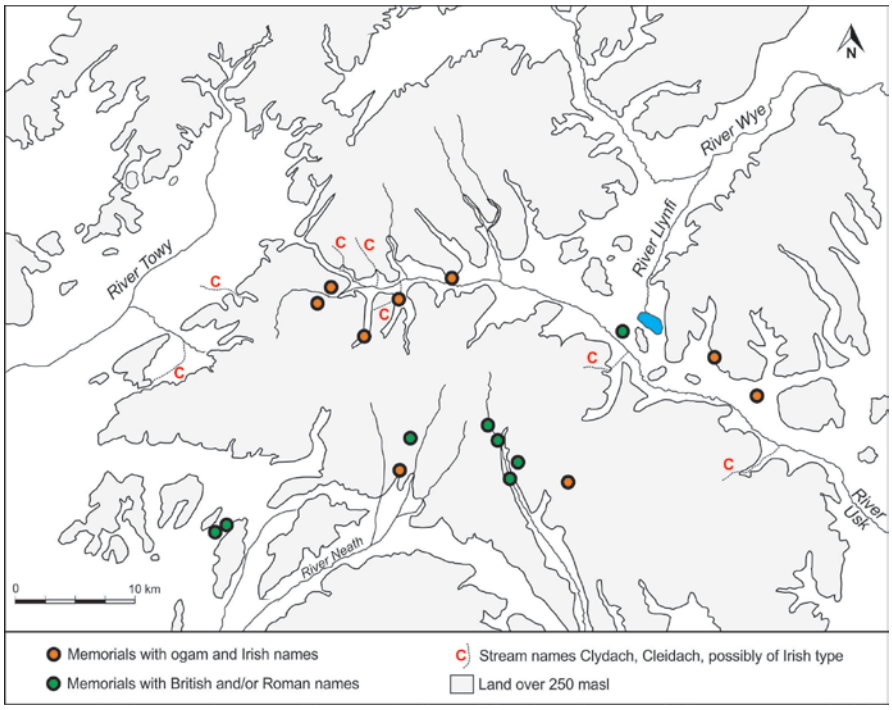


Figure 2.4: Distribution of inscribed stones within the Usk Valley (after Thomas, 1994: 126).

The distribution of these stones within the study area can be seen in Fig. 2.4. It is in the inscriptions that we see a co-existence of language within the study area; these languages are Latin and Irish ogam. The Irish ogam (variations: ogham, ogom) has been dated to 4th century Ireland (Charles-Edwards, 2013; McManus, 1991) and as Thomas (1994) states: 'there is little doubt that ogam arose within the dual-context of the Hiberno-Roman centuries and the proximity of southern Ireland to Latin-speaking Roman Britain'. An example of one of these stones can be seen in Fig. 2.5.

Other early medieval inscribed stones are also found throughout the study area. Typically these stones possess simple symbology: an inscribed cross inside a circle (Edwards, 2013b). However some stones may have been moved from their original locations and/or re-sited to nearby ecclesiastical sites (Edwards, 2013b). Fig. 2.6 presents an example of these stones from the churchyard at Llanelieu, near Talgarth.

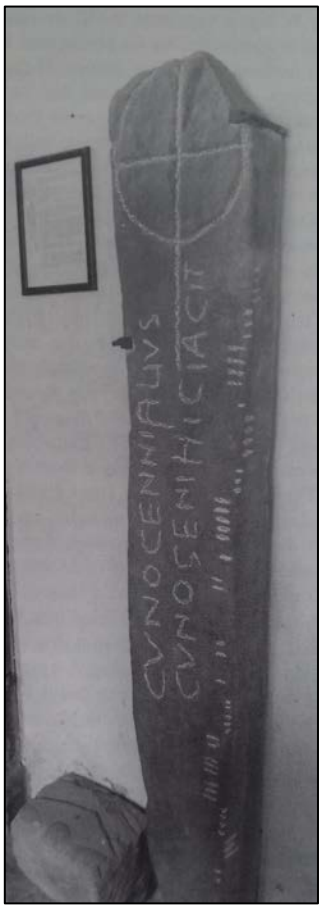


Figure 2.5: Trallong inscribed stone, after Thomas (1994).

Figure 2.6: Early Medieval cross inscribed stones, Llanelieu Church, near Talgarth.

2.5.3 High Status Sites – Centres of Lordly Power (*Llysoed*)

In searching for centres of lordly power, the archaeological evidence is scant. However, the potential importance of the crannog at Llangorse Lake cannot be overstated. The crannog (Fig. 2.7) was first identified as such by Dumbleton in 1867 (Dumbleton, 1870). Since that time it has been subject to a number of excavations, most notably by Redknap and Lane spanning 1989-2003; the full excavation report is yet to be published although an interim report has been produced (Redknap and Lane, 1994). Mesolithic, Neolithic and Roman activity is recorded around the crannog however, dating of the wood used to construct the palisades using dendrochronology suggests they were felled between the years AD 889 and 893 (Redknap and Lane, 1994). The crannog at Llangorse stands alone as a unique and typically "Irish" site within this landscape (Redknap and Lane, 1994).

Crannogs are found throughout Ireland and are concentrated in the south-west. To date there are approximately 1,200 examples distributed throughout lacustrine landscapes (O'Sullivan, 1998). They are also widespread throughout Scotland, however this number varies considerably depending on the definition and their classification (Harding, 2000). There is no consensus about the function(s) of these islands within the literature, although properties such as high-visibility and difficulty of access may be seen as common-sense interpretations (O'Sullivan, 2004). Many narratives have been put forward, ranging from simple farmsteads to royal residences – however what scholars do tend to agree upon is the idea that function was likely to have been characterised by the needs and ideals at each locale (Fredengren, 2002).

Figure 2.7: The crannog at Llangorse Lake.

Very few high-status early medieval settlement sites have been identified in Wales. Hillforts feature heavily in the literature concerning the *llysoed* characterised by "extensive defensive systems" (Kissock, 2014). We can go only on the place-name of one particular site in the study area, Llyswen, which is situated on the south bank of the River Wye (~ 6 km west of Glasbury). Present at this site is a bivallate sub-circular hillslope enclosure with a diameter of 140 – 150 m; the llys as a high-status site is implicit in the place-name. This site will receive further discussion in Chapter 4.

2.6 Brycheiniog – Secondary Early Medieval Indicators

Etymological analysis is a valuable resource to any landscape archaeologist (Gelling 2011; Hinton *et al.,* 2011) and offers potential insights into many aspects of human experience, from human-environment interactions to social organisation, economic activities, religion and belief (Jones, 2015). The use of place-names, in conjunction with known archaeological and documentary evidence has been employed to argue for the process of cultural change in an early medieval landscape through a number of enlightening studies (e.g. see Edwards and Lane, 1992; Comeau, 2012; Oosthuizen, 2016).

The study area is rich in place-names which may speak of its early history. Brecon, the county town of Brecknock is a mutation of 'Brychan'. Brycheiniog in turn is derived from Brychan, (Brecknock in English) and this has remained to this day. The region is also rich with names that relate to Brychan's children (all saints) and his spiritual teachers (e.g. Saint Brynach) (Richards, 1960). In Brycheiniog, simply a perception of the past, and its past leaders, shapes the cultural identity of the people today.

The *Book of Llandaff* has already been briefly introduced as a resource for gaining insight into the early history of the episcopal see at Llandaff (~50 km south of Brecon), along with information regarding its 6th century founding saints. The *Book of Llandaff* has been subject to considerable scholarship by Dr Wendy Davies (1978; 1979) however the content receives continued discussion regarding dating and accuracy (Charles-Edwards, 2013). The importance of the *Book of Llandaff* for this thesis is in the geo-referenced place-names which potentially offer a pre-AD 1200 dataset (Coe, 2001).

2.7 Brycheiniog – Tertiary Early Medieval Indicators

Of interest to this research are the Norman motte and bailey castles (Fig. 2.8). These castles serve as a *terminus post quem* after which the Kingdom of Brycheiniog ceases to exist as a royal Kingdom.

2.7.1 Norman Castles

Figure 2.8: Bronllys castle © RCAHMW.

Unlike the previous indicators selected for analysis, examination of the distribution of motte and bailey castles post AD 1066, requires regressive analysis. The siting and characteristics of these monuments are a testament to the ferocious resistance to the Norman Conquest after AD 1066 and the expansion of Marcher Lordships into Wales (Remfry, 1999). The early castles in Wales (motte and timber keep) were constructed to perform a variety of functions, all of which served as either high-status private residences, estate centres or military strongpoints (Remfry, 1999). They also varied by lordship and region – consistently representing the power and territorial control - forming central places and natural nucleation points within the landscape (Creighton, 2005).

With the castles went land and these castles mark the parcelling and division of land to the lesser knights of the Marcher Lord. As yet, the early Norman castles of Wales and their significance in terms of what they may offer in terms of understanding medieval Wales has not been realised.

2.8 Natural Environment Affordance

The natural 'affordance' of the landscape offers considerable opportunity for contextual analysis of the documentary and archaeological indicators introduced throughout this chapter; the theory and definition of 'affordance' will be presented in the following chapter. Terrain, hydrology and soils are of principal importance to this study. To date, there does not appear to be any published work discussing the affordance of the landscape within the context of Brycheiniog. However, a forthcoming publication by Comeau and Seaman entitled *Living off the Land: Agriculture in Wales c. 400-1600 AD* works to address this issue.

One chapter in this title by Seaman (forthcoming a) examines the landscape, settlement and agriculture of early medieval Brycheiniog through evidence in the *Book of Llandaff*. The paper provides insights into the relationships between soils, climate and seasonality to agriculture, and cross examines this against plant microfossil remains for the area surrounding Llangorse Lake. Building upon this concept, this thesis will consider the natural affordance of the landscape, weaving in wherever possible data regarding terrain, hydrology, soils and palaeoenvironment. This approach may offer key insights into the economic foundation of the Kingdom and a basis for political stability.

2.9 Summary

This literature review has revealed several indicators of early medieval activity applicable to Brycheiniog. These indicators have unveiled considerable potential for landscape study, indeed more than is possible within the scope of this thesis. It is through these indicators that this research seeks to characterise the Kingdom in terms of: activity hubs; networks and trade; and economy.

In summary, the indicators for early medieval activity are:

Primary indicators:
Ecclesiastical sites; inscribed stones; high status-sites; Roman roads.
Secondary indicators:
Place-name evidence (*Book of Llandaff*, pre AD 1200).
Tertiary indicators:
Norman castles.

The **natural environment indicators** for early medieval activity may be associated with:
Terrain; hydrology; soils.

These early medieval landscapes of Wales offer considerable opportunity in which to push the limits of landscape archaeology to its full potential; to develop innovative methodologies through which to understand the landscape from a broad-scale perspective, specifically within the context of the affordance of the natural environment. The following chapter will present such a methodology and discuss the theory behind its development.

CHAPTER THREE

Guiding Theory and Methodology

3.1 Introduction

This chapter addresses RQ 2 and RQ 3 in part by discussing the guiding theory for the work and presenting the methodology for empirical research. The theory and methodological framework is informed principally by the themes extracted from the review of secondary literature and the indicators of early medieval activity identified.

3.2 Guiding Theory

Landscape archaeology is ideally suited to understanding the complex early medieval landscape of Brycheiniog given its inter-disciplinary tradition; nevertheless, there are many challenges to overcome. Methodologies befitted to well-studied early medieval landscapes that are rich in documentary evidence and material remains are of limited use in this context – detailed historical accounts, settlement archaeology, and social signalling through grave goods are just a few of the factors which are absent. Therefore, this research is guided by theory in three principal areas: the interdisciplinary tradition of landscape archaeology; the use of Geographic Information Systems (GIS) to understand spatial relationships; the inclusion of environmental affordance analysis.

Landscape archaeology is rooted in an inter-disciplinary tradition which allows for the development of methodologies that are innovative, context-driven and suitable for answering a wide variety of research questions (David and Thomas, 2010). This thesis capitalises on this, creating a methodology containing aspects inherently present in a wide range of other disciplines including archaeology, anthropology, historical geography, ecology and palaeo-environment. While the incorporation of theory and approaches drawn from a wide range of other disciplines is often encouraged (Bell, 1994; David and Thomas, 2008), conversely it may also be seen as a "mining and bridging" exercise, as discussed by Yoffee and Sherratt (1993) - this thesis does not subscribe to the latter view. The following methodology is inclusive of both quantitative and qualitative approaches for example, historic map regression, point density distribution, photographic survey and proximity analysis.

The use of GIS in archaeology has been growing steadily since the 1990s. As a 'spatial toolbox' it has the ability to store, manipulate, analyse and present information (Wheatley and Gillings, 2002) in a way that is appropriate to research aims and questions at a variety of scales and in a variety of landscapes. Spatial data have been acquired, integrated, presented and manipulated within a GIS environment throughout this thesis. Distribution mapping and the quantification of spatial patterns, thematic mapping, terrain and hydrology modelling, and analysis of proximity surfaces are just some of the ways in which GIS can be applied to this landscape.

Human-environment interaction is significantly shaped by the nature of the underlying physical landscape, and an understanding of formation processes and change (Howard and Maclin, 1999). At one end of the spectrum this draws upon the idea of environmental determinism, which argues that human culture and society is determined by the physical and biological forms that make up the earth's many natural landscapes (Brooke, 2016). At the other end of the

spectrum is the idea of cultural determinism, which argues that the culture in which we are raised determines all aspects of our behaviour as human beings (Harris, 2001; Trigger, 2006).

The 'middle ground' between these two extremes has in many ways found its place in the archaeological palette of today, which argues that there has always been an ongoing reciprocity between nature and humanity. In a landscape so heavily characterised by its natural environment the concept of determinism, or 'affordance' is worthy of examination from a landscape perspective, particularly when considered as a basis for kingdom economy. In this thesis "affordance" will be the preferred term and is defined as the qualities or properties of the landscape which may shape human use.

3.3 Principal Datasets and Acquisition

The following datasets were acquired/constructed in order to meet the overall aim of seeking to ascertain characteristics of Brycheiniog: relevant material culture; pre-AD 1200 place-names in the landscape; data concerning the natural landscape. These are further subdivided below (Table 3.1):

Material Culture	Place-Names (pre AD 1200)	Natural Landscape
Roman roads, forts (extant sites)	Rivers	Elevation
Early ecclesiastical sites	Settlements	Hydrology
Inscribed memorial stones	Mountains	Soils
High status sites (e.g. Crannog)		
Early Norman castles		

Table 3.1: Datasets acquired or created for the study area.

Data were acquired from a number of sources and the methodology employed to create the datasets varied from the use of secondary data to the acquisition of primary data from the field. The first dataset, the material culture, was predominantly acquired from the Historic Environment Record (HER) via Clwyd Powys Archaeological Trust (CPAT). The HER was not relied upon in isolation for the selection of sites; a range of other materials were consulted and methods employed, including the examination of archaeological and project reports, walk-over surveys and historical maps.

Despite the use of an array of materials to mitigate the limitations inherent within the HER data, the selection of these sites and monuments was in some cases challenging since dating, particularly for ecclesiastical sites, is based principally on typology. In the case of the ecclesiastical sites, selection for inclusion in the dataset was based on a review of churchyard morphology, saint dedication, dating evidence and presence of material remains, and subject to a site visit and walk-over survey. The guiding literature for developing this dataset was Silvester and Hankinson (2002; 2003a) who included the area as part of the region wide project entitled *Early Medieval Ecclesiastical and Burial Sites in Mid and North-east Wales*. In the majority of cases, reports and/or the HER simply state the *possibility* or *likelihood* of early medieval origins.

Recent data generated as a result of the Royal Commission's project: *'Mapping the Historic Boundaries of Wales: 'Commotes and Cantrefs'* were incorporated into the research and used for regressive analysis into the evidence for this administrative structure in the organisation and extent of Brycheiniog. The pre-conquest existence of these land divisions is indicated by several entries in the *Domesday Book* where these administrative units had been taken under the control of a Marcher Lord (Richards, 1969).

The second dataset, place-names in the landscape, was developed principally using the secondary data source of Coe's (2001) doctoral thesis, derived from the *Book of Llandaff*. Coe's research focused on extracting and discussing the place-names within the book and applying an informed georeferenced location where there was substantive supporting evidence – this is a remarkable piece of work and of great value to scholars studying the early medieval landscapes of Wales. The second dataset also includes data from the HER and RCAHMW's *List of Historic Place Names* (online).

The third dataset, the natural landscape, concerns the topography of the study area ultimately allowing for a more detailed contextual analysis of datasets 1 and 2. Information regarding elevation, slope, aspect and hydrology was derived from the Ordnance Survey (2018) Terrain 5 data; the precision and accuracy of this DEM from an interpolation standpoint was considered to be reliable (Conolly and Lake, 2006) and samples at a 5 m interval were considered to be at an appropriate scale for the spatial and temporal foci of the study (Wheatley and Gillings, 2002; Harris, 2007).

Soils data were acquired from the LandIS dataset available through Esri, and although the resolution of these data are fit for purpose within the context of this thesis, it is acknowledged that a higher level of detail would be more appropriate for smaller scale studies. When considered in isolation the benefits of these data in understanding land use patterns in the early medieval period is limited. However, when considered thematically and when cross referenced with the material culture of the early medieval and medieval period, relevance is increased.

3.4 Data Processing

A digital elevation model (DEM) was created for approximately 2800 km² of mid-Wales. 327 tiles were downloaded as .asc files into Arc GIS (10.6), then joined together to form a single mosaic of the region. The DEM covers an area larger than necessary allowing for a buffer of approximately 20 km. The DEM was used to perform hydrological analysis based on surface run-off resulting in the formation of the watercourses. This method was preferred over the incorporation of the OS Waterways Mastermap vector files in order to mitigate the changing course of streams and rivers over time.

The majority of HER data was supplied in zip files via CPAT. The data relevant to the study area were moved into newly created Excel spreadsheets and cleaned up. The data were then migrated into Arc GIS. A series of output maps was created including: distribution density, topographical setting, proximities to Roman roads and water, georeferenced place-names and locations of Norman castles. These results are presented, along with discussion, in Chapter 4.

Not all data generated for this thesis were quantitative in nature. Further research into the secondary data has facilitated an examination into the affordance of Llangorse Lake as an economic resource, specifically as a fishery; to date, such an examination has not been undertaken. With the research community eagerly awaiting the final monograph of the crannog excavations by Redknap and Lane undertaken in 1989-1993, it made little sense to examine the crannog in any detail without all of the evidence at hand. Rather, this examination into the potential economic value of the lake forms a constructive contribution through which to characterise Brycheiniog in the interim.

All of the ecclesiastical sites considered to be of 'likely' early medieval origin were visited (except St Elyned's Chapel) and field sketches created. Many of the inscribed stones were also visited; the crannog was viewed from a canoe. Data acquired from the field such as ground and aerial photographs and walk-over survey notes were digitalised and incorporated.

3.5 Limitations

The study of early medieval kingdom characteristics in Wales is subject to a suite of limitations - there are no ‘low hanging fruit’ nor is there an array of tested methodologies for this unique early medieval landscape. The key limitations, centred on a paucity of archaeological and documentary evidence, have already been briefly introduced and limitations will continue to be discussed throughout.

No claim is made that the datasets used in this research are definitive. For example, in the absence of dateable evidence, identifying early ecclesiastical sites is largely speculative. Therefore, there is no particular bias towards any one dataset in this thesis; this attempts to mitigate some errors that arise when one particular dataset is favoured over another. However, with a general bias in the HER to high-status sites, and little settlement or burial archaeology in the region, the datasets are to some extent inherently biased - this is tempered to a degree by considering the affordance of the natural environment.

Given the constraints of this thesis, it was not possible to examine and discuss the early medieval sites and monuments within the context of a much deeper chronology. Ideally prehistoric sites, with an emphasis on Iron Age settlements, would have enriched the study. The only ‘extant’ sites, and this is defined as sites or features that may have been visible in the early medieval landscape, are Roman roads. The use of Roman roads is in lieu of medieval road networks, which are difficult to identify (Taylor, 1979) and problematic to map.

CHAPTER FOUR

Characterising Brycheiniog: Results and Discussion

Figure 4.1: View over Llangorse Lake from Llangasty Tal-y-Llyn shoreline. Dusk, winter.

4.1 Introduction

This chapter addresses RQ 2 and RQ3 and seeks to determine the extent to which the Kingdom of Brycheiniog has an expression within the landscape. This chapter presents the analysis of the early medieval indicator datasets to establish elements of Brycheiniog's characteristics by way of: activity hubs, networks and economy. Also included in the discussion are sections on the Llangorse crannog, Aberyscir and the application of boundary psychology to this landscape. Ultimately, this chapter forms a synthesis between the secondary data revealed through the literature review in Chapter 2, and the empirical data gathered for this study.

4.2 Activity Hubs

4.2.1 Activity Hubs: Results

Informed by the review of literature in Chapter 2, the primary, secondary and tertiary indicators of early medieval activity form the basis for a discussion concerning the identification of activity hubs. The primary indicators identified were: early ecclesiastical sites, inscribed memorial stones (cross-inscribed; Ogam/Latin), high-status sites e.g. Llangorse crannog (this will be addressed in a separate section) and extant Roman roads. The secondary indicator is formed by the place-name evidence in the *Book of Llandaff* (Coe, 2001). The tertiary indicator, via regressive analysis, was early Norman castles however this will be discussed in a later section. The environmental indicators of early medieval activity may be associated with terrain, hydrology and soils.

The methodology identified 24 potential early ecclesiastical sites considered to have possible early medieval origins based on three criteria: saint dedication, siting characteristics, and churchyard morphology (Fig. 4.2; Table 4.2; Appendix A). Records can be found for each of these sites in the HER by the PRN (churchyard) provided and within Silvester and Hankinson (2002; 2003a; 2004). The distribution of ecclesiastical sites would suggest some inclination towards siting in lowland, valley locations near to the River Usk and around/near to Brecon. There is also some noteworthy activity around Llangorse Lake, however several outliers seem to be situated in somewhat remote locations away from potential areas of population (e.g. Merthyr Cynog and Landeilo'r Fan).

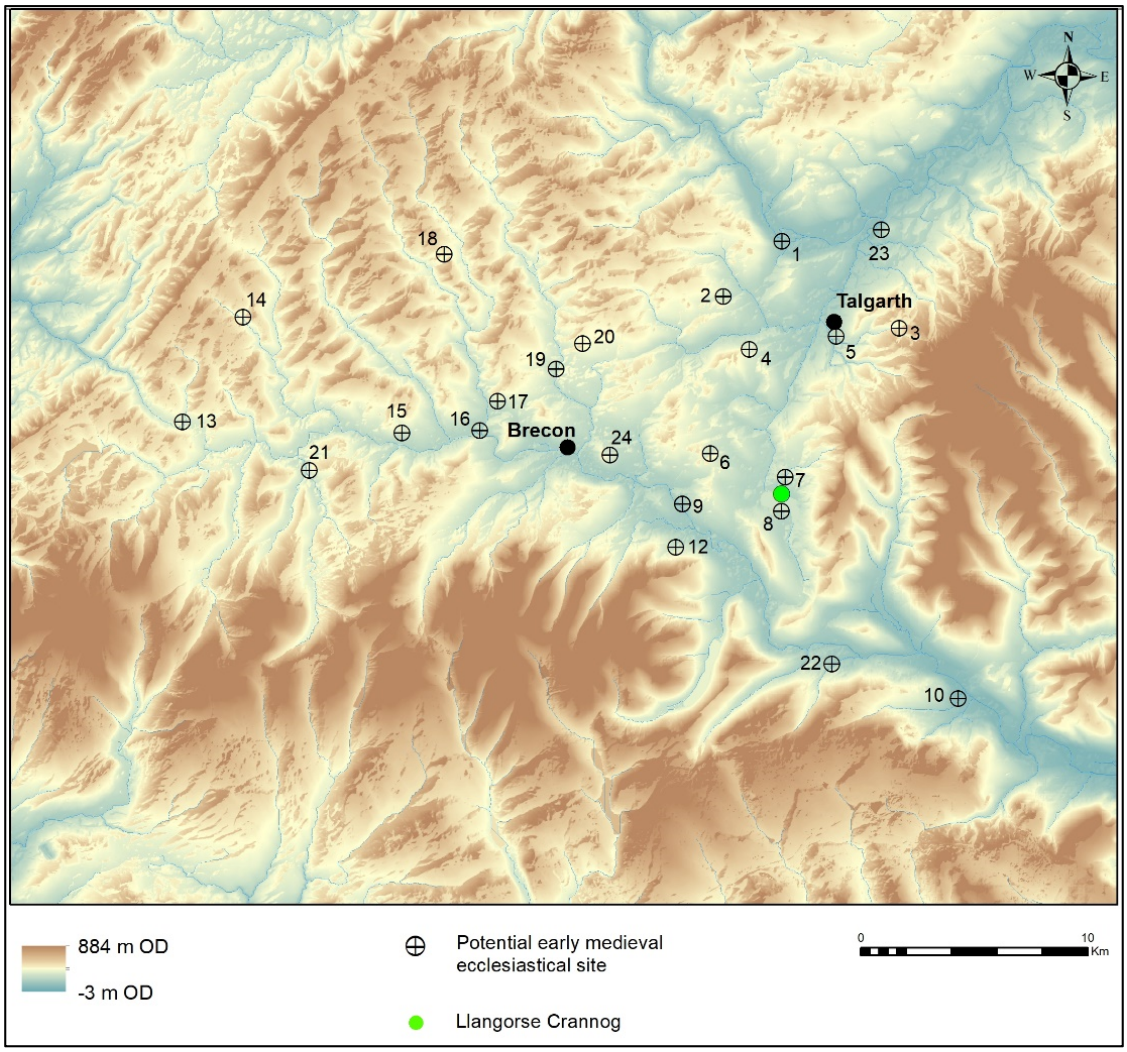


Figure 4.2: Distribution map of potential early eccelsiastical sites in study area.

#	Site Name	Early medieval	Features/Object(s) used for dating	PRN (yard)
1	Llyswen	Likely	Dedication (St Gwendoline); siting (near river); churchyard (circular).	2549
2	Llandefalle	Likely	Dedication (St Maelog); siting (near river); churchyard (partially curvilinear); holy well.	20196
3	Llanelieu	Possible	Dedication (St Ellyw); siting (near river); churchyard (curvilinear); EM stone I; stone II.	15923
4	Llanfilo	Possible	Dedication (St Beilo); churchyard (partially curvilinear).	2644
5	Talgarth	Possible	Dedication (St Gwendoline).	16438
6	Llan-y-wern	Likely	Dedication (St Cynidr); churchyard (oval).	2934
7	Llangorse	Likely	Dedication (St Paulinus); siting (near stream and Llangorse Lake); churchyard (curvilinear).	15926
8	Llangasty-Tal-y-Llyn	Likely	Dedication (St Gastyn); siting (adjacent to Llangorse Lake); churchyard (curvilinear).	16484
9	Llanhamlach	Possible	Dedication (St Illtud); siting (near River Usk); churchyard (curvilinear 'D-shape').	16481
10	Llansantffraed	Unproven	Dedication (St Bridget).	15933
11	Llanfrynach	Likely	Dedication (St Brynach); siting (near River Usk); EM 'moridic' stone.	16485
12	Llanfeugan	Possible	Dedication (St Meugan); siting near a stream.	16486
13	Llywel	Possible	Dedication (St David); churchyard (curvilinear); pre-Norman font; EM Trecastle stone (British Museum)	16475
14	Llandeilo'r Fan	Likely	Dedication (St Teilo); siting (near a stream); churchyard (partially curvilinear).	2950
15	Trallong	Likely	Dedication (St David); siting (near stream); churchyard (strongly curvilinear).	15936
16	Aberyscir	Possible	Dedication (St Cynidr); siting (confluence Rivers Ysgir and Usk).	16689
17	Battle church	Likely	Dedication (St Cynog).	2953
18	Merthyr Cynog	Likely	Dedication (St Cynog – reputed burial place); reputedly a 'clas'.	748
19	Llandefaelog Fach	Possible	Dedication (St Maelog); siting (near River Honddu); churchyard (partially curvilinear); EM inscribed stones.	2957
20	Garthbrengy	Possible	Dedication (St David); churchyard (former enclosure within).	2963
21	Defynnog	Possible	Dedication (St Cynog); EM inscribed stone.	16980
22	Llangynidr	Likely	Dedication (St Cynidr); churchyard (curving eastern boundary)	15927
23	Glasbury church	Possible	Dedication (St Cynidr); 'Clas' site. Original location of EM church unknown.	16990
24	St Elyned's chapel	5th century	Dedication (St Elyned); Excavated by Dorling (1999).	35884

Table 4.2: Potential early medieval ecclesiastical sites in study area.

Twenty-one inscribed memorial stones were identified, all of which are considered to have spanned the early medieval period, ranging in date from *c.* AD 500 - 1000 (Fig. 4.3; Table 4.3). Records of these inscribed memorial stones can be found in the HER by the PRN provided and a detailed discussion on many of the stones is in Thomas (1994) and Edwards (2013b).

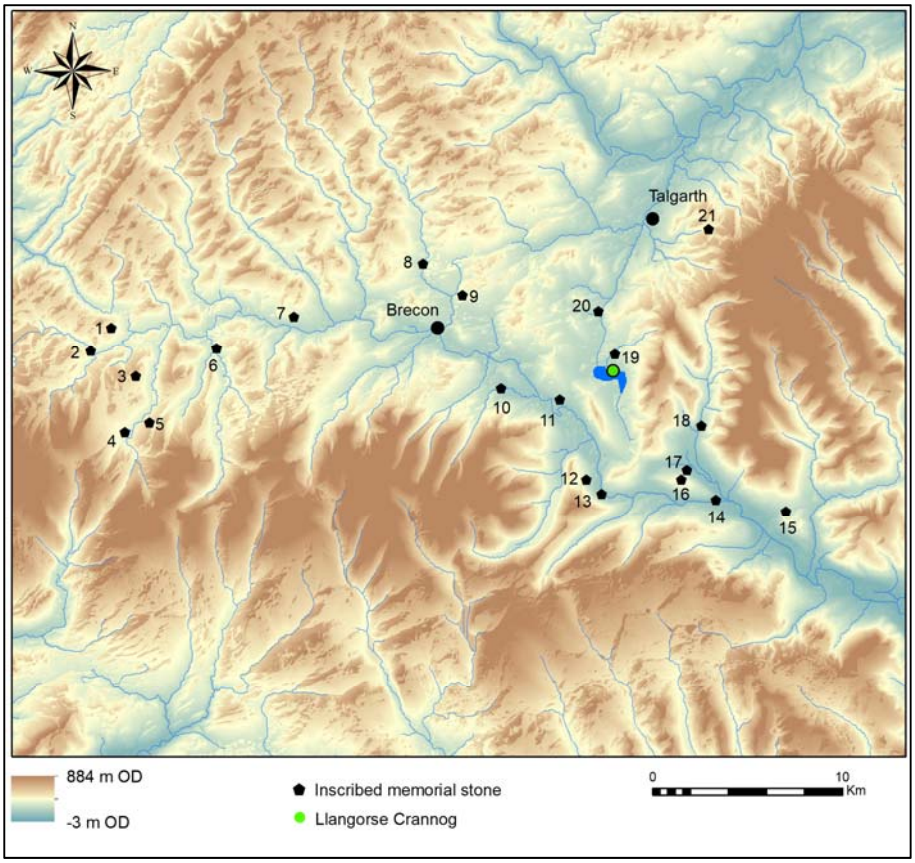


Figure 4.3: Early medieval inscribed stones.

#	Site Name	PRN
1	Trecastle stone	19394
2	Aberhydfer stone	1510
3	Pentre Poeth stone	797
4	Pentrey Goch Garreg stone	3145
5	Crai stone	19395
6	St Cynog stone I	574
7	St David stone	579
8	St Maelog stone	475
9	St David stone	2597
10	St Brynach stones	72098
11	Victorinus stone	35911
12	Talybont pillar stone	650
13	St Tetty stone	647
14	Penmyarth stone	980
15	Turpil stone	50456
16	Tir Gwenlli stone	50451
17	Archangel Michael stone I	50452
18	Archangel Michael stone II	672
19	St Paulinus stone I and II	628
20	St Maelog sepulchral slab	123744
21	Llanelieu court	5828

Table 4.3: Early medieval inscribed stones within the River Usk catchment.

The majority (15) of the ecclesiastical sites were in lowland areas, the remainder were located within the mid-zone; none of the sites identified were sited in the upland zone above an elevation of 350 m OD (Fig. 4.4). The majority (22) were located either on the flat, or on a gentle slope (Fig. 4.5); there were two exceptions with both located on medium-grade slopes - Llandefaelog Fach and Trallong. Ecclesiastical sites appeared to have a majority of north-east aspect, but generally aspect was varied (Fig. 4.6, 4.7) and is perhaps unreliable at this simplified level.

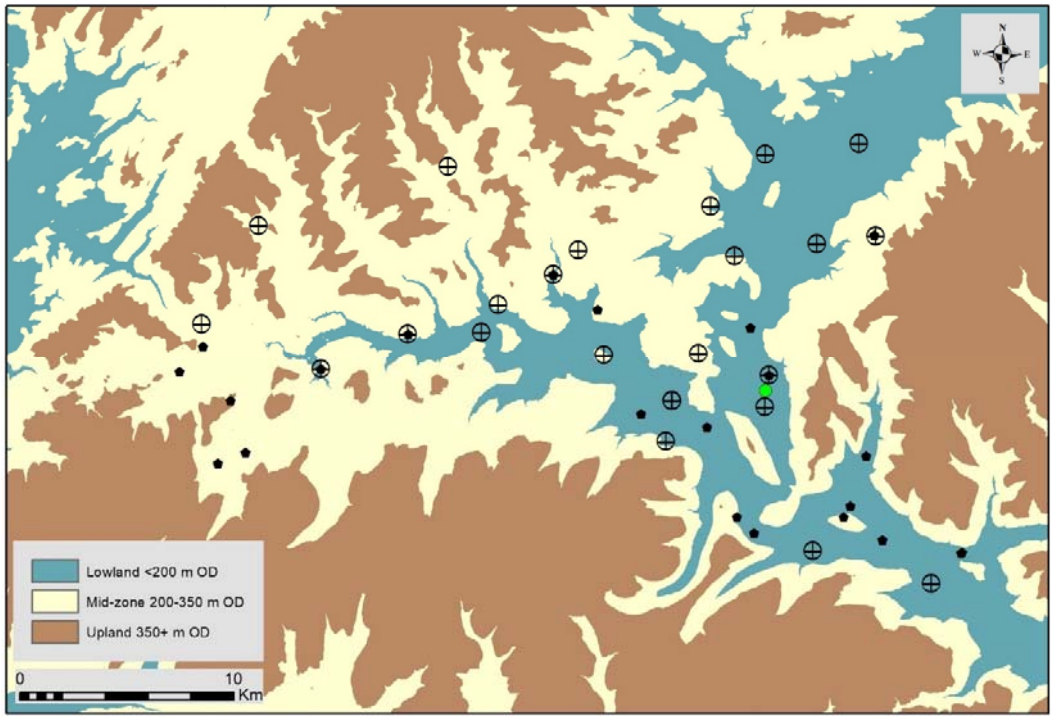


Figure 4.4: Early ecclesiastical sites and inscribed stones: Elevation.

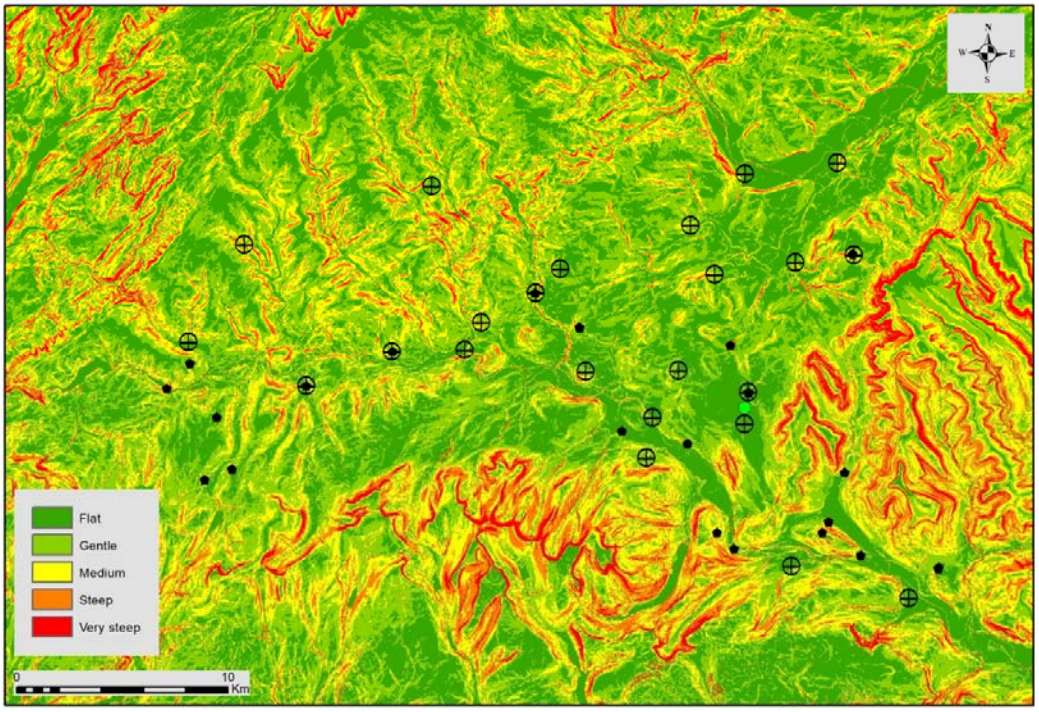


Figure 4.5: Early ecclesiastical sites and inscribed stones: Slope.

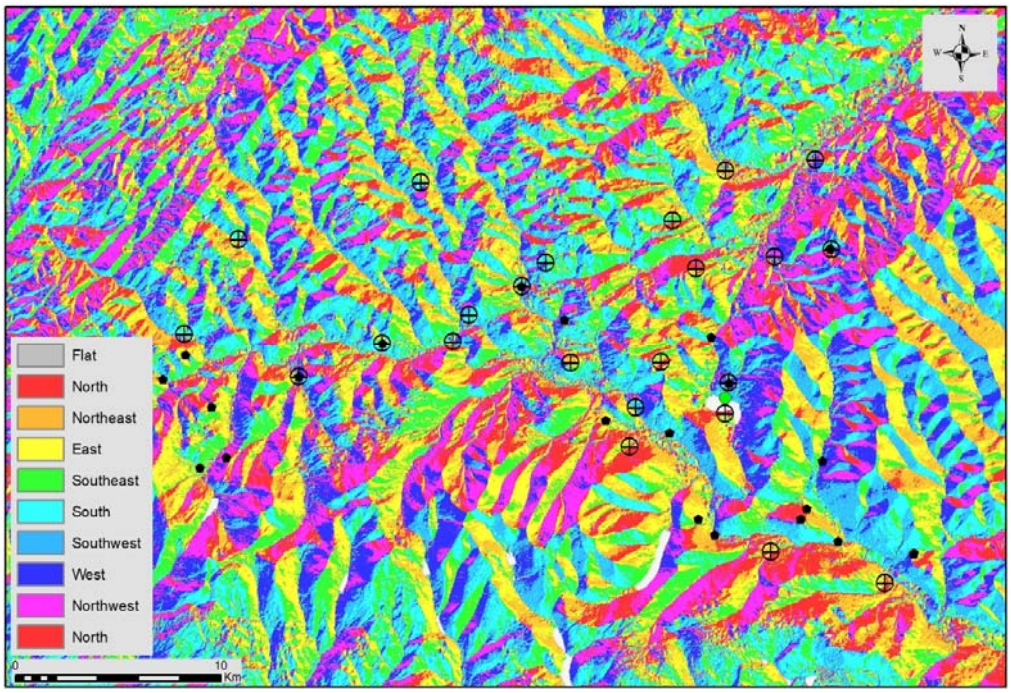


Figure 4.6: Early ecclesiastical sites and inscribed stones: Aspect.

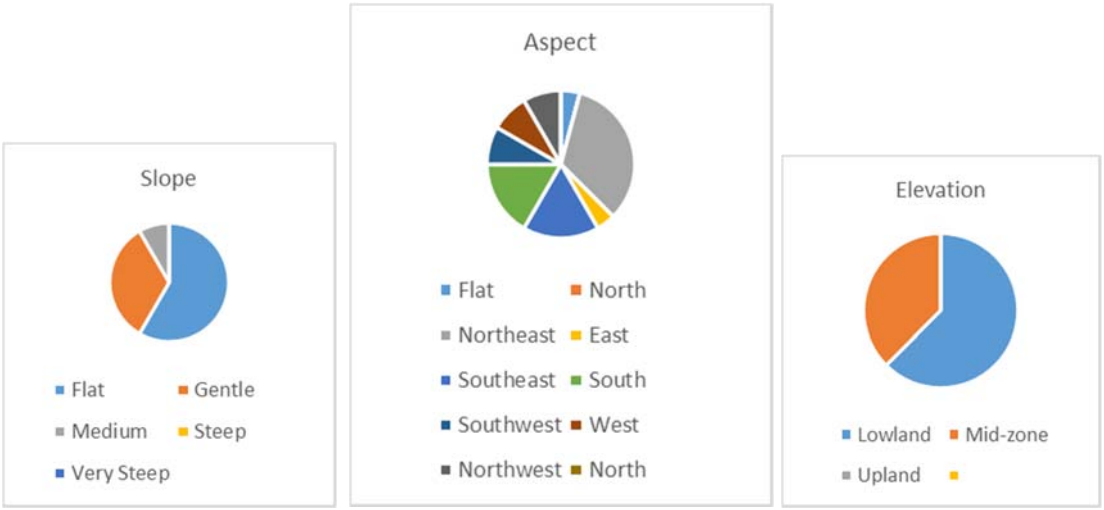


Figure 4.7: Pie charts showing slope, aspect and elevation statistics for ecclesiastical sites.

It is worth noting that several inscribed stones are present at ecclesiastical sites. Although it has been stated in Chapter 2 that many of the stones may have been moved to these locations, it is unlikely to have travelled far – perhaps no more than a mile or two. Therefore, although the distribution maps, and the relationship between these two datasets should be viewed with some caution they do perhaps offer some thematic insights.

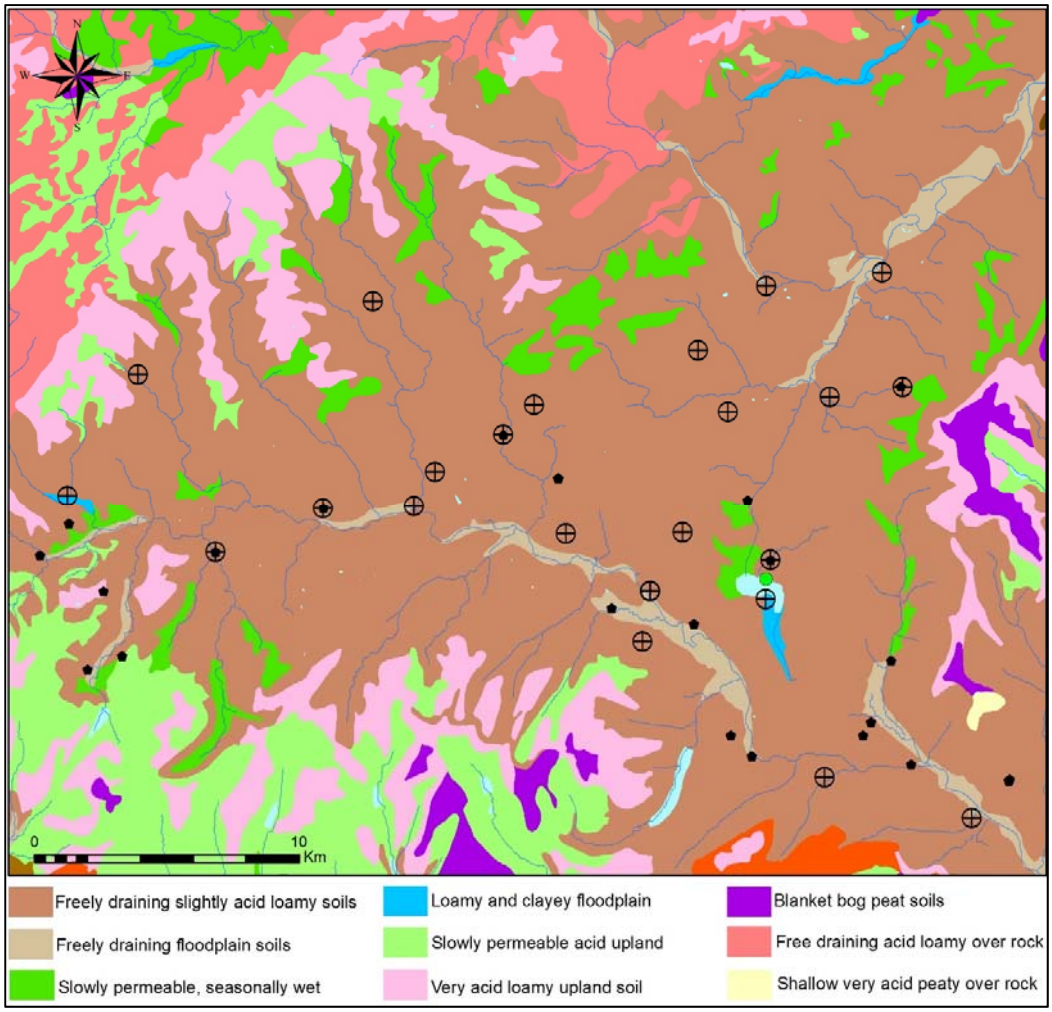


Figure 4.8: Soils and ecclesiastical sites.

The simplified soils data show that the majority of ecclesiatical sites are located on freely draining, slightly acid, loamy soils (Fig. 4.8) However, the site at Llangasty-Tal-y-Llyn, just on the south shore of Llangorse Lake, is located within a loamy and clayey floodplain, as is the site at Llywel (Figs. 4.9, 4.10).

Figure 4.9: Llangasty Tal-y-Llyn. © RCHAMW.

Figure 4.10: Llywel site, river Usk just out of frame. ©RCHAMW.

When compared with the ecclesiastical sites and inscribed stones, the geo-referenced place-names within Coe's (2001) thesis (based on land grants in the *Book of Llandaff)*, show interesting results (Fig. 4.11). The ecclesiastical sites at: Llandeilo'r Fan, Merthyr Cynog, Llandefalle, Talgarth, Llan-y-wern, Llangorse, Llangasty Tal-y-Llyn, Llangorse and potentially Llangattock are all geo-referenced by Coe (2001).

An activity hub as illustrated by point density (ecclesiastical sites, inscribed stones, pre-AD 1200 place-names), within the Llynfi catchment is demonstrated, particularly within a 5 km radius of Llangorse Lake. However, a spatial patterning of the inscribed stones either against the place-name dataset, or indeed the cantref boundaries, is difficult to see.

Caution with regards to interpretation must be exercised here: firstly, it is not the intention of the author to imply that a place-name in the *Book of Llandaff* is associated with an ecclesiastical site at the location; secondly, the sites that do not have an associated place-name should not be discounted at this stage as further research needs to be done.

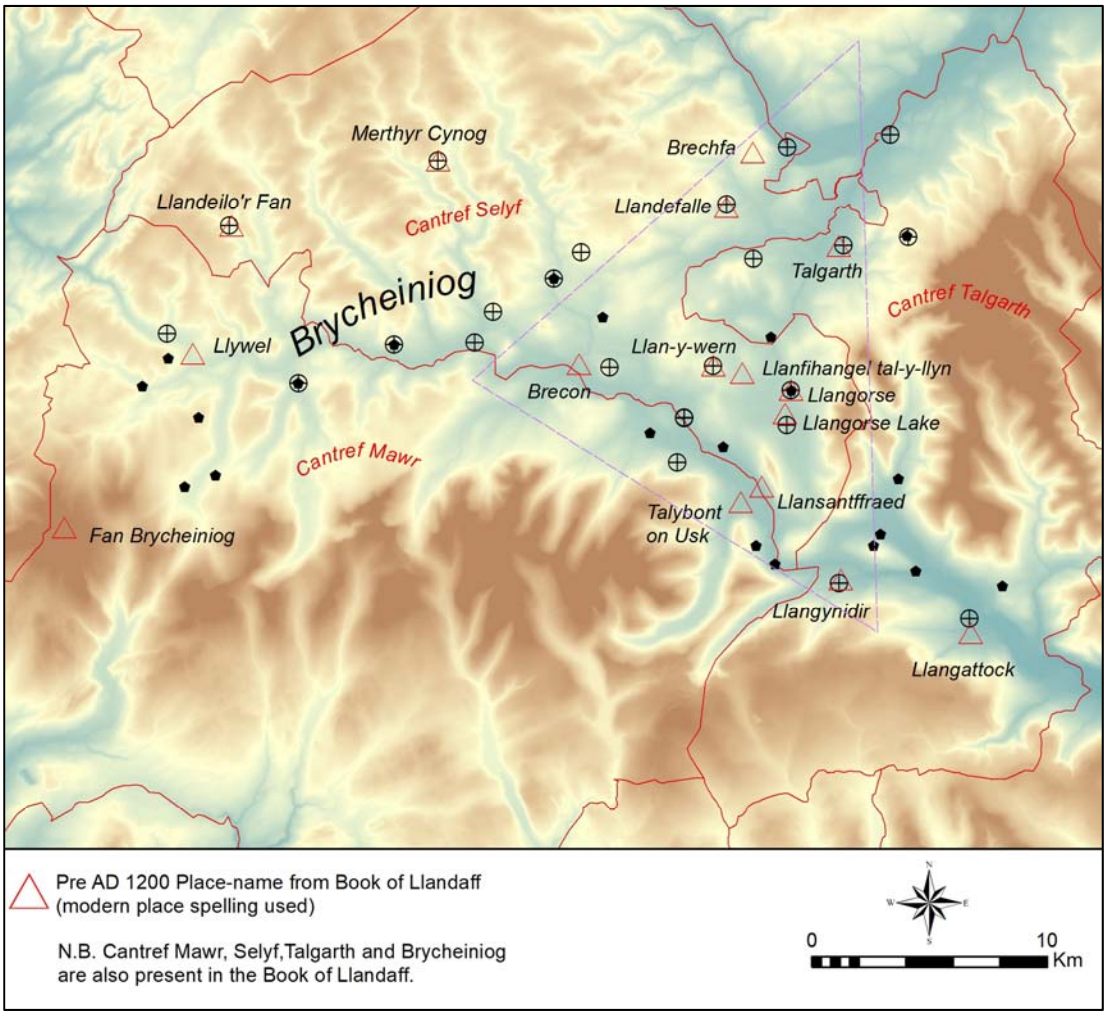


Figure 4.11: Book of Llandaff place-names within the study area.

Within the study area, 26 (including a questionable site to the south of Llangorse Lake) Norman strongholds have been identified (Fig. 4.12). These sites are early, often represented simply by the motte itself (Remfry, 1999), and were constructed soon after the Conquest of AD 1066. The distribution of the sites is not complex and there appears to be a strong relationship either between the potential boundaries of the cantrefi at this time, or to rivers and streams, or indeed both.

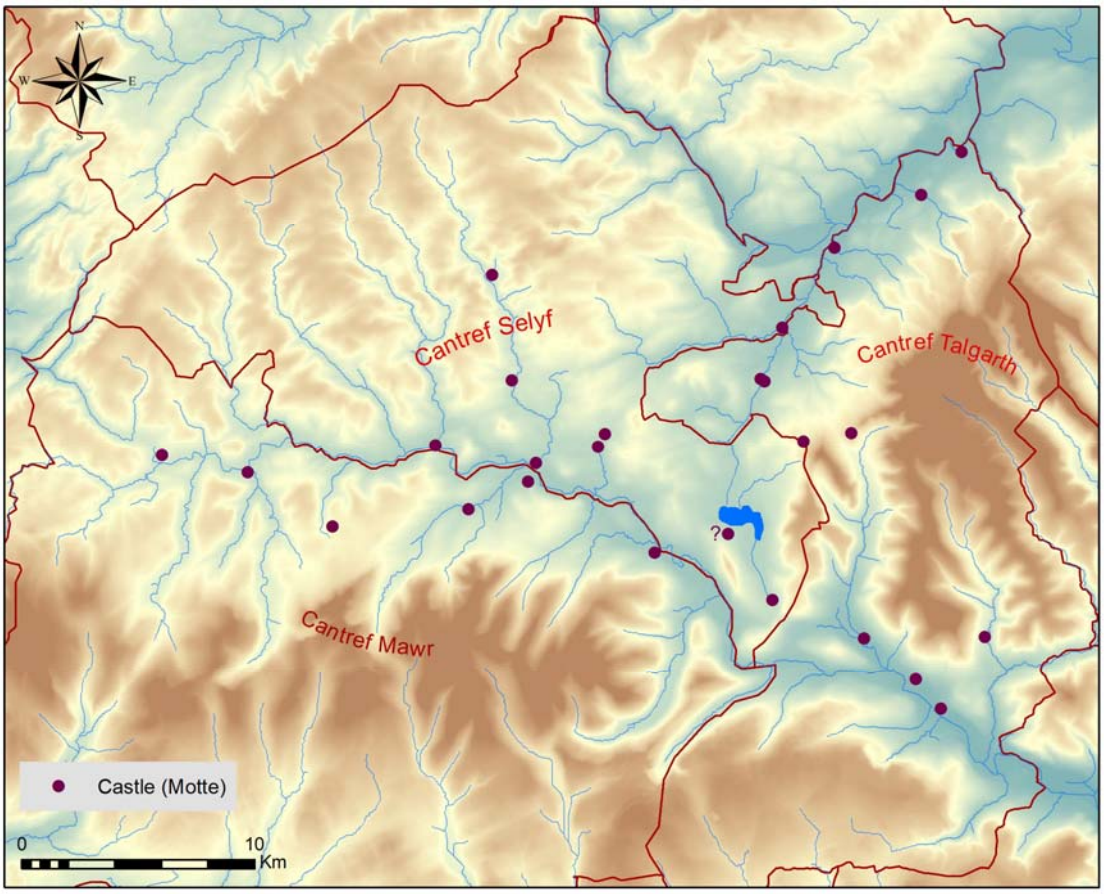


Figure 4.12: Distribution of Norman castles.

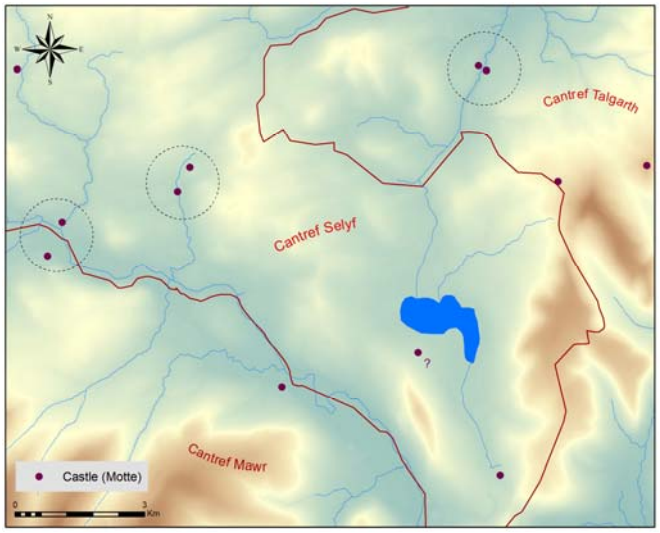


Figure 4.13: Pairs of Norman castles.

The greatest density of mottes seems to be within the Usk and Llynfi catchments and indeed adjacent in all cases to either the Usk or its tributaries. All mottes are located in lowland zones.

In three instances within the study area, two mottes are sited opposite one another over a river (Fig. 4.13). One particular pair stand out, located on the River Lynfi north of Llangorse Lake

4.2.2 Activity Hubs Discussion

4.2.2.1. Eccelsiastical sites, inscribed stones, place-names and Norman Castles

Despite the limitations inherent within each of the datasets concerning authenticity and accuracy (e.g. hagiography for ecclesiastical sites) when cross-examined against each other, and contextualised against the affordance of the landscape, some activity hubs in the landscape become evident. Generally, activity such as the siting of ecclesiastical sites, placement of inscribed stones and the construction of Norman castles is occurring in the lowland or mid-zone. A combination of acidic upland soils and more subtle land-use practices in the high ground (e.g. cattle ranching) is likely to contribute to what may be considered a 'blank space' in the upland zones.

By including the place-names data from the *Book of Llandaff* within the analysis, it is performing two roles: (1) the names offer further credibility, or corroboration, of the material culture in the ecclesiastical sites and inscribed stones data; and (2) the associated geo-referenced point of the name assists in building a picture of activity distribution. When the early medieval archaeology is combined with the place-name data and the Norman castle locations, again a stronger inclination towards lowland, valley-centred activity is witnessed. The Norman castles represent the focal point of an economic unit, as well as the acquisition and control of economic resources, and as such further understanding of inheritance traditions and the gifting of lands to the church would provide information in terms of economic units.

Coming specifically to ecclesiastical sites as community focal points in the landscape. It is appreciated that the relationship between circular and sub-circular churchyards and early ecclesiastical activity is not universally accepted (Silvester and Hankinson, 2003a). However, a study by Kissock (2014) looked at the early medieval landscape of the Gower peninsula, proposing the presence of six *llanau* based on churchyard morphology and other criteria. In this study, the results from the walk-over surveys of the most likely early medieval sites, in addition to their cross-examination with the other datasets, offers further evidence for their origins in the early medieval period.

Furthermore, the information collected in Table 4.2 and in Appendix A indicates a significant presence of saint dedications at these ecclesiastical sites with links to Brychan. At Llyswen, the church is dedicated to Gwendoline, Brychan's 11th daughter; the church at Merthyr Cynog is dedicated to the son of Brychan; at Llan-y-wern and Llangynidr both sites are dedicated to St Cynidr, Brychan's grandson. There are also some surprising dedications such as that to St Maelog, child of 6th century King of Strathclyde – this may indicate potential links with kingdoms in the north. The relationship of the *llanau* to the *llysoed* was also evident in Kissock's (2014) study. Perhaps it is worth considering that Pen-Rhiw-Wen 'hillfort' and the church site at Llyswen may also express these characteristics (Figs. 4.14 – 4.16). Previous reports have suggested early medieval elements are present here (RCAHMW, 1986; Silvester, 2007) making this a site of particular interest.

Figure 4.14: Pen-Rhiw-Wen 'hillfort'. ©RCHAMW.

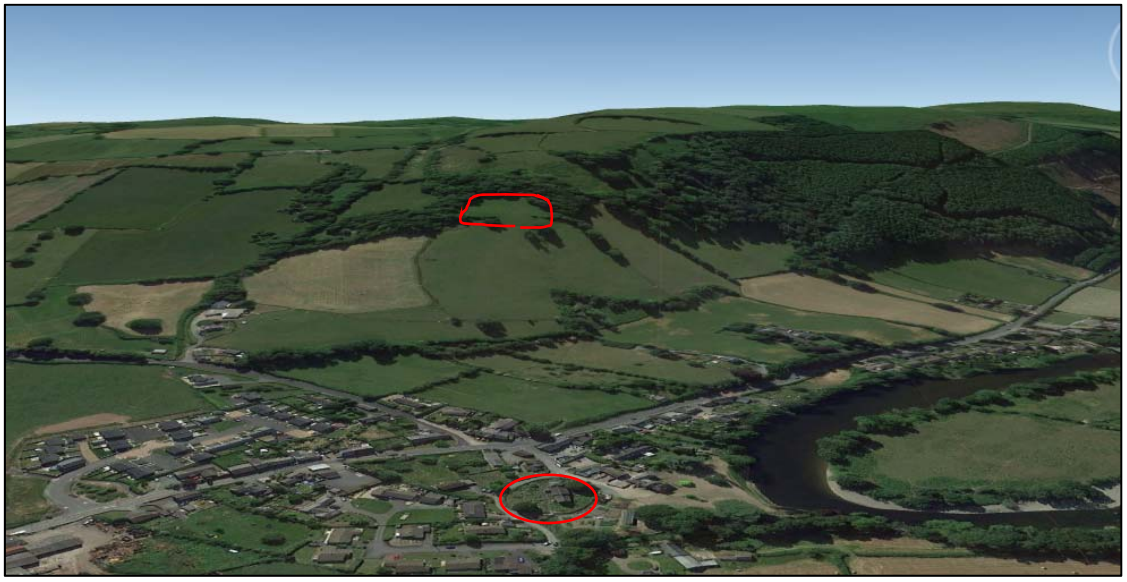


Figure 4.15: Oblique aerial view of the church and Pen-Rhiw-Wen hillfort at Llyswen. © 2018 Getmapping PLC.

Figure 4.16: Earthworks at Pen-Rhiw-Wen hillfort.

4.2.2.2 Llangorse Crannog

Located centrally within an area of considerable activity is the crannog. In the interim report (Redknap and Lane, 1994), the crannog has been proposed as a high-status site and is considered to be a complex structure. The suggestion of it as a "royal site" [sometimes "palace"] has prevailed both in academe and within the local community. This suggestion is similar to the proposition of its seasonal functionality and occupation by the King and his court for hunting and sport (e.g. see Charles-Edwards, 2013). Analysis of both the artefactual and microfossil plant remains builds the case for these narratives.

It is also worth considering that the Llangorse crannog's origins may be older and at some point played a role in the much earlier tradition of an Irish monastic hermitage (O' Sullivan, 2004). Direct links to Ireland are suggested by Redknap and Lane (1994) through analysis of crannogs which are similar in their construction and form (e.g. Crannog I, Culimore Lough). Its potential wealth, or high status, is attested to by similar sites such as Lagore in Co. Meath and Cro Inis, in Co. Westmeath (Kelly, 1991). However, numerous crannogs throughout Ireland have also been associated with craft production (e.g. Moynagh Lough, Co. Meath) and indeed have been inhabited by groups with little wealth (Fredengren, 2001).

Several factors would support the hermitage proposition for Llangorse crannog. Firstly, the crannog provides a sense/statement of conceptual isolation in which to conform to an insular and hermetic lifestyle, a characteristic commonly associated with early Christian monasticism in Ireland (Bitel, 1994; Silvester and Hankinson, 2003a). Secondly, the crannog on the north side of the lake, and what may have been a contemporary early ecclesiastical site at Llangasty Tal-y-Llyn to the south, are connected by a direct line of sight (Fig. 4.17) thus facilitating visibility, which may have been important.

Figure 4.17: Line of sight between the crannog and Llangasty Tal-y-Llyn.

The presence of a monastery has been suggested within the vicinity of the church (Silvester and Hankinson, 2003b) or at Llangorse (Redknap and Lewis 2007). However, both an evaluation of documentary evidence and a topographical survey in the environs around Llangasty have been unsuccessful in determining the presence of a monastery in this location. If there were a monastery here it would have likely been an eremitic hermitage cell, probably built in timber, possibly at the site of the present-day church (Chiu, 1999).

Figure 4.18: Ty Illtud cairn. © RCAHMW

Approximately 3 km due west of Llangasty Tal-y-Llyn is Ty Illtud (the house of [Saint] Illtud), where the orthostats and capstone of a Neolithic chambered tomb remain (Fig. 4.18) (Grinsell, 1981). There is a series of cross inscriptions and other linear designs at this site suggestive of secondary use as a hermitage.

Perhaps one of the most significant pieces of evidence in this context was the fragment of bronze carrying hinge from a small portable reliquary shrine dated to the 8th/9th century (Redknap and Lane, 1994). The presence of such an artefact, which is insular in style and similar in style to those from Ireland is not unique in its presence at crannog sites (O'Sullivan, 2004).

There are of course counter-arguments to this proposition. The evidence for the crannog's royal status is fairly strong prior to its destruction in AD 916 by the army sent by Aethelflaed (Campbell and Lane, 1989). However, there may have perhaps been a twinned royal and ecclesiastical site here – linking the crannog to the site at Llangasty. It is also possible that the reliquary fragment may have been used by the king or the household priest who, according to Welsh law, was a routine member of the royal household (Pryce, 2000).

4.2.2.3 Aberyscir

The transition of Brycheiniog from late Roman administration in the mid 4th century to the early medieval kingdom of Brycheiniog in the 5th century poses an ongoing question. Aberyscir (Fig 4.2; 4.19) may be the place where some of the principle events of the century AD 350-450 may be illustrated. It is here that a range of archaeological, literary and place-name data comes together in a significant way. A Roman fort, Y Gaer, was still in service of some kind in the late 4th century (Hankinson, 2011) and stood at the intersection of at least five Roman roads. Principle to these research concerns is a potentially large *vicus* of 10 ha (Hankinson, 2011) which one might usefully see as a ' town' of sorts. A refortification by Theodosius after AD 367 may have been augmented at a still later date in the sub-Roman period consisting of blocking the south and east gates and the strengthening a significant length of the general defensive circuit (Burham and Davies, 2010).

There are other indicators for a transition century at Aberyscir. A church site (dedicated to St Cynidr, Brychan's grandson) which has plausible origins in the early medieval period lies less than 200 m from the fort and *vicus*. 500 m to the east and overlooking the fort, *vicus* and churchyard is the unexcavated hillfort at Coed Fenni Fach. Aberyscir overlooks the parish of Llanspyddid on the other bank of the Usk and it is at Llanspyddid that Anlach, the father of Brychan, is reputedly buried (Thomas, 1994: 137-141). As a boy, Brychan also "tarried at

Benni" [Fenni Fach ~ 0.5 km from Aberyscir] for 7 years' while schooling with Drichan (Thomas, 1994:138). Aberyscir is worthy of considerable further research and it seems reasonable to propose Aberyscir as an early medieval Welsh-Hibernian princely stronghold and administrative centre possibly pre-dating the rise of Brycheiniog as a kingdom.

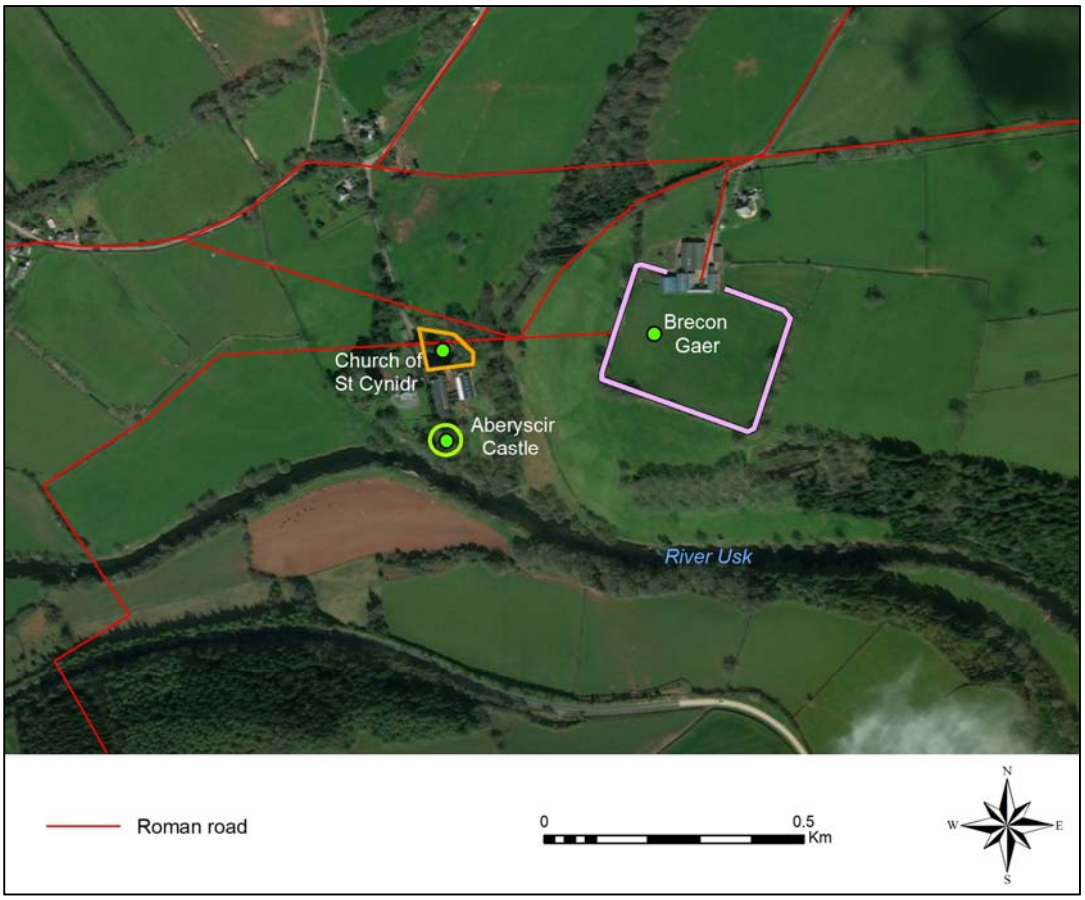


Figure 4.19: Aberyscir: The Gaer, the church, the castle.

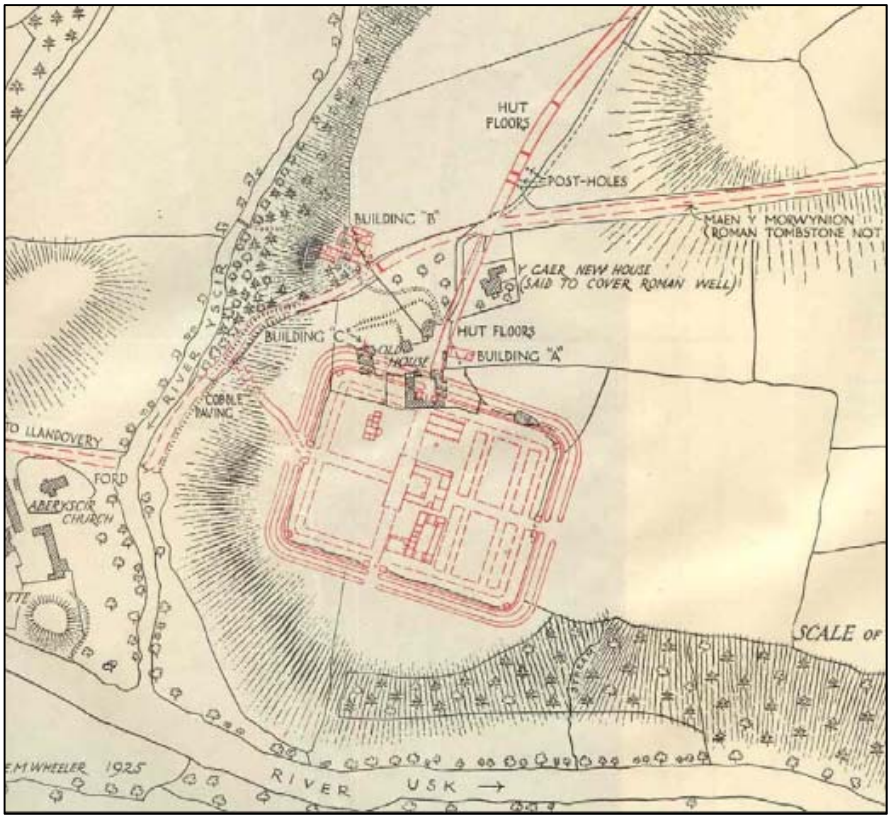


Figure 4:20. Interpretive plan of Brecon Gaer, after Wheeler (1926).

4.21: Geophysical survey around Brecon Gaer showing the vicus © Welsh Assembly Government.

4.3 Networks - Roads and Rivers

4.3.1 Networks – Roads and Rivers: Results

All of the ecclesiastical sites and inscribed stones lie within 1 km of a watercourse (Fig. 4.22). The siting of early ecclesiastical sites in terms of their proximity to water, has been the subject of examination in England (e.g. Pearce, 2012, for Cornwall). Morris (1989) notes the need for water supply to conduct a range of activities: baptism, ritual ablutions and well as the every-day needs of the priest. There is also the question of patterning - in the case of Llanelieu and Talgarth, both sites are located along the same stream. It would be interesting to see if this characteristic is repeated elsewhere.

Proximity of ecclesiastical sites and inscribed stones to Roman roads is also interesting (Fig. 4.23). Nine of the ecclesiastical sites are located immediately adjacent to a Roman road; two of these sites also contain inscribed memorial stones (n.b. the dataset used to create the network of Roman roads contains both confirmed and potential trajectories). The proximity of Norman castles is equally compelling (Fig. 4.24). In all instances castles were within 1 km of a watercourse or body of water and there is also a marked association with Roman roads. While there are some outliers, there would appear to be a strong link between the siting of Norman castles and both features.

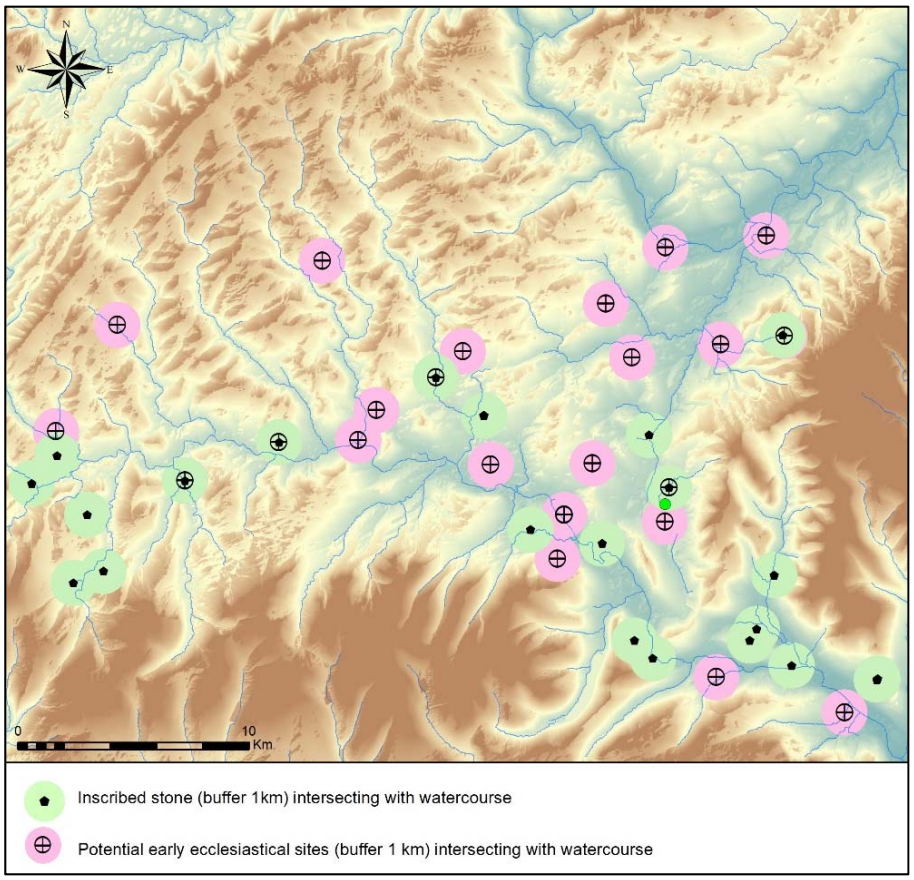


Figure 4.22: Proximity of inscribed stones and ecclesiastical sites to watercourses.

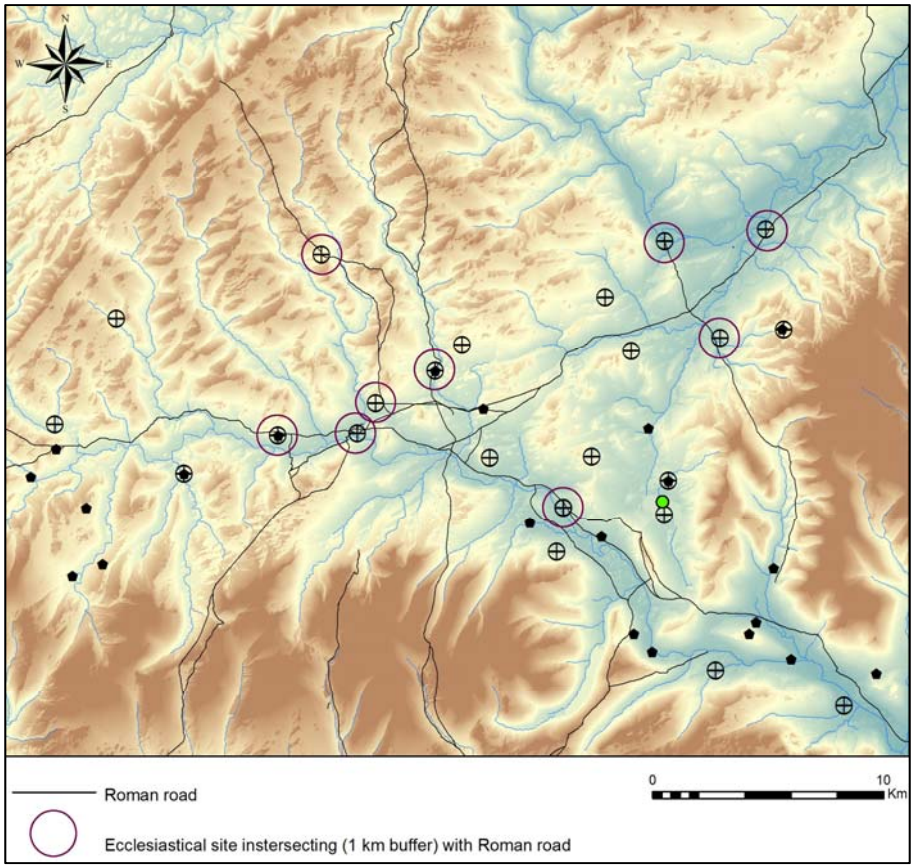


Figure 4.23: Proximity of ecclesiastical sites to Roman roads.

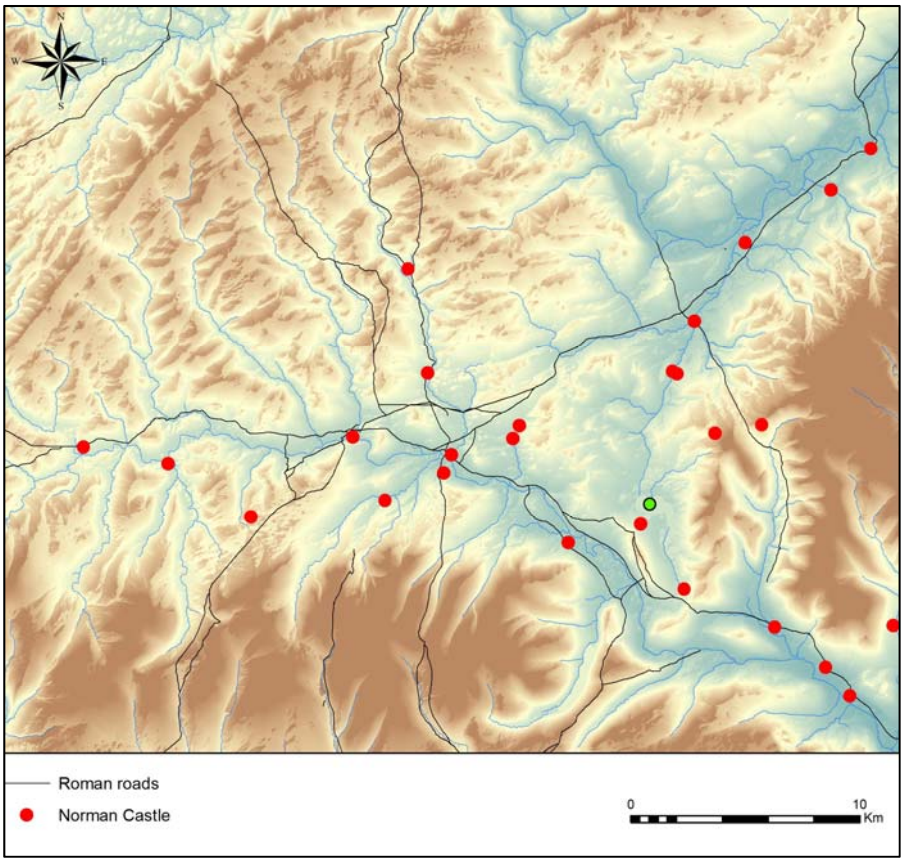


Figure 4.24: Proximity of Norman castles to Roman roads and watercourses.

4.3.2 Networks – Roads and Rivers: Discussion

The results make a case for the continuity of Roman road use throughout the early medieval period and certainly until the Norman invasion. It is not unreasonable to suggest that these roads formed some of the principal routeways within the kingdom for movement and transportation of goods. In particular, the Norman castle pair along the River Llynfi, Tredustan castle and Waynard's castle, which may be contemporaneous (Coplestone-Crowe, 1993), are particularly intriguing. There is no bridge there today and no evidence of an earlier one in the HER. It is possible that these castles were placed here to control the resources offered by Llangorse Lake and this is discussed in the following section.

Equally, the rivers as routeways for passage and trade are suggested in the analysis of these data. The 'river-centric' nature of medieval communities and territories is well documented (e.g. Draper, 2004; Baker and Brookes, 2013; Tompkins, 2016) and it is interesting to note that the data would suggest that this is also the case in Brycheiniog. The Roman tradition of utilising river ways for the importation of goods is well documented and indeed the Roman fort at Usk was supplied with a variety of Mediterranean pottery and commodities between the 1st and 4th centuries (Arnold and Davies, 2000). It is possible that this tradition continued into the early medieval period.

When considering the rivers of this region, we must move away from fixed notions of either 'navigable' or 'non-navigable' waterways. Rather, it is a matter of considering the type of crafts that were likely suitable, not only for the acquisition of the lacustrine and riverine resources, but also for their transport and distribution. This naturally works in reverse and the Roman quay at Caerleon, adjacent to the River Usk, is a reminder of this (Boon, 1978).

This raises interesting questions about the extent to which the Rivers Wye and Usk were used for navigation and for the import/export of goods, a tradition which has only recently ended. River Wye barges were in use until the late 18th century (Fig. 4.25) (Hereford Museum, 2018). These were in use at least as far upstream as Hay on Wye and the site at the Roman fort at Clyro (Fig 2.2). Similarly the industry of coracle making and their use on the River Wye only died out a century ago (Fig. 4.26). Coracles are traditionally made of willow, a key resource known through palaeoenvironmental data to have been available around Llangorse Lake (see discussion in next section).

Figure 4.25: An 18th century River Wye barge. © Hereford Museum.

Figure 4.26: River Wye oval coracle c. 1910. © Hereford Museum.

Two historical sources are of relevance to this discussion both of which are cited in Richards (1960):

> The earlier reference is by Gildas (*c.* AD 500) who speaks of the terrible hordes of Scots and Picts eagerly coming forth in their tiny crafts across the Irish Sea [*emegrunt certatim de curucis quibus sunt trans tithicam vallem evecti…tetri Scottorum Pictorumque greges]*. Richards (1960) interprets these 'tiny craft' as coracles.
>
> Secondly, when writing of the region in AD 1191, Gerald of Wales in *Itinerarium Cambriae* makes an interesting reference to rounded, small boats covered with raw hides, and notes that the fishermen, in going from one river to another, carry these boats on their shoulders (Giraldus Cambrensis Chapter XVII, 1894; 1978).

Figure 4.27: Llangorse log boat. © Brecon Museum.

The Llangorse log boat find (Fig. 4.27) in 1925 was dated to c. AD 814 (McGrail and Switsure, 1975). However, due to the possibility of contamination, no reliance can be put on the date of the canoe (Campbell and Lane, 1989). While this log boat has practical applications in a lake environment, its suitability as a river craft seems questionable.

A discussion of watercraft is by no means a digression in the context of Llangorse Lake, because when the waterways of the Kingdom are considered in terms of their potential value in supporting its economy, and indeed as the conduits for international trade and exchange of goods, this becomes a necessary and important shift in perspective (Fig. 4.28). Access to and from Llangorse Lake via the River Llynfi has the potential to make it the focal point of the Kingdom.

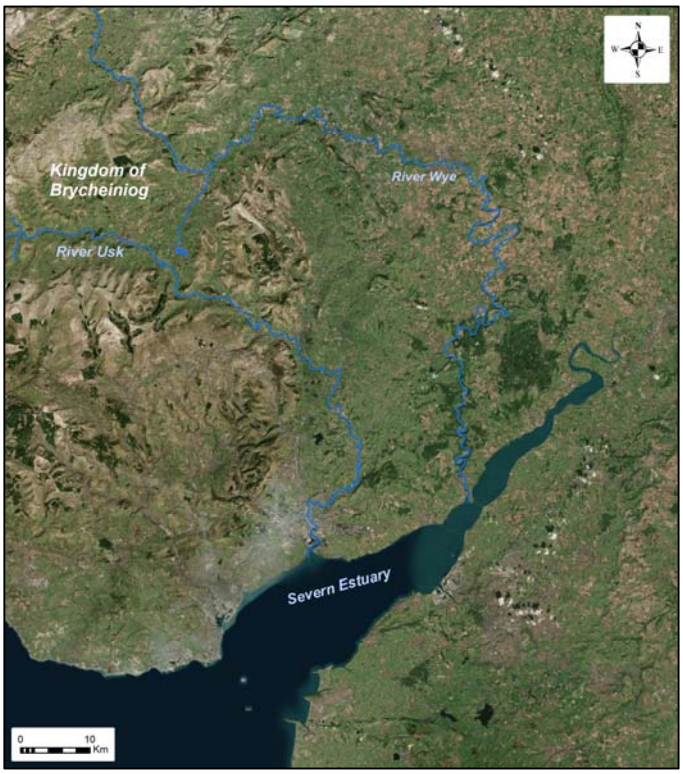


Figure 4.28: The kingdom and its connection to the sea via River Usk and River Wye.

This observation of the potential significance of river systems recognises that the Kingdom of Brycheiniog no longer presents as a land-locked microcosm high in the mountainous region of mid-Wales, but a region that is superbly positioned for the import and export of trade goods at an international level via its waterways (Fig. 4.29).

Figure 4.29: Map by Paris c. AD 1250 featuring the river ways of Britain. © National Library of Wales – digital version.

4.4 Economy: Fisheries and Agriculture

4.4.1 Llangorse Lake – An Economic Powerhouse?

Akin to Camden's statement below - that all the high ways lead to the lake - so indeed do all lines of enquiry concerning research into the kingdom of Brycheiniog. As such, this chapter will focus entirely on Llangorse Lake and its environs, seeking to address one particular question: In what ways, and to what extent, could Llangorse Lake have been a source of significant underlying economic value to the Kingdom of Brycheiniog?

"[To Llangorse Lake]…all the high waies of this shire come directly hither on every side."

William Camden, Britannia, 1587

Figure 4.30: Map of Llangorse Lake c. AD 1584.
Eel traps and possible fishing boats circled in blue. South to top. © National Archives – digital version.

Llangorse Lake or *Llyn Safaddan* (see discussion on place-name in Appendix B) is the largest natural body of freshwater in south-Wales and is the product of repeated glaciations during the Quaternary. It lies within the River Wye catchment and is fed by the River Llynfi which rises approximately 3 km to the south and drains back into the River Lynfi on its northern side. The River Llynfi joins the River Wye at Glasbury, approximately 10 km NNE of the lake. The lake has a maximum depth of approximately 7 m (Fig. 4.31) with an additional 12 m of sediment at its deepest point. It lies centrally within what has been proposed by Thomas (1994) as the 'heartland' of Brycheiniog and is one of many locations in Wales which holds considerable potential for understanding the archaeological and palaeoenvironmental history of the landscape (Rees, 1997).

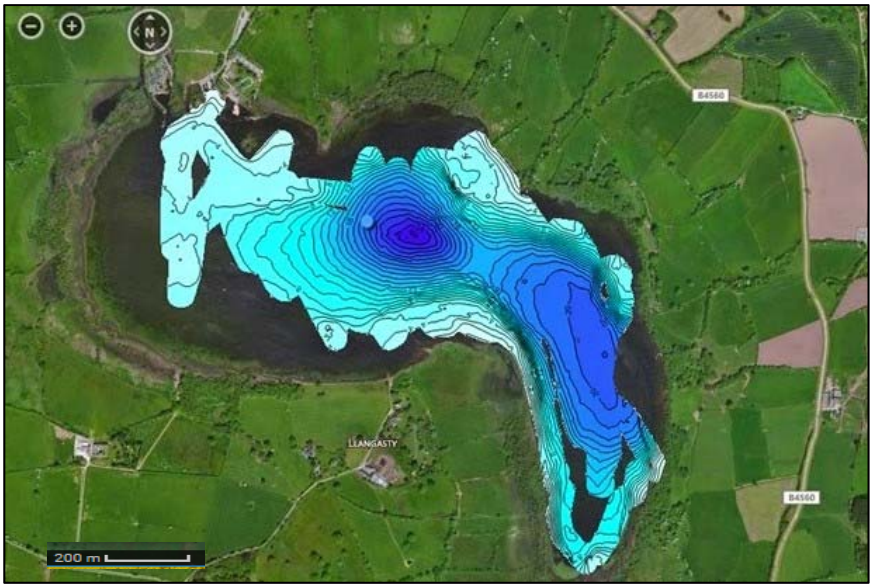


Figure 4.31: The bathymetry of Llangorse Lake (sonar) © Rob Appleby-Gouldberg

Fortunately, some research has been carried out to establish the late Quaternary history of the lake (Jones *et al.,* 1978; 1985; Chambers, 1999). Using data from sediment cores, the studies detail the conditions of the catchment during the Holocene, before going on to show how human activity has influenced lake sedimentation and ecology. Pollen analysis of the cores suggest significant human impact on the catchment during the Neolithic, possibly characterised by a diversity of woodland communities, through the Bronze Age and Iron Age resulting in an increased sediment accumulation rate (Chambers, 1999).

During the period 2000 BP – AD 1700, there is a marked change in sediment stratigraphy possibly indicating widespread tree clearance and cultivation of catchment soils. Pollen analysis indicates the presence of *Secale* (rye grass) and indeed the bread group of *Cerealia*-type indicators which builds the case for increased agricultural activity in the area. Intermittent peaks of *Plantago lanceolate* (ribwort plantain) and *Compositae Lig.* (dandelion) are present which is increasingly accompanied by *Rumex* (sorrels, docks) and *Spergula arvensis* (corn spurrey). In summary this period signalled a time of settled agriculture and potentially widespread cereal cultivation in the catchment (Chambers, 1999).

The plant microfossil remains obtained as part of the crannog excavation (1989-1993) would seem to suggest that the inhabitants of the site had access to free-threshing naked wheat, along with barley, oats and rye – all of which would have grown in the vicinity of the lake, or alternatively, were delivered to the lake from areas more suitable for cultivation (Seaman, forthcoming a). It is likely then, that the palaeoenvironmental data combined with landscape references in Charter 146 of the *Book of Llandaff* concerning the 'Llan-gors' estate, indicate that the medieval economy of Brycheiniog focused on mixed agriculture – the lowlands providing zones for arable, pasture, meadow and woodland (Seaman, forthcoming a) and the uplands providing summer grazing (Owen, 1991).

What is of particular interest to this research is the lake's economic resource as a fishery, and indeed the flora resources present in the shallows which may have facilitated a range of domestic and industrial applications. Several references have been made to the fishing economy and fishing rights, but none of these gives a sense of quantifiable value. A brief examination of the Domesday Book (AD 1086) for fisheries along the Wye in England illustrates another key problem – although fisheries are clearly a valuable economic asset (e.g. see Domesday entry for Sarnesfield, Herefordshire), they are often simply listed for example, as "1 fishery".

In Gerald of Wales' *Itinerarium Cambriae* (AD 1191), which is first-hand and contemporary, he noted the presence of 'supplies plenty of pike, perch, excellent trout, tench and mud-loving eels for the local inhabitant' (Thorpe 1978). Fish traps are also present in a partial estate map of AD 1584 (Fig. 4.24); this is briefly introduced by Seaman (forthcoming a). Remarkably, the excavations of the crannog by Dumbleton (1870) show very few fish bones in the assemblages however horse, pig, cattle and sheep bones were present. Furthermore, the 1989-1993 seasons overseen by Redknap and Lane (1994) again saw remarkably few fish bones in the assemblages. But, perhaps this is more a matter of lost evidence at the crannog by natural processes or indeed comes down to the anatomy of fish that may have been present such as lampreys (e.g. cartilaginous).

As McDonnell (1981) so pragmatically puts it, lake and river fish have been a food source since the remotest of times. However, there is scarce work by scholars interested in the early medieval period in Europe that has focussed in on fisheries from an economic resource point of view (Hoffmann, 1996). Evidence from Starr Carr and Costa Beck in Yorkshire, demonstrates that local stocks of migratory species were harvested throughout prehistory (e.g. bream), as well as seasonal or migratory ones such as eels. Eels particularly, were so prolific by the time of the Domesday survey that they became the standard measure of a fishery's value (McDonnell, 1981).

Eel was the cheapest fish and likely to be consumed by the entire spectrum of society. They were so common that they were used as a form of currency to pay rent or tithes and often counted in batches or sticks of 25. A mid-12th century statue from Ramsey Abbey shows 1,000 eels valued at 6*s* 8*d* (McDonnell, 1981). By the Middle Ages the fishing industry was already a recognised asset for landowners, and these are often listed in Anglo-Saxon charters. These traditions are replicated at a much smaller scale throughout the Middle Ages as demonstrated by the abundance of manorial fishponds in the United Kingdom (see Aston, 1988).

Present in the lake today are pike, perch, roach, bream, tench, eels and lampreys. The eutrophic conditions of the lake, and indeed the connection to the Rive Wye via the River Llynfi are ideal for all present species. The River Llynfi, where it rises to the south of the lake from its source, and drops gently into the lake after a passage of approximately 3 km is an ideal spawning ground for lampreys. Freshwater eels, with their habit of catadromy, are thus able to spawn in the sea and then access the lake via the Severn Estuary to the River Wye and on to the River Lynfi until they grow into elvers and finally mature. It is at this stage that the eel then makes its way back to the sea, however in the case of Llangorse, they may be easily caught on this journey in the River Llynfi (see fish traps in Fig. 4.1).

In addition to the fish traps, Fig 4.24 may be showing the presence of two fishing boats which may indicate the practice of siene fishing. The potential use of this 'trawl' method is supported by the abundance of simple net weights made from collars of sheet lead which were recovered from all locations around the crannog (Redknap and Lane, 1994). It is worth noting that that the Romans were exploiting the lead resources of Britain soon after their arrival (Tylecote, 1964) and doubtless this practice continued.

The aquatic vegetation of the lake is also an important consideration. Present in the shallows are extensive beds of *phragmites australis* (common reed), *typha latifolia* (broadleaf cattail) and *nuphar lutea* (water lilies). Further from the lake shore were copses of *alnus glutinosa* (common alder), *salux cineria (*willow), *salix fragilis* (crack willow) (Cragg *et al*., 1980) (Fig. 4.32). While significant changes to the submerged and non-submerged vegetation of the lake have been noted (Cragg *et al*., 1980) the evidence seems to suggest that this is reductive in

nature, postulating increased abundance of resources in the past. Not only do these plants support aquatic life, but the lake and its shallows are also a haven for migratory birds and waterfowl.

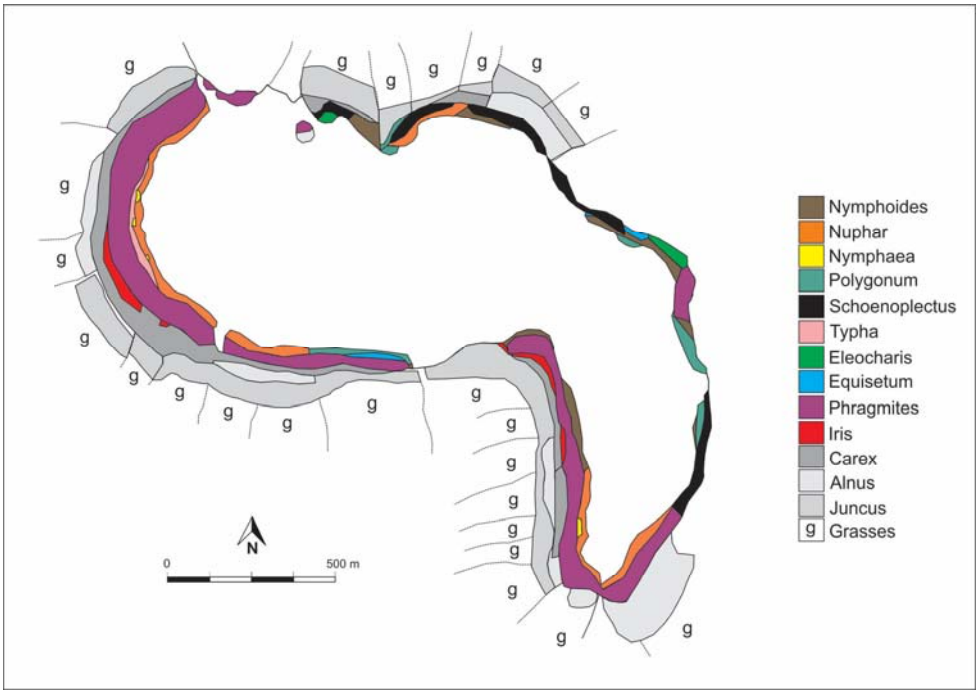


Figure 4.32: Map of non-submerged vegetation at Llangorse Lake in 1977. After Cragg et al. (1980)

With just a potential snapshot of the flora, it is reasonable to assume that the wattle revetment of willow and hazel used in the construction of the crannog (Redknap and Lane, 1994) was from a local source. Thatching, utilising the abundance of the reed resources, is likely to have been the predominant tradition for roofing within the early medieval period (Eastwood, 1951) and was selected for use on the replica crannog at Llangorse Lake. Bede makes several references to the use of thatching for roofing in his *A History of the English Church and People c.* AD 731. Reed beds need management to ensure their sustainability and maintain ecosystem balance (Ditlhogo et al, 1992), therefore it is likely that the maintenance of the reed beds at Llangorse Lake formed part of a much wider programme of resource preservation.

In the 5th and 6th centuries, declining arable and pastoral pollen indicators would suggest a major downturn in the farming economy (Edwards *et al*, 2016) and it is perhaps in this context that the importance of Llangorse Lake as a fishery began to increase. Llangorse Lake had the economic potential to support not only the aristocracy, but the general population. Religious exclusion of meat twice a week (Friday and Saturday) and during certain festivals (e.g. Lent), meant that fish were regarded as an essential component of animal consumption in the Medieval aristocratic diet (Woolgar, 2000). Early Christians avoided meat on ascetic and penitential grounds, which refracted through the monastic practices of the early medieval church and became a general obligation for believers to abstain from eating the flesh of quadrupeds for about 150 days a year (Hoffman, 1996).

Figure 4.33: Replica crannog at Llangorse Lake.

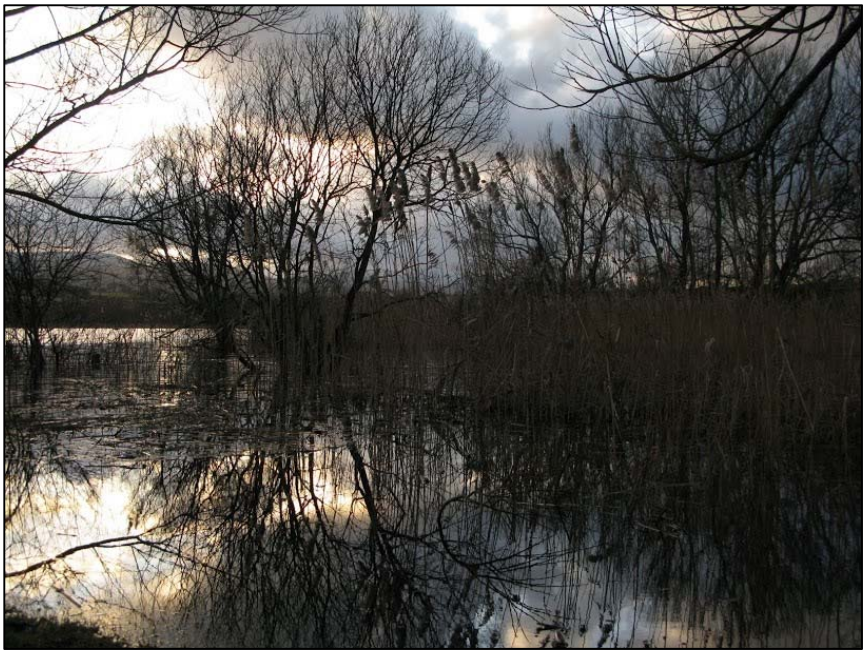


Figure 4.34: Winter vegetation at Llangorse Lake.

4.4.2 Agricultural Considerations

There has been little study into the agricultural potential of Brycheiniog, however the forthcoming publication by Comeau and Seaman *Living off the Land: Agriculture in Wales c. 400-1600 AD* will make a considerable contribution in this area. The soils map presented in Fig. 4.8 seeks to provide a general overview of the soil types within this region. Based on these data, the potential of the region's good to moderate agricultural potential has been developed by Seaman (forthcoming a) and has been reproduced below (Fig. 4.35). Given that the most productive land is found within a triangular zone which extends east from Brecon along the Usk and north up the River Llynfi catchment to Glasbury, it is not surprising that we have consistently seen early medieval activity here when examined against the archaeological evidence. There is ongoing support for Thomas' (1994) proposition of the 'heartland'.

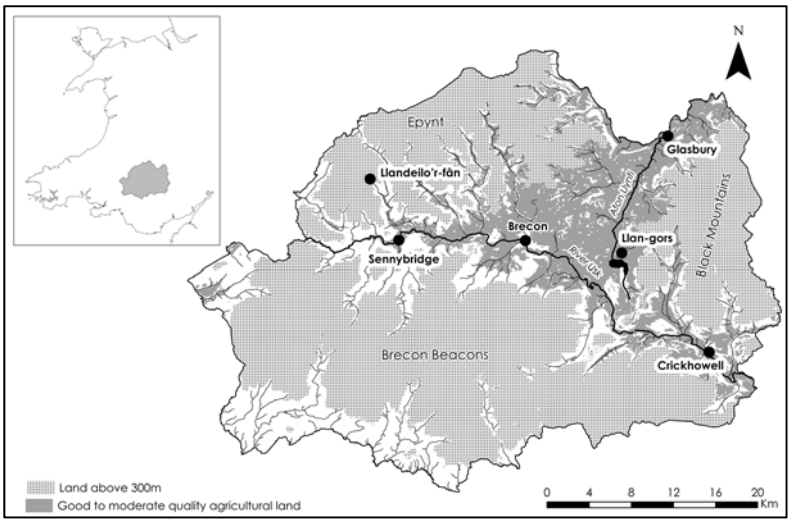


Figure 4.35: Good to moderate quality agricultural land within the upper Usk catchment. Reproduced with kind permission from Seaman (forthcoming a).

While it is not possible to go beyond a brief discussion of agriculture within this thesis, it is appreciated that the ways in which the land afforded and supported interrelated pre-Norman agricultural practices like infield-outfield husbandry and transhumance (Comeau, forthcoming) form a necessary part of understanding the economy of the Kingdom. There is also considerable work to be done to establish the extent to which the system of food-renders (Charles-Edwards, 2013) operated in Brycheiniog and the varying scales at which this happened. Evidenced within historical documents such as the *Book of Llandaff*, the *Llancarfan Charters* and the Welsh Lawbooks, parts of these systems can begin to be established at varying scales.

While land was usually valued in terms of its land renders, the "accoutrements of an aristocratic mode of life" would have been valued in cattle (Charles-Edwards, 2013: 287). With cattle indicating wealth and likely providing a critical part of the economy in Brycheiniog, one is eager to look for evidence of these cattle enclosures, or *llociau*, in the landscape. Kissock (2014) defines these *llociau* as large 'fossilised' enclosures within the landscape, sub-circular in shape, marked by boundaries and with access to running water. While it has not been possible to conduct an research into this particular area, this is of interest for further work.

4.5 A Consideration of Boundaries

This research would be incomplete without a consideration of a kingdom boundary – this is however done with some unease given that the boundaries of Brycheiniog are not defined within early historical documentation, or clearly identifiable through the archaeology. Therefore, a theoretical consideration of boundaries through the lens of psychology may offer some insights.

The physical spatial enclosure of a boundary, as presented by Higuchi (1988: 182-189), offers a physical and psychological mechanism by which human existence may be protected. The types of natural boundaries within the landscape that best fit this ideal are: mountain chains, which both shut off view yet have high visibility; and rivers, or bodies of water. Applying this concept of boundaries to archaeology, Lightfoot and Martinez (1995), suggest that the following be taken into account when considering boundaries and frontiers: that models of culture do not treat boundaries as passive recipients of core innovations; avoid the over-reliance on the use of macro-scales of examination; and treat with caution the apparent presence of "sharp" boundaries visible in the landscape or material culture.

In the case of Brycheiniog, if considering the terrain and hydrology alone, the psychology has been applied to a simple thematic map (Fig. 4.36). In this figure, Higuchi's theory regarding natural boundaries such as rivers and mountain chains have been marked; while this is an interesting exercise it is entirely subjective. However, when compared against historical boundary maps (Fig. 4.37) such as the cantrefi maps and the AD 1578 map of Brecknock by Christopher Saxton (Fig. 4.38), some correlations can be seen. It is also worth recalling that the majority of inscribed stones would appear to be sited along the River Usk. With the river Usk forming a boundary between Cantref Selyf and Cantref Mawr, might we be seeing an illustration of some of the inscribed stones acting as boundary markers or grants within Brycheiniog? Further research needs to be done.

The rivers offer the cleanest alignment with the cantrefi and Brecknock county map boundaries, clearly seen at the River Elan and along the River Wye. The River Usk is also in fairly clean alignment with the southern boundary of Cantref Selyf. The relationship between the mountain ranges and the mapped boundaries is less clear, however there is a suggestion of correlation with the northern boundary of Cantref Selyf and the Epynt mountain range. While rivers form distinctive lines in the landscape, the uplands are difficult to define.

The point being made here is fairly straightforward. Christopher Saxton's map of AD 1578 and the boundary of Brecknock before its dissoultion in 1974 are clearly very similar. This illustrates a continuity of a regional unit of almost 400 years. This raises interesting questions about how deep these ideas of territoriality go. Tacitus (*c.* AD 56 -120) speaks of tribal landscapes in Wales in his Annals; the two largest being the Silures in the south-east and the Ordovices throughout mid Wales (Todd, 2007). The Silurian territory in particular, is thought to occupy the upper reaches of the Usk (Cunliffe, 2005: 207). While speculative, it is possible that these ancient broad-scale concepts of territory and landscape within the region of mid-Wales have endured into living memory.

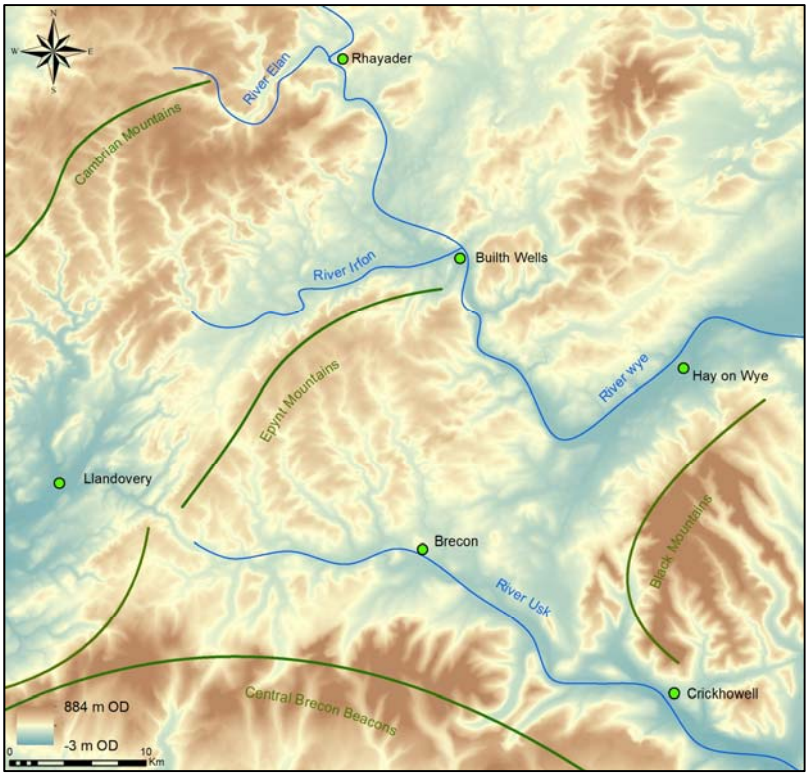


Figure 4.36: Thematic map applying boundary psychology to major rivers and mountain ranges in the wider study area.

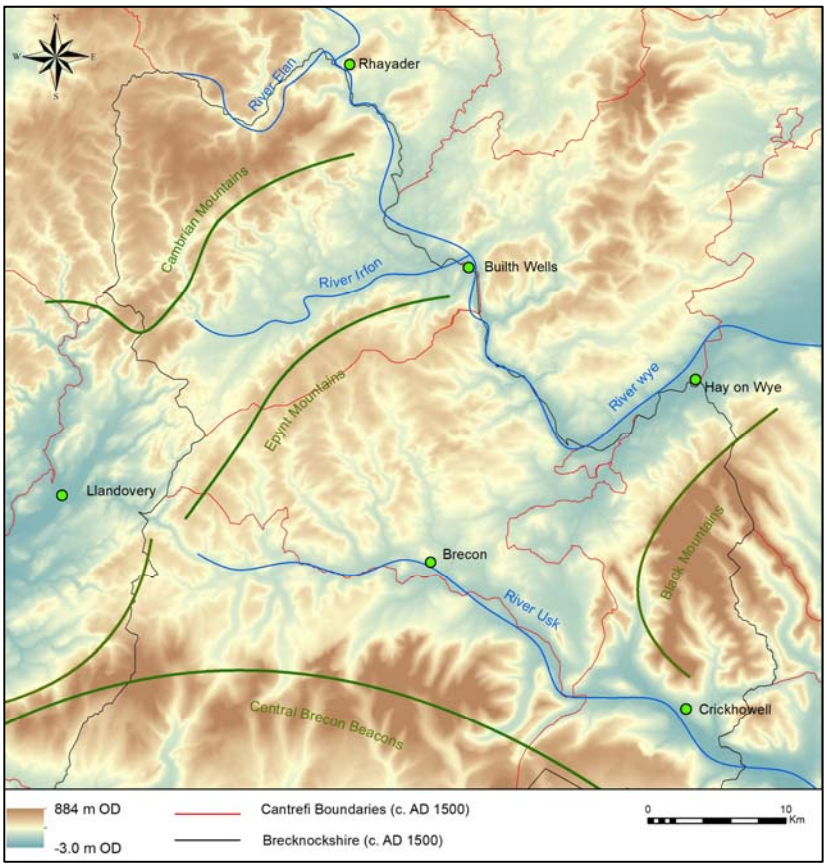


Figure 4.37: Thematic map applying boundary psychology against cantrefi and Brecknockshire.

Figure 4.38: Christopher Saxton's map of Brecknok (AD 1578). © National Library of Wales (digital version).

The following series of photographs (Figs. 4.39 – 4.42) step away from the Cartesian view, and offer the human perspective of natural landscape boundaries instead. The mountains impress feelings of enclosure, wherever one chooses to roam, and are the principal points of navigation. The rivers are full and wide, and in most instances, even in the summer, safe fording is not possible without a bridge; they cut through the landscape dividing it, quite naturally. These photographs offer the reader a visual impression of this landscape, and through them, the candidates for boundaries of the region are, hopefully, imparted.

Figure 4.39: The River Elan rising to the east of Rhayader, looking north-east, summer.

Figure 4.40: Black mountain range looking south-west, Mynydd Troed in the distance, spring.

Figure 4.41: The central Brecon Beacons from Battle, looking south south-west, winter.

Figure 4.42: The River Wye at Glasbury, looking upriver towards the mouth of the River Llynfi, summer.

CHAPTER FIVE

General Synthesis and Recommendations

5.1 Introduction

This Chapter addresses RQ 4 and critically evaluates the extent to which the methodology, results and analysis have been successful in working towards a characterisation of the Kingdom of Brycheiniog in the early medieval period. Equally, this chapter presents a general synthesis of the findings within the context of the ongoing research framework for the archaeology of early medieval Wales (Edwards *et al*., 2005; 2016). This chapter will conclude by drawing from both the critical evaluation of this research, and its contribution to the wider research framework, by presenting recommendations for further enquiry.

5.2 The Methodology – A Critical Review

Significant problems existed within the secondary data that necessitated ongoing mitigation – the principal remediation for these problems was to not focus solely on one dataset, or one category of material evidence. With so little archaeological and documentary evidence apparently available for the early medieval period, this scenario presented significant opportunities to develop and experiment with a methodology that was firmly framed in the cross-examination of a suite of archaeological datasets. Furthermore, this methodology also embraced an interdisciplinary approach through which to consider the natural affordance of the landscape, again tempering the reliance on material evidence alone.

The apparent paucity of early medieval archaeology in Wales, and the problems associated with its identification, was highly visible within the HER (Archwilio). Complexities concerning site reuse, moved/absent/eroded archaeological remains, and conflicting excavation reports were just some of the problems encountered. Therefore, it was necessary to consult a range of sources simply to generate the datasets for use in this thesis, and indeed new excel spreadsheets for use in the GIS environment had to be created. The methodological framework dictated selectivity in the datasets used – with a bias towards sites and monuments that would likely yield the most meaningful results concerning activity hubs, networks (rivers and roads), and economic potential. The research also gravitated more towards gaining an understanding of kingdom formation and environmental affordance in the 5th century, rather than unpicking later historical sources such as the charters present in the *Book of Llandaff* or the Welsh Lawbooks to establish details for specific land units in the later centuries.

The scale(s) at which the character of the kingdom was considered, and the ways in which the methodology addressed this, was given relentless thought. In a region/period which is under-examined through the lens of landscape archaeology, the dichotomal tensions that existed between seeking broad scale understanding (e.g. the Upper River Usk catchment) and obtaining small scale evidence (e.g. site specific) was ever present; the detail could not be supported without context, and the context necessitated the presence of the detail. Achieving a general balance within this thesis has been successful in part, resulting in a baseline for further research at a variety of scales. However, focussing in on one of the key areas of activity identified, or a few comparatively, has the potential to reveal patterns and processes of socio-economic organisation which are not visible at larger scales.

The interrogation of datasets through which to examine the extent of contextual meaning was also a critical part of the methodology. For instance, inquiry into the slope, aspect and elevation

of the potential ecclesiastical sites was not particularly fruitful – results showed limited patterning in this area with regards to distribution, and no obvious criteria behind siting for these proxies. However, in contrast, the interrogation of the datasets to establish networks through proximity analysis, e.g. waterways and extant Roman roads, produced considerably insightful patterning. The peaks and troughs of meaningful results are a direct symptom of limited baseline evidence in this region through the lens of landscape archaeology, thus the fluidity of the methodology mitigated this to a positive degree.

5.3 Wider Implications of Research: The Archaeology of Early Medieval Wales

In 2016, the research framework of the archaeology of early medieval Wales was revisited by Edwards *et al.*, (2016), over a decade since the initial document reviewed the current state of knowledge and understanding of Wales in the period *c.* AD 400-1070 (Edwards *et al.*, 2005). This evolving framework continues to highlight the strengths and weaknesses of research into this period as well as providing ongoing prioritised recommendations for further work. Naturally, the framework is geared towards the identification/confirmation of early medieval sites through review of existing information sources, fieldwork and excavation, analysis of existing remains and assemblages and the acquisition of environmental evidence. However, there is somewhat limited discussion concerning the value of a landscape archaeology perspective and the possible application of its various techniques. This is ultimately in direct contrast to the "bottom-up" approach of this research.

Today archaeology finds itself increasingly underfunded and under-resourced (Gardner and Harrison, 2017), the natural introduction of approaches which are non-invasive, cost effective, and resource-feasible seems a logical inclusion to the framework. Where examples of similar landscape approaches exist within the discussion (e.g. Seaman, 2010), concerns arose with regards to the cost implications of testing outcome validity through survey and excavation. While the cost implications may be true in this case, it is perhaps worth recognising that the results of such studies is an outcome, and a contribution to our understanding of early medieval landscapes in and of itself.

In the area of research and discovery of early medieval sites, it is important to state that this thesis has not produced any evidence of new sites; it was not the intention of this research to do so. Rather, it has perhaps strengthened the case, certainly in the context of ecclesiastical sites, for the origins of existing archaeology to be linked to the early medieval period. Furthermore, this research has highlighted areas of activity through progressive and regressive analysis which ultimately increases the opportunity for precision in forthcoming work. In two instances, this research makes the case for Aberyscir and the Pen-Rhiw-Wen at Llyswen to receive further examination as settlement sites within an early medieval context. This research makes the case that the potential of these sites has yet to be fully realised.

In the area of economy, land-use and the exploitation of landscapes and natural resources, this research has only been able to construct a limited argument in two areas: the value of Llangorse Lake in terms of a fishery and its natural resources, and also the agricultural potential of the wider region. The author has been explicit throughout regarding the difficulty in both discerning the implications of this research, and indeed pin-pointing the affordance to the early medieval period. It is widely agreed that fisheries played a considerable role in the later Middle Ages, yet the origins of this efficient aquaculture tradition are grounded in the early medieval period, just at different scales and in different environments. Therefore, the value of Llangorse Lake as an economic resource cannot be overstated and is a fundamental component to our understanding

of the Kingdom and the region; it is surprising that this topic has received so little attention to date.

As highlighted in the first section of this Chapter, analysis of potential early ecclesiastical sites and their proximity to both waterways and Roman roads may be indicative of some patterning, worthy certainly of further examination. These results feed directly into the framework's recommendations concerning work to establish origins, patterns, development and chronology of early medieval ecclesiastical sites. While the siting of ecclesiastical sites in proximity to watercourses is not a new idea, the relationships between the two has been spatially presented for the first time for Brycheiniog within this thesis.

In the area of trade, this thesis has worked to markedly shift the paradigm that exists regarding Brycheiniog as a land-locked upland region of central Wales, to rather, a domain exceptionally well connected to the Irish sea-sphere at the Severn estuary via the River Usk and the River Wye. It is likely that we have appreciably underestimated the role of rivers and streams both as conduits, and indeed barriers, to movement and trade within early medieval society. There is also considerable scope in the area of underwater surveying at Llangorse Lake, with 10 m of sediment forming an anoxic environment at the bottom of the lake, the potential for unlocking our understanding of the region throughout prehistory may be revealed. The protection of Llangorse Lake as a heritage asset is necessary.

5.4 Recommendations for Further Research

The study of the Kingdom of Brycheiniog from a landscape archaeology perspective has revealed a rich ballast of subject matter and data. This is present to such an extent that it is necessary to establish parameters in which to present the following recommendations for further research. Consequently, the recommendations are presented below in the form of a compendium suitable for a body of original academic research, such as a PhD. The further research can be divided into four key stages:

1) **Creation of a suite of proxies to establish indicators of activity relevant to the early medieval period in mid-Wales.**
   The development of proxies will be based upon:
   - Pan-European examination of early medieval archaeology and traditions, with a particular focus on Ireland.
   - Placement of these secondary data into a hierarchy in order to ascertain value in application to Brycheiniog.

2) **Development of a regional dataset of potential and confirmed: Iron Age, Roman, early medieval and Norman sites and monuments (up to *c.* AD 1200).**
   The datasets should include information on:
   - Site location (topographical setting).
   - Site chronologies and biographies.
   - Existing archaeological interpretation.
   - Form and contents of any burials (examination/analysis of social/cultural indicators).
   - Site assessment and ranking against hierarchical criteria (based on proxies identified).
   - Site survey followed up with topographical and geophysical survey where appropriate.

3) **Cross-examination and analysis of datasets against the affordance of the natural landscape to establish:**
    - Areas or zones of activity, and in contrast consideration of apparent 'blank zones'.
    - Considerations of accessibility and movement within the region with regards to navigation, trade and exchange of goods, seasonal agricultural practices (transhumance), King and Court seasonal movement. Identification of access points to wider networks.
    - Identification of potential 'high-production' zones, or sites, in relation to economic value (agriculture, fisheries) and natural resource exploitation (site catchment analysis, proximity analysis). Regressive analysis from later Medieval Marcher Lord Demsene, Manors and Granges.
    - Predictive modelling to identify early medieval sites (particularly secular in nature).
    - In-depth analysis of all relevant land charters and historical documentary sources to aid in regressive analysis of land systems and administration.
    - Synthesis of cultural/societal indicators through burial goods (if present) and other material remains.
    - A collation and analysis of data relating to all of the palaeoenvironmental research in the region to date to establish an environmental chronology.
    - Relevance and presence of the trio: *llysiau*, *llanau* and *llociau* in the landscape; evidence within later parish maps.

4) **Synthesis of findings within wider context of early medieval archaeology in Wales**
    - Comparative study of other early medieval kingdoms in Wales and placement of Brycheiniog within this wider context. Does Brycheiniog possess distinctive characteristics, and if so, what are they?
    - Building an increased understanding of Brycheiniog in terms of its contacts and relationships with other parts of Wales, England, Scotland, and Ireland in addition to further afield (e.g. the Mediterranean).
    - Development and understanding of linguistic application to the study of early medieval landscapes in Wales through consultation with Celtic languages experts.

CHAPTER SIX

Conclusions

What began as a few tentative steps towards the notion of a 5th century kingdom in mid-Wales, has blossomed into the revelation of a rich vein of archaeological enquiry capable of captivating a researcher for a lifetime. With a baseline now in place existing within the framework of landscape archaeology, the scope for further interdisciplinary analysis of the period and region is strengthened – at this end, there is now a place to begin.

Despite a paucity of documentary evidence and archaeological remains, characteristics which may be associated with the Kingdom of Brycheiniog have emerged throughout this research. Limited significantly by the scope of an MSc thesis, it has only been possible to present fragments of a considerably expansive narrative.

On the whole, the methodology has been successful in extracting some critical themes from the data, and this has been enriched by the use of multiple datasets, a notional triangulation, and their contextualisation within the affordance of the natural environment. It is in this area that a paradigm shift has occurred in the perception of, and value placement upon, Llangorse Lake and the region's rivers. While this requires further quantitative examination, it is likely that we have significantly underestimated the importance of rivers and streams as barriers and conduits of movement, trade and exchange of ideas in this landscape. Equally, the potential of Llangorse Lake as an economic bolster upon which to build political stability has also been a revelation and strikes to the very heart of trying to understand the resources available with which to support the Kingdom.

The condition, availability and nature of the data used has required constant attention throughout this thesis and bias, inaccuracies and inconsistencies have been mitigated where possible. However as stated in the recommendations for future work, it is now necessary to step back and consider the indicators of early medieval activity across a far broader geographic scale, and their implications for the future study of Brycheiniog. The chronology of data should also be expanded to include the Iron Age, with a particular emphasis on understanding the archaeology at this time in Ireland; it is likely that distinctive signatures of "Irish" influence, particularly for secular sites, already exist in the landscape but have either been misinterpreted, miscategorised or are not yet identified.

It can be argued at this stage, that in the case of Brycheiniog, the fragmentary nature of the few documentary sources that exist have perhaps contributed more towards confusion, than clarity. The documentary evidence has proven to be helpful at varying degrees throughout this research, however the emphasis has been placed on landscape affordance, rather than 12th century documentary evidence and this has been evident throughout. The importance of the *Book of Llandaff*, and indeed the Welsh Lawbooks, has in no way been underestimated. Collectively they offer insights into settlement and agriculture, in addition to archaeology, place-name evidence and the landscape fabric; their ongoing examination is recommended in any further work in this area.

It is necessary to conclude that there remains an ongoing ambiguity concerning the early medieval archaeology of the region, its links to Brychan, and the presence of a formal kingdom. However, despite the inconsistencies, examination of the activity identified throughout this thesis has worked to address this. The presence of an Irish ruling elite, and the association of

Brychan with this, is indeed indicated throughout the landscape: ogam stones, the crannog, church saint dedications, and place-names. However, the socio-economic constructs of the Kingdom, and how this evolved and changed over time, is yet to be understood.

As I write these final words I think back to my idyllic childhood spent unknowingly exploring the early medieval Kingdom of Brycheiniog. Without a concept of time, or of a deeper history, the landscape and its monuments were taken at face value through the eyes of my 5 year-old self. It has been an unexpected, yet enriching, journey to re-explore this landscape thirty years later, following in the footsteps of my father.

The ability to understand a landscape is not simply a skill, it is a gift.

Figure 6.1: Running down the Roman road from Maen Madoc; the Author, age 5.

"We shall not cease from exploration

And the end of all our exploring

Will be to arrive where we started

And know the place for the first time."

~T.S. Elliot, Little Gidding, *Four Quartets*, 1943

BIBLIOGRAPHY

Alcock, L. 1963. *Dinas Powys: an Iron Age, Dark Age and Early Medieval settlement in Glamorgan*. Cardiff: University of Wales Press.

Alcock, L. 1972. The Irish Sea Zone in pre-Roman Iron Age. In: Thomas, C. (Ed.), *The Iron Age in The Irish Sea Province*. Papers given at a C.B.A. conference held at Cardiff, January 3 to 5, 1969. London: Council for British Archaeology.

Alcock L. 1983. The archaeology of Celtic Britain in the fifth to twelfth centuries AD. In: Hinton, D. (Ed.), *25 years of Medieval Archaeology*. Sheffield: University of Sheffield.

Anderson, H. 2013. *The Return to Hill Forts in the Dark Ages: what can this tell us about post Roman Britain?* Unpublished Master's thesis, University of Wales Trinity Saint David. Available online [PDF]: http://repository.uwtsd.ac.uk/378/1/Helen%20Anderson.pdf. Accessed March 18, 2018.

Arnold, C. and Davies, J. 2000. *Roman and Early Medieval Wales*. Stroud: Sutton Publishing.

Aston, M. (Ed.) 1988. *Medieval fish, fisheries, and fishponds in England*. BAR British Series 182.

Aston, M. and Rowley, T. 1974. Landscape Archaeology: an Introduction to Fieldwork Techniques on Post-Roman Landscapes. Newton Abbot: David & Charles.

Bailey, G. 2007. Time perspectives, palimpsests and the archaeology of time. *Journal of Anthropological Archaeology 26(2),* pp. 198-223

Baker, J. and Brookes, S. 2013. Monumentalising the political landscape: a special class of Anglo-Saxon assembly site. *Antiquity, 93*, pp. 147-162.

Barrett, J., Locker, A., and Roberts, C. 2004. Dark Age economics revisited: The English fish bone evidence AD 600-1600. *Antiquity, 78(301),* pp. 618-636.

Bell, J. 1994. *Reconstructing Prehistory: Scientific Method in Archaeology.* Philadelphia: Temple University Press.

Bartrum, P.C. 1966: *Early Welsh Genealogical Tracts* (Second Edition). Cardiff: Welsh Academic Press.

Bartrum, P.C. 1993. A Welsh Classical Dictionary. Online at: https://www.library.wales/discover/digital-gallery/printed-material/a-welsh-classical-dictionary/. National Library of Wales.

Bennion, H. and Appleby, P. 1999. An assessment of recent environmental change in Llangorse Lake using paleolimnology. *Aquatic Conservation: Marine and Freshwater Ecosystems, 9*, pp. 361-375.

Binford, L.R. 1962. Archaeology as anthropology. *American Antiquity, 28*, pp. 217-225.

Bitel, L. 1994. *Isle of the Saints: Monastic Settlement and Christian Community in Early Ireland*. Ithaca: Cornell University Press.

Bond. C.J. 1988. Monastic fisheries. In M. Aston (Ed.), *Medieval Fish, Fisheries, and Fishponds in England*. BAR British Series 182.

Boon, G.C.1978. Excavations on the site of a Roman quay at Caerleon and its significance. In: Boon, G.C. (Ed.), *Monographs and Collections 1: Roman Sites*, Cambrian Archaeological Association, pp. 1-24.

Bowden, M. 1999. *Unravelling the Landscape – An Inquisitive Approach to Archaeology*. Stroud: Tempus Publishing.

Bowen, E.G. 1954. *The Settlements of the Celtic Saints in Wales*. 2nd Edition. Cardiff: University of Wales.

Bowen, E.G. 1977. *Saints, Seaways and Settlements in the Celtic Lands*. Cardiff: University of Wales Press.

Breverton, T.D. 2000. *A Book of Welsh Saints.* New York: Beekman Books.

Britnell, W.J. 1990. Capel Maelog, Llandrindod Wells, Powys: Excavations 1984-87. *Medieval Archaeology, 34*, pp. 27-96

Brook, D.L. 1988. The early Christian church in Gwent, Monmouthshire. *Antiquity, 5*, pp. 67-84.

Brook, D.L. 1992. Early ecclesiastical sites in south-east Wales; the early Christian church east and west of Offa's Dyke. In: Edwards, N. and Lane, A. (Eds.), *The Early Church in Wales and the West*. Oxford: Oxbow books.

Brooke, J. 2016. *Environmental Determinism*. Oxford Bibliographies [online]. Available at: http://www.oxfordbibliographies.com/view/document/obo-9780199363445/obo-9780199363445-0045.xml. Accessed 3 June, 2018.

Brun, P. 1995. From chiefdom to state organisation in Celtic Europe. In: Arnold, B. and Gibson, D.B. (Eds.), *Celtic Chiefdom, Celtic State: The Evolution of Complex Social Systems in Prehistoric Europe*. Cambridge: Cambridge University Press.

Burnham, B.C. and Davies, J.L. 2010. *Roman Frontiers in Wales and the Marches.* Aberystwyth: RCHAMW.

Cambrensis, G. 1894. The Itinerary through Wales and The Description of Wales. In: Thomas Wright (Ed.), *The historical works of Giraldus Cambrensis.* [Online]. London : George Bell. pp. 331-534. Available at: http://archive.org/details/historicalworkso00girauoft (Accessed 3 September, 2018).

Cambrensis, G. 1978. *The Journey through Wales and The description of Wales.* The Penguin classics. London, Penguin Books.

Camden, W. 1587. Britannia siue Florentissimorum regnorum, Angliae, Scotiae, Hiberniae, et insularum adiacentium ex intima antiquitate chorographica description. London.

Campbell, E. and Lane, A. 1989. Llangorse: a 10th-century royal crannog in Wales. *Antiquity, 63(241*), p. 675.

Campbell, E., Lane, A. and Redknap, M. 1989. Llangorse: A tenth century royal crannog in wales. *Antiquity, 63*, pp. 675-81.

Carragáin, T.O. and Turner, S. 2016. *Making Christian landscapes in Atlantic Europe – conversion and consolidation in the early middle ages*. Cork: Cork university press.

Chadwick, N.K. 1959. The Welsh Dynasties in the Dark Ages. In: Roderick, A.J. (Ed.), *Wales Through the Ages*. Llandybie: Christopher Davies.

Chambers, F.M. 1999. The Quaternary history of Llangorse Lake: implications for conservation. *Aquatic Conservation: Marine and Freshwater Ecosystems, 9(4)*, pp. 343-359.

Chapman, H. 2006. *Landscape Archaeology and GIS.* Stroud: The History Press.

Charles-Edwards. T.M. 1993. *Irish and Welsh Kinship*. Oxford: Clarendon.

Charles-Edwards, T.M. 2013. *Wales and the Britons 350-1064*. Oxford: Oxford University Press.

Childe, G. 1956. *Piecing Together the Past: The Interpretation of Archaeological Data*. Oxford: Routledge.

Chiu, S. 1999. *Llangasty, Llangorse Lake, Powys, Southeast Wales.* Unpublished Thesis. University of Bristol.

Chriost, D.M.G. 2005. *The Irish Language in Ireland – from Goidel to globalisation*. London: Routledge.

Clarke, D.L. 1973. Archaeology: The loss of innocence. *Antiquity, 47*, pp. 6-18.

Clarke, D.L. 1977. Spatial Archaeology. New York: Academic Press.

Coe, J.B. 2001. *The Place-Names of the Book of Llandaff.* Unpublished PhD Thesis: University of Wales Aberystwyth. http://cadair.aber.ac.uk/dspace/handle/2160/7770.

Coe, J.B. 2004. Dating the boundary clauses in the Book of Llandaff. *Cambrian Medieval Celtic Studies 48,* 1-43.

Comeau, R. 2012. From tref(gordd) to tithe: identifying settlement patterns in a north Pembrokeshire parish. *Landscape History, 33(1),* pp. 29-44.

Comeau, R. (forthcoming). The practice of 'in rodwallis': medieval Welsh agriculture in north Pembrokeshire. In: Comeau, R. and Seaman A. (Eds.), (forthcoming), *Living off the Land: Agriculture in Wales c. 400-1600 AD*. Oxford: Windgather Press.

Comeau, R. and Seaman A. (Eds.) (forthcoming). *Living off the Land: Agriculture in Wales c. 400-1600 AD*. Oxford: Windgather Press.

Conolly, J. and Lake, M. 2006. *Geographical Information Systems in Archaeology*. Cambridge: Cambridge University Press.

Coplestone-Crowe, B. 1993. Trewalkin and its Anglo-Norman lords. *Brycheiniog, 26*, pp. 43-49.

Copley, G. 1986. *Archaeology and Place-names in the fifth and sixth centuries*. Oxford: BAR.

Corlett, C. 1996. The Pagan/Christian transition in Ireland reflected in the burial record. *Trowel, 7*, pp. pp. 31-37.

Cragg, B.A., Fry, J.C., Bacchus, Z. and Thurley, S.S. 1980. The aquatic vegetation of Llangorse Lake, Wales. *Aquatic Botany, 8*, pp. 187-196.

Creighton, O.H. 2005. *Castles and Landscapes: Power, Community and Fortification in Medieval England* (Studies in the Archaeology of Medieval Europe). Sheffield: Equinox Publishing.

Cunliffe, B. 2001. *Facing the Ocean: The Atlantic and its peoples, 8000 BC to AD 1500*. Oxford: Oxford University Press.

Cunliffe, B. 2005. *Iron Age Communities in Britain* (Fourth Edition). Oxford: Routledge.

Dark, K.R. 1994. *Civitas to Kingdom – British Political Continuity 300-800*. London: Leicester University Press.

David, B. and Thomas, J. 2008. *Handbook of Landscape Archaeology*. Walnut Creek: Left Coast Press.

Davies, J.R. 2003. *The Book of Llandaff and the Norman Church*. Woodbridge: Boydell.

Davies, M. 1946. The diffusion and distribution pattern of the Megalithic monuments of the Irish Sea and North Channel coastlands. *Antiquity, 26*, pp. 38-60.

Davies, R.R. 2000. *The Age of Conquest: Wales 1063-1415*. Oxford: Oxford University Press.

Davies, R.R. 2009. *Lords and Lordship in the British Isles in the Late Middle Ages*. Oxford: Oxford University Press.

Davies, W. 1978. *An early welsh microcosm: studies in the Llandaff charters*. London: Royal Historical Society.

Davies, W. 1979. *The Llandaff Charters.* Aberystwyth: The National Library of Wales.

Davies, W. 1982. Wales in the Early Middle Ages. Leicester: Leicester University Press.

Ditlhogo, M.K.M., James, R., Laurence, B.R. and Sutherland, W.J. 1992. The effects of conservation management of reed beds. I. The invertebrates. *Journal of Applied Ecology, 29*, pp. 265-276

Doble, G.H. 1971. *Lives of the Welsh Saints.* Cardiff: University of Wales Press.

Dorling, P. 1999. *Excavation at St Elenud's Chapel and Well, June 1999*. Brecon Beacons National Park, Unpublished report.

Draper, S. 2004. *Landscape, settlement and society: Wiltshire in the First Millennium AD.* Unpublished doctoral thesis. Durham: Durham University.

Drewett, P. 1999. *Field Archaeology: An Introduction*. Oxford: Routledge.

Dumbleton, E.N. 1870. On a crannoge, or Stockaded Island, in Llangorse Lake, near Brecon. *Archaeolgia Cambrensis, 4*, pp. 192-198.

Dyer, C. 1988. The consumption of fresh-water fish in medieval England. In: Aston, M. (Ed.), *Medieval Fish, Fisheries and Fishponds in England*. BAR British Series 182.

Eastwood, T. 1951. Roofing materials through the ages. *Proceedings of the Geologists' Association, 62(1)*, pp. 6-20.

Edwards, N. 1996. *The Archaeology of Early Medieval Ireland*. London: Routledge.

Edwards, N. 1997. *Landscape and settlement in Medieval Wales*. Oxford: Oxford University Press.

Edwards, N. 2009. The Archaeology of the Early Medieval Celtic Churches: No. 29. *Society for Medieval Archaeology Monographs.* London: Routledge.

Edwards, N. 2013a. *The Archaeology of Early Medieval Ireland.* London: Routledge.

Edwards, N. 2013b. *A Corpus of Early Medieval Inscribed Stones and Stone Sculptures in Wales: Volume 3.* Cardiff: University of Wales Press.

Edwards, N. 2014. Wales and the Britons 350-1064. *Welsh History Review, 27(2),* pp. 368-370.

Edwards, N. 2016. New discoveries of early medieval carved stones in Wales. *Archaeologia Cambrensis, 165,* pp. 187-199.

Edwards, N. 2017. Christianising the landscape in early medieval Wales: the island of Anglesey. In: Carragáin, T.O. and Turner, S. (Eds.), *Making Christian Landscapes: Conversion and Consolidation in Early Medieval Europe*. Cork: Cork University Press.

Edwards, N., Davies, T. and Hemer, K. 2016. *Research Framework for the Archaeology of Early Medieval Wales.* Available online [PDF] at: https://www.archaeoleg.org.uk/pdf/refresh2016/earlymedrefresh2016.pdf. Accessed 3 March, 2018.

Edwards, N. and Lane, A. (Eds.) 1992. *Early church in Wales and the West: recent work in early Christian archaeology, history and place-names.* Oxbow monographs, 16. Oxford: Oxbow Books.

Edwards, N.M. and Edwards, N. 2001. Early medieval inscribed stones and stone sculpture in Wales: context and function. *Medieval Archaeology, 45,* pp. 15-39.

Edwards, N.M., Edwards, N., Lane, A., Bapty, I. and Redknap, M. 2005. Early Medieval Wales: a framework for archaeological research. *Archaeology in Wales, 45,* pp. 33-46.

Evans, E. 2003. Early Medieval Ecclesiastical Sites in West Wales. GGAT report 2003/030. Available online [PDF] at: http://www.ggat.org.uk/cadw/cadw_reports/pdfs/GGAT%2073%20Early%20Medieval%20Ecclesistical%20Sites%20Yr1.pdf. Accessed 15 April, 2018.

Figgis, N P. 1995. *Dead Men's Boats: The Early Medieval Canoe from Llan-Gors and the Sunken Dug-Outs of Wales and the Marches*. Borth: Atelier Productions.

Fredengren, C. 2001. Poor people's crannogs. *Archaeology Ireland 15(4),* pp. 24-25.

Fredengren, C. 2002. *Crannogs: A Study of People's Interaction with Lakes, with Special Reference to Loch Gara in the North West of Ireland*. Bray: Wordwell.

Gardner, A. and Harrison, R. 2017. Brexit, Archaeology and Heritage: Reflections and Agendas. *Papers from the Institute of Archaeology. 27(1).*

Gelling, M. 2011. *Place-Names and Archaeology*. The Oxford Book of Anglo-Saxon Archaeology. Oxford: Oxford University Press.

Gilllings, M. 2012. Landscape Phenomenology, GIS and the Role of Affordance. *Journal of Archaeological Method and Theory, 19(4*), pp. 601-611.

Gosden, C. 1999. *Anthropology and Archaeology: A Changing Perspective*. London: Routledge.

Graves McEwan, D. and Millican, K. 2012. In Search of the Middle Ground: Quantitative Spatial Techniques and Experiential Theory in Archaeology. *Journal of Archaeological Method and Theory, 19(4),* pp. 491-494.

Griffiths, D., Reynolds, A. and Semple, S. J. 2003. *Boundaries in Early Medieval Britain*. Anglo-Saxon Studies in History and Archaeology, 12. Oxford: Oxbow Books.

Grinsell, L. 1981. The later history of Ty Illtud. *Archaeologia Cambrensis, 131,* pp. 131-139.

Hall, D.N. and Coles, J. 1994. Fenland Survey. An Essay in Landscape and Persistence. London: English Heritage.

Hankinson, R. 2011. Brecon Gaer, Aberyscir, Powys. Archaeological Investigations: Interim Report. CPAT Report No. 1052. Available online at: http://www.walesher1974.org/herumd.php?group=CPAT&level=3&docid=301362757. Accessed 15, July, 2018.

Harding, D.W. 2000. Crannogs and island duns: classification, dating and function. *Oxford Journal of Archaeology, 19(3),* pp. 301-317.

Harris, M. 2001. *The Rise of Anthropological Theory: A History of Theories of Culture.* Walnut Creek, CA: Altima.

Harris, T. 2007. Scale as artifact: GIS, ecological fallacy, and archaeological analysis. In: Lock, G. (Ed.), *Confronting Scale in Archaeology: Issues of Theory and Practice*. London: Springer.

Haywood, J. 2001. *The Historical Atlas of the Celtic world*. London: Thames and Hudson.

Hemer, K.A., Evans, J.A., Chenery, C.A. and Lamb, A.L. 2013. Evidence of Early Medieval trade and migration between Wales and the Mediterranean Sea region. *Journal of Archaeological Science, 40(5),* pp. 2352-2359.

Hemer, K.A, Lamb, A.L, Chenery, C.A, Evans, J.A. 2017. A multi-isotope investigation of diet and subsistence amongst island and mainland populations from early medieval western Britain. *American Journal of Physical Anthropology 162(3),* pp. 423-440.

Hereford Museum. 2018. Navigation of the River Wye. Available at: https://htt.herefordshire.gov.uk/herefordshires-past/the-post-medieval-period/agriculture-and-industry/navigation-of-the-river-wye/. Accessed 5 June, 2018.

Higuchi, T. 1988. *The Visual and Spatial Structure of Landscapes.* Massachusetts: MIT Press.

Hinton, D.A., Hamerow, A. and Crawford, S. (Eds.) 2011. The Oxford handbook of Anglo-Saxon archaeology. Oxford: Oxford University Press.

Hodder, I. 1989. Writing archaeology: site reports in context. *Antiquity, 63(239),* pp. 268-274.

Hodder, I. (Ed).1982. *Symbolic and Structural Archaeology.* Cambridge: Cambridge University Press.

Hodder, I. and Orton, C. 1976. *Spatial Analysis in Archaeology*. Cambridge: Cambridge University Press.

Hoffman, R. 1996. Economic development and aquatic ecosystems in Medieval Europe. *The American Historical Review, 101(3),* pp. 631-669.

Howard, A.J. and Macklin, M.G. 1999. A generic geomorphological approach to archaeological interpretation and prospection in British river valleys: a guide for archaeologists investigating Holocene landscapes. *Antiquity, 73,* pp. 527-541.

Hughes, K. 1980. *Celtic Britain in the Early Middle Ages: Studies in Scottish and Welsh Sources (Studies in Celtic History, 2).* Woodbridge: Boydell Press.

Ingold, T. 1993. The Temporality of the Landscape. *World Archaeology, 25(2),* pp. 152-174.

Jenkins, D. 2000. Hawk and Hound: Hunting in the Laws of Court. In: Charles-Edwards. *The Welsh King and His Court*. Cardiff: University of Wales Press

Jones, F. 1954. *The Holy Wells of Wales*. Cardiff: University of Wales Press.

Jones, R. 2015. *Place-names in landscape archaeology. Detecting and understanding historical landscapes*. Available online at: http://hdl.handle.net/2381/33486. Accessed 15 June, 2018.

Jones, R., Benson-Evans, K. and Chambers, F.M. 1985. Human influence upon sedimentation in Llangorse Lake, Wales. *Earth Surface Processes and Landforms, 10*, pp. 1377-1382.

Jones, R., Benson-Evans, K., Chambers, F.M., Seddon, Abell, B. and Tai, Y.C. 1978. Biological and chemical studies of sediments from Llangorse Lake, Wales. *Verhandlungen der Internationalen Vereinigung für theoretische und angewandte Limnologie, 20,* pp. 642-648.

Jones-Davies, Rev. J. 1956. *The Kingdom of Brycheiniog in the Age of the Saints – with special reference to the Llywel stone*. Printed by the Brecon and Radnor express.

Kay, R. 1964. Castell Dinas, Parish of Talgarth, Brecknockshire. *Brycheiniog, 10*, pp. 15-27.

Kelly, E.P. 1991. Observations on Irish lake dwellings. In: Karkov, C. and Farrell, R. (Eds.), *Studies in Insular Art and Archaeology. American Early Medieval Studies, 1*, pp. 81-98.

Kissock, J. 2014. Llannau, llysoedd, and llociau: identifying the early medieval landscape of Gower. *Landscape History, 35(2)*, pp. 5-20.

Lane, A. and Redknap, M. (forthcoming) *The Llangorse Crannog: An Early Medieval Island Residence of the Kings of Brycheiniog.* Oxford: Oxbow Books.

Legg, R. and Taylor, D. 2006. Modeling environmental influences on the locations of Irish early medieval ringforts. *Geoarchaeology, 21(3*), pp. 201-220.

Lightfoot, K. and Martinez, A. 1995. Frontiers and Boundaries in archaeological perspective. *Annual Review of Anthropology, 24*, pp. 471-492.

Llobera, M. 1996. Exploring the topography of mind: GIS, social space and archaeology. *Antiquity, 70*, pp. 612-622.

Llobera, M. 2012. Life on a Pixel: Challenges in the Development of Digital Methods within an "Interpretive" Landscape Archaeology Framework. *Journal of Archaeological Method and Theory, 19(4),* pp. 495-509.

Lock, G. 2003. *Using Computers in Archaeology*. London: Routledge.

Locock, M. 1999. *Monmouthshire Historic Settlement: An archaeological survey.* Part 3: The hundreds of Caldicot and Raglan. GGAT Unpublished report 99/010.

Lucas, G., Hall, D., Fryer, V., Irving, B. and French, C. 1998. A Medieval Fishery on Whittlesea Mere, Cambridgeshire. *Medieval Archaeology, 42(1),* pp. 19-44.

Mattingly, H. 1943. Coinage of the Dark Age in Britain. *Antiquity, 17(67),* 162-166.

McDonnell, J. 1981. Inland Fisheries in Medieval Yorkshire 1066-1300. Borthwick Papers, 60. York: University of York Borthwick Institute of Historical Research.

McGrail, S. and Switsure, R. 1975. Early British Boats and their chronology. *International Journal of Nautical Archaeology, 4*, pp. 191-200.

McManus, D. 1991. *A Guide to Ogam*. Maynooth Monographs 4. Maynooth: An Sagart.

Morgan, R. and Powell, R. 1999. *A Study of Breconshire Place-Names.* Llanrwst Wells: Gwasg Carreg Gwalch.

Morris, R. 1989. Churches in the Landscape. London: Dent.

Morrison, I. 1985. *Landscapes with Lake Dwellings.* Edinburgh: Edinburgh University Press.

Nash-Williams. V.E. 1950. The Early Christian Monuments of Wales. Cardiff: University of Wales Press.

Nash-Williams, V.E. 1954. *The Roman Frontier in Wales*. Cardiff: University of Wales Press.

Oosthuizen, S. 2016. Culture and identity in the early medieval fenland landscape. *Landscape History*, 37*(1)*, pp. 5-24.

Ordnance Survey. 2018. OS Terrain 5. Available at: https://www.ordnancesurvey.co.uk/business-and-government/products/os-terrain-5.html. [Accessed 3 April 2018].

O'Sullivan, A. 1998. *The Archaeology of Lake Settlement in Ireland*. Dublin: Discovery Programme.

O'Sullivan, A. 2004. *The Social and Ideological Role of Crannogs in Early Medieval Ireland.* Unpublished PhD Thesis. National University of Ireland, Maynooth.

Owen, H. 1991. Wales and the Marches. In: Miller, E. (Ed.), *The Agrarian History of England and Wales: Volume III 1348-1500*, pp. 92-105. Cambridge: Cambridge University Press.

Pearce, S. 2012. Early Medieval Ecclesiastical Sites in South-western Britain: Their dates, characters and significance. *The Antiquaries Journal, 92*, pp. 81-108.

Petts, D. 2002. Cemeteries and boundaries in western Britain. In: Lucy, S. and Reynolds, A. (Eds.), *Burial in early medieval England and Wales.* Society for Medieval Archaeology Monograph Series, 17, pp. 24-46.

Petts, D. 2003. *Christianity in Roman Britain.* Stroud: Tempus.

Plummer, C. 1997. *Vita Sancte Samthannae Virginis*. Vitae sanctorum Hiberniae partim hactenvs ineditae. 2. Dublin: Four Court Press.

Postels, D. 2007. *The North Through its Names: A Phenomenology of Medieval and Early-Modern Northern England.* Oxford: Oxbow Books.

Pryce, H. 2000. The Household Priest (Offeiriad Teulu). In: Charles-Edwards. *The Welsh King and His Court.* Cardiff: University of Wales Press

Raftery, B. 1994. *Pagan Celtic Ireland: The Enigma of the Irish Iron Age*. London: Thames and Hudson.

Rance, P. 2001. Attacotti, Déisi and Magnus Maximus: The case for Irish federates in Late Roman Britain. *Britannia, 32,* pp. 243-270

Rattue, J. 1995. *The Living Stream: Holy Wells in Historical Context.* Woodbridge: Boydell.

RCAHMW. 1986. *An Inventory of the Ancient Monuments in Brecknock (Brycheiniog).* The prehistoric and Roman monuments. Part ii: hill-forts and Roman remains. London: HMSO

Redknap, M. and Lane, A. 1994. The Early Medieval Crannog at Llangorse, Powys: an interim statement on the 1989-1993 seasons. *International Journal of Nautical Archaeology, 23(3),* pp 189-205.

Redknap, M. and Lane, A. 1999. The archaeological importance of Llangorse Lake: an environmental perspective. *Aquatic Conservation: Marine and Freshwater Ecosystems, 9*, pp. 377-390.

Redknap, M. and Lewis, J. 2008. *A Corpus of Early Medieval Inscribed Stones and Stone Sculpture in Wales: Volume I.* Cardiff, University of Wales Press.

Rees, S.E. 1997. The historical and cultural importance of ponds and small lakes in Wales, UK. *Aquatic Conservation: Marine and Freshwater Ecosystems, 7*, pp.133–139.

Rees, W. 1932. A Map of South Wales and the Border in the 14th century. London: Ordnance Survey.

Remfry, P.M. 1999. *Castles of Breconshire.* Hereford: Logaston Press.

Richards, G.M. 1969. *Welsh Administrative and Territorial Units, Medieval and Modern.* Cardiff: University of Wales Press.

Richards, M. 1960. The Irish Settlements in south-west Wales: A topographical approach. *The Journal of the Royal Society of Antiquaries of Ireland, 90(2),* pp. 133-162.

Rippon, S. 1996. *Gwent Levels: The Evolution of a Wetland Landscape.* York: Council for British Archaeology.

Rippon, S.J. 2007. Waterways and water transport on reclaimed coastal marshlands: the Severn Estuary and beyond. In: Blair J (Ed.), *Early Medieval Water Management,* Oxford: Oxford University Press, pp. 207-227.

Rippon, S.J. 2008. Coastal trade in Roman Britain: the investigation of Crandon Bridge, Somerset, a Romano-British trans-shipment port beside the Severn Estuary. *Britannia, XXXIX,* pp. 85-144.

Rippon, S.J. 2009. "Uncommonly rich and fertile" or "not very salubrious"? The perception and value of wetland landscapes'. *Landscapes, 10,* pp. 39-60.

Rippon, S.J. 2018. Marshlands and other wetlands. In Rippon, S.J. (Ed.), *Water and the Environment in the Anglo-Saxon World*. Oxford: Oxford University Press.

Rippon, S.J, Martin, M.H. and Jackson, A.W. 2001. The use of soil analysis in the interpretation of an early historic landscape at Puxton in Somerset. *Landscape History, 23(1),* 27-38.

Seaman, A. P. 2010. Towards a predictive model of Early Medieval settlement location: A case study from the Vale of Glamorgan. *Medieval Settlement Research, 25*, pp. 11-20.

Seaman, A.P. 2013. Dinas Powys in context: Settlement and society in Post-Roman Wales. *Studia Celtica, XIVII*, pp. 1-23.

Seaman, A. (forthcoming a) Landscape, Settlement and Agriculture in Early Medieval Brycheiniog: The Evidence from the Llandaff Charters. In: Comeau, R., and Seaman, A. (Eds.), *Forthcoming, Living off the Land: Agriculture in Wales c. 400 to 1600 AD*. Oxford: Windgather Press.

Seaman, A (forthcoming b) Finnaun y Doudec Seint: A Holy Spring in the Early Medieval Kingdom of Brycheiniog. In Ray, C. (Ed.), Forthcoming: *Sacred Springs and Holy Wells: A Cross-Cultural Compendium.* Routledge: London.

Silvester, R. 1997. Historic settlement surveys in Clwyd and Powys. In: Edwards, N. (Ed.), *Landscape and Settlement in Medieval Wales*, Oxbow Monographs 81, Oxford, pp. 113–121.

Silvester, B. 2007. *Defended Enclosures in Brecknock*. CPAT Report 859. Available online at: http://www.walesher1974.org/herumd.php?group=CPAT&level=3&docid=301363492. Accessed 19, September, 2018.

Silvester, B. and Hankinson, R. 2002. *Early Medieval Ecclesiastical and Burial Sites in Mid and North-east Wales: An Interim Report*. CPAT Report 468. Available online at: http://www.walesher1974.org/herumd.php?group=CPAT&level=3&docid=301357384. Accessed 28, February, 2018.

Silvester, B. and Hankinson, R. 2003a. Early Medieval Ecclesiastical and Burial Sites in Mid and North-East Wales: The second report. Available online at: http://walesher1974.org/herumd.php?linktable=her_source1_link&group=CPAT&level=3&docid=301357385. Accessed 25 March, 2018.

Silvester, R.J. and Hankinson, R. 2003b. Clas, Church and Village at Glasbury. *The Transactions of the Radnorshire Society, 73*, pp. 113-126

Silvester, B and Hankinson, R. 2004. *Early Medieval Ecclesiastical and Burial sites in Mid and North-East Wales: The Field Assessment and its impact on the overall study*. CPAT report, 612. Available online at: http://www.walesher1974.org/herumd.php?group=CPAT&level=3&docid=301357489. Accessed 18 March, 2018.

Silvester B. and Martin C.H.R. 2011. *Historic settlements in Radnorshire*. CPAT Report 1088. Available online at: http://www.walesher1974.org/herumd.php?group=CPAT&level=3&docid=301362797. Accessed 18 March, 2018.

Stokes, K. 2004. *Welsh Kingship, A.D. 383-1063: A Reassessment of Terminology and Political Formation*. Unpublished PhD thesis, University of Cambridge.

Swift, C. 1997. *Ogam Stones and the Earliest Irish Christians*. Maynooth monographs, series minor 2. The cardinal press: Maynooth.

Taylor, C. 1979. *Roads and Tracks of Britain*. London: JM Dent and sons.

Thomas, C. 1971. *Britain and Ireland in Early Christian Times AD 400-800*. London: Thames and Hudson, London.

Thomas, C. 1994. *And Shall These Mute Stones Speak? Post-Roman Inscriptions in Western Britain.* Cardiff: University of Wales Press.

Thorpe, L. 1978. *The Journey Through Wales; and The Description of Wales, by Gerald of Wales*. London: Penguin.

Tilley, C. 1994. *A Phenomenology of Landscape. Places, paths and monuments.* Oxford: Berg Publishers.

Todd, M. 2007. *A Companion to Roman Britain*. London: Blackwell Publishing.

Tomkins, A. 2016. The Avon Valley in the Fifth to Mid-Seventh Centuries: Contacts and Coalescence in a Frontier Polity? Unpublished PhD Thesis. Oxford: University of Oxford.

Trigger, B. 2006. *A History of Archaeological Thought* (Second edition). Cambridge: Cambridge University Press.

Tylecote, R. 1964. Roman lead working in Britain. *The British Journal for the History of Science, 2(1),* pp. 25-43.

University of Southampton, 2018. The Submerged Neolithic of the Western Isles. Available at: http://cma.soton.ac.uk/submerged-neolithic-western-isles/. Accessed 3 April, 2018.

Waddell, J. 1993. The Irish Sea in prehistory. *The Journal of Irish Archaeology, 6,* pp. 29-40.

Wade-Evans, A.W. 1906. The Brychan documents. *Cymmrodor, 19*, pp.18–50

Wade-Evans, A.W. (Ed.) 1944. *Life of St Brynach Vitae Sanctorum Britanniae et Genealogiae*. Cardiff: University of Wales Press.

Wainwright, F.T. 2014. *Archaeology and Place-Names and History: An Essay on Problems of Co-ordination*. London: Routledge.

Wheatley, D. and Gillings, M. 2002. *Spatial Technology and Archaeology – The Archaeological Applications of GIS*. London: Taylor and Francis.

Wheeler, M. 1926. *The Roman fort near Brecon*. London: Y Cymmrodor, XXXVII, pp. 1-260.

Woolgar, C. 2001. Fast and feast: conspicuous consumption and the diet of the nobility in the 15th century. In: Hicks, M. (Ed.), *Revolution and Consumption in Late Medieval England*. Woodbridge: Boydell.

Wyn Owen, H. and Morgan R. 2007. *Dictionary of the Place-Names of Wales.* Ceredigion, Gomer.

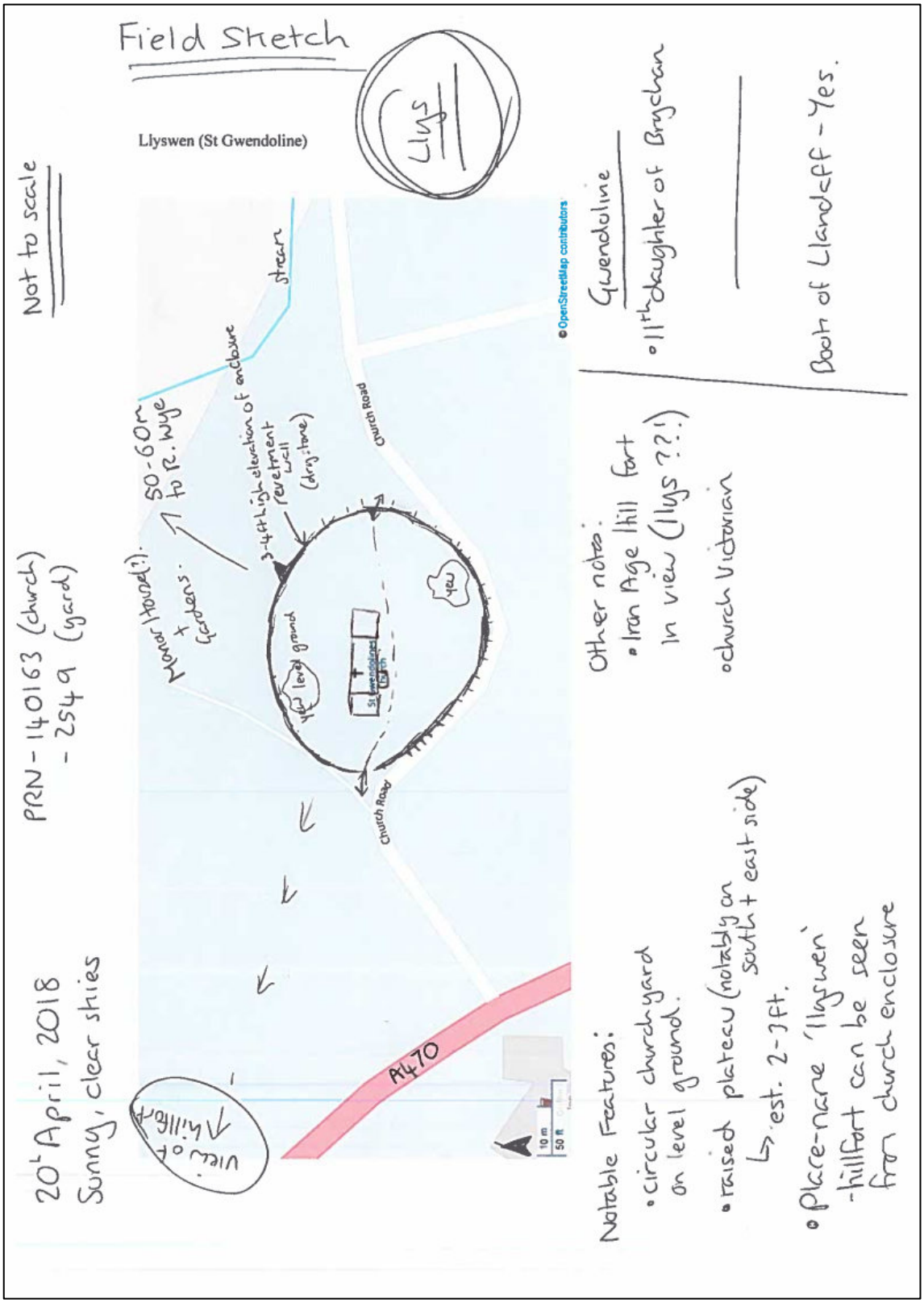
Yoffee, N. and Sherratt, A. (Eds.) 1993. *Archaeological Theory: Who Sets the Agenda?* Cambridge: Cambridge University Press.

Unpublished Sources in the National Archives:

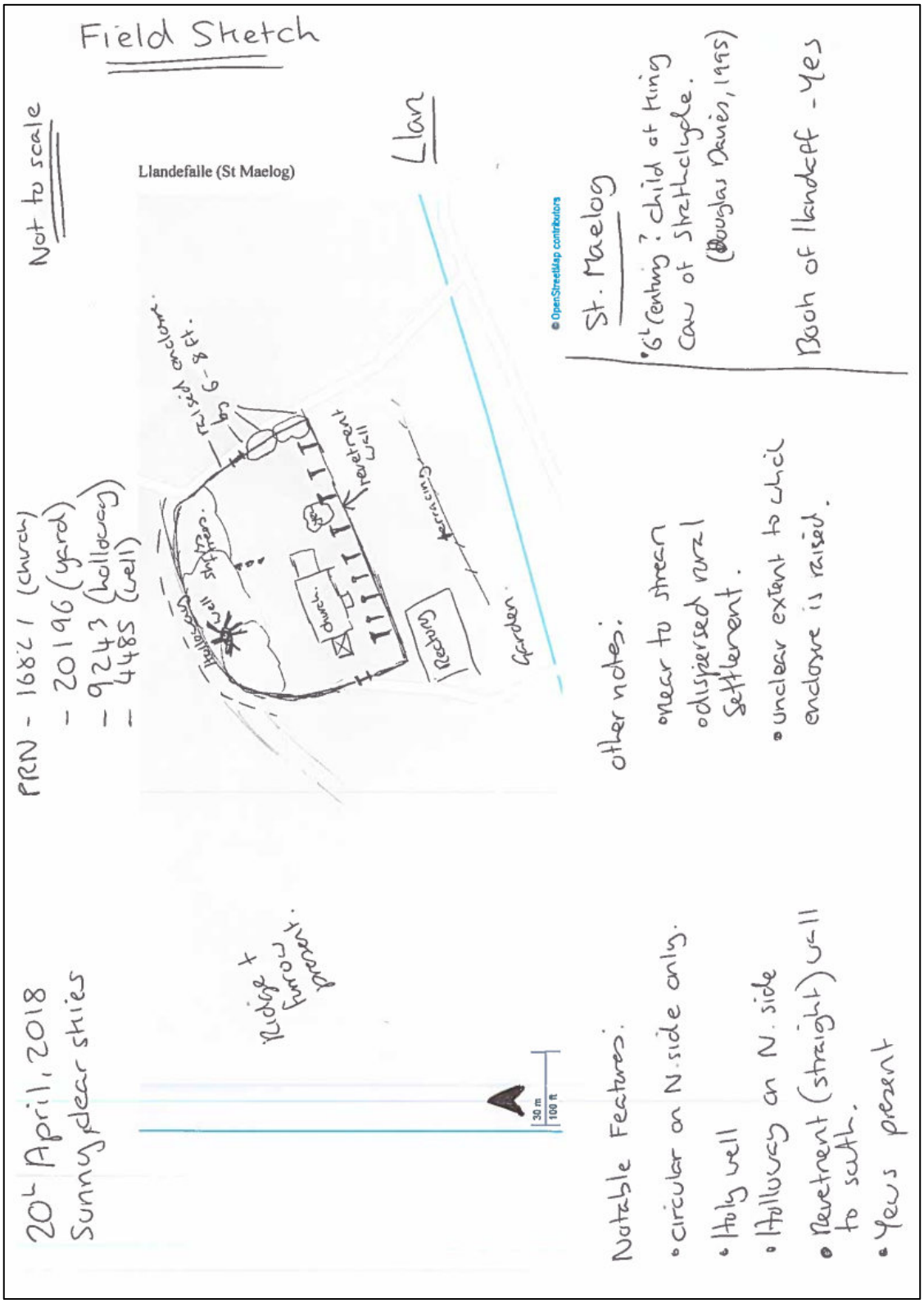
MPF 1/12: Plott describing the poole called Brecknock Poole (1584).

APPENDIX A: Field sketches of early medieval ecclesiastical sites

1) LLYSWEN



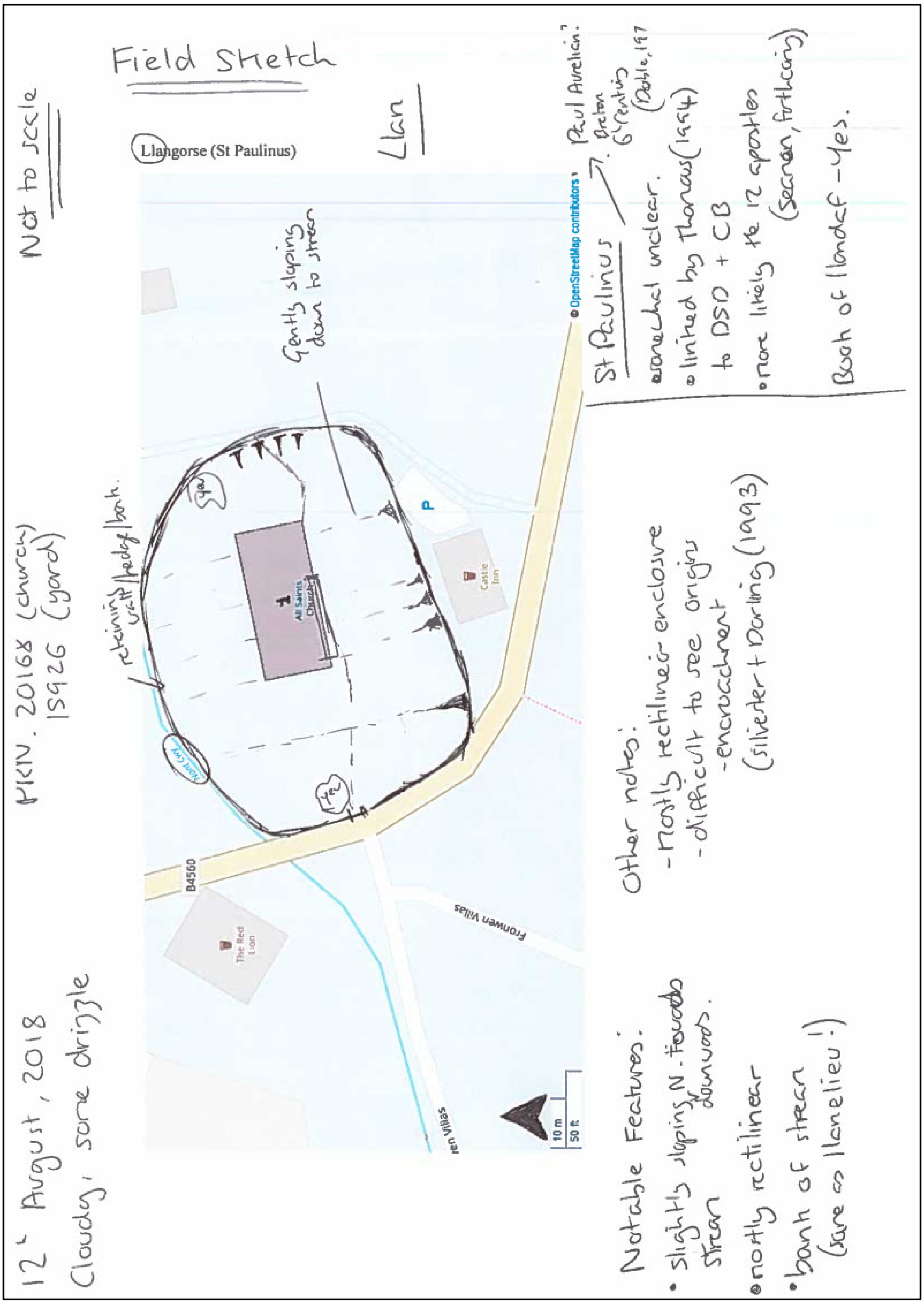
2) LLANDEFALLE



3) LLAN-Y-WERN

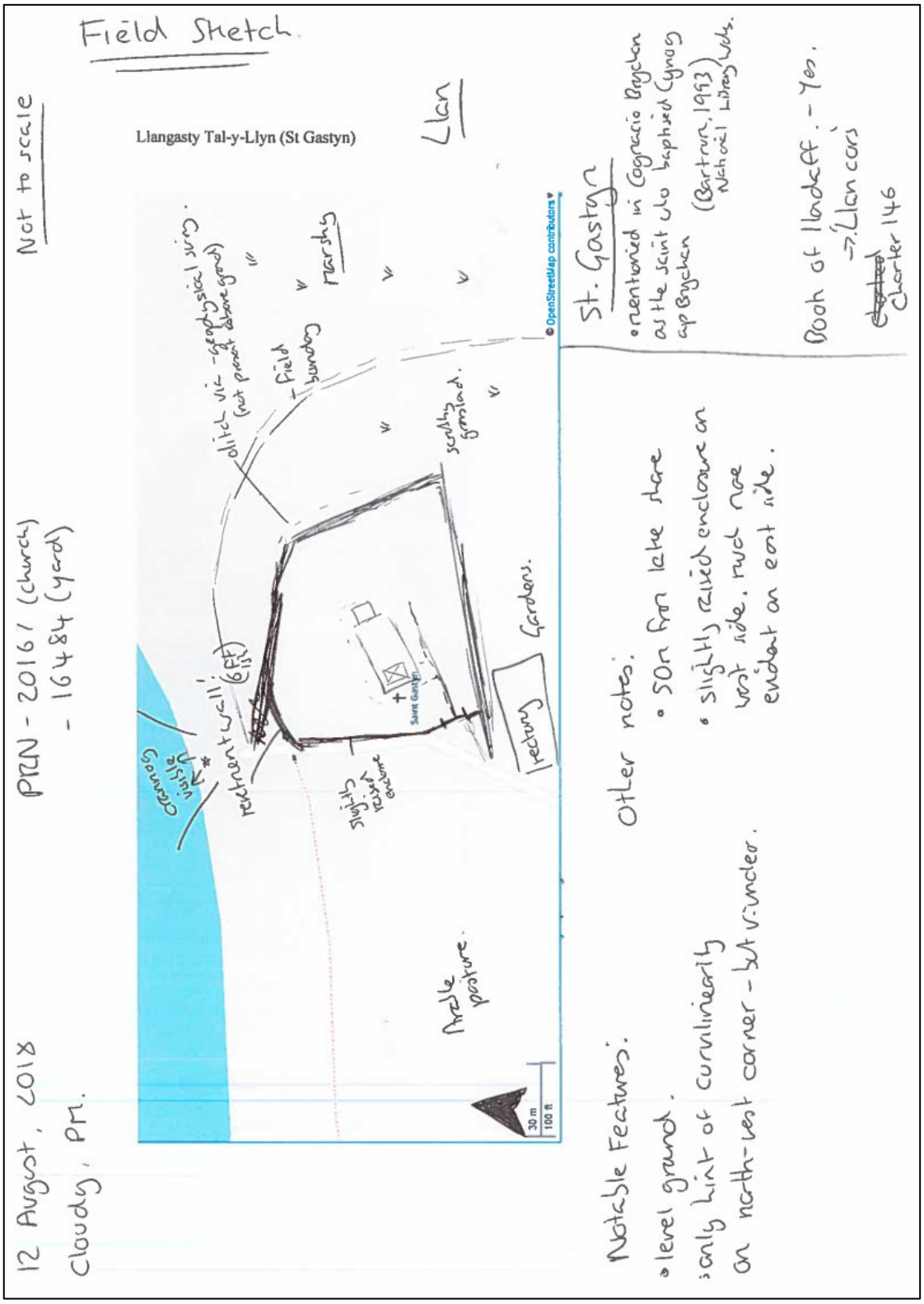
Field Sketch
Not to scale
Llan-y-Wern (St Cynidr)
Llan
PRN: 20164 (church)
2934 (yard)
12 August, 2018
Cloudy, some drizzle
St. Cynidr
- grandson of Brychan
- Buried at Glasbury
- 6th Century - First Bishop of Glasbury (Brewerton, 2000)
Book of Llandaff - Yes
Other notes:
• No gravestones
• moated site
40m North of church.
• Site of considerable interest for further work!!
Notable Features:
• V. perfectly oval enclosure
• Flat even ground.
• Not raised enclosure but slight enclosure bank visible.
10 m
50 ft

4) LLANGORSE

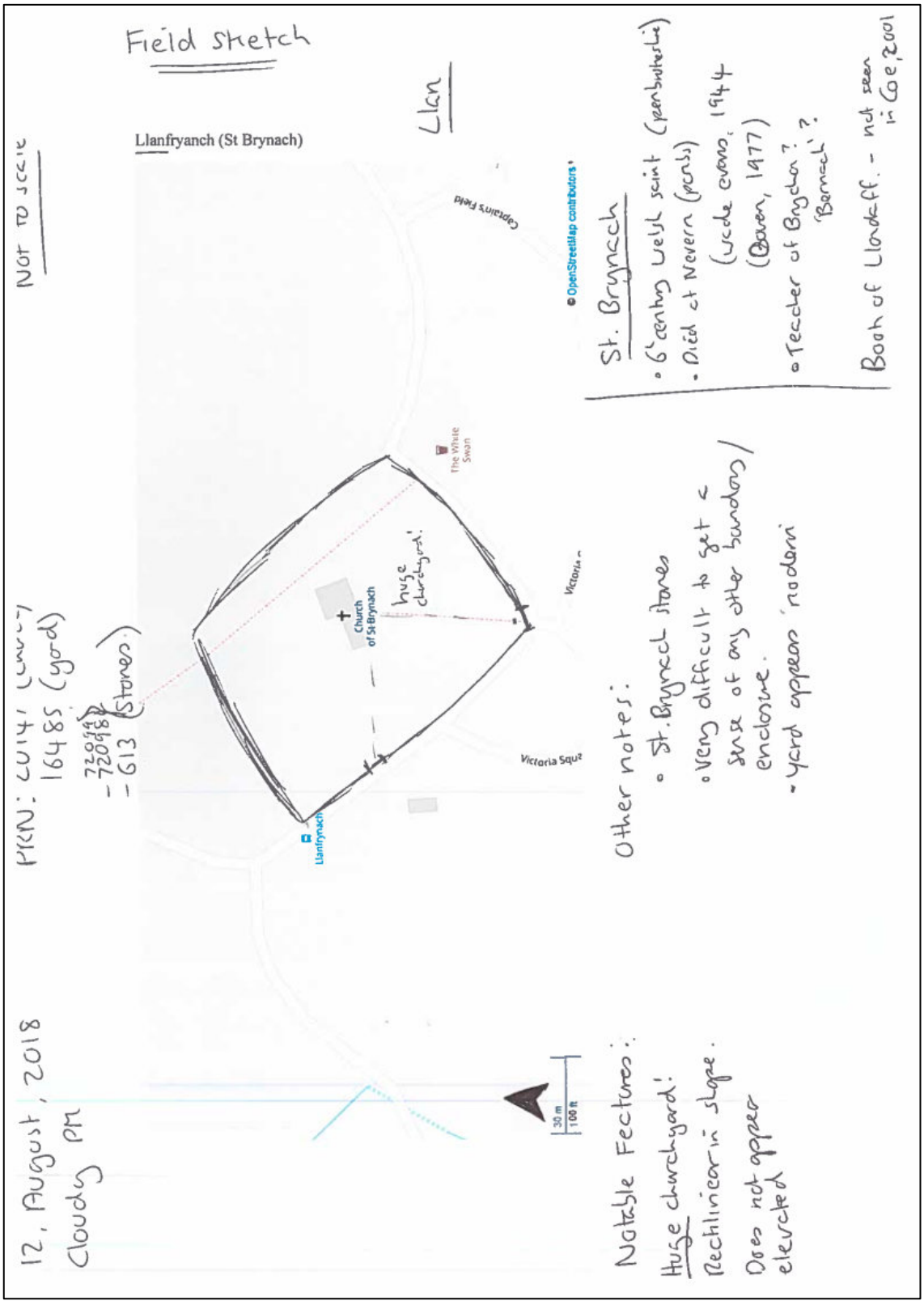


Field Sketch
Not to scale
Llangorse (St Paulinus)
Llan
12th August, 2018
Cloudy, some drizzle
All Saints Church
Castle Inn
The Red Lion
B4560
Fronwen Villas
10 m
50 ft
OpenStreetMap contributors
Gently sloping down to stream
retaining wall/hedge/bank
yew
Notable Features:
Other notes:
St Paulinus

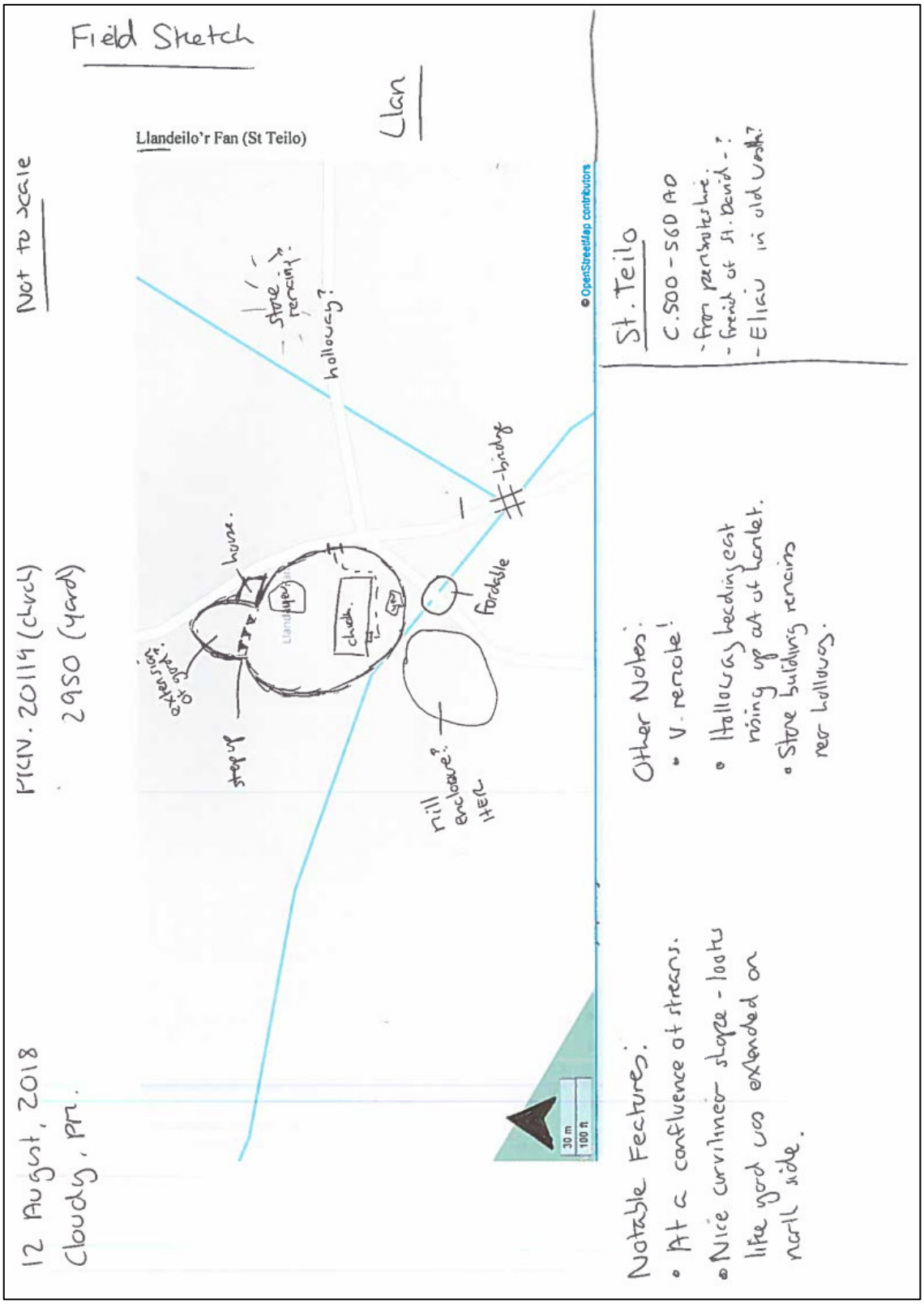
5) LLANGASTY TAL-Y-LLYN



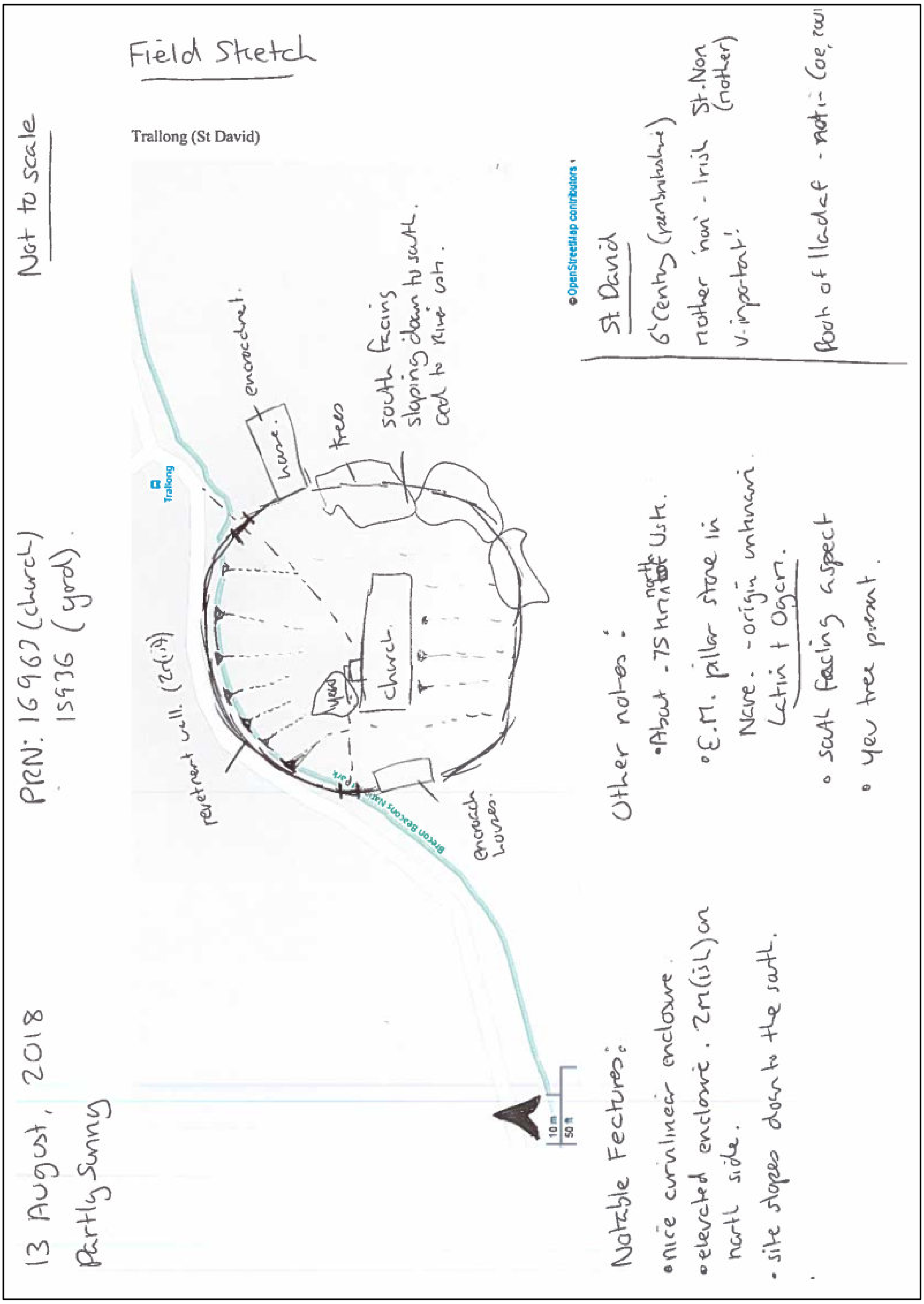
6) LLANFRYNACH



7) LLANDEILO'R FAN

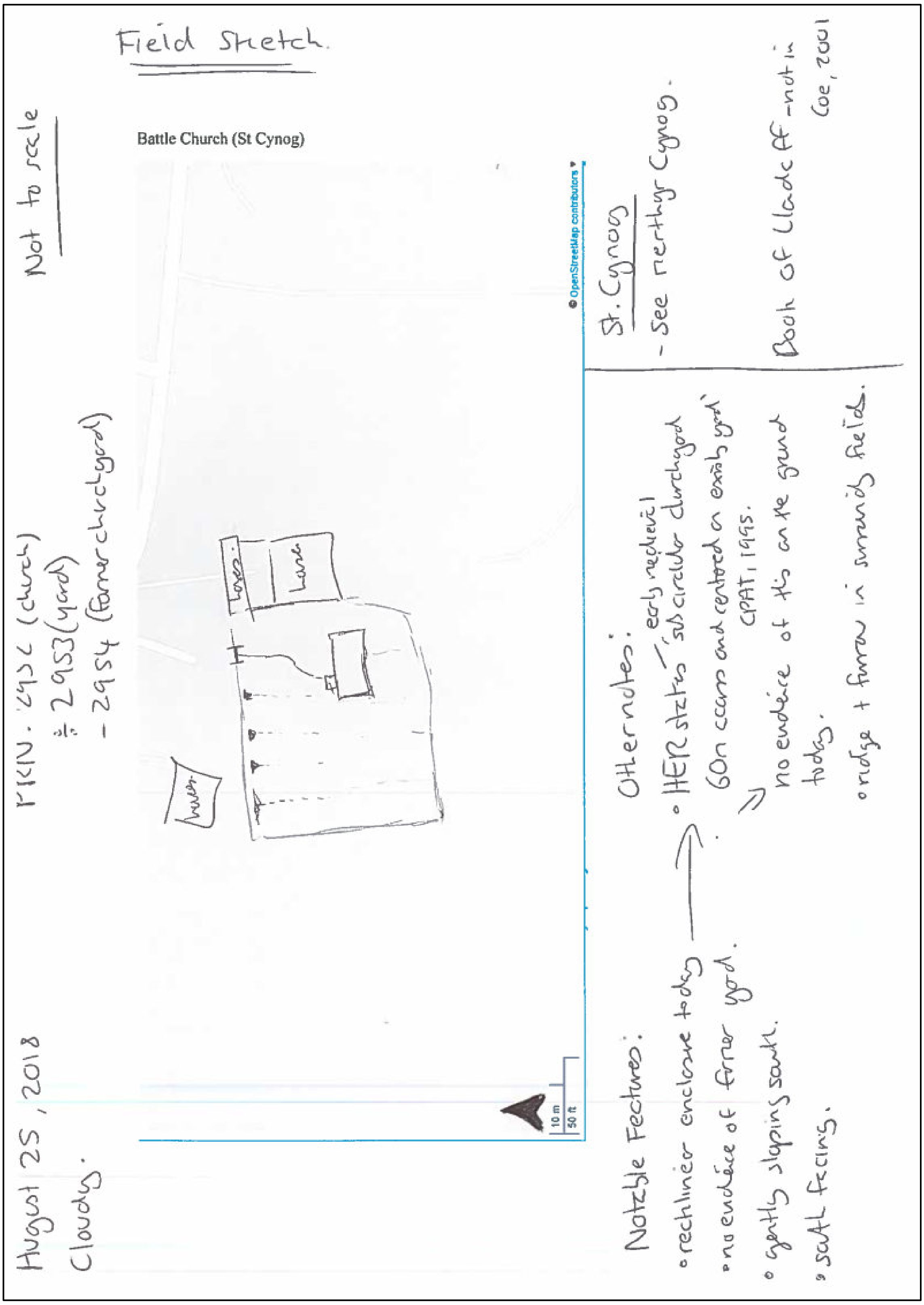


8) TRALLONG

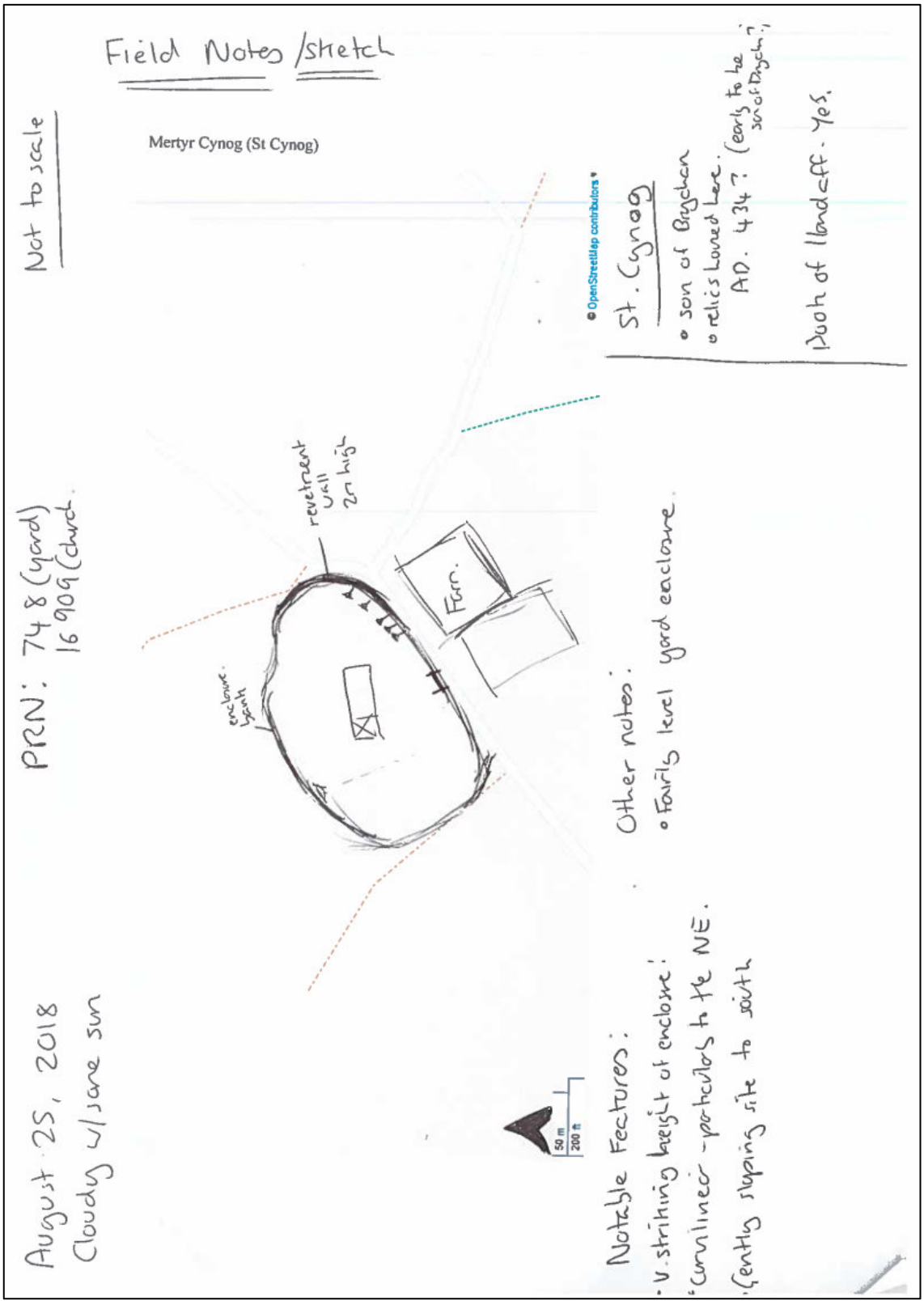


13 August, 2018
Partly Sunny
PRN: 16967 (church)
15936 (yard).
Not to scale
Field Sketch
Trallong (St David)
Trallong
revetment wall. (2m(ish))
house.
encroachment.
trees
yews
church
south facing
sloping down to south.
cond to River Usk.
encroach houses.
10 m
50 ft
© OpenStreetMap contributors
Notable Features:
• nice curvilinear enclosure.
• elevated enclosure. 2m(ish) on north side.
• site slopes down to the south.
Other notes:
• About .75 km north of Usk.
• E.M. pillar stone in Nave. - origin unknown. Latin + Ogam.
• south facing aspect
• yew tree present.
St. David
6th Century (Pembrokeshire)
mother 'Non' - Irish St. Non (mother)
v. important!
Book of Llandaf - noted Cae, Caer

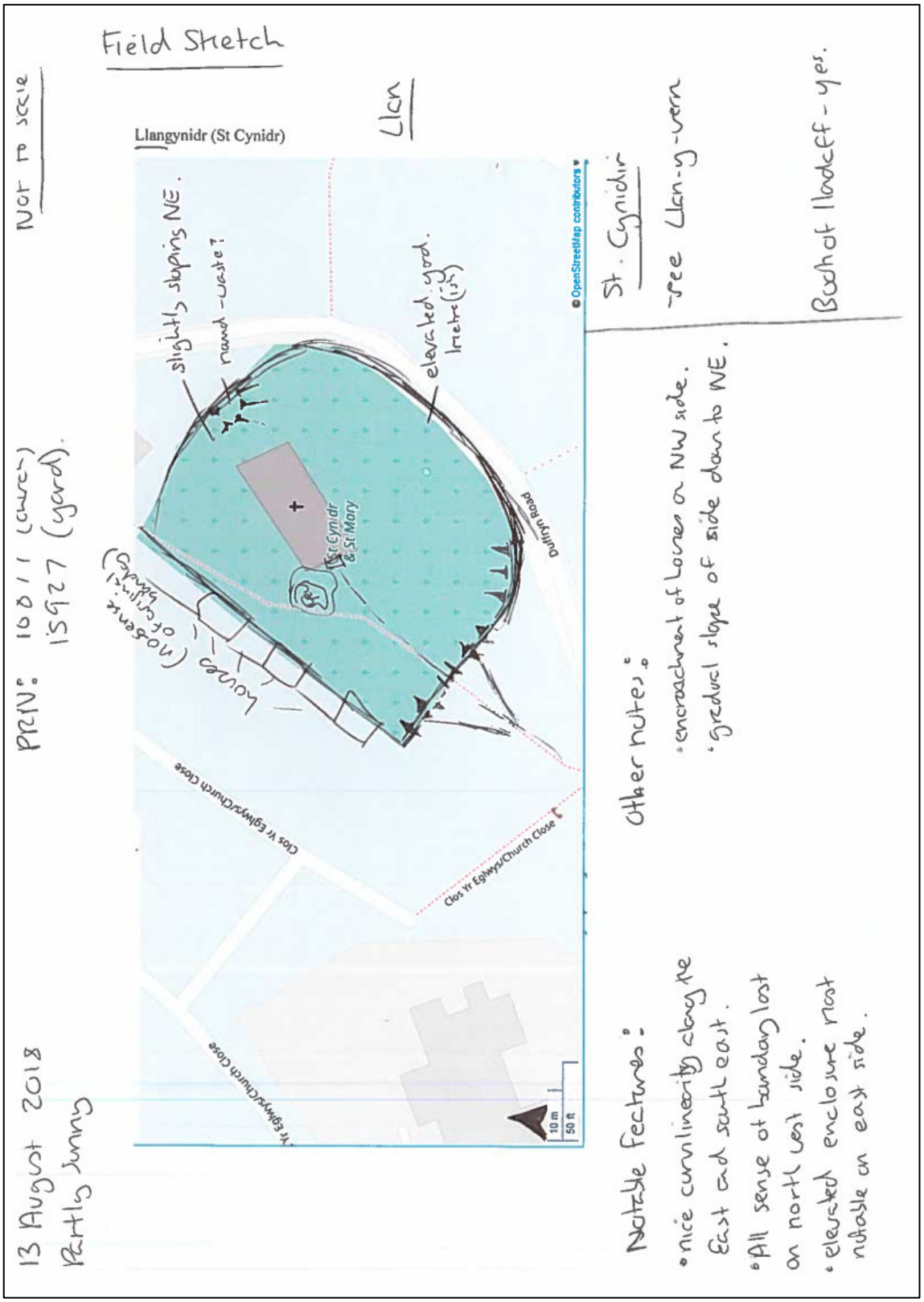
9) BATTLE


Field Sketch.
Not to scale
Battle Church (St Cynog)
© OpenStreetMap contributors
10 m
50 ft
August 25, 2018
Cloudy.
2953 (yard)
- 2954 (former churchyard)
Lane
Notable Features:
rectilinear enclosure today
no evidence of former yard.
gently sloping south.
south facing.
Other notes:
HER states early medieval sub circular churchyard
60m across and centred on existing yard
CPAT, 1995.
no evidence of this on the ground today.
ridge + furrow in surrounding field.
St. Cynog
- see Merthyr Cynog.
Book of Llandaff - not in Coe, 2001

10) MERTHYR CYNOG



11) LLANGYNIDR



APPENDIX B: Llyn Safaddan

The place-name Llyn Safaddan has yet to be fully understood. Given that Llangorse Lake has emerged as a focal point of the Kingdom further research was considered to be important. As such, Dr Simon Rodway, an expert in Celtic languages at the University of Aberystwyth was contacted for consultation. The following provides a summary of the personal communication.

In *A Study of Breconshire Place-Names* (Morgan and Powell, 1999: 138) it is asserted that the Celtic scholar John Rhys thought that 'safaddan' might be a personal name related to Irish Samthan, the name of a wicked princess. There is also an Irish folk saint with this name and one of only four female saints mentioned in Latin *Lives* (Plummer, 1997).

However, Charles Thomas (1994:160) preferred to derive it from British *Samo-ton(a), a divine personification of the summer months (*samo-), appropriately the best fishing period; *samo-, however, produced ModW haf, 'summer', not syf-, saf-.'

Dr Rodway suggests that Morgan and Powell are right to point out that Celtic *Samo-tona would give *Hyfaddon not Syvadon (an attested form), but perhaps there was Irish interference? Celtic *s- gives s- in Irish, and there was considerable Irish settlement in Brycheiniog in the Dark Ages. This might just about rescue Thomas's etymology.