

A guide to the excavations at
LOVE LODGE FARM, FFAIRFACH,
CARMARTHENSHIRE



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FOREWORD

The Ysgol Bro Dinefwr excavations revealed a rich and complex archaeological landscape, charting the story of people's lives in the river valley across 7000 years.

The building of the school has provided a rare opportunity to explore the ancient past of Ffairfach. This includes learning about the people, who were living in the Twyi valley for thousands of years before the Romans came and built forts in Dinefwr, and much later the foundation of the religious centre at Llandeilo. Thanks to this excavation, future generations attending Ysgol Bro Dinefwr will have the opportunity to learn about their ancestors who lived and died on this very spot!

For a much wider audience, the excavation and interpretation of the dig at Ffairfach firmly places it amongst the most important heritage sites in the UK, owing to the discovery of Wales' earliest recorded ring ditch with a Neolithic radiocarbon date between 3710 – 3644 BCE. The site also contained significant archaeological remains from the Mesolithic and Iron Age periods which in east Carmarthenshire, are very rare indeed.



ACKNOWLEDGEMENTS

Sincere thanks and acknowledgment must go to the many and various people and organisations involved at Ysgol Bro Dinefwr. The project was funded by Carmarthenshire County Council, who receive our thanks. Alongside Mike Ings of Dyfed Archaeological Trust, who has been particularly supportive of the project. Special acknowledgment must go to Faithful and Gould and the building contractors, Bouygues UK, for facilitating the work. Of course none of this work would have been possible without the dedication of the staff from AB Heritage and Rubicon Heritage Services, including Project Officer Stuart Farrell, both in the field and in the labs.

Special mention must also go to local volunteers who assisted the archaeologists with field walking and the recovery of stone artefacts.



Illus. 1 - A series of maps showing the location of the site.

INTRODUCTION

Carmarthenshire County Council, during the planning of a new school on the site, were conscious that construction might impact on buried archaeological remains. A plan was put in place to allow archaeologists the opportunity to investigate the site before the construction teams moved in.

sands and gravels were deposited during the Ice Age and support well drained soils ideal for natural vegetation, human settlement and farming.

In 2012 Dyfed Archaeological Trust (DAT) carried out a geophysical survey and some trial trenching. They discovered prehistoric archaeology and a stretch of Roman road. Based on these results it was decided that a full archaeological excavation should be undertaken. AB Heritage Ltd and Rubicon Heritage Services Ltd undertook said excavation between January and May 2014.



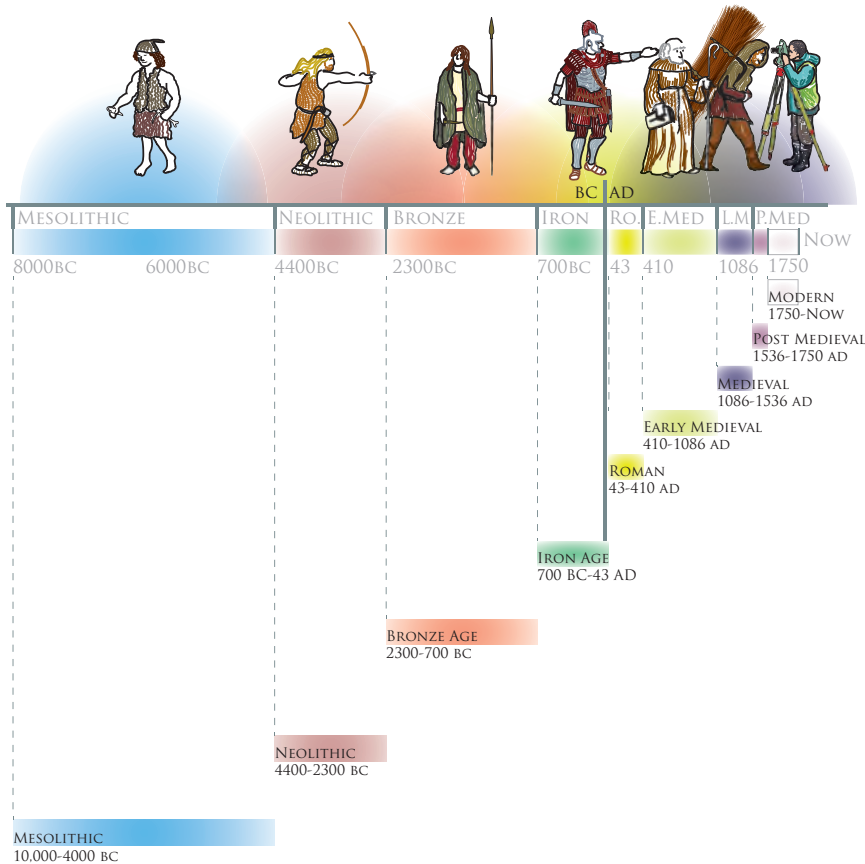
Illus. 2 - Archaeological geophysical survey can take many forms. This is an example of Fluxgate Magnetometry, which measures minute variations in the earth's magnetic field which can be interpreted to indicate buried archaeological features.

The site is large at 10.8 hectares, and rests on a gravel terrace at the edge of the floodplain of the River Tywi, very close to the west side of Ffairfach village. The geology of the area comprises clay, silts and sands, while the lower bedrock comprises Ordovician sedimentary rock formed over 400 million years ago. The



Illus. 3 - Topsoil was stripped from the site using earth-moving machinery under archaeological supervision, in accordance with accepted best-practice.

WELSH ARCHAEOLOGICAL CHRONOLOGY



Illus. 4 - Welsh Archaeological Chronology and division of periods by time

The Archaeological Chronology of Wales

The human past in Wales is divided into a number of different periods. These include broad eras such as the Palaeolithic or 'Old Stone Age', Mesolithic, or 'Middle Stone Age' and Neolithic, or 'New Stone Age.' Within these eras there are often sub-classifications, such as Early Mesolithic and Late Mesolithic. Archaeologists classify these periods based on differences in material culture (the types and form of objects used by people) over time. These differences reflect how ancient folk built their houses, buried their dead and practiced their religion. These eras or periods are not fixed and can be altered by the discovery and re-interpretation of archaeological finds.

Ffairfach's first inhabitants

The earliest evidence from our site was the stone tools left behind by the hunter-gatherer people of the Mesolithic era, more than 7,000 years ago. These implements, made of flint and chert, were used for everything from hunting to wood-working.

Burial at Love Lodge Farm

For thousands of years the site was an important centre for burial for the people of the Tywi valley. The earliest funeral monument uncovered was a ring-ditch. Ring-ditches would have originally enclosed a low mound or barrow, in which cremated human remains would have been buried. A charred hazelnut shell recovered from the backfill of the ditch was carbon dated to the time of the first farmers in Wales, 5,500 years ago

in the Neolithic period. This Neolithic monument was re-used over 2,000 years later, during the Early Bronze Age, when a cremation burial was inserted in the infilled ditch.

Later, in the Bronze Age some 3,100 years ago, funerary practices changed and people began to place cremated remains in small pits in the ground, rather than in barrows. Two cemeteries of this type were discovered at the site. Eight individuals were identified from the cremated remains and broken sherds of Middle Bronze Age pottery were included with some of the burials. It is thought that these cemeteries were originally marked with timber posts or standing stones.

During the Iron Age, between 2,700 and 2,000 years ago, four more ring-ditches (and presumably their barrows) were constructed at the site, alongside the earlier monuments. This larger barrow cemetery would have been an impressive sight and must have held a very special significance and focus for the local community.

Prehistoric houses

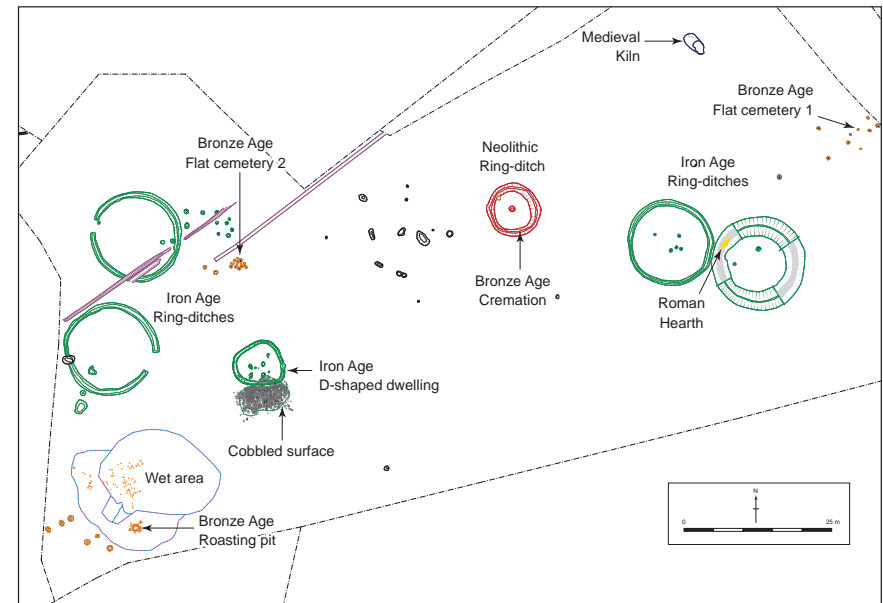
As well as burial monuments, the excavation uncovered remains of domestic life. A small Early to Middle Bronze Age roundhouse was found along with pottery, believed to have been used for cooking. An Early Bronze Age roasting pit and lots of stakeholes were revealed close to a seasonal pond. A D-shaped dwelling – also located close to the pond – was dated to the Middle Iron Age and may have been home to the people who buried their dead in the barrows.



Illus. 5 - Recording of Iron Age metalled surface.



Illus. 6 - Archaeological excavations in progress at Ffairfach



Illus. 7 - Post-excavation plan of ring-ditches and prehistoric features in Area 1 at Ffairfach

The Romans

The Roman army built a road through the site thought to be part of a network of roads connecting Llandeilo with Llandovery and Carmarthen. We know the Romans could still see the earlier burial mounds when they were here, because the remains of a small fire and some Roman pottery were found in one of the Iron Age ring-ditches. The cemetery would have provided a sheltered spot in which the soldiers could rest, as they marched along the Roman road.

Medieval times

In the centuries after Roman rule, life was centred on farming and the production of food and goods. Medieval cereal-drying kilns, a charcoal production pit and field boundaries on the site attest to how agriculture and industry in the hinterland of Llandeilo were needed to sustain the medieval market town. The site continued to be used as farmland ever since while the Roman road itself was still in use as a pathway up until relatively recent times.



DIGGING

Archaeologists digging out a ring-ditch at Ffairfach by hand.

CHAPTER 1

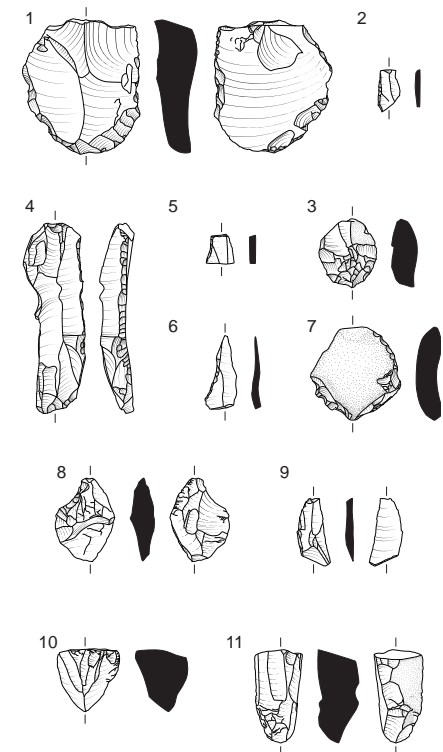
FFAIRFACH'S EARLY INHABITANTS

The Palaeolithic and Mesolithic periods in Wales span almost 250,000 years from the time of the Neanderthal humans to the emergence of farming communities 6,000 years ago. Almost all traces of human activity during the Palaeolithic period were destroyed by the retreating of the vast ice sheets at the end of the last Ice Age. There is currently no evidence for Palaeolithic activity within the immediate environs of Ffairfach. The closest known evidence is at Coygan Cave c. 40km to the south west of Ysgol Bro Dinefwr.

During the dig a number of stone tools were recovered which had been lost or discarded during the Mesolithic period (10,000 - 4,400 BC). These people lived a nomadic lifestyle, hunting animals, foraging for plants and fishing along waters like the Tywi. The river acted as an important route, providing both access through the heavily wooded landscape and a plentiful food resource.

The tools from Ysgol Bro Dinefwr included flakes and blades which were expertly struck from stone such as flint. They worked like modern day knives and would have been used for a variety of tasks, such as working wood or

Illus. 8 - Right: Examples of early prehistoric stone tools recovered during the dig at Ysgol Bro Dinefwr.



Drawn by: Hannah Sims



leather and for butchering animals. The presence of these tools indicates that people were living nearby, probably in temporary shelters and exploiting the rich ecosystem of the Tywi River valley. From excavations elsewhere in Wales we know that the Mesolithic diet was rich in fish and wild pig, both of which would have been plentiful in the Ffairfach area. Birds such as wood-pigeon, woodcock, grouse and duck were also hunted. These early people had an intimate understanding of their environment, and collected a wide variety of plant foods including apples, pears and hazelnuts.

There is more evidence that Mesolithic hunter-gatherers were active in the wider area between 12,000 and 6,400 years ago (10,000 – 4,400 BC). Scatters of stone tools, similar to that found at the Ysgol Bro Dinefwr site, have been found at locations such as Waun Fignen-Felen in the Brecon Beacons, and Marros Sands further to the west. More substantial Mesolithic settlement activity has been found at Burry Holms Island, which is situated just off the Gower Peninsula on the south coast.

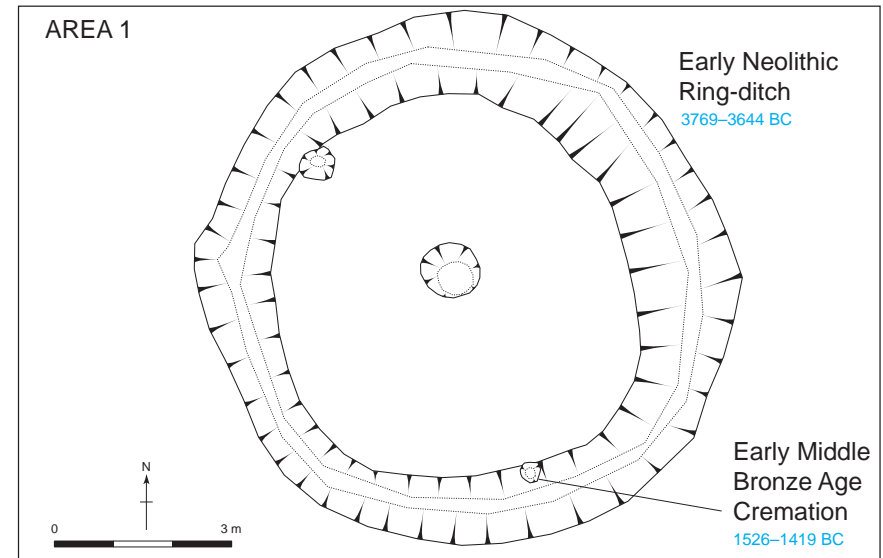
It was during the Neolithic Period or 'New Stone Age', 6400 to 4300 years ago (4400 – 2300 BC), that substantial woodland clearance began. This was a time when the first farmers needed open spaces for their crops and livestock. The Neolithic stone axes found at Dinefwr Castle and in an allotment in Llandeilo are examples of the tools that may have been used for this woodland clearance. These Neolithic farmers, who were now settled on the land, also began to build substantial houses and elaborate tombs for their dead. Many of these stone tombs are still visible in the landscape today, but signs of domestic life are harder to find as they don't survive above ground.



Illus. 9 - A view of the River Tywi at Llandeilo.



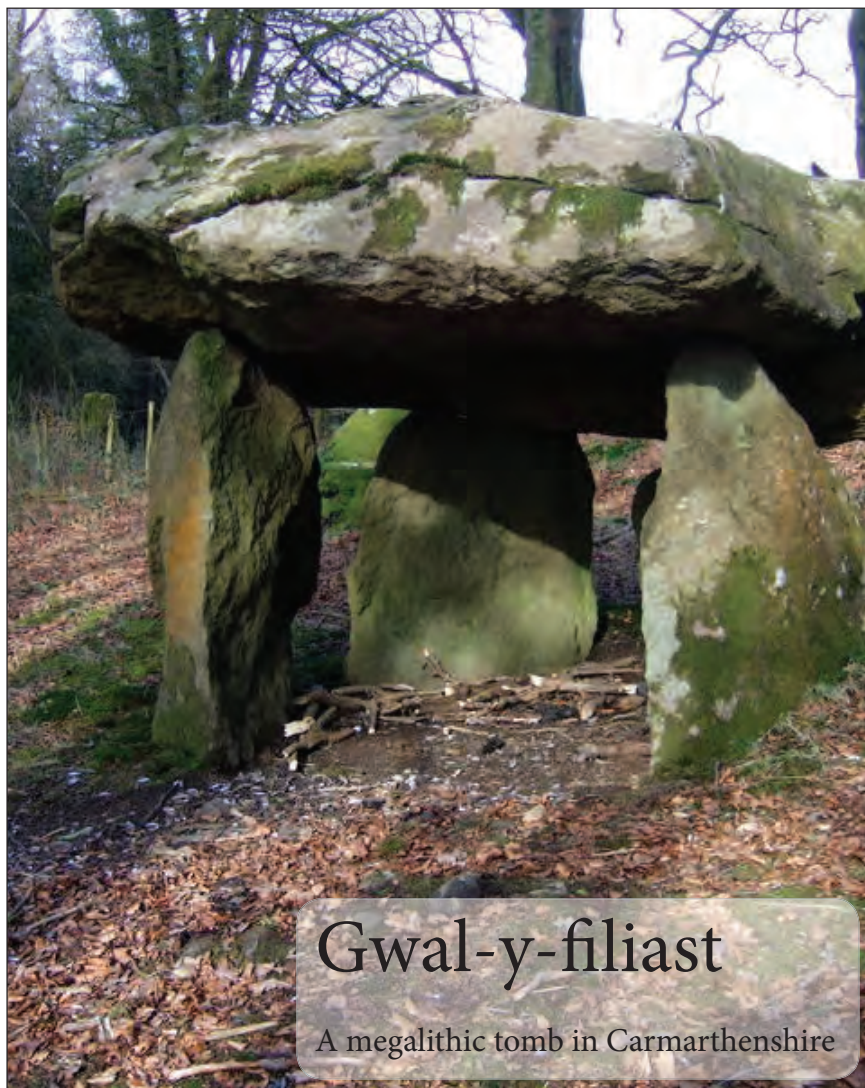
Illus. 10 - Archaeological interpretive drawing, showing how a Neolithic hunter may have used a wooden spear to fish.



Illus. 11 - Plan of Early Neolithic ring-ditch in Area 1.



Illus. 12 - Mid-excavation view of Early Neolithic ring-ditch, looking east.



At Ysgol Bro Dinefwr flint tools found at the site have been dated to the Neolithic period. The tools suggest that there may have been domestic activity taking place nearby though we don't know the exact location of the settlement. In fact few Neolithic settlements have been found in Wales although the evidence for farming has been identified in studies of prehistoric pollen, which show a decline in tree species and a rise in grasses and cereals. People of this period generally lived in isolated farms or small settlements. Excavation has shown that Neolithic houses could be either rectangular or round. Evidence for Neolithic buildings has been found at Gwernvale near Crickhowell, Trelystan on the Long Mountain in Montgomeryshire and at Moel-y-Gear in Clwyd.

The stone tools are important indicators of early habitation in and around the site, but an early feature marks the beginning of a long-lived tradition of ritual activity, that specifically relates to the veneration of the dead. This feature was an Early Neolithic ring-ditch, the earliest ever radiocarbon dated in Wales (3710 – 3644 BC). This was a surprising find as ring-ditches are thought to have originated in Wales in the Late Neolithic/Early Bronze Age period. The radiocarbon dates were bolstered by the presence of five flint artefacts within the ditch fill which were typical of that earlier period, suggesting that the ring-ditch was indeed constructed as a developmental form of the monument type. Ring-ditches were constructed around mounds of earth or stone called barrows. Cremated human remains were buried in these monuments often in pits in (or beneath) the mound, or in the ring-ditch. No human remains were found in association with this ring-ditch and it must be assumed that any

burials were destroyed with the barrow mound through centuries of agricultural activity.

Burial practices in the British Isles dating to this period have long been dominated by monuments such as long barrows and megalithic tombs. Within Carmarthenshire, some Late Neolithic burial monuments are still visible in the landscape, including the Twlc-y-Filiast burial chamber near Carmarthen and the Gwal-y-Filiast chambered tomb near Crymych. While these large stone tombs are the most common, other burial practices such as pit burials and internments within caves are also known.

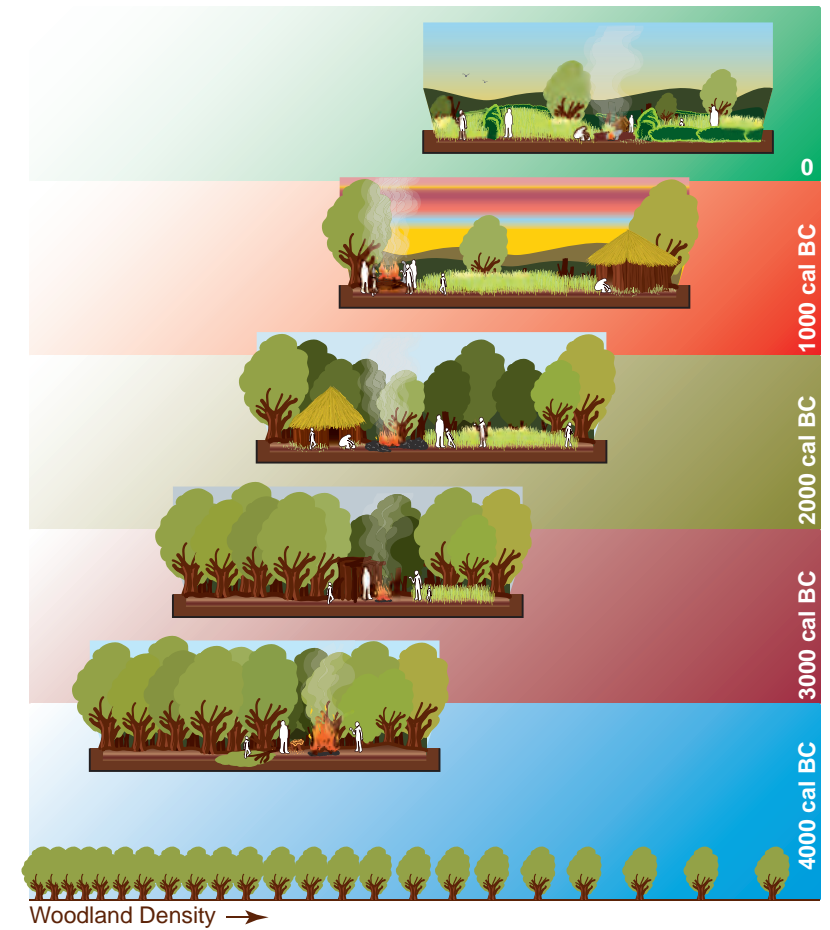
Soil samples were taken from features on the dig, and plant remains were later extracted from these. Plant remains only survive on a dry site if they have been charred through contact with direct heat. These plant remains can, however, reveal a lot about the farming practices of the people, the crops they grew and how they processed them, and also what wood fuel and wild foodstuffs they gathered. A charred hazelnut shell from our Early Neolithic ring-ditch suggests that although these people were farming, they still supplemented their diet using foraging techniques similar to those of their hunter-gatherer ancestors. It is likely that they were also using this nutshell as a form of kindling for their fires. Wood charcoal from both oak and other species was also discovered, showing that the people here were making full use of the woodland landscape that surrounded them.



Illus. 13 - Post-excavation soil sample processing.



Illus. 14 - After the soil samples have been processed, they need to be dried and sorted for any archaeological material.



Illus. 15 - Changing woodland density from the Mesolithic to the Iron Age.



RECORDING

A large part of field archaeology is making full and accurate records of everything that has been uncovered during excavation work. This includes taking photos, writing notes, making maps, plans, surveys and measurements and drawing all the 'features' that are identified.

CHAPTER 2

LIFE AND DEATH IN THE BRONZE AGE

Although southwest Wales has yet to produce large amounts of evidence for Bronze Age settlement, excavation elsewhere in the country has taught us much about life in this period. We now know for instance, that Bronze Age people were generally very healthy and of a similar height to modern day people. They lived in circular timber houses with thatched roofs (like that excavated at Stackpole Warren in Pembrokeshire), in settlements that were usually quite small; often two or three houses built together and forming the centre of a farm complex. These would have served as the home of an extended family who farmed the surrounding land, trading excess produce in the wider region for goods that were not available locally.

In general, however, the Bronze Age evidence in Wales is dominated by burial monuments. Human remains were commonly cremated at this time and often placed in round barrows. A mound of earth which possibly represents a Bronze Age barrow is present at Cae Crug Mawr in the valley below Llandeilo, while numerous cairns and mounds are known on higher ground on either side of the Tywi Valley and on the Carmarthenshire Vans. Burial evidence has also been found during excavations such as a cremation cemetery of Bronze Age date at Pentrehowell Farm (along

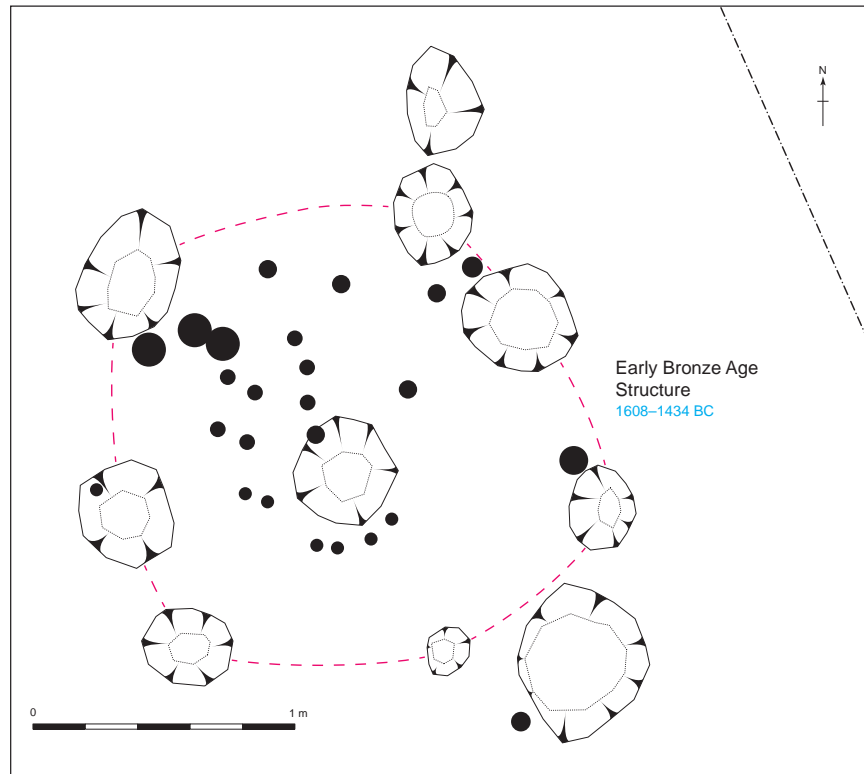
the A477) and a cluster of three ring-ditches at Llandysul. Prior to the Ysgol Bro Dinefwr dig there were indications of a Bronze Age community in the Ffairfach area in the form of a Standing Stone located 180m to the east of Ysgol Bro Dinefwr. There are also records of two other standing stones which are no longer present including one within the school site itself and one at Bridge Farm to the east. These stones may have marked burials or other significant points such as territorial boundaries.



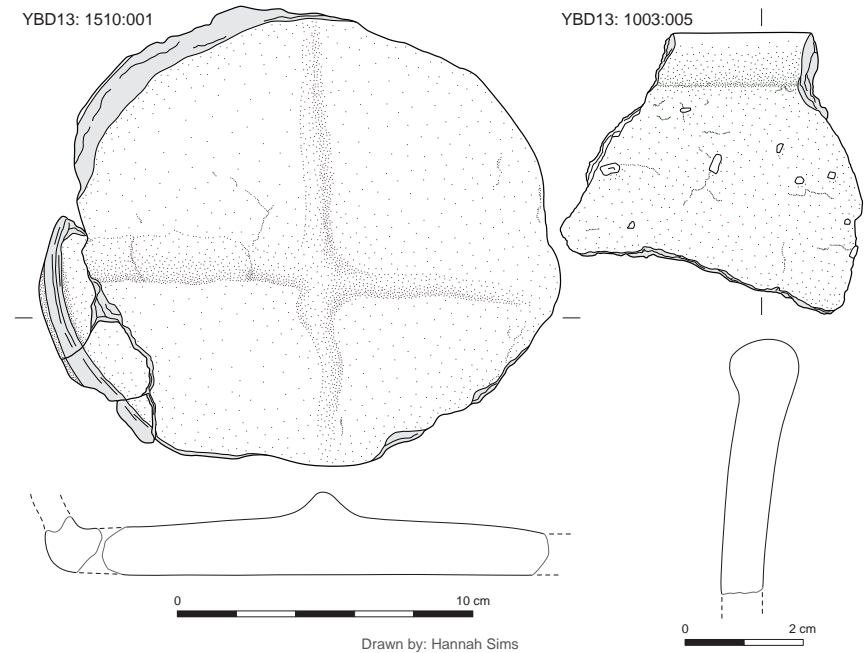
Illus. 16 - Ffairfach standing stone.

The remains of a single Bronze Age roundhouse was discovered on the east side of the Ysgol Bro Dinefwr site. It consisted of eight post-holes arranged in a roughly circular pattern with a central post-hole that would have helped support the roof. This type of house seems to be consistent with house types from the Early Bronze Age period (although there was no 'typical' Bronze Age architecture with

many different types of roundhouse evident throughout Wales). It is possible that the Ysgol Bro Dinefwr house was not isolated and may have been part of a larger settlement in the unexcavated area further to the east. Broken pieces of coarse, burnt pottery which had traces of a decoration involving incised lines and impressed dots were found in one of the postholes.



Illus. 17 - Plan of Early Bronze Age structure and an artist's interpretation of a Bronze Age round-house.



Illus. 18 - Examples of prehistoric pottery unearthed at Ffairfach

A number of Bronze Age roasting pits were identified in the west of the site along with large numbers of stake-holes. These pits were dug into the ground and used to cook large pieces of meat, or sometimes entire animals. The stake-holes are likely to be the imprints of lightweight shelters or windbreaks used by those tending the meat. The roasting pit had to be of sufficient size to hold both the meat and a large quantity of charcoal, which was burned at a high temperature. Stones were then added to the charcoal-rich fire and when they were hot enough

a thin layer of soil was laid over the top. Next, a layer of vegetation, such as large leaves, grass, or straw was laid down, and it was here that the raw meat was laid. A further layer of vegetation and earth was placed on top, sealing the meat inside roasting pit. Finally a second fire was built on the surface heating the meat from above cooking the food top and bottom. Examples of these rudimentary ovens have also been found at other locations including Parc Bryn Cegin, Llandygai, near Bangor, North Wales.



Illus. 19 - Artistic interpretation of a Bronze Age roasting pit. By Sara Nylund.

The Ysgol Bro Dinefwr site not only produced evidence for everyday life in the Bronze Age, it also revealed information about how the Bronze Age people commemorated their dead. During the Early Bronze Age, the communal burial monuments of the Neolithic were replaced by traditions that placed more focus on individual burial. The earliest evidence of this on the site was a single cremation burial found to have been placed in the fill of the Early Neolithic ring-ditch. We can assume that Bronze Age people still held the burial

monument of their Neolithic ancestors in high regard and perhaps wanted to reinforce their connections with the past by re-using the burial site.

In the Middle Bronze Age two cremation cemeteries were constructed at Ysgol Bro Dinefwr. At this time the focus of burial activity shifted away from the Early Neolithic barrow. The cremation cemeteries were of a type known as flat-cemeteries, which had no surviving form of enclosure such as a bank or ditch to mark their limits. It may be



Illus. 20 - Volunteers on site using wet-sieving to look for archaeological evidence and artefacts.

that some form of cemetery boundary or markers were used which has left no archaeological trace behind. The two cemeteries each consisted of cremations buried in small pits with associated post-holes, which may have supported wooden grave markers. It is also possible that the standing stone, visible on historic mapping, was associated with one of these cemeteries. The radiocarbon dates obtained from both cremation cemeteries overlap (late 1,400 to early 1,300 BC), suggesting they were either used at the same time or that one was created within

living memory of the other.

It is not unusual for these cremation cemeteries to develop beside a pre-existing round barrow. At Ysgol Bro Dinefwr the cremation cemeteries were placed in full view of the pre-existing Early Neolithic barrow and to either side of it. This represents further deliberate reuse of the area for burial, as had been seen with the placement of the cremation burial in the in-filled Neolithic ring-ditch.



Ash



Crab-apple



Hazel



Yew

It is likely that a funeral pyre would have been constructed nearby, although no evidence of a pyre was found during the excavations. Efficiently cremating human remains is a difficult task, but the bone recovered from Ysgol Bro Dinefwr demonstrates that the prehistoric community here were proficient at it. The burnt bone was completely oxidised, showing that consistent high temperatures were achieved in the pyre. In order to achieve this the fire had to be fed with fuel of a specific type and quantity, it had to burn for a sufficient length of time; and the pyre had to be constructed in a way that allowed enough oxygen to feed it. We know little of how cremated bone was recovered from the pyre site prior to final burial, but rarely, if ever, is all the bone included in the burial. A total of eight individuals were identified from studying the cremated bone from the site. Unfortunately due to the fragmentary nature of the burnt bone, we can say little about the lives of the individuals cremated at Ysgol Bro Dinefwr beyond the fact they were adults.

The plant remains give us some further information about the Bronze Age at Ffairfach. Hazel and to a lesser extent oak dominated the environmental picture for the Early Bronze Age. Analysis revealed that hazel branches were being selected for use as fuel, suggesting that people were trying to manage their woodland in a sustainable way; cutting branches rather than felling the whole trees. Analysis of prehistoric pollen from this part of Wales suggests that hazel and oak were plentiful in the area at this time.

The charcoal remains from the Middle Bronze Age are dominated by oak, alder and apple-type trees, suggesting these were prominent near the Tywi at this time. These woods were also used by the people around the site to build the pyres upon which they cremated their dead, carefully selecting small and medium-sized timbers to build the platforms on which their loved one's remains were placed.

Illus. 21 - An artistic interpretation of a Bronze Age cremation ceremony with funeral pyre. By Jonathan Millar.

CHAPTER 3

THE IRON AGE



Illus. 22 - Y Garn Coch, an Iron Age fort in the Brecon Beacons National Park, Carmarthenshire

While we know quite a lot about later prehistoric settlement patterns in Wales, through the survival of earthwork enclosures and hillforts, there are gaps in our knowledge within eastern Carmarthenshire. Although the impressive Iron Age hillfort of Garn Goch is visible to the north of the site, no definitive evidence from the Iron Age was known from Ffairfach. A defended Iron Age farmstead has been identified in Parc Dinefwr with a second possible one on the site of the castle. Evidence for Iron Age burials in Wales is rare, with just a handful of sites known such as Plas Gogerddan, Castell Buckett, Stackpole Warren, Drim Camp and Castell Henllys. The discovery of both Iron Age burials and an unenclosed Iron Age house at Ysgol Bro Dinefwr is therefore a significant contribution to the archaeological record for the area.

The Iron Age activity at the site is dominated by the remains of four ring-ditches with dates ranging from the Early to Late Iron Age. The earliest of these has a date range of 768-432 BC while the other three had dates overlapping slightly later in the 1st century BC. The dating evidence points to the ring-ditches being constructed consecutively rather than all at once, with perhaps each successive generation at the site creating their own monument. Once constructed, these monuments acted as a focus for

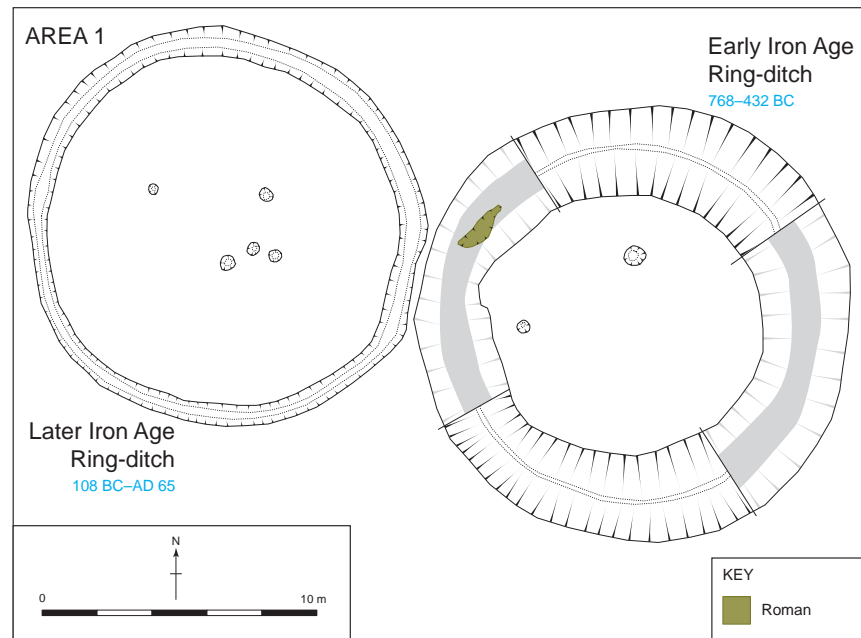
Illus. 23 - An artistic interpretation of the Iron Age landscape of Ysol Bro Dinefwr, Ffairfach, Carmarthenshire. By Hannah Sims.

later burials and continued to be built and re-used throughout the Iron Age.

The Iron-Age ring-ditches varied in size (between 10-16 m in diameter) and were all much bigger than the Early Neolithic example. The depth of the ditches varied between 0.41 m and 1.25 m and the widths varied between 0.63 m and 3.48 m. Small quantities of burnt animal bone were found in two of the ring-ditches but no human bone was identified. Finds from within the ring-ditches included Iron Age pottery, stone tools and some copper alloy fragments. Two of the four monuments had entrances, one being on the west side and the other being on the east side. In fact none of the ring-ditches

were the same, which may further indicate that they were constructed over a period of time

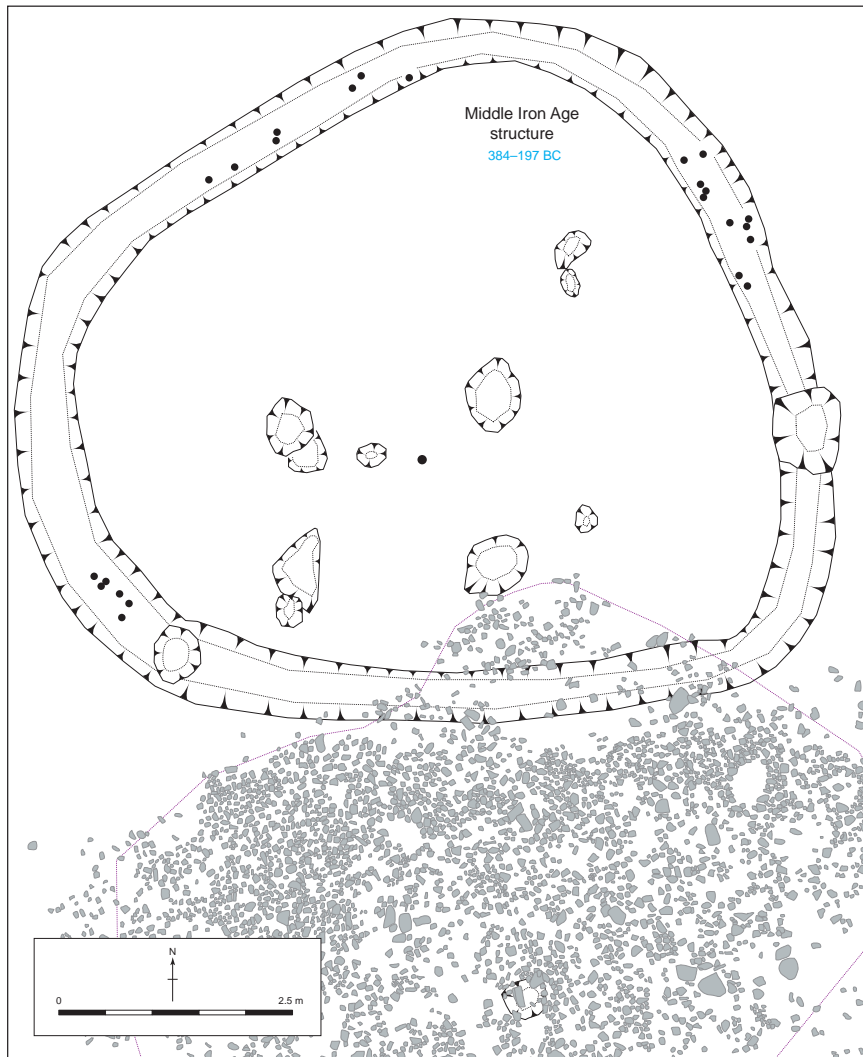
All evidence of banks and mounds associated with the four ring-ditches had disappeared due to natural erosion and agricultural cultivation. It is likely that by the end of the Iron Age there would have been an impressive collection of burial mounds on the site, possibly including the Early Neolithic mound at the centre. We know that the Iron Age cemeteries respected the earlier Bronze Age cremations cemeteries, so we can assume that the Bronze Age cemeteries were marked out in some way.



Illus. 24 - Iron Age ring-ditches at Ffairfach.



Illus. 25 - Aerial view of Iron Age ring-ditches and roundhouse at Ffairfach.



Illus. 26 - Plan of Iron Age roundhouse.

Farming was still the focus of life in the Middle Iron Age, as it had been in the Bronze Age. A roundhouse was identified on the edge of a waterlogged depression, with a cobbled area on the south side of the building. The house consisted of a D-shaped foundation trench (that would have supported upright timber planks), as well as stake and post-holes. The interior of the house measured between 6.5 and 7 m across. It is possible the south side of the building was open, and that the cobbled surface was a courtyard. As is the case in the Bronze Age, roundhouses during the Iron Age are often associated with other structures such as enclosures, field boundaries and, occasionally, and as appears to be the case at this site, with ceremonial monuments. The building was possibly in use at the same time as two of the Middle to Late Iron Age ring-ditches which were located slightly up slope to the west. This roundhouse is the first example of unenclosed Iron Age settlement to be discovered in the locality, providing a glimpse of what undefended lowland Iron Age settlement in this part of Wales might have looked like.

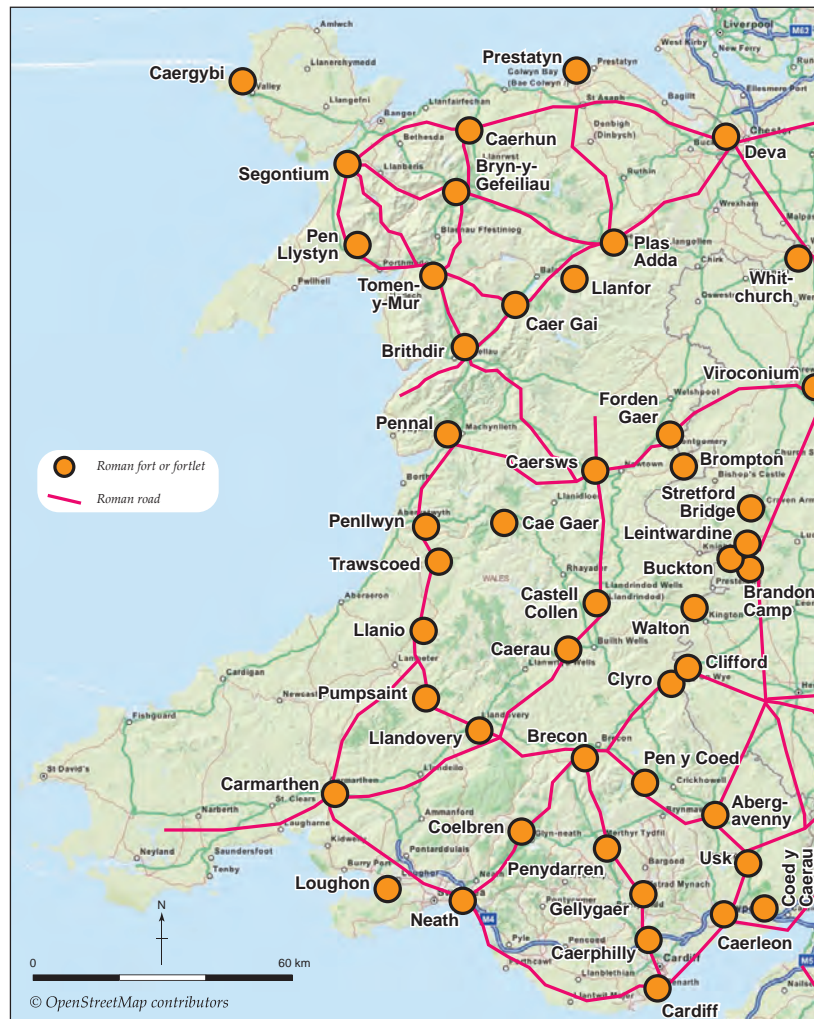
The Iron Age environmental evidence revealed charcoal from oak, hazel and apple-type trees. However, for the first time willow and wild cherry were recorded as fuel wood. Interestingly pollen analysis for the area suggests that neither willow nor wild cherry were major woodland components at this time and their use suggests an intentional collection of these species.

The Late Iron Age samples contained charcoal from large oak timbers, pointing to an increase in the felling of oak trees. This is a marked difference from the Early and Middle Iron Age, where smaller branches seem to have been preferred. The increased exploitation of

oak may mean that the inhabitants of the site required more fuel, probably for industrial or construction purposes, such as iron working.



Illus. 27 - Aerial view of Iron Age ring ditch and cobbled area.



Illus. 28 - Wales in the Roman Era, c. 75 - late 300's, roads, forts and fortlets. Based on Frere's *Britannia*, Jones' & Mattingly's *Atlas of Roman Britain* and Davies' *Wales in the Early Middle Ages* overlaid on *OpenStreetMap*, *MapQuest* layer.

CHAPTER 4 THE ROMANS

Carmarthenshire has a wealth of evidence from the Roman period. *Maridunum* was the civitas capital of the *Demetae* tribe in an area which is now modern Carmarthen. A substantial town and fort was located where Carmarthen now stands, and this would have imposed significant authority upon the surrounding area. There is further evidence of Roman military presence in the eastern Brecon Beacons area where there are a number of marching camps, with excellent examples at Y Pigwn and Waun-Ddu. There are many Roman find spots in the area surrounding Ysgol Bro Dinefwr, including coin hoards and pottery, but more substantial evidence of Roman occupation was found within Parc Dinefwr.

The outline of two large forts, one partly overlying the other was discovered in 2003. The earlier fort dates to the time of the Roman conquest of Wales in the early AD70s. This may have been abandoned for a time after the conquest, but a second, smaller fort was built on the same site shortly afterwards. Forts were vital to the success of the Roman conquest and they were strategically positioned to command the surrounding countryside. The remains of an external civilian settlement or vicus was found outside the gate of the later fort, and may have survived beyond AD 140 when the fort went was abandoned.

The later fort at Parc Dinefwr is also

associated with a network of Roman roads. Aerial survey and fieldwork in the area identified clear stretches of a Roman road running between Llandovery and Carmarthen. One stretch of road was identified to the northeast of Cwmifor in the area of Down Farm. It was thought that this stretch of road then continued in a south-westerly direction and may



Illus. 29 - Artists impression of Roman soldiers on the road to Carmarthen, while troops build a fire within the Iron Age ring-ditch. By Hannah Sims.



Illus. 30 - An aerial view of the site extents at Love Lodge Farm, Ffairfach. The approximate line of the Roman road is shown relative to the excavated area and the nearby town.



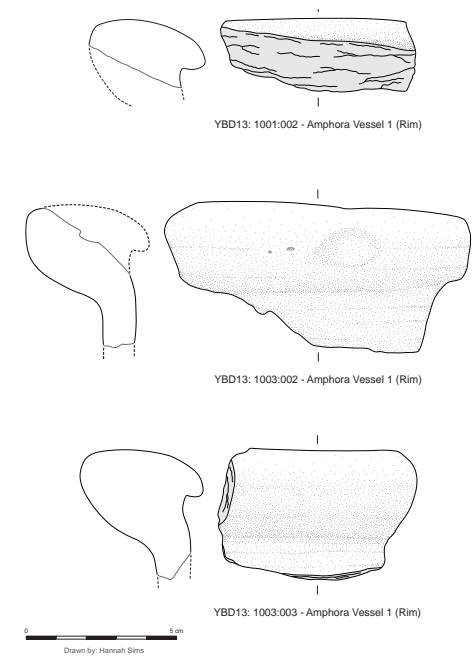
Illus. 31 - Part of the Roman road in section.

lie beneath the A40 as it approaches Rhosmaen. Stretches of the road have also been identified to the west of Llandeilo between Broadoak and Llanegwad.

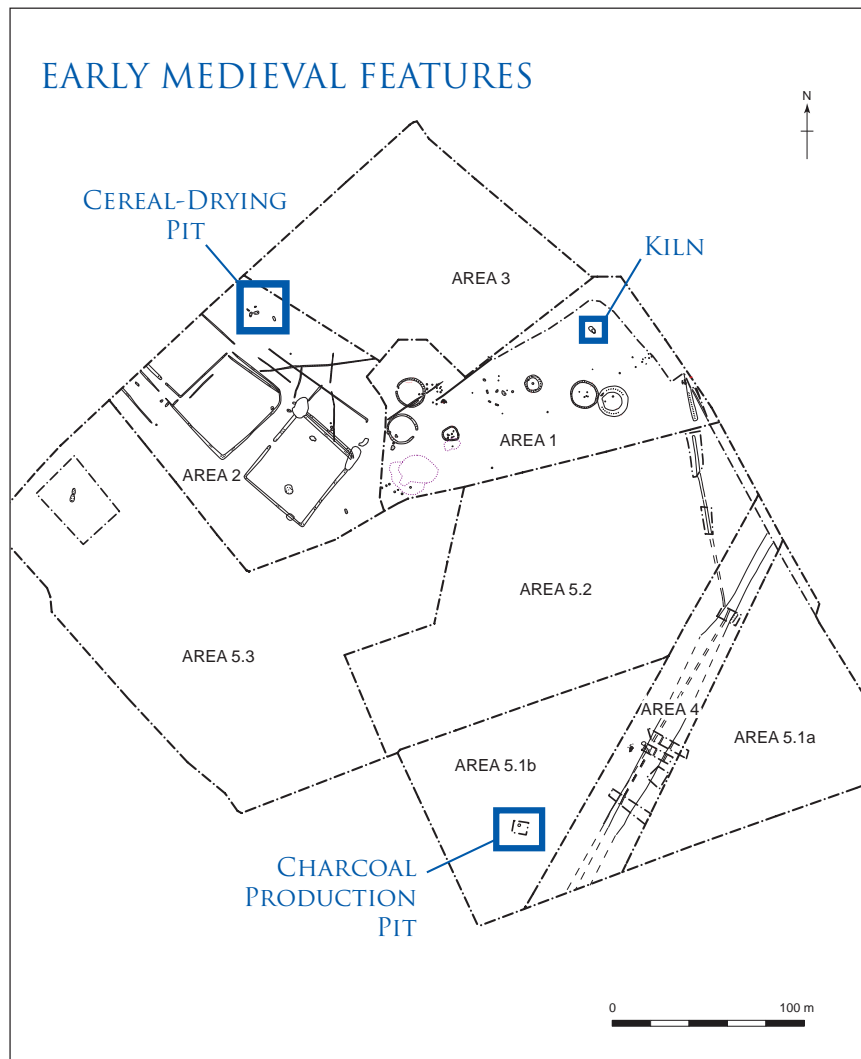
The road was the most significant of the Roman remains evident on the site. Only the foundation layers survived intact, but it was apparent that it was of typical Roman construction. A central carriageway was built on a raised gravel agger or embankment and was flanked by ditches or gullies. On the historic maps of the area the line of the Roman road appears as a field boundary or track crossing the site and it seems that the road was in use as a right of way up until post-medieval times.

An interesting find comprised 2nd century Roman pottery found in a temporary fire place cut into the ditch of one of the Iron Age barrows. This probably represented the remains of a single meal or rest break from a traveller on the Roman road, who used the barrow as a shelter in which to build a fire.

The charcoal from this Roman hearth consisted mainly of branch wood which dominated by oak with significant amounts of hazel. A number of other types of charcoal were also identified including cherry trees, blackthorn, whitebeam and ash, and these are the first recorded instances of these species being exploited for wood fuel at the site. The presence of a number of sunlight loving trees such as the cherry species indicates that woodland during this period was fairly open with a wide variety of tree types.



Illus. 32 - Roman Pottery recovered from site. By Hannah Sims.



Illus. 33 - Post-excavation site plan, highlighting the early medieval features uncovered at Llandeilo.

CHAPTER 5 FROM THE MEDIEVAL TO THE MODERN

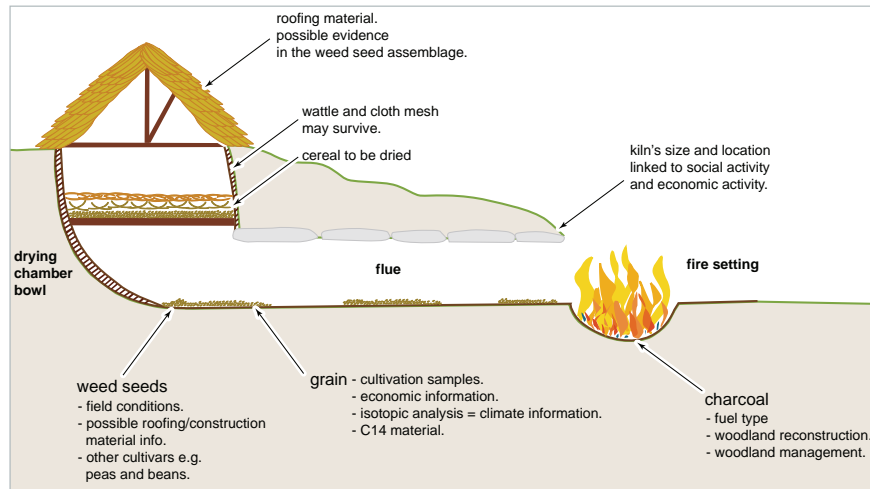
Medieval Wales saw the beginnings of urban development alongside continued rural settlement. The Church of St. Teilo in Llandeilo contains evidence of the early medieval period in the form of the 5th/6th century early Christian Curcagnus stone and two 9th century cross fragments. A holy well, located within the retaining wall around the churchyard is likely to be of at least medieval date. Llandeilo town grew up around this early ecclesiastical site and the town was given its borough charter by Edward I in 1280, with the right to hold annual fairs and weekly markets.

By the 14th century Llandeilo was a busy, albeit small, market town. It is likely that the area around Ffairfach was used for small-scale subsistence farming during the medieval period, with clear links to Llandeilo as its receiving market town.

Outside of the main settlement centres were two mills both documented as being in existence in the medieval period, a water mill at Tregib and a fulling mill at Llandeilo. To the south of Ysgol Bro Dinefwr a possible medieval enclosure (that may represent a former farmstead) is located on the north facing valley side.



Illus. 34 - St. Teilo's parish church, Llandeilo.



Illus. 35 - How it works - a cereal-drying kiln. By Eavan O'Dochartaigh.



Illus. 36 - Artists impression of an early medieval cereal-drying kiln in operation. By Jonathan Millar

Following the ritual burial activity in the prehistoric period, the medieval activity discovered on our site is firmly based around agricultural subsistence. It came in the form of two cereal-drying kilns and a charcoal production pit associated with farming and small scale industrial activity.

Cereal-drying kilns

Cereal-drying kilns were very important for cereal production, and were used from the prehistoric period until the 19th century. Cereal-drying kilns used heat to remove moisture from grain prior to storage (thus preventing germination) and also hardened the cereals to make it easier to thresh and mill them. These kilns were particularly important in damp climates. The nature of their construction and use meant that they were vulnerable to catching fire; many of the examples excavated on our site were fire damaged and subsequently abandoned.

The kilns typically consist of a sunken pit with a flue attached, making them appear keyhole or figure-of-eight shaped in plan. A structure made of materials such as turves, wood, stone and straw was then built over the pit and it was in this that the grain was laid. A fire lit at the entrance to the flue caused hot air to be drawn into the flue and upwards to dry the grain in the superstructure. In nearly all archaeological excavations, all that survives of the kilns is the sunken pit that would have held the fire and over which the grain was dried. Both kilns at Ysgol Bro Dinefwr were roughly keyhole-shaped and contained the remains of the collapsed structure, which had been accidentally burnt.

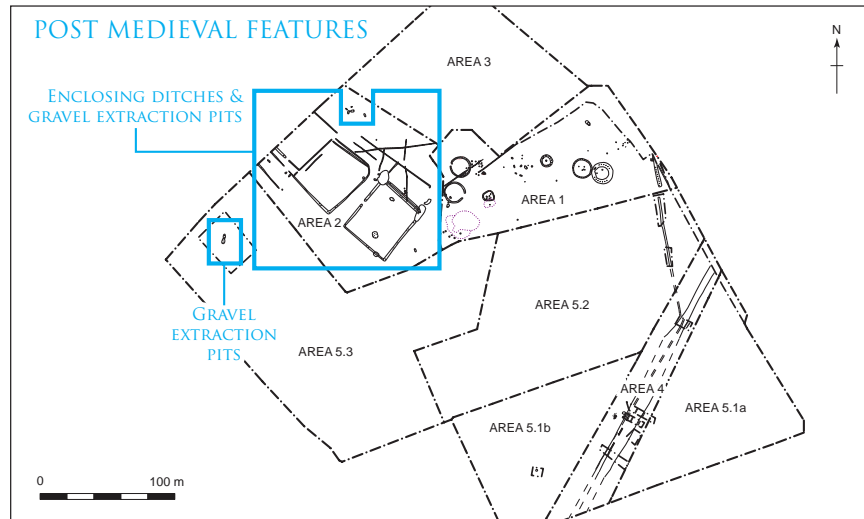
Analysis of the cereal grains recovered from samples of medieval material at the site has shown that oat grains were the most plentiful. Smaller quantities of barley were also recovered suggesting this was being grown as a second crop and thus may represent a winter cereal. The charcoal from within the cereal-drying kiln was found to be predominantly oak. This suggests a shift in practices, similar to that for the latest Iron Age period with the deliberate felling of oak trees to provide fuel for the kilns. The analysis indicates that all parts of the oak trees were used to fuel the kiln with evidence from twigs through to trunks.



Illus. 37 - Illustration of a hand-quern in action, grinding cereal into flour. By Sara Nylund.



Illus. 38 - Artists impression of a charcoal 'clamp kiln'. By Jonathan Millar.



Illus. 39 - Post-excavation plan of post-medieval features at Llandeilo.

Charcoal production

Charcoal was an extremely important resource in the past. It was used for a variety of purposes, from metalworking to glass and enamel production and for use as a domestic fuel. It was lighter than wood and also burned at a much higher temperature. As a result charcoal became a vital fuel source and was manufactured in charcoal production pits.

Archaeologically, these tend to survive as simple earth-cut charcoal filled pits that can be rectangular, oval or circular. The base and sides of charcoal pits tend to exhibit evidence for in situ burning which occurred during the charcoal production process. Selected roundwood timbers were carefully stacked in the pit and once lit were covered by soil and vegetation, with holes for ventilation. The amount of air was carefully controlled so that the wood was roasted but not burnt. Oak charcoal in particular produces very high temperatures when burned. The kiln on the site contained mostly oak, indicating it was deliberately selected.

Post-medieval

Following on from the medieval period we see the expansion of Llandeilo, and the beginning of satellite settlements such as that at Ffairfach. There was an increase in agricultural and industrial activity in the area, with a number of farms being established on the gravel terraces of the Tywi, including Bridge Farm and Love Lodge (or Llety Cariad) Farm.

The field system evident within the school site originated from this period. The cartographic sources indicate that the development site was in use as

agricultural land since at least the late 18th century. The area has remained predominantly agricultural, and has not been subject to the significant changes seen in south and north-east Wales brought about by the Industrial Revolution. There is documentary evidence for the use of the school site during the First World War as a muster site where militia, the Territorials and the Yeomanry Cavalry, would gather. Photographs show the site covered in rows of tents and it is thought that the site may have been used for a number of years as a military training ground.

Two large rectangular enclosures and part of a third were discovered in the northwest of the site. The ditches are unusual and it was difficult to determine what they were used for. The layout of the ditches points to some form of animal management. There were overlapping and double ditch arrangements which could have been utilised for droving cattle/sheep while the enclosed areas would have functioned as fields/corrals.

The general lack of features within the enclosures is consistent with this interpretation. However this is not a typical post-medieval field system and it does not appear on any of the historic mapping. This could mean that the features were short-lived and perhaps created for a specific event. Another possible explanation for these features is that they may be related to a World War I base/summer training camp. Due to the cavalry being present, the enclosures and associated ditches may have been used to picket and corral the horses.



ARTEFACTS

Prehistoric stone artefacts were recovered in the gravelly topsoil.

CHAPTER 6 CONCLUSIONS

The excavation in advance of Ysgol Bro Dinefwr has proven that human activity in the area dates back at least 6000 years to the Mesolithic period. The site has been in almost continual use up to the modern era. It seems that the land between the floodplain and higher ground would have attracted early human communities in the region. Providing easy access to the resources of the river and its associated wetlands, whilst providing a dry occupation site on the well-drained gravel terraces.

We can now for the first time say there was Mesolithic human activity in the Tywi Valley, which extends human history in the valley back by several thousand years. The Early Neolithic ring-ditch is also a significant find. The presence of a monument such as this points to a more sedentary community which took the time and resources to create a permanent, fixed living space in the landscape.

The development of the mortuary monuments on the site gives a clear indication that the site was held in high regard through the generations, and that folk memory of the sacred nature of the site endured. From the Neolithic ring-ditch we see the addition of Bronze Age cremation burials and later the construction of an Iron Age Barrow cemetery.

It is unusual to get the opportunity to

examine such a large area around these types of burial monuments. The close proximity of domestic houses to burials in the Bronze Age and again in the Iron Age is notable. While these features are within sight of the burial monuments, they do not encroach upon them and this seems to indicate some level of organisation and deliberate planning in the layout of the site.

The Roman period heralded the end of the use of the site for burial. This may be because the Romans brought with them a new way of life, and the native traditions and folk memories may have been lost. Other than a single hearth within a ring-ditch the site offers little information about what was happening adjacent to the road during the Roman period. Only the foundations of the Roman road survived, but it seems the Romans were using the local gravels as a base for construction.

Activity continued at the site throughout the medieval, post-medieval and modern periods but it was scattered and generally agricultural in nature. The fertile valley floor would have been ideal farmland and as such it was intensively used. Small scale industrial activity is indicated by the presence of cereal-dryers, a charcoal production pit and gravel extraction pits. This would be consistent with needs of a single farmstead (or group of farms) who would have been focusing on supplying the developing town of Llandeilo.

The construction of Ysgol Bro Dinefwr has given us a unique opportunity to rediscover a landscape that was sacred to the local inhabitants for thousands of years, but has long since been forgotten.

Thanks to the results of this excavation, future generations attending Ysgol Bro Dinefwr will be able to learn in detail about their ancestors - those who lived and died on this very spot!



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A guide to the excavations at
LOVE LODGE FARM, FFAIRFACH,
CARMARTHENSHIRE

In 2014 a team of archaeologists arrived at Love Lodge Farm to excavate over 7000 years of history at the site of the new school – Ysgol Bro Dinefwr. This book presents the results of the excavation and discussion of all the fascinating discoveries uncovered on site.



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