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Ynys Enlli Survey and Evaluation 2014-2015

Report on 2014-15 results

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Ynys Enlli Survey and Evaluation 2014-2015

Project No. G2318

Report No. 1232

Prepared for: Cadw

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Cover photograph: View of mainland from summit of Mynydd Enlli

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SUMMARY

This report gives a history of Ynys Enlli and summarises the data collected to inform a Heritage Management Plan for the Island. It includes the results of geophysical surveys and small excavations on sites near Porth Solfach, Henllwyn and the summit of the mountain. These investigations identified two burnt mounds, probably of a Bronze Age date, and concluded that the mound (PRN 1589) on the summit of the mountain was of fairly recent date.

1. INTRODUCTION

Ynys Enlli or Bardsey Island (centred on SH11322106) is located off the end of the Llŷn Peninsula, surrounded by famously strong tidal currents (figure 1, plate 1). The archaeology of the island is considerable and varied. Mesolithic flints have been found in many areas of the island and excavations undertaken in 2003 revealed a dense scatter of flints towards the north end of the island. There are roundhouses of unknown date, but thought to be prehistoric, on the eastern slopes of the mountain. There are also scheduled sites of medieval date, including the former Augustinian abbey, as well as many post-medieval structures of significance.

Discussions with Cadw and the Bardsey Island Trust took place during 2013-14 regarding the production of a Heritage Management Plan to accompany a wider Conservation Management Plan. Concern was also expressed about areas of erosion including coastal erosion, and the erosion, by Manx shearwater burrowing, of a SAM, interpreted as a Bronze Age barrow, (SAM Cn 140, PRN 1589) on top of Mynydd Enlli.

Preliminary work was carried out in March 2014 to survey the eroding coast of Porth Solfach and Henllwyn (GAT report 1176, Kenney 2014). This led to the identification of a site on the coast and a group of possible burnt mounds that were proposed for further investigation, which was carried out in 2014-2015. This investigation included geophysical surveys and small excavations.

Data was gathered as the basis of the Heritage Management Plan. This included inspection of sites to determine current condition and threats, the clarification of some confusions that have arisen in the records and providing more accurate grid references by the use of a hand held Global Positioning System (GPS). This data collection also involved collating information on previous archaeological work on the island and identifying the location of archives.

2. ACKNOWLEDGEMENTS

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The authors would like to thank Guy Burrows for volunteering to assist with the geophysical survey and Rhodri Evans for helping us move equipment and ensuring that we were comfortable in our accommodation. Dan Dawson was very helpful in pointing out some sites on the mountain that we would otherwise have missed. Thanks to Tom Dawson for detailed unpublished information on the two possible cremations found at Henllwyn and to Graeme Warren and Mark Edmonds for information about the current progress of work on the flint assemblage from near Bae y Rhigol (PRN 16779). Thanks to Helen Gwerfyl of Bangor Museum for her assistance with the Ty Newydd Collection.

Finally thanks to Steven and Emma Stansfield for inviting us to the Bird Observatory end of season/Halloween party. This report was edited by David Hopewell with comments and advice from Andrew Davidson.

3. METHODOLOGY

3.1. Aims and objectives

The aims of this year of the project were to discover more about sites threatened by coastal erosion and to gather data to inform the Heritage Management Plan. In addition there was an aim to establish the nature, character and date of the scheduled site interpreted as a round barrow (SAM Cn 140) which is being actively eroded by Manx shearwater burrows. This information is required before an appropriate management strategy can be designed for the monument.

A technical objective of the work was to determine the effectiveness of geophysical survey on the island considering the variety of rocks present as clasts within the general melange which comprises the bedrock of the island.

3.2. Survey of sites and background research

A Heritage Management Plan is to be written for Ynys Enlli, but the first stage of this requires gathering together information about known sites, their condition and potential threats. The gazetteer of sites was based on the Gwynedd Historic Environment Record (HER) and National Monuments Record (NMR). Where a site was listed in both records the information was amalgamated; where sites were only recorded in the NMR new Primary Record Numbers (PRNs) for the HER were allocated to these. Listed building records were also consulted and also used to generate new HER records where none existed. Entirely new sites found during the project were allocated new PRNs.

Information was also sought from other sources. Archaeological work has been carried out on the island over many years, not all of it reported or easily available. Douglas Hague, of the Royal Commission on the Ancient and Historical Monuments of Wales carried out private investigations on the island in the 1970s and 1980s. His records are held in Caernarfon Record Office and these were consulted. Information on work carried out by Tom Dawson of St Andrews University was obtained and other published work consulted. Christopher Arnold (1994) has drawn many of the sites together in a single report with extensive plans and drawings. This was extremely useful, but there are typographic errors in the grid references and other sources of confusion so visiting and recording sites on the ground was important to clarify these confusions. The artefacts from Arnold's excavation at Tŷ Newydd (Arnold 1998) are held in Gwynedd Art Gallery and Museum, Bangor. A quick inspection of these was made to see their condition and the range of artefacts (see appendix IV for summary of material).

As many sites as possible were visited on the ground to check their location, descriptions and condition. The site visits involved taking notes and photographs and locating the sites using a hand-held global positioning system (GPS). Condition and threats were recorded. This process also led to the identification of some new sites. Recording was done during all visits to the island in March, June and October 2014, so sites were seen in differing vegetation conditions. Not every site was visited but the large majority were. An Access database of all sites was created and updated as new information was found.

See appendix I for a full list of sites on the island.

3.3. Geophysical survey

Introduction

The objective for geophysical survey, as presented in the grant application to Cadw, concentrated on the area around the abbey, where survey was hoped to detect remains of building associated with the abbey. However in June when the survey was to be undertaken these areas were under a hay crop and so were inaccessible. Three possible burnt mounds (PRNs 39569-71) had been located in March 2014. It was too late to include them in the grant application. The area around them was, however, identified as a priority for geophysical survey. This was located to the north-east of Porth Solfach. Time that would have been spent surveying around the abbey was therefore transferred to this area. The aim was to first determine how effective a gradiometer survey would be on the island, then to try and determine whether the mounds were burnt mounds and whether any related settlement could be detected in the area.

Another area considered a priority for survey was to the west of Cafn Enlli, where Tom Dawson's team from St Andrews University found two possible cremations eroding from the cliff (PRN 59966 and 59967). It was considered unlikely that individual cremations would be detectable by the gradiometer but a ring ditch around a barrow might have been identified. The third area that required survey was a mound on the summit of Mynydd Enlli (PRN 1589) scheduled as a Bronze Age barrow but considered likely to be a later feature. This was being eroded by shearwater burrowing and required investigation to inform any mitigation.

A secondary objective of the survey was a general assessment of the usefulness of geophysical survey on the island. The underlying geology is highly variable and in many areas close to the surface. Igneous and metamorphic rocks are often strongly magnetic, producing natural anomalies several orders of magnitude greater than archaeological features. Gradiometer surveys cannot produce meaningful archaeological results where such rocks are within sensor range.

The survey was carried out by David Hopewell (plate 2) with the assistance of Guy Burrows between 16/6/2014 and 19/6/2014. Conditions were good; the larger areas near the coast were in fields with short grass with few obstacles. The area on the top of the mountain was very uneven with overgrown raised ant nests and numerous Manx shearwater burrows. This resulted in some inaccuracy in walking the traverses.

Instrumentation

The survey was carried out using a Bartington Grad601-2 dual Fluxgate Gradiometer. This uses a pair of Grad-01-100 sensors. These are high stability fluxgate gradient sensors with a 1.0m separation between the sensing elements, giving a strong response to deeper anomalies.

The Grad601 detects variations in the earth's magnetic field caused by the presence of iron in the soil. This is usually in the form of weakly magnetised iron oxides which tend to be concentrated in the topsoil. Features cut into the subsoil and backfilled or silted with topsoil therefore contain greater amounts of iron and can therefore be detected with the gradiometer. This is a simplified description as there are other processes and materials which can produce detectable anomalies. The most obvious is the presence of pieces of iron in the soil or immediate environs which usually produce very high readings and can mask the relatively weak readings produced by variations in the soil. Strong readings are also produced by archaeological features such as hearths or kilns because fired clay acquires a permanent thermo-remnant magnetic field upon cooling. This material can also get spread into the soil leading to a more generalised magnetic enhancement around settlement sites.

Not all surveys can produce good results as anomalies can be masked by large magnetic variations in the bedrock or soil or high levels of natural background "noise" (interference consisting of random signals produced by material within the soil). In some cases, there may be little variation between the topsoil and subsoil resulting in undetectable features. It must therefore be stressed that a lack of detectable anomalies cannot be taken to mean that that there is no extant archaeology.

The Bartington Grad601 is a hand held instrument and readings can be taken automatically as the operator walks at a constant speed along a series of fixed length traverses. The sensor consists of two vertically aligned fluxgates set 1.0m apart. Their mu-metal cores are driven in and out of magnetic saturation by an alternating current passing through two opposing driver coils. As the cores come out of saturation, the external magnetic field can enter them producing an electrical pulse proportional to the field strength in a sensor coil. The high frequency of the detection cycle produces what is in effect a continuous output.

The gradiometer can detect anomalies down to a depth of approximately one metre. The magnetic variations are measured in nanoTeslas (nT). The earth's magnetic field strength is about 48,000 nT; typical archaeological features produce readings of below 15nT although burnt features and iron objects can result in changes of several hundred nT. The instrument is capable of detecting changes as low as 0.1nT.

Data Collection

The gradiometer incorporates an on-board data-logger. Readings in the surveys were taken along parallel traverses of one axis of a 20m x 20m grid. The traverse interval in the survey was 0.5m and readings were logged at intervals of 0.25m along each traverse giving 3200 readings per grid. This is double the resolution used for general prospection and is designed to resolve smaller-scale archaeological features and increase spatial accuracy.

The survey grid on the mountain was set out using a Trimble R6 GPS system to an accuracy of +- 30mm. The grids on the lowland were set out using tapes and located by reference to known features shown on Ordnance Survey mapping.

Data presentation
The data is transferred from the data-logger to a computer where it is compiled and processed using ArchaeoSurveyor 2 software. The data is presented as a grey-scale plot (Figures 5, 7, 9 and 10) where data values are represented by modulation of the intensity of a grey scale within a rectangular area corresponding to the data collection point within the grid. This produces a plan view of the survey and allows subtle changes in the data to be displayed. This is supplemented by an interpretation diagram (Figures 6, 8 and 11) showing the main features of the survey with reference numbers linking the anomalies to descriptions in the written report. It should be noted that the interpretation is based on the examination of the shape, scale and intensity of the anomaly and comparison to features found in previous surveys and excavations etc. In some cases the shape of an anomaly is sufficient to allow a definite interpretation e.g. a Roman fort. In other cases all that can be provided is the most likely interpretation. The survey will often detect several overlying phases of archaeological remains and it is not usually possible to distinguish between them. Weak and poorly defined anomalies are most susceptible to misinterpretation due to the propensity for the human brain to define shapes and patterns in random background noise. An assessment of the confidence of the interpretation is given in the text.

Data Processing
The data is presented with a minimum of processing although corrections are made to compensate for instrument drift and other data collection inconsistencies.

In the magnetic data high readings caused by stray pieces of iron, fences, etc. are usually modified on the grey-scale plot as they have a tendency to compress the rest of the data. The data is however carefully examined before this procedure is carried out as kilns and other burnt features can produce similar readings. Large-scale spatial variation in the background magnetic field caused by bedrock can be reduced by using a high-pass filter. Large variations of more than about 20nT cannot, however, be compensated for. Grey-scale plots are always somewhat pixelated due to the resolution of the survey. This at times makes it difficult to see less obvious anomalies. The readings in the plots can therefore be smoothed using the "graduated shade" function in ArchaeoSurveyor 2. This calculates a continuously interpolated value for every pixel. Each pixel value is calculated by generating cubic spline curves from all the data points in both the X and Y axes. This reduces the perceived effects of background noise thus making anomalies easier to see. Any further processing is noted in relation to the individual plot.

3.4. Evaluation trenching

Trenches were dug to investigate a potential site on the coast (PRN 38294), the three possible burnt mounds (PRNs 39569-71) and the mound on top of the mountain (PRN 1589). A single trench was dug in each site with the exception of the potential burnt mound PRN 39571. Trenching was not possible here as this had western clover growing on it, which is a protected species.

In total four trenches were excavated. All were dug by hand. Turf was removed and layers excavated stratigraphically down to bedrock or the glacial substrate. The trenches were recorded by notes on proforma context sheets, by photography and by hand drawn plans and sections at appropriate scales. A photographic record was made using digital camera set to the highest resolution. On completion the trenches were backfilled and the turf replaced.

Trenches were located either by total station theodolite or by survey quality GPS, depending on the availability of a signal for the GPS telephone connection.

All the excavations took place with permissions from Natural Resources Wales and the excavation on the mound on Mynydd Enlli took place under Scheduled Monument Consent. Trenches 5 to 7 were dug between 16th and 20th June and trench 8 was dug between 29th October and 1st November 2014.

See appendix II for a detailed list of contexts from each trench.

3.5. Report and database

This report describes the background and methodology of the project, the results of the survey, and provides recommendations for scheduling and future research. The report incorporates a full gazetteer of sites (appendix I). This gazetteer is a basic list with minimal details but has been generated from the project database, which holds more information, including detailed descriptions and notes on condition. The Access database that accompanies this report is designed to aid input into the HER.

3.6. Copyright

4. GEOLOGY

Even a cursory examination of the exposed rocks on Mynydd Enlli and around the coast indicates the complexity of Bardsey's geology. The rocks are part a series of groups of sedimentary, metamorphic and igneous rocks called the Monian Supergroup dating from the very end of the Pre Cambrian period that can also be seen on parts of Anglesey. Most of the rocks on Bardsey belong to the Gwna Mélange, a disparate mix of isolated rock fragments (clasts) in a mix of fine-grained matrix of greenschist. The clasts vary from large pieces of rock hundreds of metres long down to microscopic fragments, although most are 1 to 3 m in length in this area. The most common clasts are meta-greywackes, quartzite, limestone, jasper, conglomerate, sandstone and siltstone. The rocks are partially metamorphosed, the limestone having been converted to marble in places. The mélange also contains a concentration of granite clasts at the northwest of the island, termed the Bardsey Island Granite Block-swarm (Leslie, Krabbendam, and Gillespie 2012, 12). This jumbled formation of rocks was formed by an olistostrome; a huge underwater landslide caused by tectonic activity (Howells 2007, 17-19). The geology is further complicated by Tertiary period igneous intrusions of dolerite, one of which has eroded to form Cafn Enlli. The drift geology consists of glacial till across the lowland areas (ibid).

5. HISTORY

5.1. Arthurian Legend

There is little reliable evidence for the early medieval activity on Bardsey but there are many suspiciously detailed published accounts both in antiquarian literature from the 18th to the early 20th century and recent popular literature. While not strictly historically or archaeologically sound by modern standards, these traditions shape the way that Bardsey is perceived both today and probably influenced its role as an historical centre for pilgrimage.

Bardsey has been interpreted as being the Avalon of Arthurian legend; Lewis Morris writing in 1779 locates Tŷ Gwydr (the house of glass), where Merlin went with the thirteen treasures of Britain, on the island (Morris 1878, 170). He also shows the alleged sinking place of Arthur's favourite ship Gwenan derived from a poem of 1450 (Morris 1748, plate 11). There are several accounts in the Mabinogion and writings of the bard Taliesin relating to Annwn, the Irish and Welsh "otherworld" that mention a glass castle. This has been interpreted as a glass-house or green-house where apples were grown by the monks on Bardsey; thus Ynys Affalach, a welsh form of Afalon that can be translated as Isle of the Apples. It was here that Arthur was brought after his final battle (Barber and Pykitt 1993, 137-143). These accounts are based on over-literal interpretations of a wide range of sources, themselves of variable reliability, including the influential but generally discredited writings of Geoffrey of Monmouth, the Mabinogion and other folk tales from medieval manuscripts. These have then been correlated to a range of genealogical sources and place-name evidence. Many of these sources, such as the collection of stories comprising the Mabinogion, that date from before the confusion caused by Geoffrey of

Monmouth's manufactured histories in the 12th century include historical events along with a lot of mythology and cryptic material that can be interpreted in many different ways. Unsurprisingly there are many other contenders for the site of the mythical Avalon and sleeping place of Merlin, all with equally closely-argued but ultimately unprovable justifications. There has been much debate about the Arthurian Legends and some see him as a historical figure or a conflation from a range of earlier figures and legends. There is however little reliable early evidence and others are less convinced; "no figure on the borderline of history and mythology has wasted more of the historian's time" (Myres 1986, 16).

5.2. The early ecclesiastical history; saints, hermits and culdees

Most popular histories of Bardsey (e.g. Chitty 1992, 12-13) start by recounting the tradition that St Cadfan, coming from Brittany with a large company of saints, established a monastery on the island in the 5th or 6th Century, some say at the instigation of Einion Frenin prince of Llŷn. Cadfan was succeeded by Lleuddadd and many people travelled to the island to die because anybody buried on the island would not go to hell and people on the island always die in order, with oldest dying first. These traditions are so commonly repeated that it is worth tracing the origins of the information.

The sources of the traditions are quite diverse. Much of the wording seems to come from Baring-Gould and Fisher who describe the life of Saint Cadfan in some detail in *The Lives of the British Saints* (1910, 1-9). This detailed account comes from several sources, none of which dates from before the 11th or 12th century. The '*Vita sancti Paterni* or the Life of Saint Padarn in the Cotton Manuscripts (British Library, MS Cotton Vespasian A, xiv) dated to c.1120 by Wade Evans (1944: xii-xiii). This records how *Catman* (Cadfan) was one of the leaders of a large group of monks who came from Letavia (Llydaw in Welsh or Brittany in English) to Wales. It makes no mention of Cadfan beyond this. The link to Brittany may well be a result of the conflation of several earlier manuscripts to produce the *Vita* including a life of Saint Patern of Vannes (Guimarães 2009, 195-197; Doble 1941, 1-6, 36-37). Bartrum also notes that there seems to be little doubt that Cadfan and his company came from a forgotten place in Britain called Llydaw as opposed to Brittany (1993, 84). Cadfan was probably the founder of the church in Towyn, Meirionydd (Davidson 2001, 369–70).

The first links to Bardsey come from various versions of the Genealogies of the Welsh saints that were probably written in the 13th century. The most complete is *Bonedd y Saint* (Harleian MSS. in the British Museum. No. 4181) where it is listed 'St. Cadfan in [Ynys] Enlli, son of Eneas Ledewig [the Letavian], and Gwen Teirbron, daughter of Emyr Llydaw,..'

It is also recorded that Hywyn ap Gwyndaf Hen of Llydaw was *periglor* (father-confessor) to Cadfan and that the following saints, 'who came to this island with Cadfan', were also in Enlli: Cynan, Dochdwy, Mael, Sulien, Tanwg, Eithras, Llywen, Llyfab, and Tegwyn. *Bonedd y Saint* then lists four cousins of Cadfan, grandsons of Emyr Llydaw, namely, Padarn, Tydecho, Trunio, and Maelrys (*Bonedd y Saint*, 21-24). Bowen argues that medieval genealogists considered these saints to be closely related because they have churches dedicated to them in Wales in close proximity to each other, as opposed to any genuine historical connection, thus making the list "almost entirely worthless" (Bowen 1956, 92). Cadfan was also a witness to one of the Llancarfan Charters (Bartrum 1993, 84 and 530).

It should be remembered that these hagiographic and genealogical documents were written six hundred or more years after the lives of the historical figures they describe. They may retain some information from earlier documents and the earlier oral traditions but were not written as unbiased history. Most were written in response to the repercussions of the Norman conquest. The accounts of saints' lives aimed to legitimise claims to control of churches and episcopal jurisdiction by demonstrating the antiquity of these claims (Petts 2009, 44-5).

It can be deduced from the above that Cadfan was probably a genuine historical figure but the links to Bardsey are somewhat tenuous and are very different from the detailed narrative that occurs in modern popular histories. The source of this seemingly convincing information including the idea that Cadfan became the first abbot at the instigation of "Einion Frenin prince of Lleyn" is revealed in Baring Gould and Fisher where the majority of the information about Cadfan is derived from the *Iolo Manuscripts*. These are the work of Iolo Morganwg otherwise known as Edward Williams (1747-1826). He was a writer, poet, polymath and scholar of ancient Welsh manuscripts who turned to forgery and embellishment of historical sources. His aim was to promote the Welsh culture of South Wales and in particular his native Glamorgan where he claimed the purest bardic traditions survived. The Iolo manuscripts were collected together and published by his son but do not appear to be genuine historical manuscripts. His legacy is, however, still of great importance to all things "Celtic". He was founder of

the *Gorsedd of the Bards of the Isle of Britain* in 1792 and created the bardic alphabet along with an extensive range of rituals and pseudo-historical documents. The Gorsedd still plays a leading role in modern-day eisteddfodau. It is a testament to his wide knowledge and skill that it was many decades before the extent of his invention was discovered.

Many of the other traditions of Bardsey can be traced to the life of St Leuddad, (*Buchedd Llewddog Sant).* Lleuddad was also listed (in Enlli) in *Bonedd y Saint*, and is said to have succeeded Cadfan. The *Buchedd* was not written until the sixteenth century (Llanstephan mss 34) and is thus long removed from any historical events. The most often encountered traditions from the manuscript are the three requests that Llewddog made of an angel.

> *"First, that his canons should die from eldest to eldest, whilst they kept the commandments of God. Secondly, that the soul of any person buried within that island should not go to hell. Thirdly, that so might it also happen unto him that should maintain the privileges of the island."*
> (*Buchedd* Llewddog Sant, Llanstephan mss 34)

The first repeats an earlier tradition: Giraldus Cambrensis in his "Journey through Wales" of 1191 tells us, "beyond Lleyn, there is a small island inhabited by very religious monks called Caelibes or Colidei. This island, either from the healthiness of its climate, or rather from some miracle and the merits of the Saints, has this wonderful peculiarity that the oldest people die first, because diseases are uncommon, and scarcely any die except from extreme old age" (Gerald of Wales 1978, 183-90). This tradition is still encountered on the island and Pen Llŷn. There is a medieval poem about Cadfan, *Canu a Gaduan,* written by Llywelyn Fardd in the twelfth Century that mostly praises the church at Towyn but closes by eulogising Cadfan and Lleuddadd as guardians of Enlli (Baring Gould and Fisher, 5).

The earliest credible documentary evidence of an ecclesiastical community occurs in the *Brut y Tywysogion* which records the death of Iarddur, a monk of Bardsey in 1012. Royal patronage is recorded in the 12th century History of Gruffudd ap Cynan; he bequeathed 10s. to the church at Enlli in 1137 (Jones 1910 157). The final major source for the early ecclesiastical history is the *Vita Sancti Elgari* or *Life of Saint Elgar* that is found in a collection of Gospel texts, charters and saints' lives known as the *Liber Landavensis or Book of Llandaf.* This collection was compiled during territorial disputes between Llandaff and St David's in the early to mid-twelfth century.

The life recounts how Elgar, a young Englishman, was captured by pirates and lived as a slave in Ireland. He obtained his freedom and landed on Bardsey "the Rome of Britain"…

> *"its sanctity is due to the 20,000 bodies of saints of saints buried there, both confessors and martyrs; its integrity is due to the fact that it is surrounded on all sides by the sea and has a lofty promontory on its eastern side, with its western coast level and fertile with soil irrigated by a sweet fountain……and in it no younger brother was seized by death while an elder was still living"…*
>
> *"He lived seven years with a community of brethren….and for a further seven years while the whole of Gwynedd was desolate, he remained alone in the hermitage, having nothing for his sustenance except for what was provided by those creatures succouring him at the will of God".*
> (Translation from Jankulak and Wooding 2010, 43-47)

He told a visitor, master Caradog, that he was visited by the spirits of "Dubricus the Archbishop of Western Britain, Daniel Bishop of the church of Bangor and St Paternus and may others whose bodies are buried on the island". At the time of his death he dug his own grave and was buried by passing sailors in (or by) "the little church". In the year 1120 "his teeth were translated from the Island of Enlli on the same day that the relics of St Dubricus were translated to Llandaff by Bishop Urban" (Translation from Jankulak and Wooding 2010, 43-47).

The *Life of St Elgar* is examined in some detail by Jankulak and Wooding (2010, 15-47). They consider the *Life* to be "more historical than not" and set between 1081 and 1106. It was almost certainly included in the *Liber Landavensis* because it adds legitimacy to the relic-cult of Dubricus and the claims of Llandaf. The *Life* may however provide an interesting snapshot of the religious life on Bardsey before the influence of the Normans. "Elgar's world is one of ethnic diversity, destructive changes to society, and renewed interest in the heroic saints of the early Christian tradition. Elgar's monasticism, an eremitical renewal of uncertain date, was suddenly of great interest in this time of change" (ibid 36).

The religious community on Enlli did not exist in isolation. The early church in Wales is, however, poorly documented and there is little archaeological evidence apart from early inscribed stones. The Welsh Church may have developed from Christianity in Roman Britain although perhaps only in the more urbanised areas of south-west Wales. The conversion of the north and west is most likely to be the result of individual holy men (saints) establishing monasteries which after their death became the centres of devotional cults. Gildas records Wales as being Christian in the early sixth century (Petts 2009, 157-179).

One possible early Christian foundation was at Capel Anelog at the western end of the Llŷn Peninsula. Two engraved stones, dating from the first half of the sixth century, were found here. Translations of their Latin inscriptions record that "Veracius the priest lies here" and more significantly "Senacus the priest lies here with the multitude of the brethren". This might refer to a monastic cemetery or the community of the faithful Christian dead in surrounding graves (Edwards et al 2013, 241-246). This is one of several early sites in Wales, Petts notes that these early foundations were not remote hermitages but were sited on the coast or by rivers with good communication and in good quality fertile land (Petts 2009, 165). An extensive network of monastic sites had become established in Wales by the eighth century, usually known as *clasau* (*clas* singular) in Welsh. These were eclectic ecclesiastical settlements often not following a formal monastic order (secular canons) and probably headed by an abbot. There was a *clas* church at Aberdaron that presumably had links to, or developed from, the nearby Capel Anelog.

It seems that Bardsey was a different kind of establishment to the *clas* at Aberdaron; Giraldus Cambrensis in 1188 described the "very religious monks" on Bardsey as "Culdees". The Culdees (trans. Servants of God) were originally members of Irish ascetic and eremitical communities first recorded in the late 8th or 9th century. It appears that there were several similar communities in north-western Wales, two on equally inaccessible islands, Puffin Island (Ynys Lannog) and St Tudwal's and two in remote locations on the mainland, Penmon and Beddgelert (Stober and Austin 2013, 41). These sites were probably paired or closely affiliated with nearby *clas* churches, in the case of Bardsey with Aberdaron on the mainland (Johns 1960).

5.3. The later ecclesiastical history – The Augustinians to the Dissolution

This distinction between these eremitical settlements and clas churches is emphasised with the coming of the Augustinians. The abbey at Enlli was refounded as the Augustinian priory of St Marys, in the 13th Century probably a change probably instigated or at least supported by Llywelyn Fawr (ap Iorwerth) (Pierce 1963, 77). Similar refoundations of the Augustan orders occurred at Puffin Island, St Tudwal's, Penmon and Beddgelert. In all cases it is the Culdee element and not the *clas* that was replaced by the Augustinians (Davidson 2009, 51-2).

The exact date and of the foundation and name of the founder are not known but for the first time the evidence is supported by contemporary documentation. In about 1212 two canons of Bardsey, Gruffydd and Cynddelw, were witnesses to a charter of the Augustinian abbey of Haughmond, indicating that they were canons of the same order (Haughmond Cartulary MS.1 f.149; RCAHMW 1964 17-19).

Changes in the status of the abbey and its relationship with the *clas* at Aberdaron appear to have been problematic; an agreement was made in 1252 between the abbot and convent of Enlli and the secular canons of Aberdaron, "concerning controversies which have arisen between the aforesaid". The agreement is examined in detail by T Jones Pierce (1963), but in summary the secular canons of Aberdaron retained control over a small "*clasdir*", an area around Aberdaron, and a few hamlets. The holdings of the Augustinian Priory on Enlli (the Abadaeth) in contrast included fairly extensive holdings on Pen Llŷn (Uwchsely and Issely, Tremorfa and Ultradaron), and also the receipt of tithes from the area including from the church at Aberdaron. The place names Cwrt and Secar probably indicate a court and exchequer on the mainland.

Thirty years later Edward I had defeated Llywelyn ap Gruffydd and the rule of the Welsh Princes was over. Edward made a series of grants to repair damage caused by the recent war including one of ten marks (£6.3s 4d) to Ynys Enlli (Edwards 1940, 82) although as Mary Chitty remarks it is a little difficult to see why Enlli suffered in its remote location (Chitty 2000, 30). Edward embarked on a triumphal tour of Gwynedd in 1284 including a pilgrimage to Bardsey. His Household and Alms Rolls record that Edward and his substantial entourage arrived on Enlli on July the 30th stayed for two days and returned to the mainland on August 2nd. A series of alms and obligations were distributed (ibid 33-37).

Documentary records for the 14th and 15th centuries are patchy but the names of some abbots are known and there are records of the properties and tithes. The sale of rabbits and rabbit skins was listed as an important source of income in the *Taxatio* of Pope Nicholas IV in 1291. The only record that can be linked to building was permission granted for the abbey to take timber from the woods of Merioneth in *c.*1305. Substantial buildings are almost certainly present in 1346 when the island was raided by a robber J Bannebury with two boats containing thirty well-armed men. The abbot and canons were able to shut themselves up while the abbey was plundered of food drink and other goods. (Edwards 1935, 235; RCAHMW 1964, 17; Chitty 2000, 42).

Enlli is famous as a place of pilgrimage although it is not known when this became established. It seems likely that the writings in the 12th century onwards indicate an effort to promote the sanctity of the island and its popularity as a destination for pilgrimage. St Leuddad's vision stating "that the soul of any person buried within that island should not go to hell" must have been influential and probably accounts for many of the burials on the island. A series of chapels and churches on the mainland are related to pilgrimages to the island ending with St. Mary's chapel, now totally ruinous, that overlooks the island (Pennant 1781, 373). A late flourishing in pilgrimages may be indicated in the rebuilding and enlarging of churches and chapels along the Llŷn in the 16th century (Allchin 2002, 16).

5.4. Post dissolution history

The pilgrimages came to a halt with the Dissolution in 1537. The monastery was disbanded and the island and Cwrt were leased to Ralph Body and Thomas Jones of London but changed hands several times before becoming the property of John Wyn of Bodfel in 1547 (Chitty 2000, 61-2). Two leases survive; the second from August 1547 contains a memorandum describing the island (P.R.O. Exchequer Augmentation Office Misc. Books, E 315, Vol 373- reproduced in Chitty 2000):

> *…there was a Monastery or smal priory the church hows and steple wherof ben defaced having neyther, belles, leade, iron nor glas remayning opon the same And there is no habytacon in the said Ile. The same Ile ys plenteously stored with conyes to the number of 400 cople or more by est[imation] of the country and in seasonable tyme may be taken yearly by est[imation] 800 puffins. The same Ile hath no pasture, arable or medow ground within yt by reason of the grete plenty of conyes whiche Destroy thyncrease thereof but ys a mete ground to kepe by est[imation] gots 100 and shepe 300.…..…The same hathe a faire springe of fresh water within yt but no kind of woodes or under woods be growynge opon the same.*

It seems that within 10 years of the dissolution the buildings on the island had been stripped of anything useful and Enlli was uninhabited and over-run with rabbits. The reference to puffins is misleading. The Manx Shearwater's scientific name is *Puffinus puffinus*. This signifies a name change; shearwaters were called Manx puffins until the 17th Century. "puffin" was originally a word for the plump young of Manx Shearwaters taken from the nesting burrow and cured for use as food (Oxford English Dictionary and Jobling 2010, 323). The listing of "puffins" along with rabbits which had been a source of income for the abbey probably indicates that shearwater young were collected for food.

John Wyn ap Hugh was given Bardsey by the Duke of Northumberland in 1553. In 1569 a Bill of Complaint was made in The Court of the Star Chamber where it was alleged that John Wyn was "a man of Evill disposition, principal captain, chief and only supporter, defender and maintainor" of piracy in North Wales. He was alleged to have an agent and a store on the island which acted as a depot for trading stolen goods and provisioned pirate ships. It appears that nothing came of this; he sat in one further parliament after this before his death in 1576 (Roberts 1960, 49, Bindoff 1982 674).

A record of buildings was made by the naturalist John Ray in 1662 who noted a ruined church adding "three more they told us of" (RCAHMW 1964, 18; Derham 1760, 233). Pennant visited the island in 1773 and described the abbot's house as a "long stone building, inhabited by several of the natives" and not far from it was a "singular chapel or oratory being a long arched edifice with an insulated stone altar near the east end" Moses Griffith's engraving in Pennant's Tours shows a distant view of Bardsey from the mainland. The present tower seems to rise above a block of other buildings (Pennant 1781 Vol 2, 369). Fenton records in his Tours of 1810 to 1813 that the island "contains 12 to 15 houses occupied by about 60 people or more" (Fenton 1917, 229) later in his description he notes that "The Island Belongs to Lord Newborough, purchased by his grandfather Sir John Wynne of a Doctor Wilson, of Newark in Nottinghamshire. It is occupied at present by 3

or 4 families. Farmers, the principal of which resides in a miserable old house, but the largest having been formerly the Abbot's lodging" (ibid 330).

A visit to the island is described in Archaeologia Cambrensis 1847 by Rev H Longueville Jones. By this time only the abbey tower was standing, in a similar to condition to the present day, although "The inhabitants state that considerable remains of buildings have been taken down, within the memory of man on the north-western side of the tower alluded to; but they can give no account of their form or character. On the south-eastern side of the tower, they shew the traces of what they call the church-yard and say that considerable quantities of bones have been disinterred there, from time to time". A tradition of the remains of a small chapel near a holy well dedicated to the Blessed Virgin on the hill above was also recorded. The island was inhabited by 140 people at this time and traded lobsters and oysters with Liverpool.

The history of Bardsey from the 18th century onwards was dominated by its owners, the Wynn Family and the Glynllifon estate. The first Lord Newborough (Sir Thomas Wynn 1736-1807) in 1786 made an unusual second marriage to a 13 year old Italian music hall singer, Maria Stella Patronialla, who claimed to be the daughter of Lois Philippe, Duke of Orleans, afterwards King of France, although it was never proved. Memories of their visit to the island were recorded by William Bingley in 1801 (Bingley 1804, 432-3).

> *…the grandest sight the present inhabitants ever witnessed, was a visit of the proprietor, Lord Newborough, about eight years ago, acompanied by lady Newborough, and several persons of distinction, in the whole to the number of about forty. This company embarked in fishing smaks from Porthor, near Carreg Hall, in the parish of Aberdaron. On their arrival in the island, marquees were immediately pitched. The whole company dined in the open air; and, at the conclusion of their repast, all the inhabitants were assembled. The ensuing scene reminded a gentleman of my aquaintenance, who was present, of what he had read respecting the inhabitants of some of the South-Sea Islands. They were drawn up in a circle, and the lady Newborough adorned the heads of the females with caps and ribbons, whilst lord Newborough distributed hats among the men.* (Bingley 1804, 432-3)

The Third Baron Newborough made major changes to the island in the 1870s. Up to this time the island contained about 14 houses; maps and rentals from 1776 to 1871 list the names. The island was divided into 4 quarters (Christin, Penrhyn, Bengen and Cross quarters). It appears that only one house in each quarter had outbuildings and that these were shared by the other houses (Arnold 1994, 5). The rebuilding in the 1870s included the construction of three detached houses and four pairs of conjoining houses with shared outbuildings and yards. The houses are all substantial two-storey buildings and are an unusual feature of a small relatively inaccessible island. A new chapel was built at the same time and opened in 1876 (Arnold 1994), replacing the small chapel that had been converted into a schoolhouse.

The earliest new construction was a 99ft high lighthouse (PRN 3604) and outbuildings designed by Joseph Nelson and completed in 1821 (RCAHMW 1964, 20). The fog signal tower (PRN 59851) was erected in 1828, now replaced by a modern fog horn outside the boundary wall. There were houses for the keepers with additional accommodation added in 1882, a vaulted paraffin store and in the eastern part of the enclosure a garden with pig sties and privies (Arnold 1994).

A series of "kings" of Bardsey were crowned by Lord Newborough who wanted to impose a constitution on the islanders, possibly because of difficulties in extracting rent (Wheeler 1955, 78; Chitty 1925, 190). A crown and ceremonial snuff box were made and were first used at the coronation of the second king of Bardsey in 1826. The crown is now in Bangor Museum and is described by Arnold (1994, 36 and 1996, 109). It is made of gold painted tin and glass and kept in a glass case; the snuff box is lost. The last king of Bardsey, Love Pritchard, led a general exodus of most of the older residents from Bardsey to the mainland in search of a less laborious existence in 1925. He told the Daily Sketch that 'we have not enough men to row boats off for us and look after the cattle.' Pritchard was 82 years old at this time and he died the following year. New residents moved in to the vacant properties. Census records, show, however, that the population of the island went into steep decline in the 20th century falling from 132 in 1881 to 54 in 1931 and to 14 in 1951.

Bardsey has been an inspiration for writers and artists. The best known resident on the island was Brenda Chamberlain the writer and artist, who lived at Carreg from 1947 to 1962. Several murals survive on the walls of the house. Her best-known book 'Tide Race' is based on her time on Enlli (Chamberlain 1962).

Lord Newborough sold the island in 1972 to the Hon. Michael Pearson (Lord Cowdrey), who merged the farms to form a single tenancy. The Bardsey Island Trust bought the island from him in 1979, following an appeal supported by many Welsh academics and public figures, as well as the church in Wales. The Bardsey Bird and Field Observatory opened in 1953 and is still active. The island is currently farmed as one unit and the rest of the houses are used for the observatory, a warden's house and holiday lets.

5.5. Archaeologists

There has been surprisingly little archaeology done on the island. Douglas Hague of the Royal Commission on Ancient and Historical Monuments of Wales recorded the island for the Caernarvonshire Inventory (RCAHMW 1964 17-21), but returned regularly and carried out small investigations across the island. He also drew detailed plans of all the houses and carried out consolidation work on the abbey building and the limekiln. His notes are held in the Caernarfon Record Office and some of the available documents have been consulted for this report. Christopher J Arnold, of the University of Wales, Newtown and Aberystwyth, built on Hague's work and pulled it together into a valuable report that has been the basis of the present work (Arnold 1994). This report is unpublished but much of its information was published in a Welsh language volume on Enlli (Arnold 1996). Arnold also carried out the only fairly large excavation on the island at Tŷ Newydd, investigating the 19th century house and the medieval cemetery below (Arnold 1998).

Geophysical survey has been carried out on the island. In 1973 the Ancient Monuments Laboratory carried out magnetometer and resistivity surveys in various locations all around the abbey (CRO XD64 347). However this was very early days in the development of geophysical survey and the results as unclear and confusing. Both magnetometer and resistivity surveys were carried out in the triangular field to the east of Hendy, known as Cae Uchaf, in 2002 (Dawson and Roberts 2002). A linear stone feature was detected that was interpreted as a possible wall, perhaps related to the abbey, and a circular feature was also identified.

This survey was part of an archaeological assessment in advance of a proposal, which never came about, to use Cae Uchaf for a cremation cemetery. A desk-top assessment report written for this included a full summary of all the archaeology on the island based on Arnold's work (Dawson and Arnold 2002). They record that a pollen core was taken at SH 1155 2125 and analysed by a student from the University of Wales, Aberystwyth. This is reported to have covered the period from about 8000 BP to the present day, showing that the low-lying parts of the island were covered by a woodland community of hazel, birch and alder. This work was for a 1994 MSc dissertation by DT Paterson, but the dissertation has not yet been obtained for this project.

Several seasons of work were carried out at the north end of the island between 2002 and 2004 investigating a flint scatter in fields near Bae y Rhigol. This work was carried out by Mark Edmonds (then of Sheffield University), Tom Dawson (St Andrew's University, Robert Johnston (then of Bangor University) and John G Roberts (then of Gwynedd Archaeological Trust). See below for details.

This is a surprisingly short list of investigations on the island considering the archaeological potential. This partly reflects the lack of threats to the island, as much archaeology is now carried out in response to specific threats.

6. RESULTS

6.1. Survey of sites

Introduction
A total of 233 sites have been recorded in the gazetteer located across the island (figure 1).

The chronological division of sites is as shown in the table below. The date given for many of the sites, especially those dated to the prehistoric and medieval periods, is largely due to guesswork and loose comparisons to sites elsewhere. Few have been investigated or dated by artefacts or radiocarbon dating. Further investigation could change these numbers significantly.

Table 1. Sites on Ynys Enlli by period

Period	Number of sites
Mesolithic	5
Bronze Age	4
Prehistoric/ Prehistoric?	31
Early Medieval	2
Medieval/ Medieval?	22
Post Medieval/ Post Medieval?	94
Modern	7
Not Applicable	2
General	1
Unknown	65
Total	**233**

The table below lists the sites by the general classes used by the HER and NMR to categorise sites.

Table 2. Sites on Ynys Enlli by Class

Class	Number of sites
Agriculture and Subsistence	41
Commemorative	3
Communications	2
Defence	1
Domestic	45
Domestic?	2
Education	2
Industrial	4
Maritime	10
Object	29
Recreational	1
Religious, Ritual and Funerary	21
Transport	13
Unassigned	40
Water Supply and Drainage	19

The range of site types is given below. Many of these are very general or confusing; for example ‘building’, ‘house’, ‘platform’, ‘house platform’, ‘long hut’ and ‘hut platform’ could all relate to the same type of feature. Much more work would be needed to identify site types more accurately, including detailed survey and possibly excavation.

Table 3. Sites on Ynys Enlli by Site Type

Site Type	Number of sites
Abbey	1
Agricultural Building	5
Building	15
Building Platform	2
Buried Soil	4
Burnt Mound	2
Cave	3
Cemetery/burials	8
Chapel	1
Cistern	2
Cremation burial	2
Cross	3

Site Type	Number of sites
Drainage System	1
Enclosure	5
Feature	4
Field	3
Field Boundary	14
Field System	6
Findspot	3
Flagstaff	1
Flint Scatter	28
Fog Horn	2
Hollow	2
Gorse mill	1

Site Type	Number of sites
Holy Well	3
Horse Engine	1
House	14
House Platform	3
Hut Circle	6
Hut Platform	3
Incised Stone	2
Island	1
Landing Point	1
Lighthouse	1
Lime Kiln	2
Linear feature	1
Long Hut	3
Mound	10
Platform	6
Pond	1

Site Type	Number of sites
Port?	1
Promontory Fort	1
Quarry/ Quarry?	6
Road	3
Rubbish Pit	1
School	1
Settlement	2
Shelter	1
Slipway	1
Spring	6
Stone Setting	1
Structure	2
Trackway	9
Wall	12
Water Trough	1
Well/spring	9

The data as it currently stands does indicate a variety of activities over a wide time span. As would be expected the majority of sites are post-medieval and agricultural but there are a significant number of prehistoric and medieval sites and future work is likely to increase their number considerably. There is very little industry on the island with sites classed as being industrial actually being quarries for houses and walling. Surprisingly there is no evidence of a smithy on the island. 'Religious, Ritual and Funerary' sites are restricted to medieval and post-medieval sites. The lack of prehistoric funerary sites (for the reassessment of the supposed round barrow (PRN 1589) see below) suggests that either these have not yet been identified or that all burial took place on the mainland. Domestic sites apparently date from no earlier than the Iron Age or Roman period but as none of these sites have been investigated in detail their actual date is not known. Settlement sites from the Bronze Age and earlier are suggested by the presence of flint scatters and buried archaeological remains may survive under the improved farmland of the lower part of the island.

Statutory designations

There are 42 sites with statutory designations. Of these 36 are listed buildings, all with grade II listing, except the standing remains of the abbey, which is grade I listed (reference number 4232) (figure 2). These "buildings" include the walls around the gardens and cemetery as well as the houses and farmyards. Three of the memorial crosses in the cemetery are also listed (reference numbers 20050 to 20052).

There are only 6 SAMs but two of these are large areas including many individual features so that 22 sites in the gazetteer fall within a scheduled area. The two inscribed stones originally found near the abbey ruins but now in the chapel are scheduled even though they are not in their original find location (Cn141 and 142).

These legal designations give considerable protection to many sites on the island. All the buildings that are inhabited or in use are listed (with the exception of the boathouse and some other small buildings) and require listed building consent for most types of work, including repairs. Many of the walls around these buildings and their gardens also require consent. This does not prevent work but allows the type of work and how it is carried out to be controlled to prevent any damage to the historic interest of the buildings.

While not statutory designations, the island is within the Llŷn and Bardsey Island Landscape of Outstanding Historic Interest (HLW (Gw) 8) (Cadw 1998) and the Llŷn Heritage Coast. Although these designations do not provide specific protection they are considered by Local Authorities when they make planning decisions.

Flint scatters

Twenty eight flint scatters or individual flint finds were identified on the island (figure 3). Their distribution must mainly be determined by factors influencing their discovery. They are generally only found where erosion is occurring, in ploughed fields, especially the most frequented fields near the houses, and in excavations. However there is some clear patterning that suggests that they are not found everywhere that these factors apply. There are numerous places where erosion occurs down the west coast but flints are only recorded from Porth Solfach and Trwyn yr Hwch. Although many of the fields are ploughed occasionally few flints have been

recovered except around Carreg Fawr (even PRN 59857, the grid reference for which places it near Plas Bach, is actually recorded as having come from near Carreg Fawr). There are hints of activity around the abbey. Although it is not entirely clear whether PRN 16797 and PRN 59945 represent separate collections this does seem likely, suggesting prehistoric activity just north of the abbey. However the scraper found on the track (PRN 16792) (Burrow 2003) might have been brought in on mud from elsewhere.

Several of the flint scatter sites have previously been included under a single PRN (PRN 7366) and not given locations beyond generally having been found on the island. However the HER Further Information Files included a report on this flint collection with enough detail about find locations for approximate grid references to be given and for these sites to be added more usefully to the distribution plan. The descriptions of this collection and illustrations of the more significant pieces have been included as appendix III.

The most extensive flint scatter is in the northern end of the island near Bae y Rhigol (PRN 16779). There had been several finds during ploughing in fields in the area but systematic investigation, including field walking and excavation by Edmonds et al (2002, 2003, 2004, 2009) recovered an assemblage of 6,500 pieces. The investigation concentrated on two fields and included field-walking, test pitting and a small excavation across a field bank. The bulk of the material dates to the later Mesolithic (7500 - 4000 BC) and includes scrapers, microliths, blades, cores and waste flakes. A variety of raw materials were used; chert, pebble flint, till flint, quartz, rock crystal and igneous rock possibly from Mynydd Rhiw. Preliminary analysis indicates that a few artefacts may date to the Earlier Mesolithic (Edmonds et al 2003-4). The study of this assemblage has been undertaken in Dublin University by Emmett O Keeffe, under the supervision of Graeme Warren. O Keeffe's PhD based on the assemblage was due to be submitted by Christmas 2014. A timetable for publication and archiving will be decided, leading to a full published report and the deposition of the assemblage with Bangor Museum (Graeme Warren pers. com. 22/05/2014).

Other smaller collections along the north coast also contain Mesolithic elements. About 50 pieces, including some Mesolithic items have been found all along the north coast (PRN 16801). Other occasional finds have been made in this area including a layer of flint fragments found by Douglas Hague when excavating one of the possible long huts in the area (PRN 59718). Microliths have also been found near Port Solfach (PRN 16823) and Henllwyn (PRN 16823). Porth Solfach seems to have been a focus for activity in the prehistoric period. The existence of an area of old ground surface (PRN 16822) visible in the access route down to the beach, which has produced pieces of animal bone (Kenney 2014), suggests that some remains of this activity may exist under the present ploughsoil.

The recovery of a microburin amongst a scatter of possibly later flint (PRN 39569) as part of the present works (see below) just north of Porth Solfach adds to the suggestion that these areas were a focus for both Mesolithic and later activity.

It is probable that there are many more flint scatters across the island that could be revealed by ground disturbing activities. Although not all flint scatters have surviving archaeological features associated with them it should be assumed that where flints are found other buried archaeology may survive. No specifically Bronze Age artefacts have been identified, although it would be interesting to know what type of arrowhead Arnold (1994) reports as having been found at PRN 16823. Many of the items of expedient technology could have been used at any time within the Neolithic and Bronze Age.

Prehistoric and medieval settlement

Only 17 sites in the database are listed as domestic or possibly domestic and dating before the post-medieval period or of unknown date (figure 4). The nature and date of several of these sites is uncertain. This number does not include several sites identified by Chris Arnold (Arnold 1994) on Mynydd Enlli which on inspection could not be found and were considered to be very likely to be misinterpretations of groups of anthills and natural hollows. However detailed topographic survey and geophysical survey could possibly prove Arnold right and there may be more features now obscured by anthills that were previously more visible. Certainly some of the features on the mountain are convincing as roundhouses (plate 3). In the past these have been considered as possible cells for the first monks on the island and of early medieval date. As the features are similar to Iron Age and Roman period sites elsewhere there is no reason to assume they are early medieval, but their date could only be proved by excavation and radiocarbon dating.

The possibility of prehistoric settlement on the lower part of the island is suggested by the identification in this project of two burnt mounds (PRN 39570 and 39571) (see below). These are likely to have been close to permanent settlement, probably of a Bronze Age date. The presence of two other mounds (PRNs 16828 and

16830), not yet investigated but possibly burnt mounds, could indicate another area of settlement near Carreg Fawr.

With the reassessment of a mound on the summit of Mynydd Enlli (see below) the only evidence of prehistoric burial is from the shore at Henllwyn. In 2003 Joanna Hambly of St Andrew's University, with the assistance of Esther Roberts of Gwynedd Art Gallery and Museum, discovered two possible cremation burials eroding out of the coastal cliff and they were still there to photograph in 2009. One feature (PRN 59966) appeared to be a shallow pit with a deposit of concentrated charcoal and burnt bone fragments in the base. The pit seemed to have been sealed by a layer of large angular stones. The other feature (PRN 59967) was a lens of charcoal and burnt bone-rich gravel between the gravel and sand of the raised beach deposit and the clay soil below. A flint flake was recovered from the clay below this lens. Samples were taken for radiocarbon dating, but dates have not yet been obtained. The burnt bone was considered likely to be human but has not yet been studied by a specialist (Tom Dawson pers. com. 26/02/2015). Information on these finds provided by Tom Dawson is included in appendix V.

There is some considerable doubt about the interpretation of features at the north end of the island as long huts, even though these are scheduled as such. Douglas Hague excavated one such feature (PRN 2761, part of Cn 186). He records that the feature was located at SH11582243, just outside the SAM area. The feature was visible as a low rectangular earthwork on an east-west axis measuring 13ft by 33ft (c.3.96m by 10m). Hague cut a trench through its northern wall, but found no evidence of it having been a stone structure. Bedrock was 4 inches (0.1m) below the turf in the interior and there was no trace of occupation. The thickness of the turf on the line of the walls was 10 inches (0.25m) (CRO XD64/340).

A group of rectangular features at the north end of the island (PRN 4530) were also planned by Hague and he dug a trench through the larger structure (plate 4). The excavation took place in 1982 but again no evidence of a stone wall was found and the wall of the feature was defined only by turf (CRO XD64/340). Hague concluded that the function of "these primitive structures" "remains a mystery" (CRO XD64/340). He believed that the structures could have been roofed and speculated that they may have been connected with the storage of winter feed (CRO XD64/340). Their slight banked remains, with no trace of stone walls, make their function as roofed buildings in doubt, although turf walled buildings can be roofed. Certainly their interpretation as long huts seems unlikely, as they are quite different to the stone-walled long huts usually seen on the uplands. Much more work would be needed before these sites could be reliably interpreted as medieval dwellings.

The remains of the houses that preceded the 1870s rebuilding on the island are listed in the gazetteer as post-medieval as they were clearly in use into the late 19th century, however the date of their origin is unknown. The only one of these structures that has been investigated is Tŷ Newydd (Arnold 1998) and that does indeed seem to have been a new house when it was constructed in the early 19th century, but other areas of settlement could have been considerably older.

It seems likely that the main settlement areas in all periods were close to the present locations of the farm houses. These would be much more favourable and sensible locations than the side of the mountain or the wind-swept northern end of the island. Remains surviving in these other areas are therefore likely to be outlying ancillary buildings or the homes of lower status individuals. Medieval settlement was probably concentrated near the site of the abbey, where there are numerous springs, although it is probable that farms were spread across the island as today. However no securely identified houses or other settlement evidence of a medieval date has yet been identified on the island. The name Bardsey is derived from a Norse personal name (Charles 1938, 328) and it is tempting to suggest that there may have been Norse settlement on the island but if so this has still to be found.

Some records mention a field system related to the hut sites on the mountain but there is little to see on the ground. The huts use linear hollows running down the mountain and these could form natural fields, although in places the ground is quite steep. A detailed survey would be necessary to detect field boundaries here.

There is certainly evidence of medieval fields. Broad, low ridges, up to 10m wide survive at the north end of the island (PRN 4532). These appear to be the only surviving ridge and furrow on the island and are probably of a medieval date. They have been recorded as extending under a later field boundary, and so represent an earlier field system than that defined by most of the boundaries now in use.

This ridge and furrow probably formed the end of an extensive arable field. The 1790 estate map (CRO XD64/447/1) shows several long narrow fields, a few of which still survive today. Some of these have curved

ends hinting at aratral curves typical of medieval ploughing (Hall 1982, 6; Beresford and St Joseph 1979, 23). Some other broader fields also have distinctive curving boundaries. This suggests that there were open fields farmed in narrow strips (lands or *llainau*), that have since been enclosed, with in some cases only a few strips being enclosed together so preserving the layout of the open field. The orientation of the strips suggests one large field running north-south along much of the western side of the island and another smaller field around Tŷ Pellaf, with furlongs running south-west to north-east. While the latter of these fields (PRN 59964) is still fairly intact the former is barely discernible from the present field layout, except for a couple of narrow fields (PRNs 59962 and 59963) (figure 4). The whole of the lowland in the northern part of the island therefore seems to have been cultivated, but the surviving evidence is likely to relate to the 13th century or later, so the extent of arable fields is not known earlier in the medieval period. The 1790 map shows the southern part of the island as unenclosed and uncultivated. Traces of ridge and furrow (PRN 4537) and field boundaries here seem to date to after 1790.

Water supply was important on the island and a good supply was what allowed permanent settlement. Twenty one wells, springs and cisterns were identified on the island, although two (PRN 16796 and 16803) could not be located at their given grid references and it is suspected that they are duplicates of other springs elsewhere. Most are distributed along the base of the mountain but others occur on the coast and there is one spring (PRN 59841) on the south end of the island. Many of these have rock-cut cisterns and some have some built stone walling or covered channels. PRN 59713 is a stone-built trough on the line of a very short stream rather than being right at the point that the stream emerges. PRN 2770 is surrounded by a low wall of modern brickwork (0.2m high) on the southern half of its circumference to form a trough.

Some wells, such as PRNs 59951 and 59953, are late in the island's history as they are shown in the 1918 25 inch map but not earlier and were presumably constructed in the early 20th century. Others must be of some considerable age but as they have presumably been used throughout history it is very difficult to date them. The most complex stone-work, suggestive of a medieval date, was found at the unnamed well (PRN 1203), to the east of the abbey. This had a stone basin made of slabs of yellow gritstone, measuring 0.68m by 1.0m, with a step or shelf at the back, beneath which was a large slab containing the outlet. There was also the suggestion of a former superstructure (Arnold 1994; RCAHMW 1964, 20-21). Arnold has a plan of the stone basin forming this well (figure 54, No 1), which is fortunate as the basin has now been sealed with a plastic lid and it is unclear how much of the original masonry still survives (plate 5). The well is the main water supply for the north end of the island, which is why it has had to be sealed and adapted.

Three of the wells are considered to be holy wells and two others wells that Arnold was not able to locate were also considered by Chitty to be holy wells (Arnold 1994; Chitty 1925). Ffynnon Corn (PRN 2769), a small pool in a rocky alcove with a dry-stone outlet culvert, is located just east of the abbey. Ffynnon Dolysgwydd (PRN 2770) is located on the coast east of Cafn Enlli and its trough built of modern brickwork is as likely to indicate its use for watering sheep as continued use as a holy well. Ffynnon Weirglodd Bach (PRN 2771) is in a field south of Tŷ Pellaf with no visible structure. Whether any of these or the other wells were used in the medieval period as holy wells associated with specific saints is unknown.

Several of the wells are known as 'shaving wells', where the hair of the head was shaved into the monastic tonsure, when a new candidate entered monastic life. Hague mentions a group of seven or perhaps five wells at the north end of the island are traditionally identified as shaving wells, as well as some on the coast (Hague, CRO XD64/451/4). The two springs (PRN 59834 and 59835) (plate 6) are probably the only ones of this group still visible, and Gresham records the name of Ffynnonau Barfau (springs of the beards) that also seems to apply to these springs, which also suggests a connection to shaving, although perhaps of a less ritual sort (CRO XD64 327).

The medieval monastery/abbey

Figure 5

There is limited archaeological evidence for the early ecclesiastical activity on Bardsey. An unshaped stone pillar incised with a linear Latin cross comes from the area of the abbey (PRN 1588). This is thought to date from the seventh to ninth century (Edwards 257-8). An incomplete cross-shaft (PRN 3628) dating from the tenth or eleventh century came from the same area (Edwards 259-261). Both are now in the chapel and are scheduled (Cn141 and Cn142).

The island is known as the "Island of Twenty Thousand Saints" due to the number of pilgrims who are supposed to be buried there. There is a tradition that burials have been found all over the island but the only recorded examples have been found around the abbey and it is clearly here that the medieval cemetery (PRN 16793) was

located. Burials were found during the construction of the Tŷ Nesaf/Hendy yard and when lowering the road past the abbey in the 1870s (PRN 59958) (Wynn 1876, 152). Hague reported disturbed human bone (PRN 59961) in a trench dug for a generator exhaust-silencer by the south-eastern corner of Tŷ Nesaf barn (Arnold 1994). Human bones have also repeatedly been found in the garden of Tŷ Bach (PRN 59960), and Hague suggests that they have been found in Tŷ Nesaf garden as well (PRN 59959). Three jawbones (PRN 59968) held in the Bangor Museum are recorded as having been found in 1985 near Tŷ Newydd at the start of the track to the chapel.

The only burials that have been archaeologically excavated, in fact the only excavation of a significant scale on the island, were excavated by Chris Arnold in 1993-8 (Arnold 1998). The excavation was in the interior of a derelict dwelling called Tŷ Newydd to the south of the abbey remains. Under the floor of the house he discovered a medieval inhumation cemetery (PRN 59949). A total of 25 graves were identified; 24 of which were oriented in an east-west direction and one a communal grave containing five children was orientated north-south. The other graves contained males, females and children. One body was buried with a silver penny in its mouth. This was a penny of King Edgar minted before c.973 and probably deposited before c. 980. Anglo-Saxon coins are rare in Wales and the discovery of a coin in a grave of this date is also highly unusual. Arnold draws parallels with "pagan Norse" graves on the Isle of Man. The coin and burial practice indicates at least contacts with, and the influence of, travellers along the Atlantic seaboard. The finds from the excavation, including the human remains, are currently held by Gwynedd Art Gallery and Museum, Bangor (see appendix IV).

Arnold notes the lack of context for the burials means that they cannot be definitely linked to the Christian community (Arnold 1998, 103). He also notes differences between levels of caries in the teeth of the excavated skeletons and those recovered from the bones scattered in the ploughsoil, which were probably stratigraphically later, indicating possibly at least two phases of burial. If the early Christian community on the island was eremitical the presence of women and children and somewhat esoteric burial practices may indicate a burial ground of a lay population. It cannot, however, be assumed that the people buried in the graves originated on the Bardsey (ibid) so, until further information emerges, no firm conclusions can be drawn.

Some of the later burials under Tŷ Newydd probably belonged to the Augustinian abbey and evidence of fairly late burials comes from the discovery of a hoard of gold coins (PRN 2758), one of which was identified as a noble of Henry VI dating to 1434-5. The coins were found with a skeleton in a grave when digging house foundations in the 19th century, although it is not known which house. As human bones have been found in the garden of Tŷ Bach it is possible that the grave and coins were found when this house was being built in the 1870s. They could have been found under Tŷ Newydd, but the probable construction date of this of c.1820, suggests that it was built before the discovery of the coins. The number of coins found and what happened to them is somewhat confused as the find was only recorded many years after it was made.

> *"In 1918 the Hon. FG Wynn shewed me at Glynllifon a gold coin which he said was one of a hoard of twenty-six found at Bardsey many years before, in the time of his father, the third Lord Newborough (i.e. between 1832 and 1888). Mr Wynn said that there were twenty-six of these gold coins, of which his father had one, and that they were found 'under the hand of a skeleton' when the foundations of a new house were being dug. About the same time the late Mr Peter Morris Jones of Pwllheli told me that he knew of the discovery and that forty-five gold coins in all were found together in a grave; that three were then in Aberdaron and seven more in Bardsey."* (Hemp 1963, 191)

Another find presumably related to the medieval monastery or abbey but of even more uncertain provenance is a silver reliquary (PRN 59859) found somewhere on the island.

> *"Many years ago he (Mr Peter Morris Jones) said a Caernarvon man when visiting Bardsey saw a black hand of about life size in the soil beside a path; he dug it out, and found that it was of metal, in one piece, with a forearm, and made of silver. The object of the size described can scarcely have been anything but a medieval reliquary, made to hold the appropriate bones of a saint".* (Hemp 1963, 192).

Hemp could not trace the sale or location of this object and his account does not give any indication where it was found. Whether this was a genuine discovery or one of the stories that circulate on the island is difficult now to prove. Even less certain is the record of the discovery of part of a silver crosier (Wynn 1876, 152). A key, that seemed to have been designed to wear as a ring, was found in 1875 and earlier, near the same spot, was

found a gold noble of Edward III, but the locations of these finds is not recorded (Wynn 1876, 152-3). They may give an indication of the wealth of the abbey.

All that remains of the Augustinian abbey or priory is a tower-like stone building (PRN 781) in the corner of the modern burial ground (plate 7). This is 5.1m by 4.8m externally and stands up to 8m high. As discussed above there is written and drawn evidence of other structures around this in the 18th century, including a "long stone building" described the abbot's house and a "singular chapel or oratory being a long arched edifice with an insulated stone altar near the east end" (Pennant 1781 Vol 2, 369). Precisely where these other buildings were located has not yet been determined. However the surviving building was part of a larger structure as stones projecting from the south wall would have keyed into an adjacent building, and there also seems to have been a building against the western side. Douglas Hague excavated outside the south corners of the tower and found evidence that the walls did continue (Arnold 1994; RCAHMW 1964, 18). It is possible that the tower stood at the angle of ranges to the south and west (RCAHMW 1964, 17-20). There are reports that when the Hendy/Tŷ Nesaf yard was constructed walls were found when cutting foundations (Arnold 1994; Wynne 1876, 152), so it is possible that buildings relating to the abbey extended into this area. Douglas Hague thought that crop marks visible on aerial photographs in the field to the east of the burial ground could also relate to abbey buildings, but after small test excavations concluded that these were the result of ploughing and natural outcrops (CRO XD64 343; RCAHMW 1964, 19). The abbey remains were consolidated by Douglas Hague in 1981 (CRO XD64 343).

There is no documentary record of demolition of the Abbey buildings after the Dissolution, so they must have been left to fall into ruin, and by 1823 little more than what survives today remained. The only other possible above ground remains of the abbey is a block of masonry in the south-west corner of the burial ground (PRN 59855), and other similar blocks forming the steps into the burial ground. The main block is about 2m long and 0.6m wide and 0.7m high and it has neat faces of uncut field stone, not dissimilar to the abbey tower. The block appears to be a fallen lump rather than *in situ* as it is rather tilted, however it is unclear where it may have fallen from. Arnold (1994, figure 32) has elevations of this and the masonry next to the steps into the burial ground. Arnold and Hague (RCAHMW 1964, 19) suggest that all three pieces are fragments of fallen wall from the medieval abbey.

The extent of the abbey precinct is not known. A scarp running across the field to the east of the burial ground may indicate the limits of the precinct on this side, but investigation would be necessary to confirm this. A geophysical survey was carried out in this field in 1973 (CRO XD64 347). This was carried out by the Ancient Monuments Laboratory and they also surveyed other locations all around the abbey. However this was very early days in the development of geophysical survey and the results as unclear and confusing. In the western half of the field between the burial ground and Tŷ Capel were found indications of an enclosure defined by a ditch (PRN 59957). Arnold (1994, fig 37) interprets the results as a circular enclosure but it could more easily be interpreted as a rounded corner to a rectangular enclosure. This could relate to the abbey precinct and modern geophysics in this field is a high priority. Another contender for a precinct boundary was found by resistivity survey in the triangular field to the east of Hendy, known as Cae Uchaf, in 2002 (Dawson and Roberts 2002). A linear stone feature (PRN 59965) was detected that was interpreted as a possible wall, perhaps related to the abbey. However no field boundaries are shown in this area on the 1790 estate map (XD64/447/1), which shows the area as open waste. This may support the alternative interpretation of the feature as a stone-lined drain.

To the north-west of Nant and Hendy is a pond (PRN 59711). This is shown as a small sub-oval pond on the OS maps but earthworks suggest that it originally extended to the east and was once about 55m long and 16m wide (plate 8). Its location makes it possible that this was originally related to the abbey and could have originated as a small fishpond. In which case the northern limit of the precinct must have been somewhere between the remaining tower and the pond, possibly under Nant and Hendy.

The 19th century farms

Figure 6

The island is notable for its planned farms all built in the 1870s for Lord Newborough to a common design and to quite high standards. Ten farmhouses were built either semi-detached or detached (plates 9 and 10) plus a house of the minister. The farm houses either shared a fine stone-built farmyard or had their own yard, and they all have walled gardens. Plas Bach (PRN 11410), which was built for widow Anne Williams and her family, had rooms kept for the use of Lord Newborough and his own privy at the front of the house (Evans and Marloh 2008, 88). This house had superior quality internal fittings and the only properly dug and lined well with a pump (Hague, CRO XD64 341).

All the houses are either still permanently occupied or let out to visitors so they have been well-maintained but not significantly altered and still have almost all original features including windows, doors, stoves, and outside toilets, which are still in use. The gardens have also been kept under control and that at Tŷ Bach has been kept as a flower and vegetable garden.

A lime kiln (PRN 16835) stands at the junction of the main track. Hague suggests that the lime kiln was for mortar for building not for lime for agricultural use, and was constructed for the major rebuilding of the houses and farms. In 1986 Hague consolidated the structure using a concrete lintel for support, hidden behind a wooden one (CRO XD64 343; CRO XD64/340).

Carreg Bach (PRN 11995), a small single storey cottage, is the only surviving house from before the rebuilding still in use. It is unlikely to date before the late 18th century and has a crogloft (Hague, CRO XD64 341). Arnold (1994) considers a building (PRN 16837) north-east of Tŷ Pellaf ,now used as a workshop, to be a survival from before the rebuilding. However this only appears on the 1918 OS map and not before; its predecessor represented by the adjacent earthworks.

The ruins of a house called Tŷ Newydd (PRN 16794) also survive and were excavated by Chris Arnold (Arnold 1998). This has related ruined outbuildings, including a gorse mill (PRN 59954). Tŷ Newydd is described by Arnold (1998, 1238) as a longhouse with a cowshed, cartshed and pig sty in a line to the south. The excavation revealed traces of a wooden floor in one room and a fire-place. There was an upper floor reached by a ladder. It was built by 1823, when its gable end appeared in a drawing of the abbey tower by H. Hughes (Hughes 1823).

The school house (PRN 11657) also pre-dates the main rebuilding (plate 11). It was originally a chapel, but was used as a school and meeting place (including for the tenants' "parliament") once the new chapel was built (Arnold 1994). It is now used for a display about the island and for meetings. The boathouse (*storws*) (PRN 16826) (plate 12), near Cafn Enlli, was built during the construction of the lighthouse (Evans and Marloh 2008, 87), so must therefore have been built prior to 1821 when the lighthouse was completed. It is in fairly good condition but some slates are missing from the roof, which could quickly lead to problems if not repaired. The windows are not original as they were replaced by replicas made and fitted by Douglas Hague in 1982, when he also mended the slate roof (CRO XD64/340).

The rest of the early buildings survive as earthworks between the main north-south road and the base of the mountain. One group (PRN 16787) lies near Plas Bach and another (PRN 16838) south of the schoolhouse. Arnold (1994) has plans of both these groups of house platforms.

The 19th century cemetery

Figure 6 (inset)

A burial ground (PRN 59721) was constructed on the approximate location of the abbey with the remaining abbey building in its north-west corner (plate 7). The burial ground is surrounded by a stone wall with an entrance up steps in the western side. It is shown on the 1889 25 inch OS map, when it extended to the east of the abbey tower, before this area was divided off for Lord Newborough's memorial and tomb (plate 13). Within the burial ground there is a mixture of late 19th and early 20th century memorials including 12 box tombs, and at least 22 other graves marked by a stone at head and foot (Arnold 1994). The inscriptions on the grave stones have been recorded by Arnold (1994), and the earliest is dated 1867. The burial ground was certainly created after 1823, when H Hughes drew the abbey tower, as there was no burial ground at that time.

There are two late 19th century memorial crosses (PRNs 59846 and 59847) within the burial ground. They are in a Celtic revival style and were erected to commemorate the twenty thousand saints supposedly buried on the island (listed building records). In its own enclosure is a large memorial cross to the 3rd Baron Newborough (PRN 59845). It was erected by the Hon F G Wynn in 1891, and made by Hugh Jones & Co, Seiont Marble Works, Caernarfon, with Anglesey marble from the Moelfra Quarries (Listed building record 20052). The front inscription reads:

> *"Under this cross rest the mortal remains of Sir Spencer Bulkeley Wynn, 5th Baronet and 3rd Baron Newborough of Glynllifon and Bodfean, born 23rd May 1803, died 1st Nov 1888. Conveyed to this spot according to his wish on the 20th Novr 1889"*

Lord Newborough was initially buried at Llandwrog but his remains were brought to the island in 1889 (Cracroft's Peerage) and reinterred in a brick vault that lies underneath the cross. There is an iron grill covering steps that lead down into an access chamber with the coffin is in a walled-off vault beyond.

6.2. Geophysical Survey

Area 1 Mynydd Enlli "barrow".
An area of 20m by 40m was surveyed. The area was very uneven with overgrown raised ant nests and Manx shearwater burrows. This resulted in some inaccuracy in walking the traverses. This was lessened by applying a selective 25cm destagger function in ArchaeoSurveyor in order to correct a slight misalignment of the traverses. The data was clipped to+-15nT (Figure 7).

The survey detected features of probable archaeological origin. These are transcribed and numbered on the interpretation plan (Figure 8) and are described below.

The mound and the area around it produced a complex cluster of anomalies. The central most steeply raised part of the earthwork (1) showed low levels of magnetic variation that were similar to the presumably undisturbed area to the north of the monument. This suggests that it is an earthen structure as opposed to a collection of stones. This is bounded on all but the northern side by a slight and somewhat diffuse negative anomaly (2). A sub-circular area (3) centred on the mound with a diameter of 16m and including anomaly 2 but not the central area (1) is characterised by increased magnetic 'noise' (random signals) and a concentration of magnetic dipoles of a type usually associated with small ferrous objects within the soil. Such features can also be associated with magnetic stone. Several very strong dipoles (40 to 3000 or more nT) are almost certainly ferrous and are indicated on the grey-scale plot. The rest could have been produced by either stones or ferrous objects. A line of regular spaced anomalies (4) along the south-eastern edge of the area correspond to the edge of what appears to be an artificial shelf cut into the natural rise in the ground at the top of the mountain. Short linear anomalies running to the north-west from the line of anomalies have been somewhat artificially enhanced by the "graduated shade" process in the software but do not appear to be a processing artefact. These correspond to the artificial shelf and could have been produced by a process used during the levelling of the soil or bedrock. The origin of the wider scatter of anomalies is not entirely clear but it would be expected that the mound, being the highest point on the mountain and at the end of a substantial footpath would have been the focus of a wide range of activity, from picnics to New-Age rituals. These could have increased magnetic enhancement through burning and deposition of rubbish and other imported materials. Two further diffuse anomalies in the area (5 and 6) could be associated with the activity around the mound.

A sub-rectangular hollow to the NNE of the mound corresponds to a faint negative anomaly (7) that suggests that there is no buried structure associated with it.

A series of somewhat diffuse linear and curvilinear anomalies (08 to 17) run across the area to the north of the mound. There are no obvious earthworks in this area but anomaly 10 corresponds to the line of the footpath shown on late 19th /early 20th century County Series 25" Ordnance survey maps. It seems likely that the rest of these anomalies were produced by informal footpaths which appear to become established and fall out of use as the result of the varying patterns of ant nests and shearwater burrows.

Three discrete stronger anomalies, probably either ferrous objects or magnetic stones (18, 19 and 20) are visible in the northern half of the survey. The low frequency of this type of anomaly is very noticeable compared to the area around the possible barrow.

Summary
The survey results suggest that the mound is earthen as opposed to being a stone cairn. Activity around the mound suggests that the top of the hill may have been at least partially levelled either to produce material for the mound itself or to produce a level area to construct a trig point or similar structure. The spread of stronger anomalies around the mound, including some which are almost certainly ferrous reflects a concentration of activity on the highest point of the mountain but it is unclear how much of this is associated with the construction of the earthwork.

Area 2 Burnt mounds and their environs, east of Porth Solfach
An area of 200m by 80m was surveyed, extending across three fields separated by earth and stone banks. Background noise levels were low as were magnetic variations in the soil. As a result the data-set used to the produce the grey-scale plot was clipped to +-4nT as opposed to a more usual +-15nT for soils in north Wales (Figure 9). A spread of small magnetic dipoles (small half black /half white dots on the grey-scale plot) was particularly evident in the southernmost field. These are probably small pieces of ferrous material spread on the

field presumably as a result of nails and other rubbish being mixed in with manure from the farmyard. These are less frequent in the northern two fields indicating a difference in agricultural practice between the two areas. The field boundaries (21 22 and 23) and the sunken bed of a stream all produced clear linear anomalies (Figure 10).

The strongest anomalies were produced by three isolated areas of fairly strongly magnetic bedrock. The anomalies are well-defined indicating that the rock is close to the surface (25, 26 and 27). The largest of these anomalies (25) coincides with the three possible burnt mounds. These are outlined in red on the interpretation plot. Mound 39570 is almost entirely masked by the strong magnetic field produced by the bedrock. There is a scatter of small anomalies to the north and west of this that could indicate a spread of stones that have been magnetically enhanced by heating (28). This is a characteristic anomaly produced by most burnt mounds. This spread encompasses mound 39571 but is less evident on 39569 which appears to be a ridge of bedrock. Another small mound is best interpreted as being bedrock (29) and a strong anomaly (30) in the southern field was produced by a large basalt boulder. Parallel anomalies in the northern field are a result of ploughing and could be ridge and furrow. A linear scatter of small anomalies alongside the foreshore marks the line of a slightly sunken track (32) and may indicate a buried surface of shingle from the foreshore. A second track (33) cutting bank 22 is also visible.

Summary
The survey produced clear results and detected a range of features, most of which are visible as earthworks. The results from the area around the possible burnt mounds were partially masked by magnetic bedrock making interpretation uncertain. No other buried archaeology was detected.

Area 3 West of Cafn Enlli
An area with maximum dimensions of 80m by 50m was surveyed. The results were dominated by bands of fairly deeply buried but strongly magnetic bedrock running along the north eastern side of the survey. This is shown on Figure 11. Figure 12 shows the survey after application of a high pass filter, some of the effects of the bedrock were removed but the strongest responses were in excess of +-75nT and could not be compensated for.

Elsewhere the levels of magnetic noise and enhancement are similar to area 2. The strong ferrous anomalies around the edge of the survey (35-37 and perhaps 38 and 39) are the result of boats, machinery and scrap close to the landing place (Figure 13). A spread of small stronger anomalies close to the shoreline appears to be a result of small pieces of scrap iron and slightly magnetic shingle thrown onto the field during stormy conditions. No archaeological anomalies were detected.

Summary
This area demonstrates that magnetic geology will make some parts of the island unsuitable for gradiometer survey. No features associated with the possible Bronze Age activity were detected.

Ynys Enlli gradiometer surveys conclusions
The surveys demonstrated the potential usefulness of gradiometer surveys on the island. Geological interference was unexpectedly low, particularly on Mynydd Enlli where the bedrock was very close to the surface. Area 3 showed that the geology is highly variable and could render some areas unsurveyable. It was also noted that basalt boulders are particularly strongly magnetic. A general assessment of the potential of various parts of the island could be quickly carried out by using the manual scan function of the gradiometer.

6.3. Evaluation trenching

The coastal erosion sections previously recorded and reported in GAT report 1176 (Kenney 2014) were recorded as if they were trenches, meaning that context numbers were prefixed by a trench number, making the records tidy and easy to use. Trench 1 was therefore section 1on the west coast of the island at SH 11482 21485 (PRN 38293), trench 2 was section 2, just north of Porth Solfach at SH 11492 21284 (PRN 38294), trench 3 was section 3 at the access to Porth Solfach beach at SH 11496 21230 (PRN 16822), and trench 4 was section 4 at SH 11442 21080 in Henllwyn. The evaluation trenches therefore start at trench 5.

Trench 5
PRN 38294 (SH 11492 21284)
(Figures 14-17)

Trench 5 measured 2.4m by up to 2m and was situated on the very edge of the low cliff, about 2m high, just north of Porth Solfach (plate 14). This was the location recorded by section 2 reported in GAT report 1176 (Kenney 2014), where a dark brown layer was seen in the eroding section. This layer contained stones, many laid flat, and some were burnt. The trench was positioned to investigate this layer and stones in plan.

The topsoil (501) was 0.15m deep and below that was a brown sandy silt (502), 0.18m deep that appeared to be either colluvium or a ploughsoil. Under (502) in the north-east corner of the trench was a patch of angular and sub-angular stones up to 0.2m long (503). There was no pattern to these stones and they were probably tossed onto the contemporary ground surface by a storm.

Across most of the trench and extending under (503) was a very dark grey-brown friable silty sand with occasional flecks of charcoal. This was the layer recorded in the section as (204). It contained few stones but in places groups of fairly angular and sub-rounded stones up to 0.25m long were present on its surface. There were also lenses of gravel on the surface of this layer. Most of the stones on the surface of (504) were randomly distributed but close to the edge of the cliff was a rough line of stones up to 0.35m long (505). A length of 2.7m of this deposit was exposed in the trench and it was up to 0.7m wide. Some of the stones were rounded but many were angular and some appeared burnt. Many were laid flat as if deliberately placed. These were the stones seen in section. The south-eastern side of this spread of stones was fairly straight and might be seen as a rough face, but there no evidence of deliberate coursing or convincing suggestion that this was the remains of a structure. There was essentially little difference between the stones of (505) and the other stones on the surface of (504) (plate 15). It seems most likely that these stones were thrown onto the cliff top by a storm, and the presence of gravel lenses on the surface of (504) supports this. The stones of (503) would also be part of this storm deposit. The layer (504) would have been the ground surface at the time and its flat upper surface would have caused most stones to fall flat, making them look laid. The presence of some burnt stones amongst the stones tossed up by the storm suggests that there was probably some human activity in the area. However, this activity could have long pre-dated the storm if the burnt stones had merely been present on the beach, perhaps washed or thrown there from elsewhere. As there were burnt mounds just inland from this location it is not impossible that some stones from there reached the beach through erosion, ploughing or other human activity.

The occasional flecks of charcoal in layer (504) and its generally dark colour, which probably comes from fine charcoal dust, suggests that there was human activity very nearby, the charcoal from which got incorporated into the ground surface. However there was nothing to suggest that there was occupation directly on this site. No finds, not even tiny burnt bone fragments, were recovered.

Beneath layer (504) was a firm but friable orange-brown sandy silt with occasional small stones (506), which seemed to be the B horizon under the A horizon of the buried soil represented by (504) (plate 16). Beneath this was the firm orange brown stony clay of the boulder clay (507), which overlay the bedrock that could be seen in the cliff face.

This site therefore appears to be a buried soil that was somewhere in the vicinity of human activity from which some charcoal blew across. The ground surface was then partially covered with stones and gravel thrown up by a storm, including some burnt stones from the beach. This was then sealed by soil washed or moved down slope by ploughing.

Trench 6

(Figures 14 and 19)

A trench measuring 2.6m by 1.0m was excavated over a low mound (PRN 39569, SH 11582 21346). This had been thought to be a possible burnt mound and when a small square of turf was lifted on the top of it shattered stone had been seen that was interpreted as burnt mound stone. A flint flake was also found. The trench was positioned to run from the top of the mound to its base to test whether this was a burnt mound. The topsoil (601) over the mound was a dark grey friable sandy silt with few stones, and numerous bracken roots, which was up to 0.23m deep. Immediately under the topsoil shattered stone was found but with a larger area opened it could be seen that this was natural shattered bedrock. There were occasional small beach pebbles and pieces of quartzite on the surface of the bedrock but there was no evidence that these were humanly introduced.

However the trench as not entirely archaeologically negative as a scatter of flints was found in the base of the topsoil (plate 17). These are described in detail in the flint report below. There were 7 pieces of struck flint from this area and one piece of knapped stone, possibly a tuff (SF08) (Figure 25). The latter was a large thick blade with tip snapped off. None of the flint pieces had secondary working although three pieces have evidence of utilisation wear, two for cutting and one for graving although these are not datable by type. Two pieces have

been burnt. There is one probable narrow blade butt microburin (SF09-1), which is probably of Later Mesolithic date. A small punch-struck fragment (SF09-3) would also be consistent with this date. This assemblage therefore suggests Later Mesolithic activity in this area, although not all the pieces may be of the same date. See below for full flint report.

Trench 7

(Figures 14, 18 and 20, plates 18 and 19)

As trench 6 had failed to identify a burnt mound another trench was dug into the adjacent mound (PRN 39570, SH 11560 21335). It was not possible to investigate the largest of the three mounds (PRN 39571, SH 11541 21334) by trenching as this had western clover growing on it, which is a protected species.

A trench measuring 3.0m by 0.9m was dug from the top to the base of the mound. The topsoil (701) was only 0.15m deep and below that was a 1m thick deposit (702) composed mainly of angular stones up to 0.15m in length with a matrix of dark grey silt. The stones were clearly heat shattered, but no charcoal was present. This deposit formed the mound visible on the surface and extended beyond the obvious base of the mound as it was still 0.35m deep at the lower end of the trench. This deposit is typical of burnt mounds, although often charcoal is present mixed in with the stones. It was hoped that the charcoal may have washed through the mound and collected at the base or that there might be traces of a fire with a layer of charcoal but nothing was seen under the mound of stones. The stones came directly onto a firm brown clayey silt (703), which appeared to be the surface of the boulder clay. No fire reddening or other evidence of burning was seen on this surface but only a small area could be exposed as the sides of the trench had to be battered to prevent collapse of the loose stones.

There is no doubt that this mound is a burnt mound. Unfortunately the lack of charcoal means that there is no dating material to prove the date of this feature.

Trench 8

(Figures 21 - 24)

Trench 8 was dug into the mound (PRN 1589, SH 12276 21866, plate 20) on the summit of Mynydd Enlli with scheduled monument consent. The trench was L-shaped and measured 5.4m down the arm aligned west-south-west to east-north-east, and 5.3m along the arm aligned north-north-west to south-south-east. Both arms were about 1m wide. The trench was located to investigate an area at the edge of the shearwater burrowing, while damaging as few burrows as possible and also to investigate an undisturbed area. The position of burrow entrances determined the positioning of the trench and only three burrow entrances were destroyed by digging the trench. The trench was also positioned to investigate the centre of the mound where any cist or burial might be expected if this was a barrow.

Over the undisturbed area the topsoil (801) was no more than 0.1m deep, little more than a covering of turf. Where the shearwaters had been burrowing it was up to 0.3m deep and clearly resulted from the birds burrowing and mixing the deposits on the surface of the mound. The current shearwater burrows (806) were oval in cross section, c.0.2m wide and 0.13m high. The base of the burrows was c.0.3m below the ground surface, and none of the burrows seemed to go deeper than this (plates 21 and 22). The fact that the mixed topsoil was also exactly this deep shows that this is a consistent depth for burrowing. The burrows could be seen in plan ending in round-ended nesting chambers rarely more than 1m from the entrance. More recent burrows crossed through earlier largely infilled burrows. The fill of the burrows was loose, with some stones, and presumably much of it had come from digging later burrows.

The arm of the trench in the undisturbed side of the mound showed that there was no physical obstacle to burrowing in this side. The location of burrow entrances is therefore almost certainly determined by the level of sunlight. The shadowy northern side of the mound was avoided, while presumably the sun on the mound and down the burrow entrances warms the burrows during the day. Wind direction may also be of some significance as the coldest winds would be from the north.

The mound itself was made up of a grey brown slightly gritty silt (802) with occasional angular stones up to 0.2m long (plates 23 and 25). Careful inspection of the undisturbed section showed that this was nowhere more than 0.35m deep, and generally much less. In many places the base of this layer was defined by a thin, humic, dark grey gritty silt layer (807) no more than 0.05m thick. This appeared to be the remains of a buried turf layer. Under the turf layer were various buried soil layers, up to 0.3m thick. In the northern end of the northern arm of the trench was a mid-orange brown silt with occasional stones (812), which may had eroded from the soil layers higher up the slope, but still had traces of the buried turf layer on its surface. Under this was the main buried soil horizon (811), a mid-grey gritty silt with occasional small stones. At the base of the horizon pockets of glacial

substrate (809) existed between cracks in the bedrock. Soil formation processes had caused some changes to the buried soil directly over the bedrock, where it was sometimes darker brown or rather red-brown in colour (804).

In most of the trench, once the mound and buried soil deposits had been removed a shattered bedrock surface (803) could be seen (plate 24). Only at the northern end of the northern arm of the trench was a very firm orange/grey silty clay (810) seen, which represented the natural boulder clay over the bedrock. The bedrock sloped upwards towards the middle of the trench. In the northern arm the difference between the level bedrock/boulder clay at the northern and southern ends was over 1m. In the eastern arm the difference in height was 0.55m. Much of the appearance of a mound at this location was due, therefore, to a lump in the bedrock, creating a natural knoll. The actual mound deposit on top of this lump was much smaller in extent than the knoll as a whole. The mound therefore seems to have enhanced a pre-existing natural feature.

Finds

Five finds were recovered from the trench. A small fragment of pale green modern glass (SF12) came from the topsoil. Also from the topsoil, immediately below the turf was a large, well-formed clear quartz crystal with smaller crystals adhering to it (SF11) (Figure 25). This crystal cannot have come from the island, and is so large and impressive that it is unlikely to have come from Britain. It is the type imported and sold for New-Age spiritual purposes or geology collections. Its form and the position immediately under the turf suggest that it was brought to the island recently and deliberately deposited here for modern ritual purposes. As there was a concern not to cause offence to whoever had deposited this object and as it has little archaeological value the crystal was photographed as a record and during backfilling was placed back where it was found.

A small piece of burnt bone (SF14) and a flint flake (SF13) were found in the mound material (802) (Figure 25). The burnt bone was a tiny eroded piece and there was no indication that it was part of a cremation as there was no charcoal or any other material related to it. The flint was also isolated and it is suggested that these items had been collected with the soil used to form the mound and that they originated from where ever the soil was gathered from. They therefore cannot be used to date the mound or in any way indicate its function. The flint is included in the report on flint items below.

A rounded, water worn pebble (SF15) was collected from the buried soil over the bedrock (804). It had no evidence of working and the deposit it came from proved to be the lower part of the natural buried ground surface under the mound. It is therefore highly unlikely that this pebble was brought up to the site by human activity. It is probably from glacial deposits but might possibly have been thrown up from the beach in a storm.

6.4. Flint report

George Smith

Introduction

Figure 25

Twelve pieces of worked lithics were found of which three (SF01-1, 1-2 and 1-3) were surface finds from the area of the large flint scatter at the north of the island (PRN 16779). Eight pieces (comprising SF03, 5, 6, 7, 8, 9-1, 9-2 and 9-3) came from trench 6 on a natural knoll (PRN 39569). One other piece came from Trench 8, the investigation of a small mound (PRN 1589) on the summit of Mynydd Enlli.

The pieces are described individually. Sizes are shown in millimetres as Length x Breadth x Depth where complete. Where broken the incomplete measurement is shown in brackets.

PRN 16779

SF01-1 Flint, dark pink as a result of heat alteration. Heat fractured fragment from the surface of a pebble. (19) x (13) x (5)

SF01-2 Flint, off-white with dark grey mottles, probably all as a result of heat alteration. Heat fractured tertiary fragment. (22) x (15) x (3)

SF01-3 Flint, mid-light grey, slightly heat altered. Bulbar end fragment of a small flake, punch-struck. (7) x (11) x (3)

Trench 6 (PRN 39569)

Context 601 (topsoil) (see Figure 19 for location of finds)

SF03 Flint, off white slightly iron stained to a cream colour. Bulbar end fragment of a punch-struck thin broad secondary blade flake with tip snapped off. Pebble cortex. Some later edge damage but there is also some continuous edge micro-chipping on one straight sharp edge that probably results from use. (34) x 20 x 5

SF05 Flint, translucent mid-grey. Pebble cortex. Plunging secondary flake with cortical platform. It has a natural strong distal point which has wear polish suggestive of use as a graver, rather than a piercer. 45 x 17 x 8

SF06 Flint, grey-purple interior with a thin light grey outer skin, both colours as a result of heat alteration. A broad, tertiary flake mid-fragment, its surface altered by burning and then more-recently trample fractured. (25) x (20) x (6)

SF07 Flint, translucent light brown partly surface weathered to a light grey. Pebble cortex. A small, short broad thin secondary flake. Cortical platform. Both convex, sharp edges have some micro-chipping and light edge polish suggesting use as a cutting tool. 28 x 16 x 4

SF08 Tuff? Hard, fine metamorphic stone, Dark grey with probable sedimentary banding. Not Mynydd Rhiw stone. A large thick blade with tip snapped off. Plain platform with heavy impact removal and bulbar scar. No secondary working but one long convex edge is sharp enough for use as cutting tool, although the material would probably not retain wear signs. (73) x 30 x 8

SF09-1 Flint, very light grey. Punch-struck probable butt microburin, i.e. the blade remnant removed in the process of making a microlithic point, although with a non-typical fracture. 12 x 6 x 2.5

SF09-2 Flint, off-white. Tertiary flake tip fragment. (6) x (14) x 2.5

SF09-3 Flint, mid-grey with light grey heat alteration. Tertiary flake bulbar fragment. Punch-struck plain platform, shattered by heat. (11) x 12 x (5)

Trench 8 (PRN 1589)

Context 802 (mound material)

SF13 Flint, mid-grey merging to black band beneath cortex. Secondary flake, hard-hammer struck from a cortical platform. The flint is quite fine, fresh and unweathered although with a good deal of fine edge damage, suggesting it has been trampled. The cortex appears to be partly rolled nodular. It could be imported material unlike the rest of the objects.

Comments

Material. Where visible all pieces are from pebbles, which are available locally, in different colours apart from SF13, which could be imported material. All are flint apart from one larger flake of a hard metamorphic rock (material and source as yet unidentified), which was also produced from a pebble and therefore likely to be non-local glacial material.

Technology. Several pieces are punch-struck suggesting specific controlled flaking probably to produce blades, although there are no examples of blades in the collection.

Function and dating. There are no tools with secondarily working although three pieces have evidence of utilisation wear, two for cutting and one for graving although these are not datable by type. Context 601 includes one probable narrow blade butt microburin (SF09-1) that can be expected to be of Later Mesolithic date and there is another small punch-struck fragment (SF09-3) from the same context and another from elsewhere (SF01-3), both of which could be of the same period. Context 601 was close to two burnt mounds, which might be expected to be of Later Neolithic or Bronze Age date, suggesting that the lithic material, of probable Later Mesolithic date was not associated with that activity. However, that is not necessarily the case.

These pieces are a useful addition to the known distribution of lithic material from Bardsey. Most of the finds have been coastal but that is probably because of the presence of soil exposures due to erosion there. The previous finds have mainly been few and non-diagnostic but with an element of Later Mesolithic material (e.g. Wainwright 1963, Arnold 1994). However, in 2002 a large area of lithic scatter was found after a field had been ploughed at the northern tip of the island near Bae y Rhigol, SH 117224 (Edmonds *et al* 2002, 2004). This scatter has been investigated by gridded excavation and has already produced some 5,000 artefacts. The work as yet to be published in full but the lithic material is mainly of Later Mesolithic date, including microlithic points as well as pebble tools but also includes a few pieces that may be of Earlier Mesolithic date (Edmonds *et al* 2009). SF01-3, found in the same area fits well with the rest of the assemblage. This large assemblage means that there is now good evidence for fairly intensive use of Bardsey at least during the Later Mesolithic period, despite its difficult accessibility, with a presumption of exploitation of desirable coastal resources.

7. DISCUSSION AND CONCLUSIONS

Burnt mounds

Three mounds were initially identified as potential burnt mounds, all located close together next to the main stream on the island (Figure 14). These were:-
PRN 39569: length c.10m; breadth c.5m; height c.0.5m
PRN 39570: length c.7.5m; breadth c.6m; height c.0.6m
PRN 39571: length c.16.5m; breadth c.7.5m; height c.0.7m

The geophysical survey in this area (Figures 9 and 10) was obscured by a very strong response from bedrock close to the surface. This meant that the survey could give little information about PRN 39569 and 39570. However PRN 39571 was beyond the influence of the bedrock and fairly strong signals over and around this mound did suggest that it was composed of burnt stone, made more strongly magnetic by heating. This information was very valuable because the presence of western clover on this mound meant that it was not possible to dig here. The geophysical results are however strong enough to say that this is a burnt mound. The trial trenches showed that PRN 39570 was without doubt a burnt mound and the mound was composed entirely of burnt stones. Excavation showed that PRN 39569 was a natural mound but did reveal a scatter of flints over it. The south-eastern corner of PRN 39571 is disturbed by a shallow sub-rectangular hollow. Some burnt stone has been incorporated into the adjacent clawdd, and this hollow may have been a borrow pit for the bank.

Two out of the three mounds were therefore confirmed as burnt mounds, and other prehistoric activity was indicated in the area by the flint scatter. It is tempting to relate the latter to the use of the mounds but as the only diagnostic item was a microburin indicating a Mesolithic date the relationship between the mounds and the flint scatter may be entirely coincidental.

No burnt mounds have previously been identified on Ynys Enlli and the implications of their discovery are of some significance. Although these sites used to be considered to be cooking sites for roving bands of hunters this view is now out-dated and the sheer numbers of these sites suggests that they were frequently used and probably related to activity close to settlements. Although the precise relationship of burnt mounds to settlements has been hard to establish they generally seem to be in wet areas on the edge of settled landscapes (Kenney 2012).

Although burnt mounds occur in north-west Wales as early as the middle Neolithic (about 3300 BC) and occasional later examples have been found, most mounds are Bronze Age in date (Kenney 2012, 2013), and it is likely that these two mounds would prove to belong to that period. This find therefore suggests settlement on Ynys Enlli probably of a Bronze Age date and probably of a fairly long-term nature. The location of the burnt mounds may provide a clue as to where to look for this settlement (Figure 26). It might be expected that settlement would be in a more sheltered, well-drained location somewhere in the vicinity of the mounds, possibly no more than a couple of hundred metres away. In this particular case it would be worth looking inland, as this would be more sheltered than right on the coast and at less risk from storm damage. The area immediately inland from the mounds is currently very boggy, but this may largely be due recent changes in the drainage regime. This area is enclosed by field banks like much of the rest of the island suggesting that these were fairly dry productive fields in the 19th century. There are also rocky knolls and flat drier areas within this zone that could provide some shelter or a good base for a settlement.

Two other mounds have been recorded on the island in low-lying wet locations (PRN 16828 and 16830). These are low, sub-circular mounds and while no burnt stones have been recorded from them it is probable that these are also burnt mounds. These are around 500m north of the mounds investigated in this phase of the project and are both close to Carreg Fawr, around which many of the recorded flint scatters have been recovered. If a search is to be made for Bronze Age settlement this would also be a promising area to investigate and it is possible that there were at least two settlement sites on the island at that period.

Mynydd Enlli Mound (PRN 1589)

Once the difference between the mound and the natural soil and rock below had been identified in the trench it was possible to discern a slight change of angle in the slope on the ground surface that seemed to coincide with the mound deposits. By surveying this it could be seen that the artificial mound only measured c.6.25m by 6.00m. The excavation had shown that it was no more than 0.35 high and that at least half of the depth of the deposits excavated in the trench were natural soil horizons sealed by a buried turf line.

No trace of any burials and particularly no trace of a central cist was found, despite excavation down to bedrock in the area of the centre of the mound. The mound appeared to be composed of grey, fairly organic soil, probably former topsoil or ploughsoil. It was well-mixed with no turf lines suggestive of intact turves being used. In the undisturbed section slight differences could be seen, probably indicating separate barrow loads. The soil included some stones.

A Bronze Age burial monument on this rocky mountain top would be expected to have been built of stone to form a cairn. Earthen barrows are very rare in such positions. If earth was used it might be expected that turf would have been cut from the location of the feature and used to create a mound. The presence of a largely intact buried turf horizon under the mound shows that turf was not cut from the site of the mound and the lack of traces of turves in its make-up shows that this form of construction was not used. The use of soil, possibly even ploughsoil, suggests the use of wheel barrows or carts to bring soil in from elsewhere, which is highly unlikely in the Bronze Age.

Where the shearwaters have burrowed it would be expected that the level of the mound would gradually reduce as soil dug out of the burrows is washed or blown away. If the mound had been in use by shearwaters for nearly 4 millennia as would, presumably, have been the case if it was Bronze Age, it seems unlikely that it would have survived as a distinct mound. Although burrowing has caused mixing of the surface layers of the mound it has not resulted in any significant loss in height when the burrowed side is compared to the undisturbed side, strongly suggesting that the burrowing has not been taking place over a very long period of time. The numbers of shearwaters is likely to have varied over time. Rabbits probably reduced the numbers of birds nesting by using available burrowing areas, but rabbits would have had much the same effect on the mound as the shearwaters if they also used it for burrows. Prior to the introduction of rabbits to the island the shearwaters would have had the mound to themselves or had to compete with puffins if the mound was indeed ancient, so erosion pressures would have been likely to have been fairly consistent.

The lack of dating evidence makes the interpretation of this mound less confident than it might be but it seems very unlikely that it is a Bronze Age barrow. The single flint recovered could have been introduced with the soil from where ever this was collected. The single tiny piece of burnt bone could similarly be from elsewhere. It was quite high in the mound and there was no suggestion that it was part of a cremation. The simple soily make-up of the barrow, lack of burials or cists, the lack of long term erosion damage, despite considerable current shearwater burrowing, and the small size and height of the mound all suggest that this was not a Bronze Age barrow and that it was a fairly late feature.

The mound has long been considered to be probably recent rather than ancient. The Inventory entry states that it "appears to be recent" (RCAHMW 1964, 20) and Arnold (1994) speculates that it was related to the Admiralty coastguard signal station that seems to have functioned on top of the mountain between 1889 and 1892. Arnold (1994) suggests that it might have supported telegraph apparatus, but the excavation showed no evidence of anything inserted through the mound or supported by it. Other sites on the summit are almost certainly related to the signal station, including the remains of a hut (PRN 784) and a low mound that would have held a flagstaff (PRN 16804) (figure 21). Arnold (1994) suggests that a hollow (PRN 4538) near the mound may have been for a beacon, but there is no charcoal visible even where the shearwaters have been burrowing, so the function of this and its relationship to either the signal station or the mound is unclear.

If a 19th century date for the mound is considered, its position close to the end of the path up the mountain made for Lord Newborough (Lockley 1938, 119) may be significant. This path (PRN 16854) starts from Plas Bach, where Lord Newborough stayed when he visited the island, and allowed easy access to the summit. The path must have been constructed after the building of Plas Bach in the 1870s. The path follows a zig-zag route from directly opposite Plas Bach to the summit of the mountain ending at the edge of the cliff just adjacent to the mound (Figure 27). Creating the terraced path would have meant that there was soil available for the creation of the mound and the path seems to have been wide enough for small carts to have been brought up, so any spare soil could have been easily moved. The volume of the mound at very approximately 13m^3 would not require much effort to move, especially if a cart was used. The presence of a small mound to stand on and admire the view, or to picnic on, would provide a focus for people ascending the path, and it seems probable that this was the context in which the mound was built.

What is odd is that there seems to be no recorded memory of its construction. This might be explained by the changing population of the island. By 1925 the population of the island was aging and nearly three quarters left

for an easier retirement, to be replaced by new tenants. This change was sufficiently dramatic in the history of the island to be referred to as the "Exodus" (Hope Taylor 1988, 123; Evans and Marloh 2008, 91-2).

Another mystery is the trig point that is marked on the 25 inch maps (1889, 1901 and 1918) (Figure 27). It is shown on the 6 inch map until the 1920 edition (surveyed in 1914) but is not shown on the 1953 edition (surveyed in 1949). As no one had previously located the mound accurately the relationship between this and the trig point has not been raised before. However with the new survey it is clear that the trig point occupied exactly the same location as the mound. A trig pillar would have been built directly onto bedrock so there would have been no need to create the mound to place the pillar on. It is assumed that the mound pre-dated the trig pillar or the latter would have already provided a focus for visitors to the summit. If the mound was constructed in the late 1870s and the trig pillar shortly before 1889 there can have been only a short period of time between their construction. It was expected that remains of the base of the trig pillar would be found cut into the top of the mound, but no trace of the trig pillar was seen in the excavation.

It is possible that part of the summit to the south of the mound was levelled to take the trig pillar, which was then entirely removed. This would explain the level platform on which the mound seems to sit and may explain the iron objects detected in the soil by the geophysical survey. If iron reinforcement had been used within the trig pillar this may have been left in the soil when this feature was dismantled. Similarly the concentration of possible magnetic rocks, not seen elsewhere on the mountain summit could be explained if these were used in building the pillar. However Ernest Evans, who has lived on the island most of his life, has no recollection of a trig pillar or its dismantlement (Christine Evans pers. com). It is highly unlikely that the Ordnance Survey made a mistake in showing a pillar here, especially as it had a bench mark on, the height of which is also shown, but the relationship of the pillar to the mound and its ultimate fate is unclear.

8. RECOMMENDATIONS

The investigations strongly suggest that the mound on the summit of Mynydd Enlli is not a Bronze Age barrow. It is likely that it is of a late date and that its scheduling is not justified. It is recommended that the scheduling is removed. As a site of minor, local interest damage by shearwater burrowing is not considered to be of great concern and no works are recommended to prevent this. As such works have proved unsuccessful in the past a great deal of trouble will be avoided and the shearwaters can occupy the mound undisturbed.

It is however worth noting that the current scheduled area as shown on the digital MapInfo polygon data and on the paper map associated with the scheduling is centred about 82m south of the actual location of the mound. If the site is not descheduled this error would have to be corrected. While this is an exceptional error most SAM polygons provided by Cadw have a small degree of error in comparison to the OS digital data. These are only significant where there are specific elements of hard detail, such as walls and buildings that indicate the limits of the area. On Ynys Enlli this is noticeable with Cn068 (the abbey ruins), which is offset by 3.8m from where is should be and Cn 186, the field systems and settlement at the northern end of the island, which is offset by about 5.5m from the walls that are supposed to define it. It is recommended that these errors are corrected so that any confusion is removed. The same issue applies to the Listed Building polygons.

In 2015-16 the data presented here will be used to create a Heritage Management Plan for archaeological sites on Ynys Enlli. This will include specific recommendations relating the preservation and management of individual sites.

There is much work that could be done to clarify the archaeology. It has been proposed to carry out geophysical survey around the abbey in 2015-16 in an attempt to locate the abbey precincts and possibly buried building foundations and other remains. Trial excavations may be necessary to clarify the results of the geophysical survey.

Investigation of the supposed long huts at the north end of the island would potentially contribute to the understanding of the medieval settlement. Survey and excavation of the roundhuts on the mountain would similarly add to knowledge about prehistoric settlement. As argued above the discovery of burnt mounds suggests permanent Bronze Age settlement and a programme for locating this could produce interesting results.

There is only one known pollen core that has been taken on the island and that was not dated. The wet lands near the main stream may hold a good record of vegetational change from the Mesolithic period onwards. As

this is a small island and agriculture will have been taking place close to such a sample site this may include a good record of changing agricultural practices as well as natural vegetation. Future pollen work on the island would be recommended.

It would be valuable for the burnt bone found by Tom Dawson's team near Cafn Enlli (PRN 59966 and 59967) to be studied by a specialist to confirm whether it is human and if so for it to be dated by radiocarbon assay. This would confirm whether these are the remains of Bronze Age cremation burials.

The artefacts from the Tŷ Newydd excavation are a priority. Although these are held in Gwynedd Art Gallery and Museum they are not well organised and in some cases in need of conservation. No catalogue of items accompanies the artefacts and Chris Arnold's site record, which may contain a full list, has not yet been located. The silver Saxon penny in particular requires conservation, as do several iron objects, if they are considered worthwhile retaining in the archive.

The majority of items in the 10 archive boxes are human remains. There is a strong feeling on the island that human remains should not be removed and a general belief that these remains had been reinterred, not removed. The presence of these remains in the museum is therefore likely to be problematic for some members of Bardsey Island Trust and others associated with the island. A decision will therefore have to be made about what to do with these human remains. There is the conflicting consideration of this assemblage as a very valuable archaeological resource. The remains were studied at the time but many other techniques are now available. Various types of isotope analysis can reveal information about diet and about the origin of individuals. Considering the questions about whether these burials represent a resident population or pilgrims the latter analysis could provide some important answers. DNA analysis may be possible to look at the genetic relationships between those buried and radiocarbon dating would be straight forward and could give a real indication of the date range of the burials.

It would be strongly recommended that if reburial is desirable that before this is done funding is found to carry out a range of analyses on the bones. At very least enough radiocarbon dates should be carried out to resolve the issue of the date of the burials.

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Maps

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XD64/348: Schedule for 1790 estate map
XD64/349: Douglas Hague's map of Bardsey Island (1973)
XD64/447/1: Glynllifon Estate map 1790 and the Holy Wells of Bardsey
XS 3429/8: Photograph of 'excavation' at Tŷ Nesaf barn 1978

10. APPENDIX I: GAZETTEER OF SITES ON YNYS ENLLI

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
781	93544	St. Mary's Abbey, Bardsey Island	SH1201122170	SAM, Listed building	CN068; 4232, grade I	Abbey	Medieval	Building - Ruined
782		Hut Circle, Mynydd Enlli, Ynys Enlli	SH1220621650	SAM	CN187	Hut Circle	Prehistoric?	Earthwork
783		Hut Circle?, Ynys Enlli	SH12202183			Hut Circle	Unknown	Building - Ruined
784		Hut Platform, Ynys Enlli (related to Coast Guard Station)	SH1225421906			Hut Platform	Post Medieval	Earthwork
785		Hut Circle, Mynydd Enlli, Ynys Enlli	SH1215821390			Hut Circle	Unknown	Earthwork
786		Hut (rectangular), Mynydd Enlli, Ynys Enlli	SH1215321520	SAM	CN187	Hut Platform	Unknown	Earthwork
787	406917	Cave, Ynys Enlli	SH1205221850			Cave	Unknown	Landform
1203	32186	Well, Mynydd Enlli	SH1216822190	Listed Building	4233, grade II	Well	Medieval	Other Structure
1226		Flint scatter, Ynys Enlli	SH11902190			Flint Scatter	Prehistoric	Multiple
1588	93608	Cross-Incised Stone, St. Mary's Abbey, Bardsey	SH1206722143	SAM	CN141	Incised Stone	Early Medieval	Other Structure
1589	275723	Mound, Mynydd Enlli, Bardsey Island	SH1227621866	SAM	CN140	Mound	Post Medieval	Earthwork
1721		Stone Implement, Findspot, Ynys Enlli	SH1170121856			Findspot	Unknown	Find Only
2758		Coin Hoard - Findspot, Ynys Enlli	SH120221			Findspot	Medieval	Find Only
2760		Platform House, S of Penrhyn Gogor, Ynys Enlli	SH11552240	SAM	CN186d	Long Hut	Medieval	Earthwork
2761		Long House, S of Penrhyn Gogor, Ynys Enlli	SH11592245	SAM	CN186c	Long Hut	Medieval	Earthwork
2769	32196	Ffynnon Corn Holy Well, Ynys Enlli	SH1213322190			Holy Well	Medieval	Other Structure
2770		Ffynnon Dolysgwydd Holy Well, Ynys Enlli	SH11822105			Holy Well	Unknown	Other Structure
2771		Ffynnon Weirglodd Bach Holy Well, Ynys Enlli	SH11952130			Holy Well	Unknown	Other Structure
3277		Promontory Fort and Hut Circle, Possible, Ynys Enlli	SH11042020			Promontory Fort	Prehistoric	Other Structure
3604	34151	Lighthouse, Ynys Enlli	SH1113820602	Listed Building	4234, grade II	Lighthouse	Post Medieval	Other Structure
3628	275724	Carved cross slab, St. Mary's Abbey, Ynys	SH1206822144	SAM	CN142	Incised Stone	Early Medieval	Other Structure

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
		Enlli						
4529	15044	Platform Hut?, Penrhyn Gogor, Ynys Enlli	SH1163722598	SAM	CN186	Enclosure	Unknown	Earthwork
4530		Hut Platform and Enclosure, Bae y Rhigol, Ynys Enlli	SH1169022549	SAM	CN186a	Long Hut	Medieval	Earthwork
4531	309528	Rectangular enclosure, Trwyn y Gorlech, Ynys Enlli	SH1190022571	SAM	CN186	Enclosure	Unknown	Earthwork
4532	309527	Field System, Trwyn y Gorlech, Ynys Enlli	SH11902254	SAM	CN186b	Field System	Medieval	Earthwork
4533		Hut Platform, Mynydd Enlli, Ynys Enlli	SH1220621674	SAM	CN187	Hut Platform	Prehistoric	Earthwork
4534		Hut Circle, Mynydd Enlli, Ynys Enlli	SH1221121687	SAM	CN187	Hut Circle	Prehistoric	Earthwork
4535		Hut Circle, Mynydd Enlli, Ynys Enlli	SH1218521734	SAM	CN187	Hut Circle	Prehistoric	Earthwork
4536		Hut Circle, Mynydd Enlli, Ynys Enlli	SH1217621493	SAM	CN187	Hut Circle	Prehistoric	Earthwork
4537		Field System, SE of Lighthouse, Ynys Enlli	SH11242047			Field System	Post Medieval	Earthwork
4538		Hollow, Mynydd Enlli, Ynys Enlli	SH1228321879			Hollow	Unknown	Earthwork
7366		Flint Finds, Bardsey Island	SH11002100			Flint Scatter	Prehistoric	Find Only
9928		Worked Flint - Findspot, Bardsey	SH11502195			Flint Scatter	Prehistoric	Find Only
11410	16736	Plas Bach, Ynys Enlli	SH1191321745	Listed Building	4391, grade II	House	Post Medieval	Building - Roofed
11443	16796	Rhedynog Goch and Ty Pellaf	SH1196621343	Listed Building	4386, grade II	House	Post Medieval	Building - Roofed
11657	23251	The School, Cristin, Bardsey	SH1196321581	Listed Building	4387, grade II	School	Post Medieval	Building - Roofed
11995	26182	Carreg-bach, Bardsey	SH1197522022	Listed Building	4392, grade II	House	Post Medieval	Building - Roofed
12098	26354	Cristin House, Bardsey	SH1198221665	Listed Building	4389, grade II	House	Post Medieval	Building - Roofed
12207	26611	Hen Dy and Ty Nant, Bardsey	SH1201922198	Listed Building	4394, grade II	House	Post Medieval	Building - Roofed
12267	26697	Light House Keepers' Home, Bardsey	SH1115920589	Listed Building	17924, grade II	Building	Post Medieval	Building - Roofed
12564	31363	Cristin, Walled Court	SH1197221634	Listed Building	4388, grade II	Agricultural Building	Post Medieval	Building - Roofed

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
12581	31390	Hen-dy and Ty-bach Yard, Bardsey	SH1198722160	Listed Building	4393, grade II	Agricultural Building	Post Medieval	Building - Roofed
12602	31428	Plas Bach: court and outbuildings	SH1191621718	Listed Building	4390, grade II	Agricultural Building	Post Medieval	Building - Roofed
12607	31436	Rhedynog Goch and Ty Pellaf Yard	SH1199321323	Listed Building	4385, grade II	Agricultural Building	Post Medieval	Building - Roofed
16777		Mound, NW Ynys Enlli	SH11642240			Mound	Unknown	Earthwork
16778		Earthwork, NW Ynys Enlli	SH11722189			Mound	Post Medieval	Earthwork
16779		Flint Scatter, Findspot, NW Ynys Enlli	SH11772247			Flint Scatter	Mesolithic	Find only
16780		Relict Field-banks, NW Ynys Enlli	SH11722187			Field Boundary	Unknown	Earthwork
16781		Earthwork, NW Ynys Enlli	SH1177522503			Enclosure	Unknown	Earthwork
16782		Rectangular Platform, NW Ynys Enlli	SH11832202			Platform	Post Medieval	Earthwork
16783		Flint Scatter, NW Ynys Enlli	SH11852232			Flint Scatter	Prehistoric	Find Only
16784		Carreg Fawr Yard, Bardsey	SH11862192	Listed Building	20062, grade II	Agricultural Building	Post Medieval	Building - Roofed
16785	26187	Carreg Fawr, Bardsey	SH1186121944	Listed Building	20060, grade II	House	Post Medieval	Building - Roofed
16786		Building, site of, Ty Nesaf garden	SH11952211			Building	Post Medieval	Earthwork
16787		Building Platforms and Earthworks	SH11942176			Building Platform	Post Medieval	Earthwork
16788		House Platforms, NE of Carreg Fawr	SH1196421964			House Platform	Post Medieval	Earthwork
16789		House Site, Possible, Bardsey	SH1197322290			Platform	Post Medieval	Earthwork
16790		Robert William's House, Site of, Bardsey	SH11992217			House	Post Medieval	Documents
16791		Rectangular Building, Site of	SH1199522182			Building	Post Medieval	Earthwork
16792		Flint, Findspot, Nr Carreg Bach	SH12012214			Flint Scatter	Prehistoric	Find Only
16793		Medieval cemetery, Bardsey	SH11992213			Cemetery	Medieval	Buried Feature
16794		Ty Newydd and Outbuildings, Bardsey	SH1200822128			House	Post Medieval	Building - Ruined
16795		House Platforms and Road, Possible, Bardsey	SH1205322136			House Platform	Unknown	Earthwork
16796		Cistern, NE Ynys Enlli	SH12042212			Cistern	Unknown	Other Structure
16797		Flint, Findspot, E of Hendy	SH12062224			Flint Scatter	Prehistoric	Find Only

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
16798	6847	Capel Enlli (Welsh Calvinist), Ynys Enlli	SH1206922143	Listed Building	20054, grade II	Chapel	Post Medieval	Building
16799	11577	Ty Capel/Chapel House (Mission House), Ynys Enlli	SH1207522158	Listed Building	20055, grade II	Chapel House	Post Medieval	Building - Roofed
16800		Rectangular Building, Possible Site of, Bardsey	SH1200622526			Structure	Unknown	Earthwork
16801		Flint and Chert, Findspots, N Ynys Enlli	SH11862256			Flint Scatter	Mesolithic	Find Only
16803		Cistern, NE Ynys Enlli	SH12172213			Cistern	Unknown	Other Structure
16804		Circular Setting, Mynydd Enlli	SH1230421965			Feature	Post Medieval	Other Structure
16805		Cave, N Ynys Enlli	SH12502221			Cave	Unknown	Landform
16806		Stone shelter, S end of Ynys Enlli	SH1109320270			Shelter	Unknown	Earthwork
16807		Earthworks, SW Ynys Enlli	SH11132032			Feature	Unknown	Earthwork
16808		House and Outbuildings, Possible Site of, Bardsey	SH11252067			House	Post Medieval	Earthwork
16809		Relict Field-bank, Isthmus, Ynys Enlli	SH11252093			Field Boundary	Unknown	Earthwork
16810		Relict Field Bank, Isthmus, Ynys Enlli	SH1127820930			Field Boundary	Unknown	Earthwork
16811		Pillow mounds, S Ynys Enlli	SH11272047			Mound	Post Medieval	Earthwork
16812		Quarry, SW Ynys Enlli	SH1127121124			Quarry	Post Medieval	Earthwork
16813		Building Platforms, Bardsey	SH11652249	SAM	CN186	Building	Unknown	Earthwork
16814		Flint, Findspot, Carreg Garden	SH11852196			Flint Scatter	Prehistoric	Find Only
16815		Rectangular Platform and Enclosure, NE Ynys Enlli	SH11872227			Platform	Post Medieval	Earthwork
16816		House Site, NW Ynys Enlli	SH11882211			House	Post Medieval	Earthwork
16817		Relict Fieldbank and Arable Ridging, NW Ynys Enlli	SH11902198			Field System	Unknown	Earthwork
16818		Relict Field Bank, NE Ynys Enlli	SH1190822495			Field Boundary	Post Medieval	Earthwork
16819	16923	Ty Nesaf and Ty-bach	SH1196422112	Listed Building	20058, grade II	House	Post Medieval	Building - Roofed
16820	309529	Rectangular Structure, Site of, Bardsey	SH1200322551	SAM	CN186	Building Platform	Unknown	Earthwork
16821		Mound, SW Ynys Enlli	SH11392110			Mound	Not Applicable	Landform
16822		Old Ground Surface, SW Ynys Enlli	SH11492123			Buried Soil	Unknown	Earthwork
16823		Worked Flint, Findspot, SW Ynys Enlli	SH11492135			Flint Scatter	Mesolithic	Find Only

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
16824		Flint, Findspot, Trywyn yr Hwch	SH11502190			Flint Scatter	Prehistoric	Find Only
16825		Flint, Findspot, SW Ynys Enlli	SH11562113			Flint Scatter	Mesolithic	Find Only
16826		Boathouse, SW Ynys Enlli	SH1158221094			Building	Post Medieval	Building - Roofed
16827		Relict Hedgebank and Ridging, SW Ynys Enlli	SH11652105			Field Boundary	Unknown	Earthwork
16828		Mound, W Ynys Enlli	SH1165621888			Mound	Unknown	Earthwork
16829		Field Drains, W Ynys Enlli	SH11662162			Drainage System	Post Medieval	Buried Feature
16830		Mound, W Ynys Enlli	SH1175821774			Mound	Unknown	Earthwork
16831		Relict Field Bank, W Ynys Enlli	SH11782178			Field Boundary	Unknown	Earthwork
16832		Relict Fieldbanks, Bardsey	SH11802164			Field Boundary	Unknown	Earthwork
16833		Quarry, SE Ynys Enlli	SH1195021445			Quarry	Post Medieval	Earthwork
16834		Flint, Findspot, SW of Ty Pellaf	SH11932130			Flint Scatter	Prehistoric	Find Only
16835	409418	Limekiln, SE Ynys Enlli	SH1193121397	Listed Building	20067, grade II	Lime Kiln	Post Medieval	Other Structure
16836		Enclosure, SE Ynys Enlli	SH11952123			Enclosure	Post Medieval	Earthwork
16837		Stone Rubble Building, SE Ynys Enlli	SH1196321377			Building	Modern	Building - Roofed
16838		House Platforms, SE Ynys Enlli	SH11962153			House Platform	Post Medieval	Earthwork
16839		House Site (Possible), E of Ty Pellaf	SH11992136			House	Post Medieval	Earthwork
16840		Platform, Nr Ty Pellaf	SH12032133			Platform	Post Medieval	Earthwork
16841		Relict Field Banks, Nr Cristin, SE Ynys Enlli	SH12042165			Field System	Unknown	Earthwork
16842		Quarry, Nr Cristin	SH12062160			Quarry	Post Medieval	Earthwork
16843		Hollow, Possible Beacon/quarry, SE Ynys Enlli	SH1217221219			Feature	Post Medieval	Earthwork
16844		Building, Site of, SE Ynys Enlli	SH12222145			Building	Unknown	Earthwork
16845		Building, Site of, SE Ynys Enlli	SH12212146			Building	Unknown	Earthwork
16846		Building, Possible, Site of, Mynydd Enlli	SH12212158			Building	Unknown	Earthwork
16847		Building, Site of, Mynydd Enlli	SH12222161			Building	Unknown	Earthwork
16848		Building, Site of, Mynydd Enlli	SH1216921512	SAM	CN187	Building	Unknown	Earthwork
16849		Building (Possible), Site of, Mynydd Enlli	SH12232160			Building	Unknown	Earthwork

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
16850		Rectangular Feature, Site of, Mynydd Enlli	SH12242162			Building	Unknown	Earthwork
16851		Possible building platforms, Mynydd Enlli	SH12202127			Building	Unknown	Earthwork
16852		Concrete Blocks, Mynydd Enlli	SH1227521863			Feature	Modern	Other Structure
16853		Road, E of Ty Newydd	SH1197222059			Road	Post Medieval	Earthwork
16854		Path, Mynydd Enlli, Opposite Plas Bach	SH1210321804			Trackway	Post Medieval	Earthwork
16855		Road, Harbour to Lighthouse, Ynys Enlli	SH1128720931			Road	Post Medieval	Earthwork
16856		Road, W of Ty Pellaf	SH11802140			Road	Post Medieval	Earthwork
16857		Track, W of Ty Nessaf, Ynys Enlli	SH1186122107			Trackway	Post Medieval	Earthwork
30811	403433	Mynydd Enlli Stone Setting	SH1237821782			Stone Setting	Modern	Other Structure
30813	401316	Cafn Enlli Slipway	SH1158721041			Slipway	Modern	Documents
30814		Old Limekiln W of Ty Pellaf	SH1150221468			Lime Kiln	Post Medieval	Documents
30815		Flagstaff E of Lighthouse	SH1123720588			Flagstaff	Post Medieval	Other structure
30816		Fog Horn W of Lighthouse	SH1112020587			Fog Horn	Modern	Other structure
30817		Well 1 S of Cristin	SH1201721612			Well	Unknown	Other structure
30818		Well 2 S of Cristin	SH1197521598			Well	Unknown	Other structure
30819		Well E of Carreg Fawr (Ffynnon Bryn Baglau)	SH1193821881			Well	Unknown	Other structure
30820		Small Quarry (poss) W of Ty Pellaf	SH1154121403			Quarry?	Unknown	Documents
30821		Boundary Walls to Hendy and Ty Nant	SH1200822207	Listed Building	20057, grade II	Wall	Post Medieval	Other structure
30822		Walls to Chapel and Ty Capel	SH1206422134	Listed Building	20056, grade II	Wall	Post Medieval	Other structure
30823		Walls to Carreg Fawr	SH1185221954	Listed Building	20061, grade II	Wall	Post Medieval	Other structure
30824		Walls to Plas Bach	SH1192521755	Listed Building	20063, grade II	Wall	Post Medieval	Other structure
30825		Walls to Cristin	SH1197421675	Listed Building	20064, grade II	Wall	Post Medieval	Other structure
30826		Walls to Ty Pellaf and Rhedynog Goch	SH1195521350	Listed Building	20066, grade II	Wall	Post Medieval	Other structure
30828		Compound Walls at Bardsey Lighthouse	SH1115820624	Listed Building	17927, grade II	Wall	Post Medieval	Other structure
30829	24290	Earthworks, Bardsey Island	SH1216021505	SAM	Cn187	Field System	Prehistoric?	Earthwork
38269		Former track, near Cristin, Ynys Enlli	SH11962162			Trackway	Post Medieval	Earthwork
38270		Seaweed track, W coast Ynys Enlli	SH11482150			Trackway	Post Medieval	Earthwork
38293		Section drawn to record deposits, west coast of Ynys Enlli	SH11482148			Buried Soil	Unknown	Buried feature

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
38294		Buried soil, west coast of Ynys Enlli	SH11492128			Buried Soil	Unknown	Buried feature
38359		Track to Porth Solfach, Ynys Enlli	SH11582121			Trackway	Post Medieval	Earthwork
38360		Field track near Porth Solfach, Ynys Enlli	SH11582116			Trackway	Post Medieval	Documents
38677		Buried soil, Henllwyn, Ynys Enlli	SH11442108			Buried Soil	Unknown	Buried feature
39569		Natural mound with flint scatter, Ynys Enlli	SH11582135			Flint Scatter	Mesolithic	Find only
39570		Burnt mound, Ynys Enlli	SH11562134			Burnt Mound	Bronze Age	Earthwork
39571		Burnt mound, Ynys Enlli	SH11542134			Burnt Mound	Bronze Age	Earthwork
59708		Semi-circular platform, Mynydd Enlli	SH1224221673			Platform	Prehistoric?	Earthwork
59709		Field bank, Mynydd Enlli	SH1216621219			Field Boundary	Post Medieval	Earthwork
59710		Low bank, north end of Ynys Enlli	SH1179722496			Field Boundary	Post Medieval	Earthwork
59711		Pond near Hendy, Ynys Enlli	SH1199622234			Pond	Medieval?	Earthwork
59712		Disused field boundary, north end of Ynys Enlli	SH1183022335			Field Boundary	Post Medieval	Earthwork
59713		Water trough/well, N of Ogof Trwyn yr Hwch Bach	SH1151122004			Water Trough	Post Medieval	Other structure
59714		Track west from Cristin	SH1168221666			Trackway	Post Medieval	Earthwork
59715		Quarry, Bae'r Nant	SH1203222473			Quarry	Post Medieval	Other structure
59716		Hollow/building platform near Ogof Nant	1208922428			Hollow	Unknown	Earthwork
59717		Well, E of Ty Bach	SH1202622064			Well	Post Medieval	Earthwork
59718		Flint scatter (find spot), N end of Ynys Enlli	SH1169022549			Flint Scatter	Prehistoric	Find only
59719	24291	Field Systems, Bardsey Island	SH116226			Field System	Post Medieval	Documents
59720	402783	Bardsey Island;Ynys Enlli	SH1222			Island	General	Landform
59721		Burial ground, Ynys Enlli	SH12022216			Cemetery	Post Medieval	Other structure
59722	308036	Mynydd Enlli, Huts And Field Systems	SH12202166	SAM	Cn187	Settlement	Unknown; Medieval	Complex
59723	309528	Trwyn-y-Gorlech, Settlement	SH11952259	SAM	CN186	Settlement	Unknown; Medieval	Earthwork
59724	519014	Landing Place, Bardsey Island	SH1152120860			Landing Point	Post Medieval	Documents
59826		Low mound, Mynydd Enlli	SH1233322065			Mound	Unknown	Earthwork
59827		Low mound, N end of Mynydd Enlli	SH1237622252			Mound	Unknown	Earthwork

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
59828		Low mound, N end of Mynydd Enlli	SH1239622259			Mound	Unknown	Earthwork
59829		Caves, N end of Mynydd Enlli	SH1242222267			Cave	Not Applicable	Landform
59830		Bank, N end of Mynydd Enlli	SH1233422343			Field Boundary	Post Medieval	Earthwork
59831		Spring next to Ffynnon Corn, N end of Ynys Enlli	SH1212922183			Spring	Unknown	Other structure
59832		Spring, N end of Ynys Enlli	SH1214822199			Spring	Unknown	Other structure
59833		Spring, N end of Ynys Enlli	SH1211822226			Spring	Unknown	Other structure
59834		Spring, N end of Ynys Enlli	SH1221822273			Spring	Unknown	Other structure
59835		Spring, N end of Ynys Enlli	SH1222322279			Spring	Unknown	Other structure
59836		Quarry/platform?, SW of Capel Enlli	SH1210622113			Platform	Unknown	Earthwork
59837		Possible house site, NE of Carreg Bach	SH1200522053			House	Unknown	Buried feature
59838		Field bank and ridge and furrow, S end of Ynys Enlli	SH1107220606			Field Boundary	Post Medieval	Earthwork
59840		Field bank, S end of Ynys Enlli	SH1114520368			Field Boundary	Post Medieval	Earthwork
59841		Spring on S end of Ynys Enlli	SH1123720406			Spring	Unknown	Other structure
59842		Structure near lighthouse, Ynys Enlli	SH1109220553			Structure	Modern	Other structure
59843		Rubbish dump for lighthouse, S end of Ynys Enlli	SH1106720608			Rubbish Pit	Post Medieval	Buried feature
59844		Walled Enclosure to Newborough Cross	SH1201822184	Listed Building	20053, grade II	Wall	Post Medieval	Other structure
59845		Newborough Cross	SH1202022179	Listed Building	20052, grade II	Cross	Post Medieval	Other structure
59846		Memorial Cross in graveyard	SH1202022164	Listed Building	20050, grade II	Cross	Post Medieval	Other structure
59847		Memorial Cross in graveyard	SH1201322150	Listed Building	20051, grade II	Cross	Post Medieval	Other structure
59848		Graveyard Wall to Abbey of St Mary	SH1202822171	Listed Building	20049, grade II	Wall	Post Medieval	Other structure
59849		Walls to Old School	SH1195721590	Listed Building	20065, grade II	Wall	Post Medieval	Other structure
59850		Stores Buildings at Bardsey Lighthouse	SH1115920576	Listed Building	17925, grade II	Building	Post Medieval	Building - Roofed
59851		Former Engine House and Fog Station at Bardsey Lighthouse	SH1113220595	Listed Building	17926, grade II	Fog Horn	Post Medieval	Building - Roofed
59852		Track to Carreg Fawr	SH1169521950			Trackway	Post Medieval	Earthwork
59853		Walls to Ty Bach / Ty Nesaf	SH1196122126	Listed Building	20059, grade II	Wall	Post Medieval	Other structure

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
59854		Main track up the island	SH1193921837			Trackway	Post Medieval	Earthwork
59855		Block of masonry in burial ground, Ynys Enlli	SH1201522153			Wall	Medieval?	Other structure
59856		Lynchets/terraces/field boundaries, W of Ty Nesaf	SH1192922141			Field Boundary	Medieval?	Earthwork
59857		Flint find spot, Carreg Fawr	SH119217			Flint Scatter	Prehistoric	Find only
59858		Flint Finds, Bardsey Island	SH1121			Flint Scatter	Prehistoric	Find Only
59859		Silver reliquary, Ynys Enlli	SH1222			Findspot	Medieval	Find only
59860		Flint Finds, near Carreg Fawr	SH118219			Flint Scatter	Prehistoric	Find Only
59938		Flint Find, near Cafn Enlli	SH11552108			Flint Scatter	Prehistoric	Find Only
59939		Flint Find, Solfach	SH115212			Flint Scatter	Prehistoric	Find Only
59940		Flint Finds, near Carreg Fawr	SH11942195			Flint Scatter	Prehistoric	Find Only
59941		Flint Finds, Solfach	SH11452120			Flint Scatter	Prehistoric	Find Only
59942		Flint Find, N coast, Bardsey Island	SH11652260			Flint Scatter	Prehistoric	Find Only
59943		Flint Finds, Trwyn yr Hwch	SH11492192			Flint Scatter	Prehistoric	Find Only
59944		Flint Find, N coast, Bardsey Island	SH11642260			Flint Scatter	Prehistoric	Find Only
59945		Flint Finds, potato field, Nant	SH12062212			Flint Scatter	Prehistoric	Find Only
59946		Flint Finds, Porth Solfach	SH11452122			Flint Scatter	Prehistoric	Find Only
59947		Flint find, Mynydd Enlli, Bardsey Island	SH1227621866			Flint Scatter	Prehistoric	Find only
59948		Remains of horse gin, east of Hendy Yard	SH1200022180			Horse Engine	Post Medieval	Other structure
59949		Medieval burials, Ty Newydd	SH1200622130			Cemetery	Medieval	Buried feature
59950		Spring west of Plas Bach	SH1182021671			Spring	Post Medieval	Documents
59951		Well west of Ty Pellaf	SH1190821347			Well	Post Medieval	Documents
59952		Spring north of Ffynnon Dolysgwydd	SH1182021118			Spring	Post Medieval	Documents
59953		Well next to Garreg Fawr	SH1185221960			Well	Post Medieval	Documents
59954		Gorse mill, near Ty Newydd	SH1198422088			Gorse Mill	Post Medieval	Building - Ruined
59955		Quarry at north end of Ynys Enlli	SH1199422402			Quarry	Post Medieval	Earthwork
59956		Rhigol y Porth Newydd	SH1179822561			Port	Unknown	Documents
59957		Possible enclosure, east of graveyard	SH1203722167			Enclosure	Unknown	Buried feature

PRN	NPRN	Site Name	NGR	Status	Status reference and grade	Site Type	Period	Form
59958		Medieval burials, Bardsey	SH1199622172			Cemetery	Medieval	Buried Feature
59959		Medieval burials, Bardsey	SH11972213			Cemetery	Medieval	Buried Feature
59960		Medieval burials, Bardsey	SH1198022122			Cemetery	Medieval	Buried Feature
59961		Medieval burials, Bardsey	SH1200622149			Cemetery	Medieval	Buried Feature
59962		Enclosed strip field, west of the abbey	SH11872220			Field	Medieval	Documents
59963		Enclosed strip field, NW of Ty Pellaf	SH11872146			Field	Medieval	Documents
59964		Group of enclosed strip fields, SW of Ty Pellaf	SH11862119			Field	Medieval	Documents
59965		Geophysical anomalies, Cae Uchaf	SH12052222			Linear Feature	Unknown	Buried feature
59966		Cremation burial 1, Henllwyn	SH1149521092			Cremation burial	Bronze Age?	Buried Feature
59967		Cremation burial 2, Henllwyn	SH1151521098			Cremation burial	Bronze Age?	Buried Feature
59968		Human remains near Ty Newydd	SH1201322147			Burial	Medieval?	Find only

11. APPENDIX II: CONTEXTS FROM THE EVALUATION TRENCHES

Trench 5

Context no.	Type	Description	Interpretation	Dimensions
501	Layer	Friable grey sandy silt with few stones	Topsoil	0.15m deep
502	Layer	Firm but friable brown sandy silt with occasional stones up to 0.15m long	Main build-up of soil, possible ploughsoil	0.18m deep
503	Layer	Patch of angular and sub-angular stones up to 0.2m long in matrix similar to 502.	Presumably storm tossed stones	0.9m by 0.3m, 0.15m deep
504	Layer	Very dark grey-brown friable silty sand with occasional flecks of charcoal. It contains few stones apart from a few fairly large stones on the surface.	Buried soil horizon	0.16m deep
505	Layer	A rough line of stones up to 0.35m long. Some are rounded but many are angular and some appear burnt. Many are laid flat as if deliberately placed.	There is little to distinguish these stones from those in the top of 504. They are probably flat because they have fallen on a flat surface. Despite the traces of burning there is little to prove that these were not just dumped by a storm.	2.7m by 0.7m, 0.15m deep
506	Layer	Firm but friable orange brown sandy silt with occasional small stones	Lower buried soil horizon, B horizon	0.05m
507	Layer	Orange brown silty clay, very firm with numerous stones	Boulder clay	

Trench 6

Context no.	Type	Description	Interpretation	Dimensions
601	Layer	Dark grey friable sandy silt with few stones, numerous bracken roots	Topsoil	0.23m deep
602	Layer	Densely packed angular stones with minimal grey sandy matrix. Stones up to 0.2m long but with corners of larger stones or bedrock visible.	Shattered surface of bedrock	

Trench 7

Context no.	Type	Description	Interpretation	Dimensions
701	Layer	Dark grey friable sandy silt with few stones.	Topsoil	0.15m deep max
702	Layer	c.90% angular stones up to 0.15m in length with a matrix of dark grey silt. The stones are clearly heat shattered. No charcoal present.	Burnt mound deposit	1.0m deep
703	Layer	Firm brown clayey silt with occasional	Surface of boulder clay	

Context no.	Type	Description	Interpretation	Dimensions
		stones		

Trench 8

Context no.	Type	Description	Interpretation	Dimensions
801	Layer	Dark grey brown silt with grass and bracken roots and occasional stones.	Topsoil	0.1-0.30m deep
802	Layer	Grey brown very slightly gritty silt with occasional angular stones up to 0.2m long.	Mound material	0.35m deep max
803	Layer	Angular fractured bedrock. Fractured fragments mixed with orange silt in some hollows but mainly fairly solid bedrock.	Bedrock	0.9m by 0.3m, 0.15m deep
804	Layer	Very dark brown slightly gritty silt with occasional small stones	Lower part of buried soil in hollows in bedrock	0.10m deep
805	Layer	Friable dark brown silt with black staining from bracken roots.	Lower part of topsoil where bracken is growing.	0.25m deep
806	Cut	The burrows are oval in cross section, c.0.2m wide and 0.13m high. The base of the burrows is generally c.0.3m below the ground surface. None of the burrows seem to go deeper than this.	Shearwater burrows	
807	Layer	Firm, dark grey slightly gritty silt. Humic.	Probable buried turf layer	0.01-0.05m thick
808	Layer	Firm mid orange brown silt with occasional stones	Natural soil build-up over bedrock	0.15m deep max
809	Layer	Hard grey-orange silty clay with occasional stones.	Pockets of natural substrate between bedrock cracks	0.03m deep
810	Layer	Very firm orange/grey silty clay	Natural glacial substrate	
811	Layer	Firm mid grey gritty silt with occasional small stones	Buried soil	0.2m
812	Layer	Firm mid orange brown silt with occasional stones	Buried soil, colluvium	0.3m

12. APPENDIX III: Report on Flints Found by Dr Richard Kennedy on Bardsey

Frances Lynch

Flints, which include small beach pebbles, struck lumps and flakes and a few worked pieces, were found at 10 locations around the island. A few had no recorded location.

The poor quality of the raw material, the dense white patina on many pieces and the appearance of small point flakes which would seem suitable for microlith manufacture would suggest that some of this material dates from the Mesolithic but later material is also included. The scrapers are very rough and are undiagnostic as to date but the small knife would seem more appropriate to a Late Neolithic context. The presence of one piece of high quality material is also indicative of this horizon.

The bags have been numbered in an arbitrary sequence and flints within each bag given that number. The more interesting pieces have been drawn by students at UWB (figure app III.1).

1. Below Carreg 3 pieces
   - 1.1. A struck flake of poor quality pale flint. It has a good bulb of percussion but attempts to thin the butt have been unsuccessful.
   - 1.2. A small flake of pale flint but not suitable as a microlith because a hinge fracture makes the tip too thick.
   - 1.3. A coarse cortical lump.

2. Beach near gabions 1 piece
   - 2.1. 1 small rod in reddish brown flint, sea-washed after flaking. It has a triangular cross-section and signs of use on both sides; snapped in antiquity.

3. Mid cliff behind Solfach 1 piece
   - 3.1. A struck flake of poor quality pale flint. It has a good bulb of percussion but attempts to thin the butt have been unsuccessful.

4. Carreg Upper Wall 3 pieces
   - 4.1. 1 large flake patinated white, thinned butt but no deliberate working on edges, though signs of utilisation.
   - 4.2. and 4.3. Struck lumps, one sea-washed.

5. Solfach 15 pieces
   - 5.1. to 5.3. Tiny flakes suitable for microliths but not worked.
   - 5.4. 1 micro-bulb
   - 5.5. to 5.7. Small, thin but broader flakes.
   - 5.8. to 5.10. Medium flakes with bulbs and snapped ends.
   - 5.11. to 5.13. Struck lumps.
   - 5.14. A sea-washed piece with possible working on one edge.
   - 5.15. A struck lump which might possibly be a scraper.

6. No location 3 pieces
   - 6.1. Small knife in orange flint. There is working on both edges and round the tip on both sides.
   - 6.2. Trimming flake with a hinge fracture at the end.
   - 6.3. A thin broad flake with no working.

7. NW coastal path E of hide 1 piece
   - 7.1. A parallel-sided thin flake with signs of utilisation.

8. Trwyn yr Hwch 27 pieces (1 lost)
   - 8.1. to 8.2. Two roughly worked scrapers.
   - 8.3. Small neat flake with no working.
   - 8.4. Thick triangular-sectioned flake with clear bulb and possible working on edge.
   - 8.5. Fragment of core, pale brown.
   - 8.6. Butt of flake suitable for microlith but rather thick

8.7. Pointed flake with some working to create beak, orange flint.
8.8. Fragment, possibly from a scraper edge, yellowish flint.
8.9. A curved narrow flake, suitable for microlith but too thick.
8.10. Small flake suitable size for microlith but poor quality flint
8.11. Butt of medium sized flake, attempt to thin butt. ?burnt.
8.12. Thick triangular sectioned flake, broken to a point with possible working (post patination) on edge.
8.13. to 8.14. Thick triangular sectioned unworked flakes in yellow/white flint.
8.15. to 8.17. Medium-thin unworked flakes, 2 orange, 1 grey flint.
8.18. Strongly patinated flake of shape and size to be a scraper but unworked.
8.19. Triangular sectioned piece of orange flint with battered end and utilised edges.
8.20. to 8.23. Cortical flakes of poor quality white patinated flint.
8.24. Curved thickish flake of yellow/white flint, no working.
8.25. Struck lump.
8.26. Piece of shell.
8.27. (lost) Medium flake possibly with utilised edges

9. Behind NW hide 1 piece
9.1. Large thin flake of pale bluish flint; butt thinned; point recently snapped off.

10. Potato field, Nant 2 pieces
10.1. A struck flake of high quality dark flint with slight working on the tip; an awkward shaped piece.
10.2. A triangular-sectioned small flake of orange flint battered at both ends.

11. Porth Solfach 2 pieces
11.1. A battered lump of red flint.
11.2. A battered and sea-washed flake of yellow flint.

12. Loose in bag - unlocated 15 pieces
12.1. to 12.10. Small pebbles
12.11. to 12.13. Very coarse flakes.
12.14. A struck lump with a flake recently removed. Might have been a core.
12.15. A struck lump with battered edges.

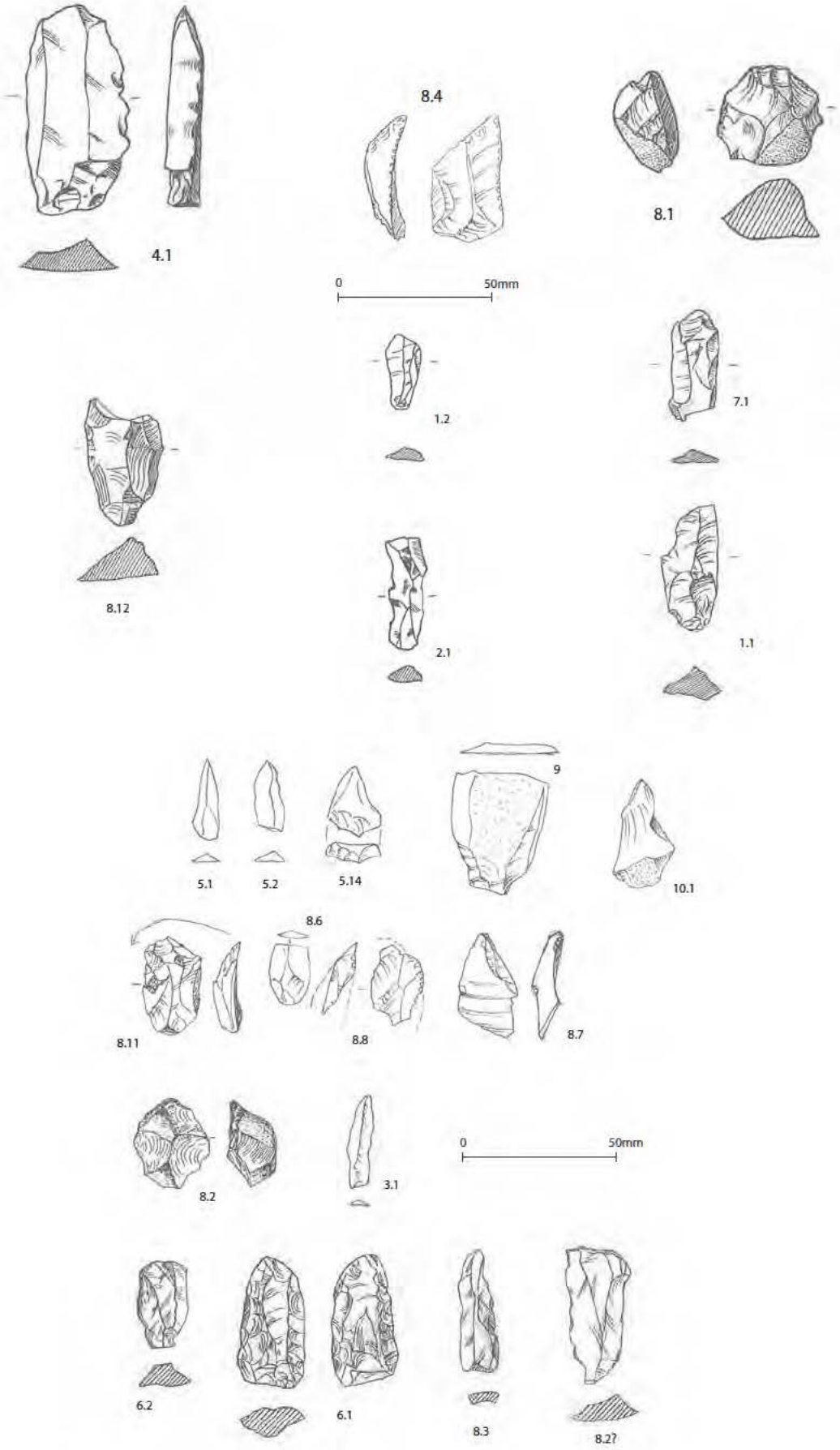

Figure app III.1. Flints found by Dr Richard Kennedy and drawn by Bangor University students

13. APPENDIX IV: CONTENTS OF TŶ NEWYDD COLLECTION, GWYNEDD ART GALLERY AND MUSEUM, BANGOR

Inspected by Jane Kenney on 17/12/2014

Finds from excavation by Christopher Arnold during 1993-1998 within the remains of Tŷ Newydd, Ynys Enlli. The excavation recorded the early 19th century house and dug through its floor. Under a layer of cultivated soil graves forming part of a medieval cemetery were revealed. The remains of at least 28 individuals were found, including men and women of all ages. One body has been buried with a silver penny dating to the 10th century AD in its mouth.
Arnold, C.J., 1998. 'Excavation of 'Ty Newydd' Ynys Enlli (Bardsey Island), Gwynedd', Archaeologia Cambrensis vol CXLVII (2001)

10 boxes
A rough summary of the contents of each box follows:-

Box 1 – Bone, much of it human, with pieces of several skulls included, but also animal bone and teeth.

Box 2 – Human and animal bone, mostly fairly small fragments.
1 piece of flint, 1 piece of roofing slab.

Box 3 - Human and animal bone, mostly fairly small fragments, plus a carrier bag of human long bones.
1 piece of roofing slab, 3 pieces of flint.

Box 4 – Bone, mostly human but with some animal bone present.

Box 5 - Human and animal bone.
Occasional pieces of flint and stone, including one piece of flint in a bag along with bone.

Box 6 – Envelope containing finds in the top of the box. This contains pot sherds, stone and metal objects and pieces of flint, including some nice blades and flakes. There are some small copper alloy items that might be worth conserving or at least reboxing. Also includes the 10th century silver penny in a Crystal box.
In the main part of the box is mixed human and animal bone, flint, medieval tiles, roof slabs, shells, and metal objects including some iron objects most of which are in a poor condition and need conservation and moisture free conditions. Also a small glass bottle, possibly for perfume, very fragile and unprotected.

Box 7 – Bone, mostly human with some animal bone.

Box 8 - Bone, mostly human with some animal bone.
1 flint, 1 iron object in very poor condition.

Box 9 – Bone, mostly human with some animal bone.
1 piece of flint.

Box 10 – Bone, mostly human with some animal bone.
1 piece of flint in a bag with bone. Some brick or tile.

The material is very mixed. Although box 6 has most of the artefacts there are occasional other pieces in other boxes. Generally animal and human bone is in separate bags but mixed between the boxes. It is likely that some bags contain both human and animal bone and some contain occasional pieces of flint as well. None of the metal is suitably contained and the iron especially is suffering badly. Small fragile items are in bags, unprotected, in with heavier items. There is no catalogue.

Other human remains

The only other finds in the museum catalogue from Ynys Enlli also refer to human remains. These were not inspected for this project but the catalogue entry is as below:-

GWYCA 7197/1-9
7197/1 - Documentation regarding human jawbone fragments. A detailed written report by Mr M B B Edge BDS of 6 Church Street, Penrhyndeudraeth suggests that they may have belonged to a young male, older than 20 years, younger than 40-45, who had a diet largely comprising of flour and cereal products produced on stone grinding wheels. The jawbones are thought to be no later than 19th century and quite possibly much older.
7197/2 - Three specimens of human jawbone found on Bardsey Island / Ynys Enlli in July 1985; discovered at Gateway near Ty Newydd at the mouth of the track up to the chapel. For a report on the jawbones see GWYCA 7197/1 and GWYCA 7197/3-9 for X rays.
7197/3-9 – X rays.

14. APPENDIX V: DETAILS OF POSSIBLE CREMATION BURIALS FOUND AT HENLLWYN

PRN 59966
Cremation burial 1, Henllwyn
SH 11495 21092
One of two possible cremation burials found by Joanna Hambly of St Andrew's University in 2003.
"Deposit of concentrated charcoal and burnt bone fragments [110] eroding out of east facing beach section towards centre of Henllwyn. Recorded in section in 2003 and photographically in 2009. In 2003 there appeared to be a concentration of charcoal and burnt bone fragments [110] below a dark soily gravelly sand raised beach deposit [109] which also contained fragments of charcoal and burnt bone but in lower concentrations. A layer of large (15cm - 50cm) angular stones appeared to have been laid upon the part of [109] that contained charcoal and bone material. Material from [110] was sampled for C14 dating. In 2009 the large stones had been eroded as well as the concentration of charcoal and burnt bone [110]. However, the dark soily fine gravel containing fragments of burnt bone still forms a distinctive layer in the eroding section" (Joanna Hambly 6th October 2009).

The samples collected and section drawings made are held by Tom Dawson in St Andrew's University.

Photograph of PRN 59966 taken in 2004 by Joanna Hambly

PRN 59967
Cremation burial 2, Henllwyn
SH 11515 21098
One of two possible cremation burials found by Joanna Hambly of St Andrew's University in 2003.
"Deposit of concentrated charcoal and burnt bone fragments [113] eroding out of east facing beach section at northeast end of Henllwyn. Recorded in section in 2003 and photographically 2009. In 2003 it seemed to form a lens of charcoal and burnt bone-rich gravel between fine gravel/coarse sand raised beach deposit [106] and clay sand subsoil [107]. Charcoal and bone was sampled for C14 dating. In 2009, much less charcoal and burnt bone was visible in the section. However a clear band of material was seen within the subsoil [107]" (Joanna Hambly 6th October 2009).
A flint flake was recovered from the clay below this lens.
Grid reference obtained for this is given as SH11514 20990, but the section drawing suggests that this should be SH1151521098, which puts it in a more sensible location.
The samples collected and section drawings made are held by Tom Dawson in St Andrew's University.

Photograph of PRN 59967 taken in 2004 by Joanna Hambly

15. FIGURES AND PLATES

Figures

Plates

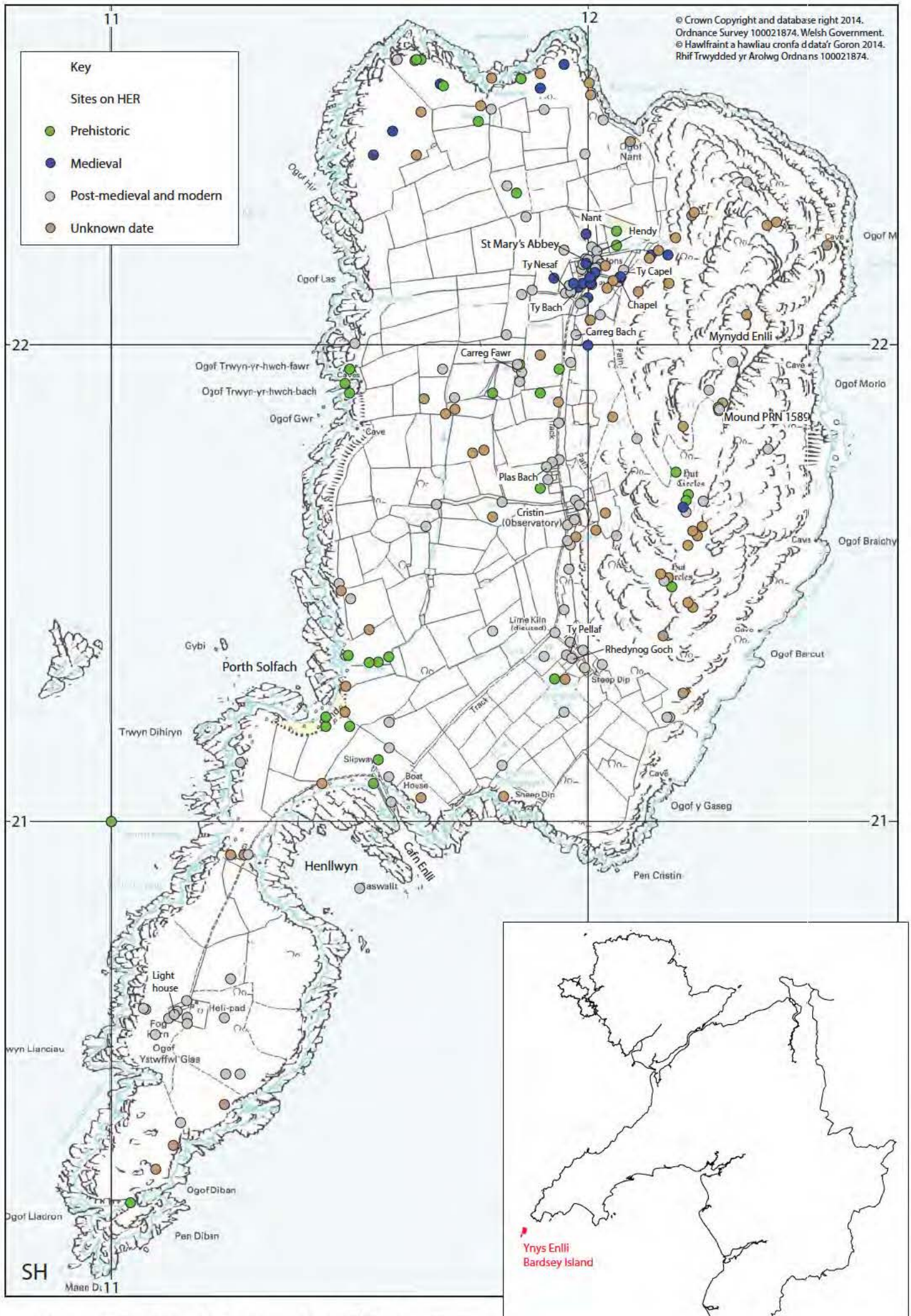

Figure 1. Ynys Enlli and its location with sites from the gazetteer

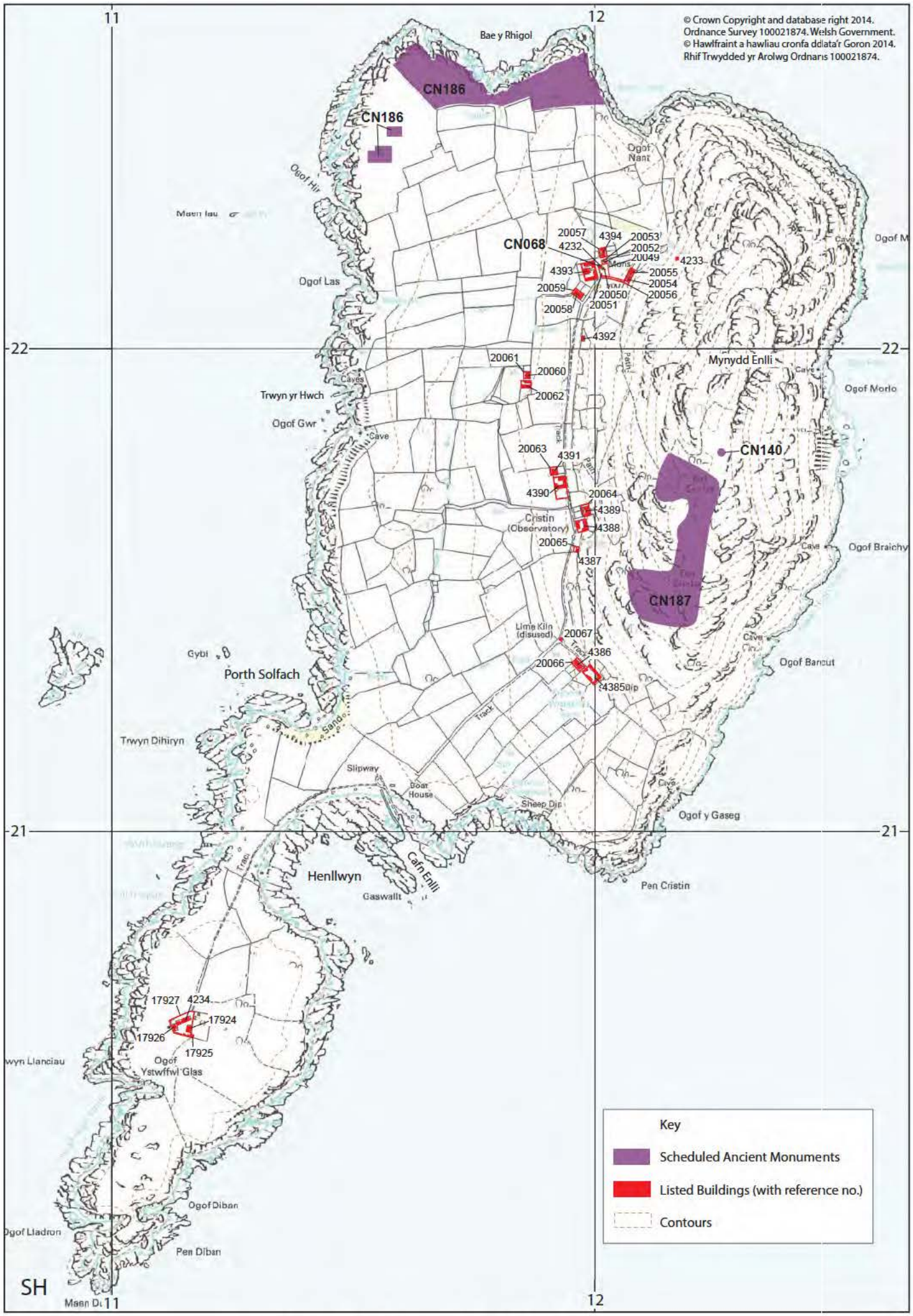

Figure 2. Statutorily designated sites on Ynys Enlli

Figure 3. Flint scatters on Ynys Enlli

Figure 4. Early settlement on Ynys Enlli

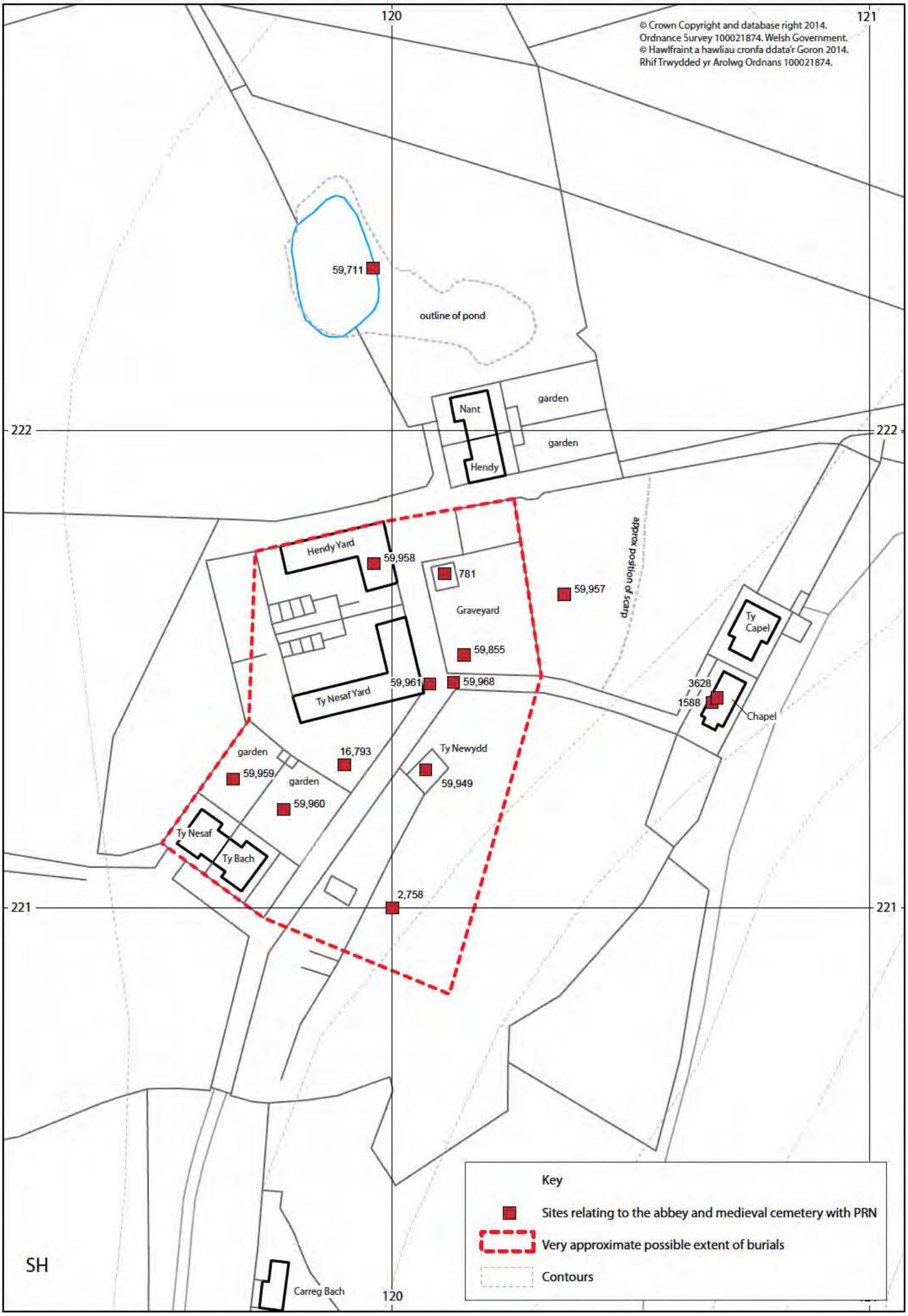

Figure 5. The abbey and medieval cemetery

Figure 6. Post medieval and modern sites on Ynys Enlli with an inset of the area around the abbey

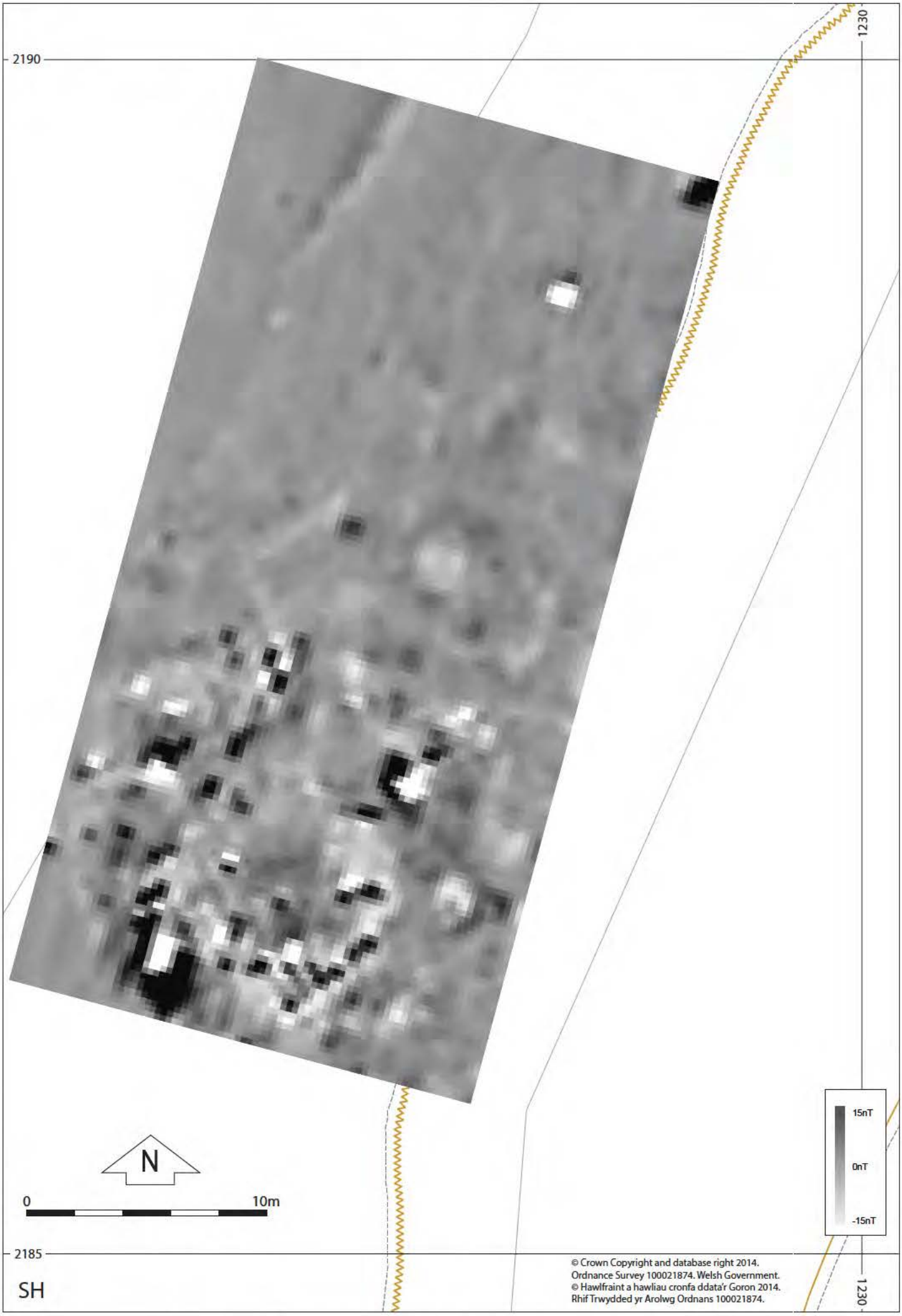

Figure 7. Area 1: Mynydd Enlli fluxgate gradiometer survey, grey-scale plot

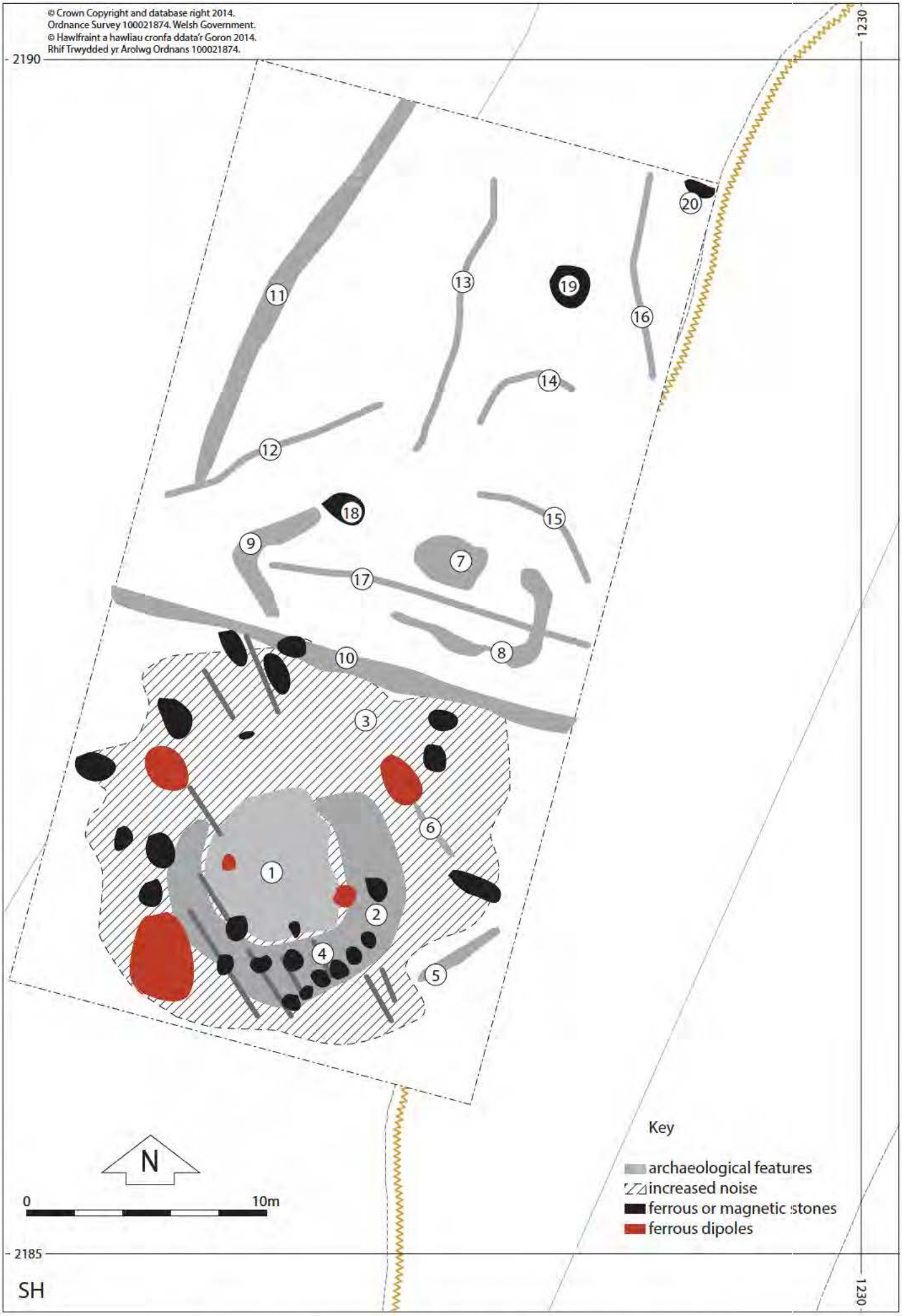

Figure 8. Area 1: Mynydd Enlli fluxgate gradiometer survey, interpretation

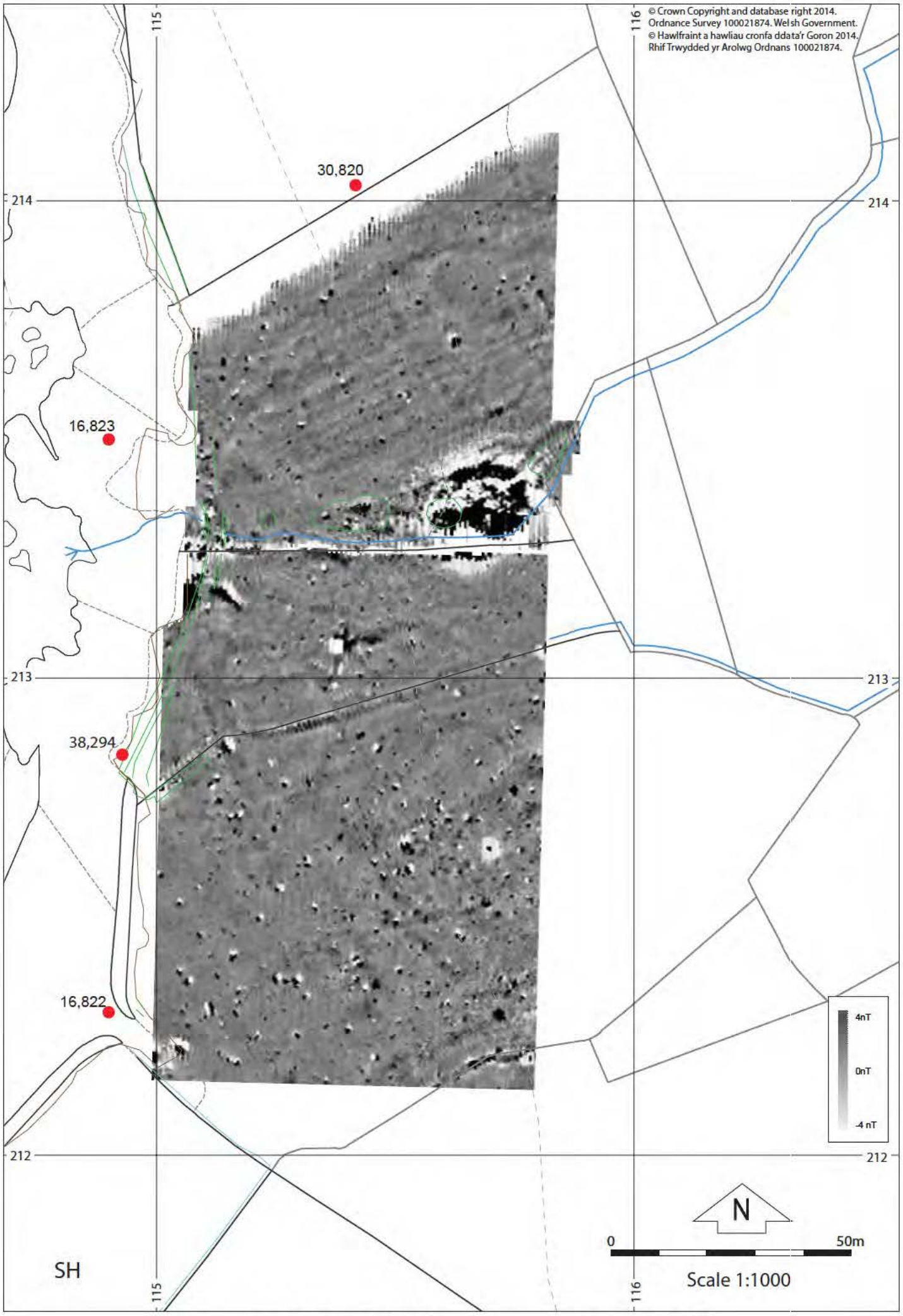

Figure 9. Area 2: East of Porth Solfach, fluxgate gradiometer survey, grey-scale plot

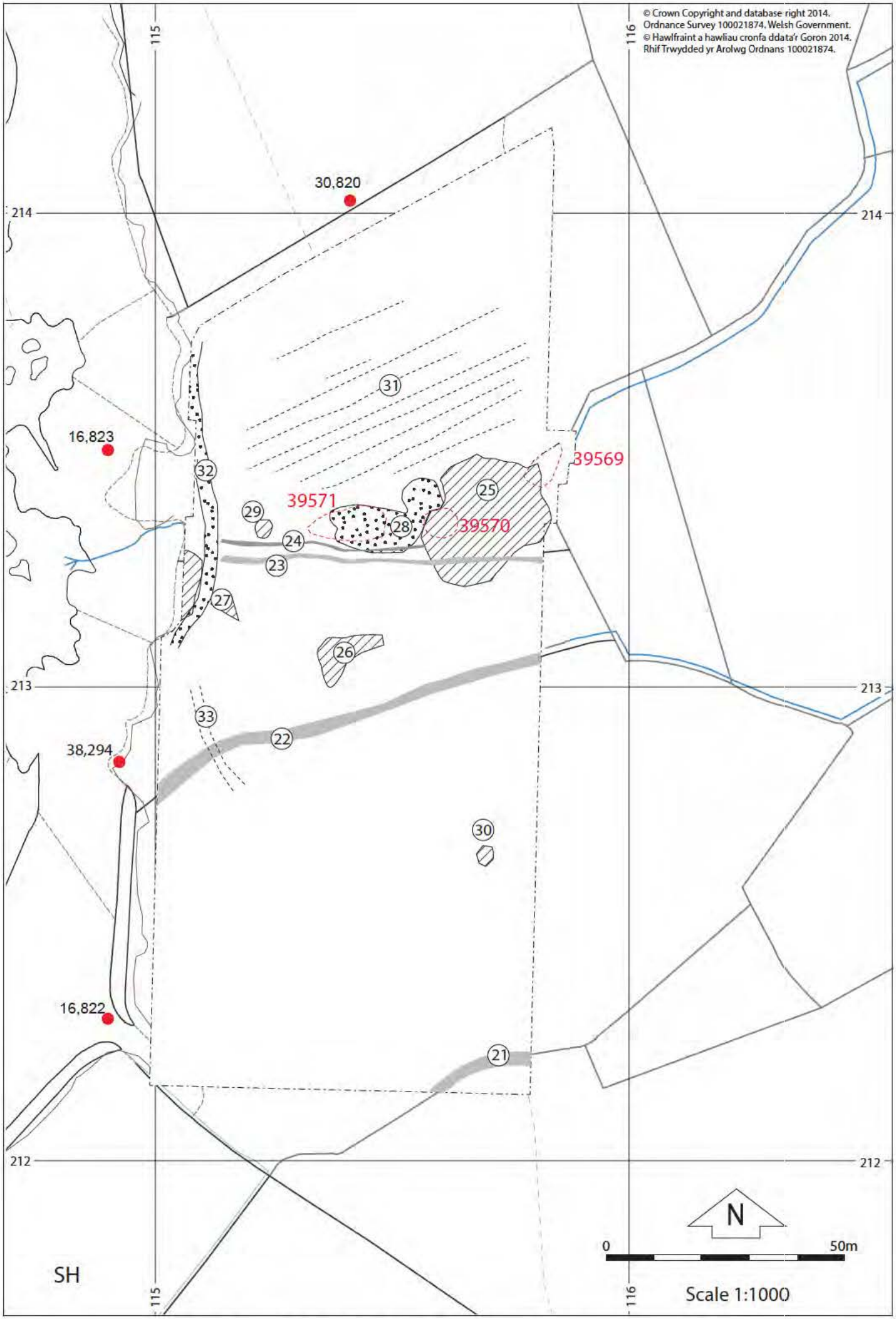

Figure 10. Area 2: East of Porth Solfach, fluxgate gradiometer survey, interpretation

Figure 11. Area 3: West of Cafn Enlli, fluxgate gradiometer survey, grey-scale plot showing effects of buried geology

Figure 12. Area 3: West of Cafn Enlli, fluxgate gradiometer survey, grey-scale plot with high-pass filter

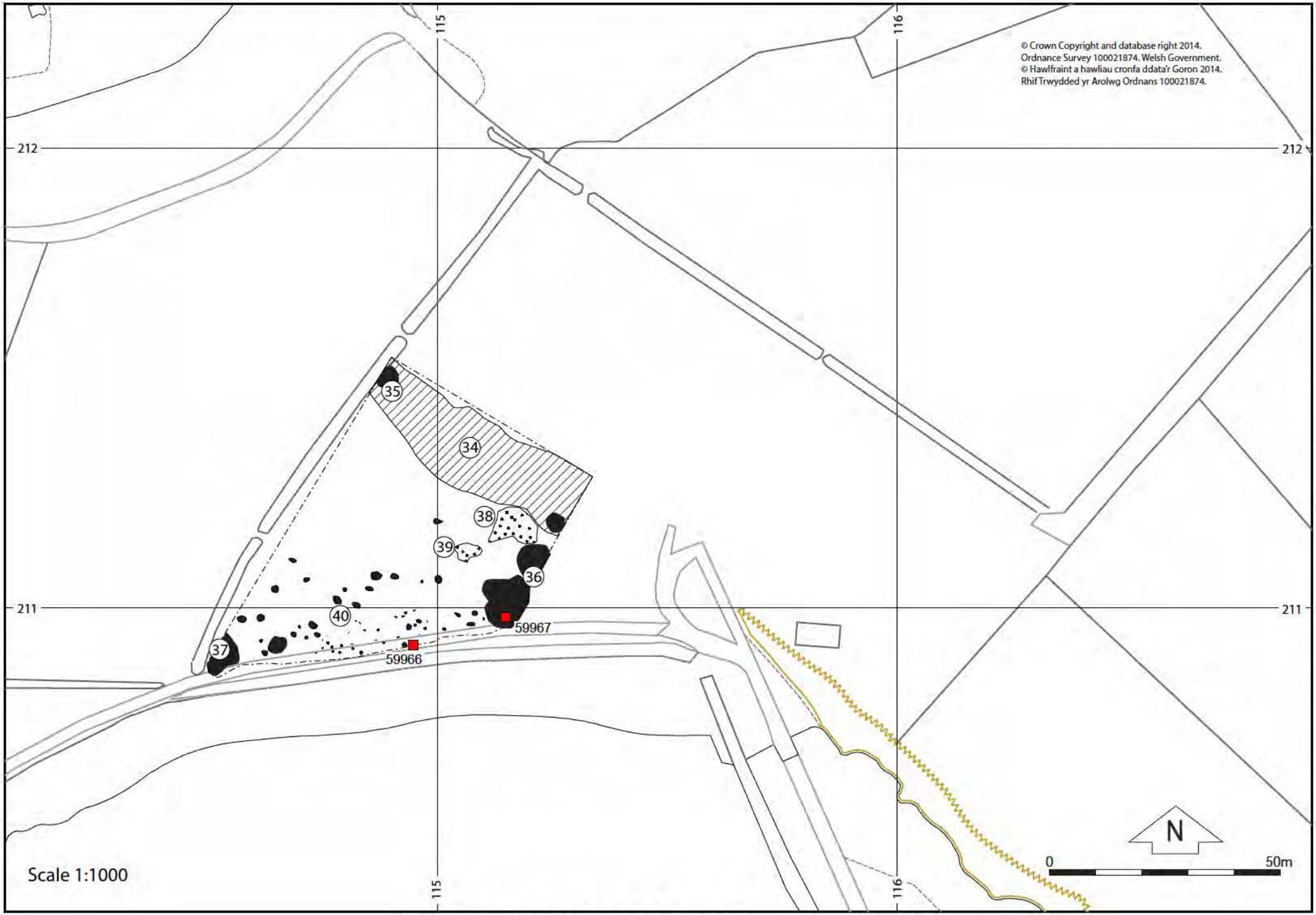

Figure 13. Area 3: West of Cafn Enlli, fluxgate gradiometer survey, interpretation

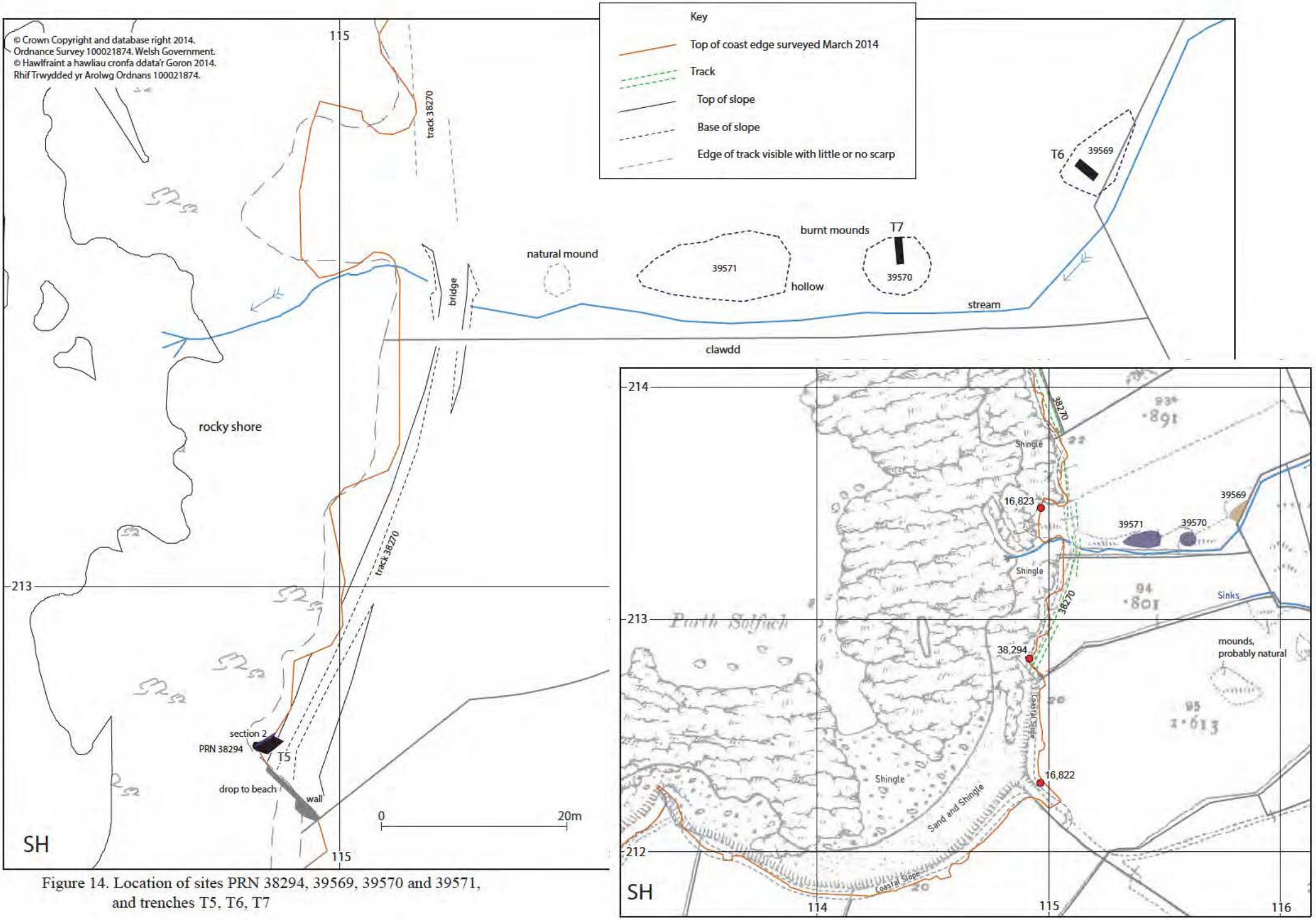

Figure 14. Location of sites PRN 38294, 39569, 39570 and 39571, and trenches T5, T6, T7

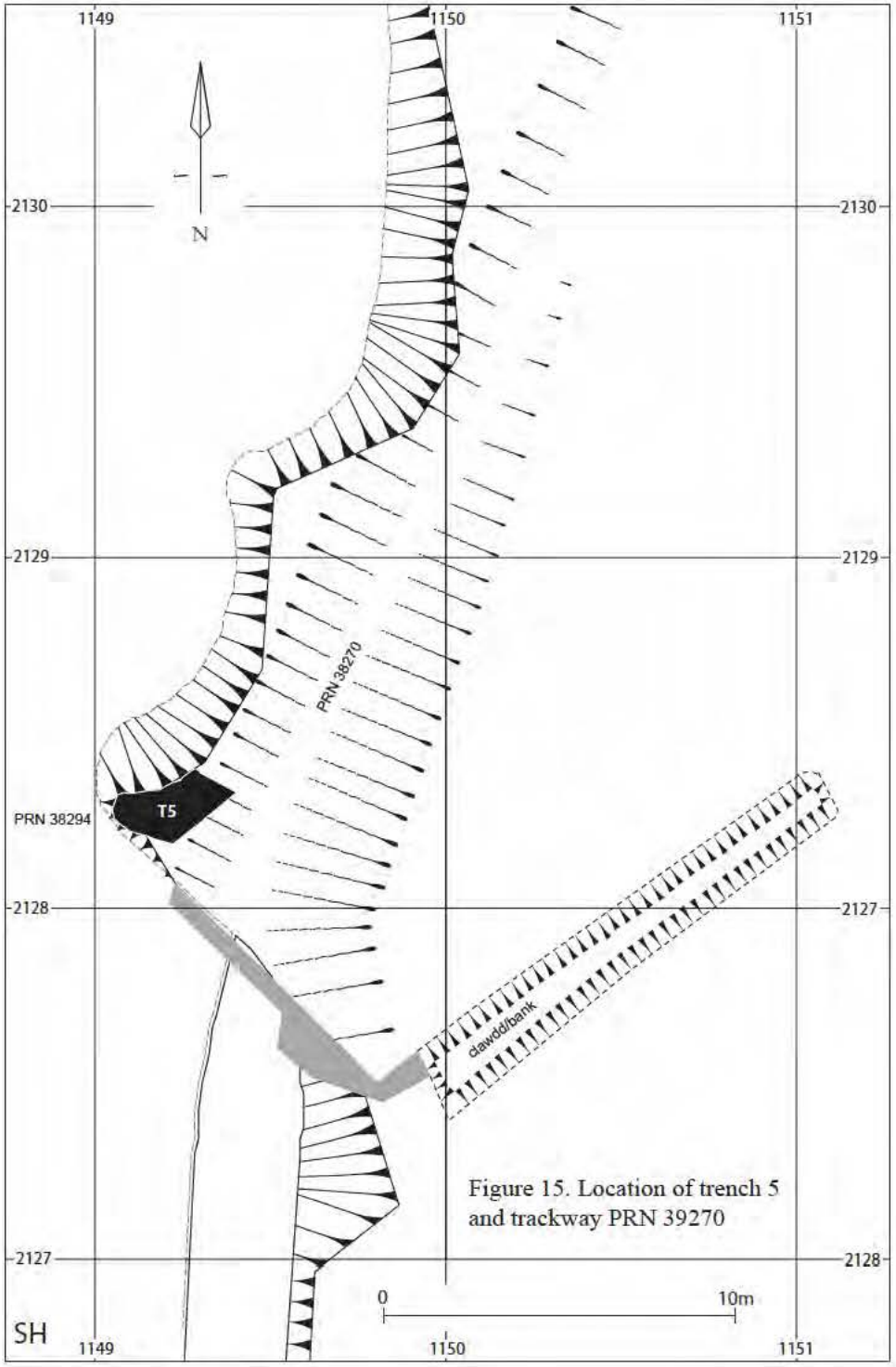

Figure 15. Location of trench 5 and trackway PRN 39270

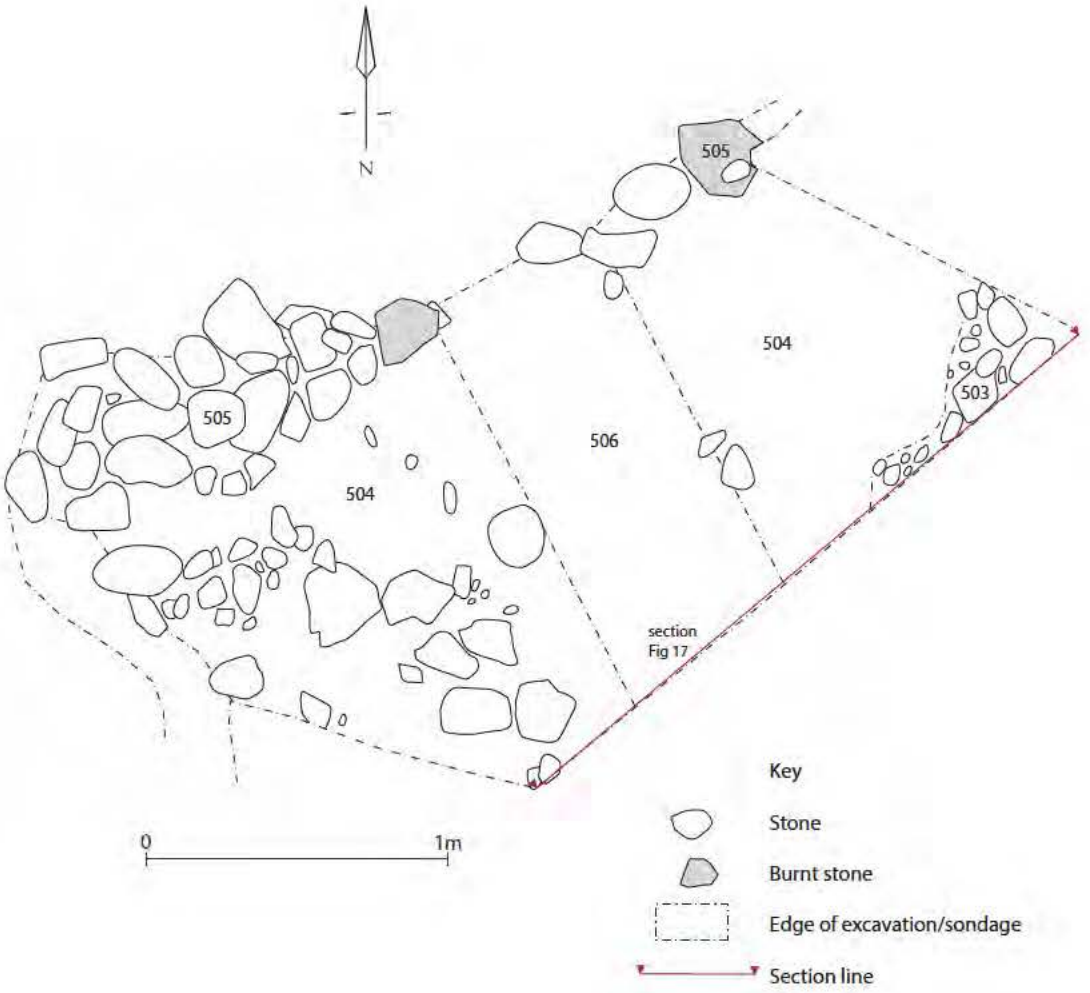

Figure 16. Plan of trench 5

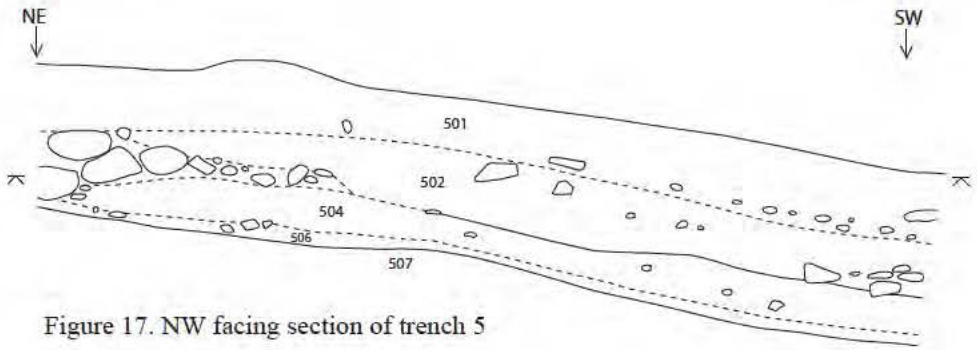

Figure 17. NW facing section of trench 5

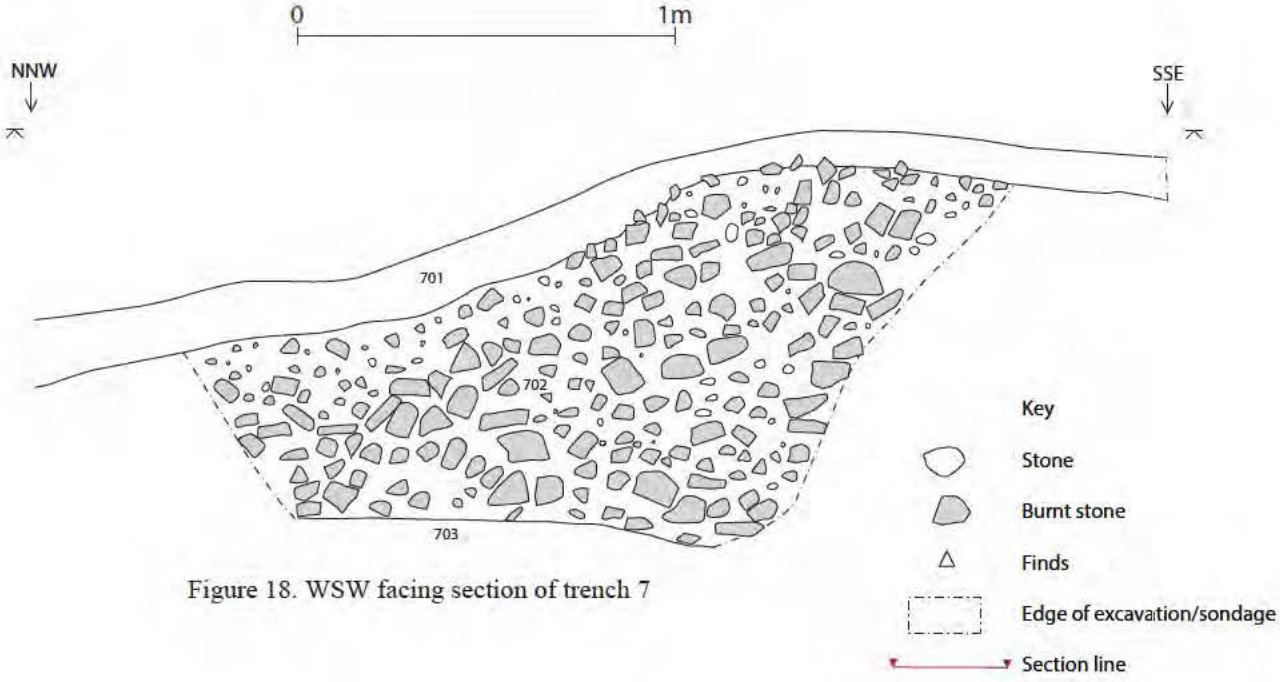

Figure 18. WSW facing section of trench 7

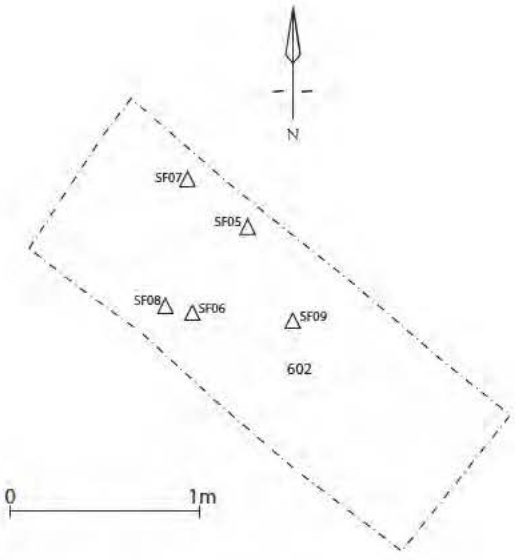

Figure 19. Plan of trench 6

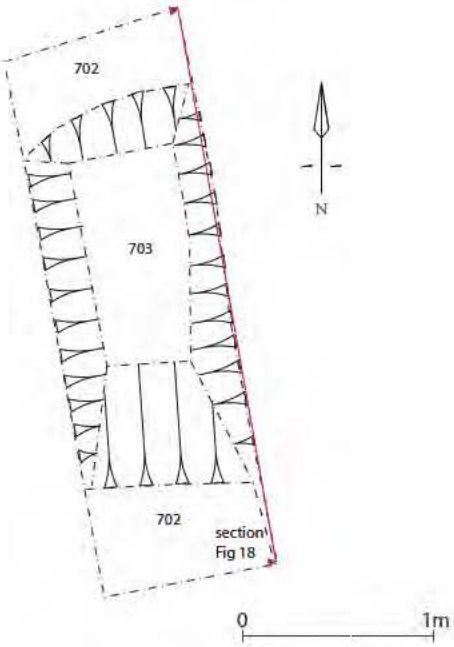

Figure 20. Plan of trench 7

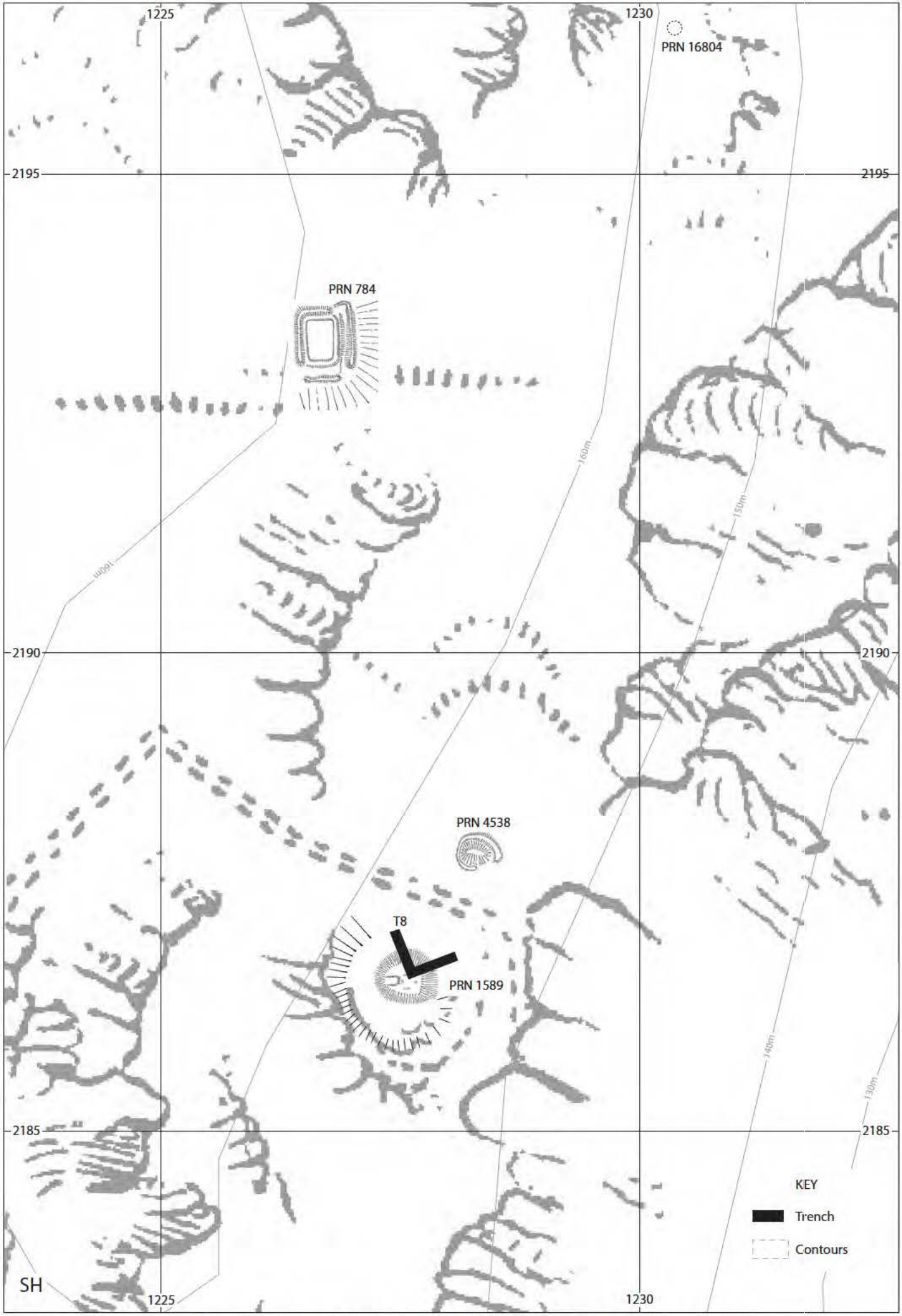

Figure 21. Location of mound (PRN 1589) and others features on summit of Mynydd Enlli (overlayed on 1889 25 inch OS map and using plans of features from Arnold (1994))

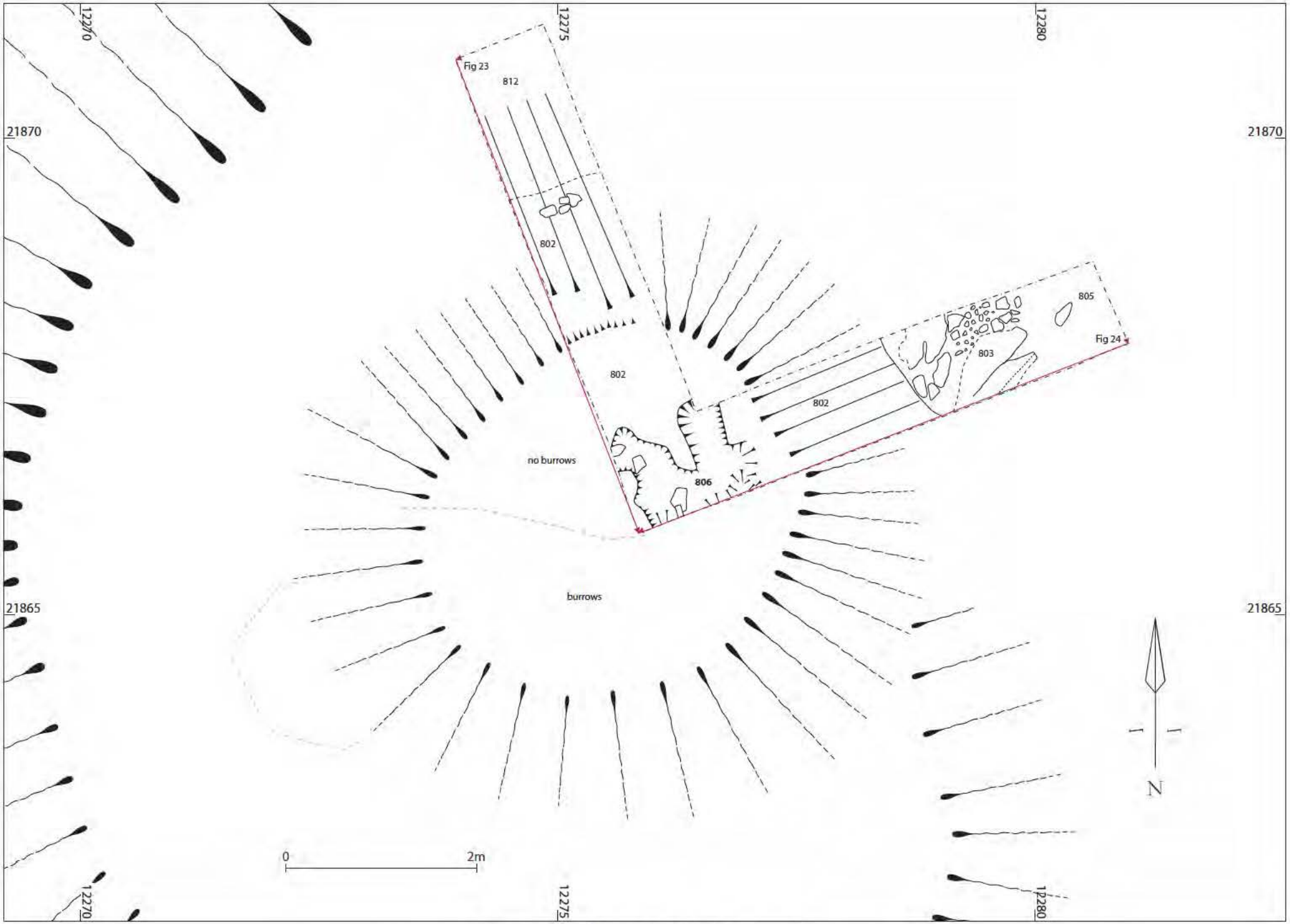

Figure 22. Plan of mound PRN 1589 and trench 8

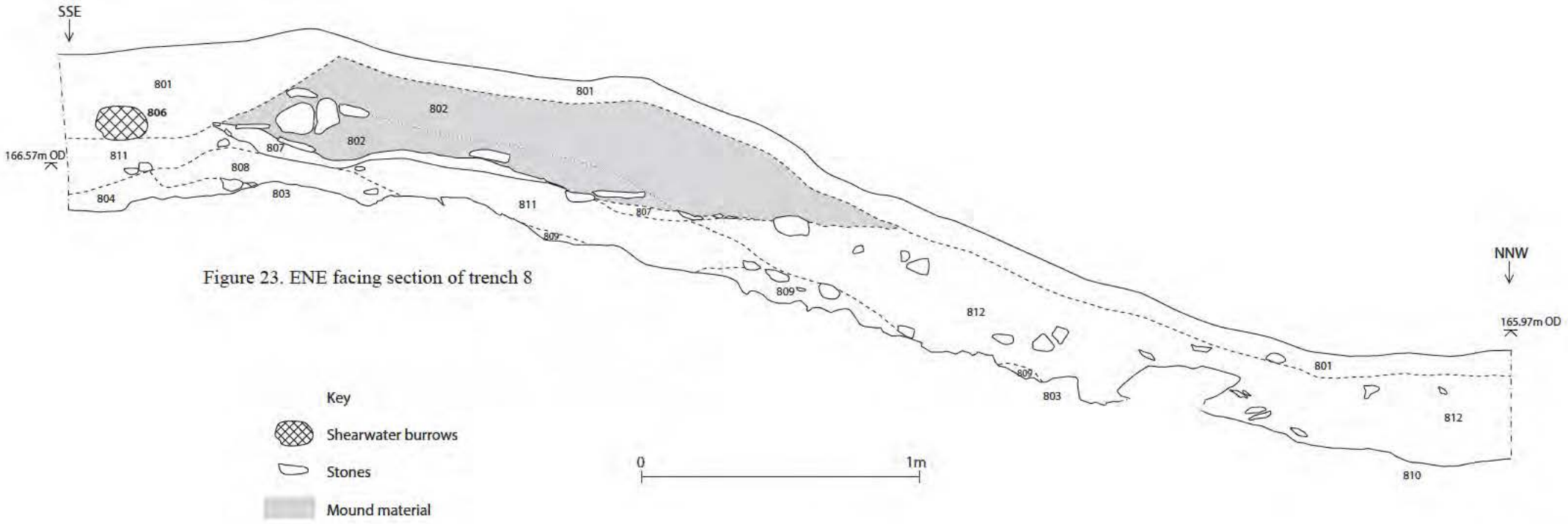

Figure 23. ENE facing section of trench 8

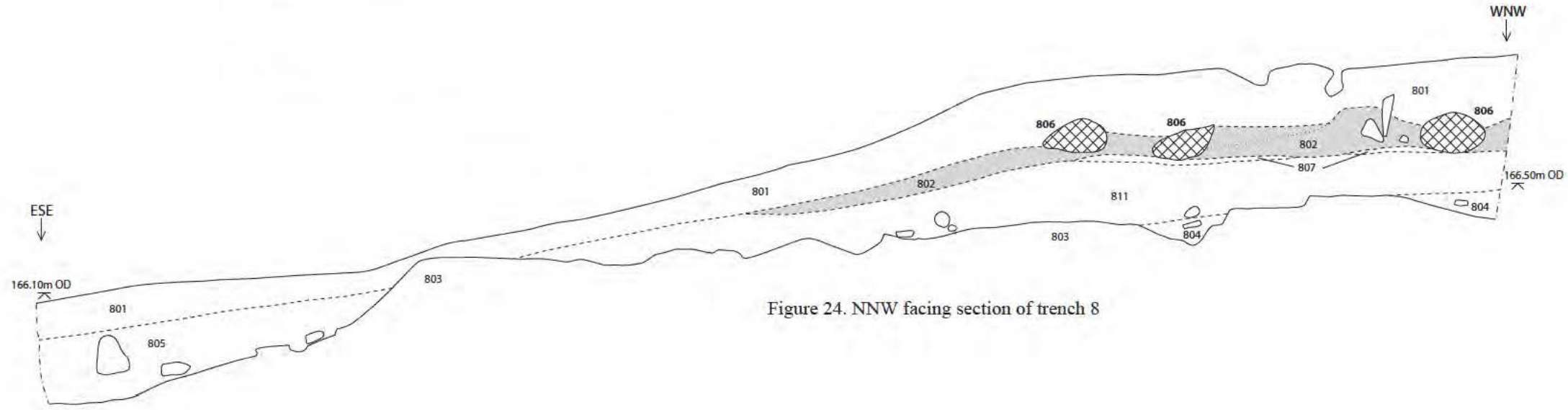

Figure 24. NNW facing section of trench 8

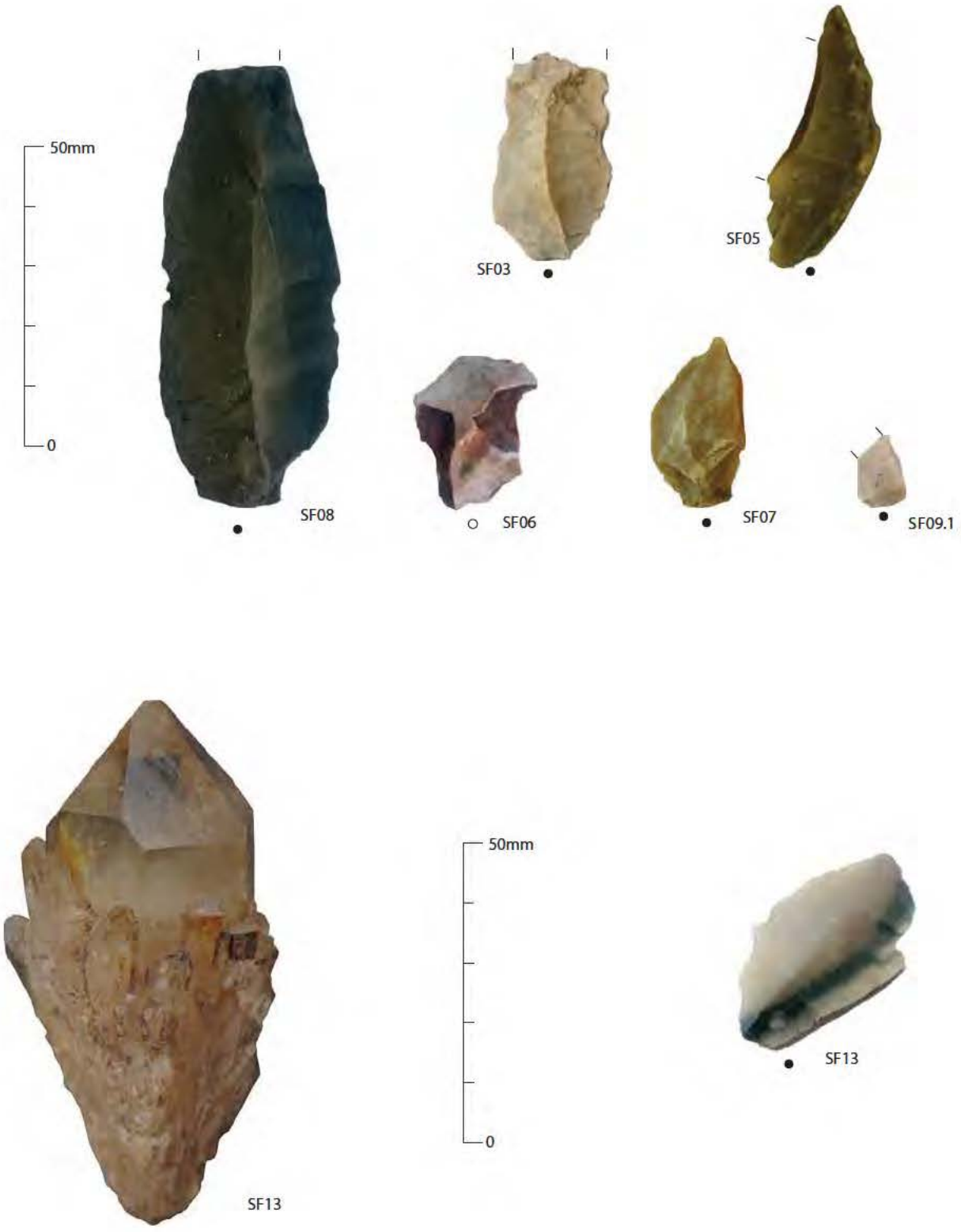

Figure 25. Finds from the excavations
SF03, 05, 06, 07, and 09.1 are flints from trench 6 (PRN 39569):
SF09.1 is a microburin, SF08 is a stone blade from the same trench.
SF13 is a flint flake from mound (PRN1589).
SF11 is a quartz crystal from mound (PRN1589)

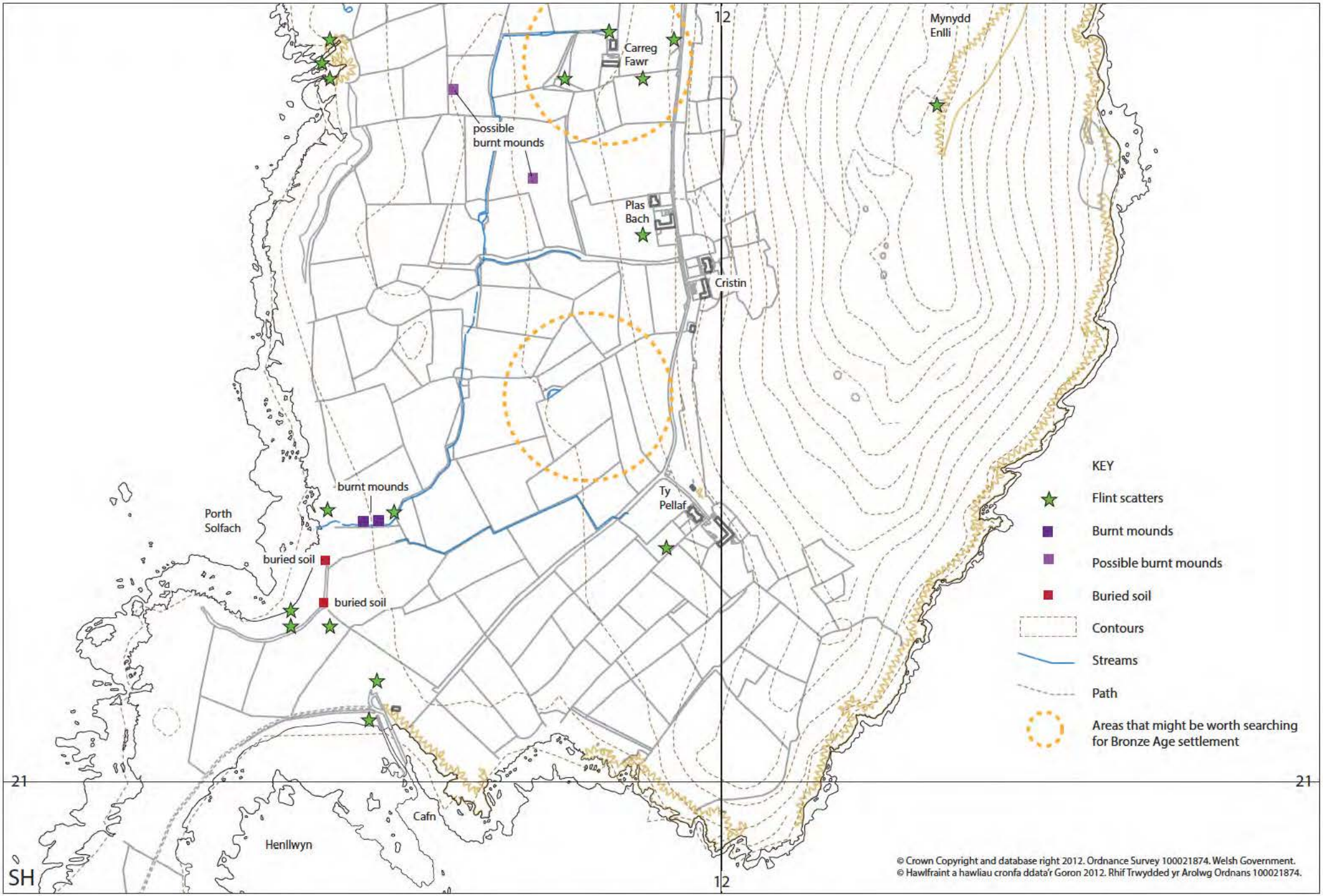

Figure 26. Location of burnt mounds and possible burnt mounds in relation to flint scatters and possible areas to search for Bronze Age settlement

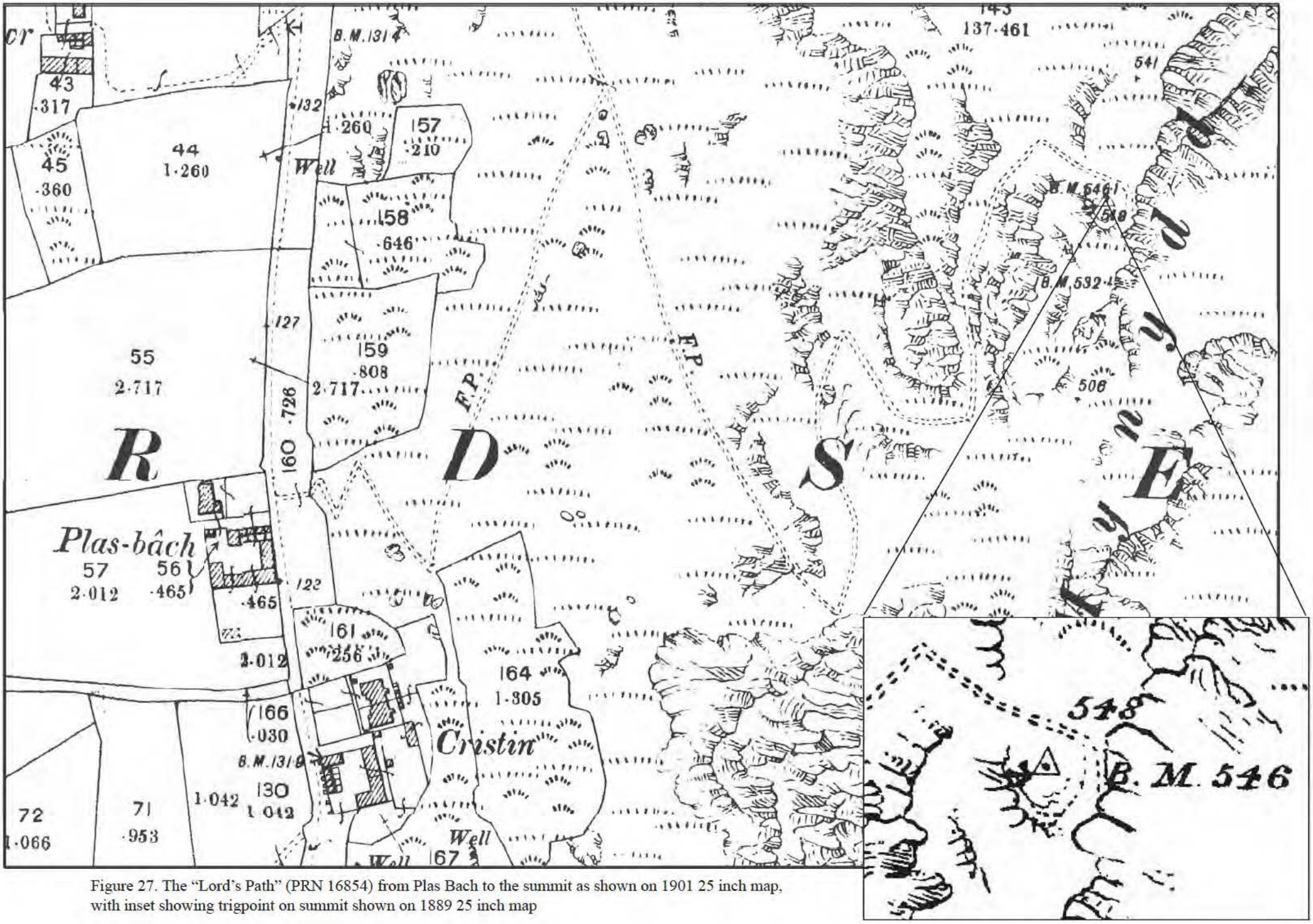

Figure 27. The "Lord's Path" (PRN 16854) from Plas Bach to the summit as shown on 1901 25 inch map, with inset showing trigpoint on summit shown on 1889 25 inch map

Plate 1. View of Ynys Enlli/Bardsey Island from St Mary's Church (PRN 779), near Mynydd Gwyddel, Aberdaron

Plate 2. Dave Hopewell carrying out geophysical survey near Porth Solfach

Plate 3. Possible roundhut on Mynydd Enlli (PRN 4535)

Plate 4. Rectangular feature (PRN 4530) on north end of Island recorded as a long hut and excavated by Hague

Plate 5. Well/spring (PRN 1203) with modern cover and fence

Plate 6. Spring (PRN 59835), probably one of the Ffynnonau Barfau

Plate 7. The abbey tower (PRN 781) in the corner of the modern burial ground (PRN 59721)

Plate 8. Pond (PRN 59711), north of Nant/Hendy, possible medieval fishpond

Plate 9. Carreg Fawr (PRN 16785) with its yard (PRN 16784)

Plate 10. Nant and Hendy (PRN 12207)

Plate 11. The Schoolhouse (PRN 11657)

Plate 12. The boathouse (PRN 16826)

Plate 13. Memorial cross over
Lord Newborough's tomb (PRN 59845)

Plate 14. Excavating trench 5 near Porth Solfach

Plate 15. Trench 5 with stones (505) and dark soil (504) exposed

Plate 16. SW facing section of trench 5

Plate 17. Trench 6 with white labels showing locations of finds

Plate 18. Trench 7

Plate 19. Section of Trench 7, showing burnt stone

Plate 20. Mound PRN 1589, showing shearwater burrows

Plate 21. Shearwater burrows exposed in trench 8

Plate 22. Shearwater burrows in section showing level of disturbance

Plate 23. Mound (802) exposed in trench 8

Plate 24. Bedrock (803) exposed in trench 8

Plate 25. Part of ENE facing section in trench 8, showing mound, buried turf line and buried soil horizons

Cadw

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Welsh Government

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