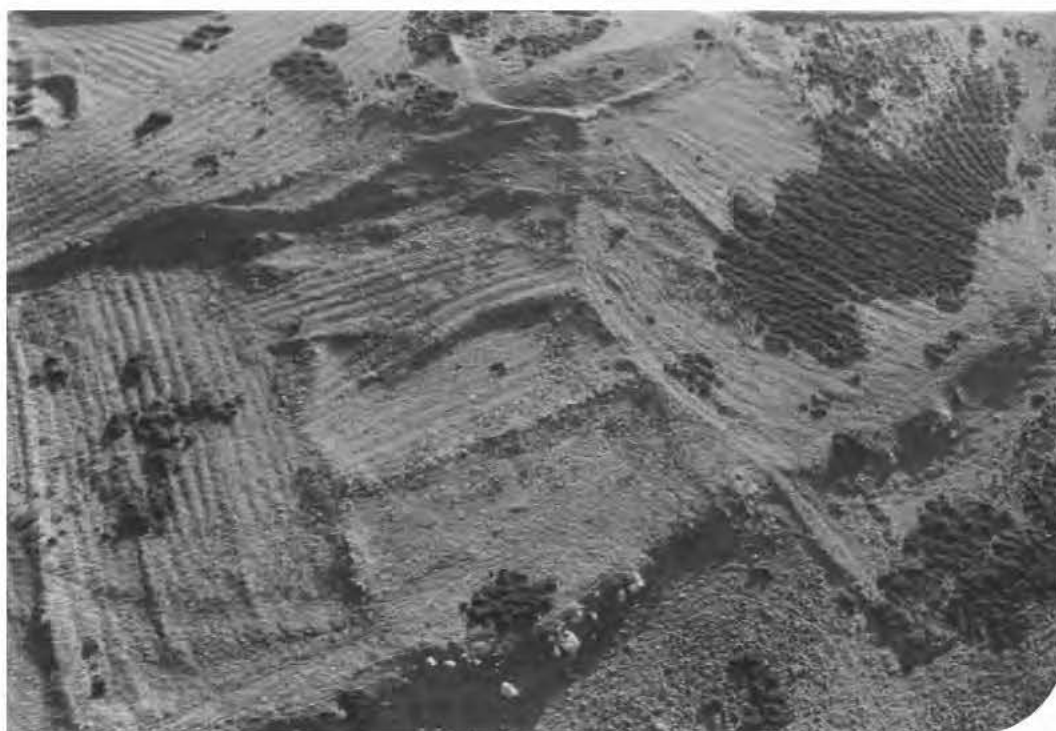


Medieval Field Systems in North-West Wales Scheduling Enhancement 2014-2015

Part 1: Report and Gazetteer



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Medieval Field Systems in North-West Wales

Scheduling Enhancement

2014-2015

Project No. G2156

Report No. 1236

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MEDIEVAL FIELD SYSTEMS IN NORTH-WEST WALES SCHEDULING ENHANCEMENT 2014-2015

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**MEDIEVAL FIELD SYSTEMS IN NORTH-WEST WALES SCHEDULING
ENHANCEMENT 2014-2015**
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GAT PROJECT NO. G2156

GAT REPORT NO. 1236

Part 1: Report and Gazetteer

SUMMARY

This report describes the results of a study of medieval field systems in north-west Wales. The aim was to identify sites with surviving remains worthy of scheduling. Seventy three potential sites were inspected, many were visited on the ground and outlines of field boundaries were transcribed from lidar and aerial photographs. Issues relating to scheduling these sites are considered and sites proposed for scheduling are included in the confidential part 2 of this report.

1. INTRODUCTION

This report forms part of a wider pan-Wales project which aims to assess all classes of medieval and post-medieval sites for scheduling enhancement. The project is coordinated through regular meetings attended by Cadw and the Welsh Archaeological Trusts. This part of the project adds to the study of agricultural features carried out in 2013-14 and focuses on the main substance of the landscape, the field systems.

This report is a study of surviving remains of medieval field systems in north-west Wales, concentrating on those that may be worthy of scheduling or of increased protection by the extension of existing scheduling.

2. METHODOLOGY

2.1. Aims and objectives

The aim of this project is to identify field systems of medieval date which are not represented, or are under-represented, within the record of statutory protected sites and to assess their suitability for scheduling or the extension of existing scheduled areas.

The following objectives have been achieved by fulfilling this aim:

- Identification of the resource
- Assessment of the resource in a national and regional context
- Enhancement of Historic Environment Record

This project aims to contribute to Welsh Government priorities by identifying new sites and assessing the status of known sites. This will allow the designation of heritage assets, their protection and management.

While the plotting of field boundaries from lidar and aerial photographs has provided considerable detail, supported in many cases by field visits, this project cannot claim to have studied any site in detail. Many field systems are palimpsests of activity from many periods and only a superficial attempt has been made to address this complex issue. Only detailed fieldwork and survey supported by documentary research could pick apart most of these areas to securely distinguish post-medieval from medieval ploughing and determine to what extent late prehistoric field systems were altered in the medieval period.

2.2. Desk Top Study

To concentrate effort on sites most likely to be worthy of scheduling or scheduling enhancement the desk-based study initially focussed on scheduled sites. Areas were identified by searching the Gwynedd Archaeological

Trust (GAT) Historic Environment Record (HER) for medieval settlement features (long huts, house platforms etc.) that occurred within scheduled areas. Field systems within scheduled areas were also identified. This identified areas that may have been scheduled for sites of another period, but that contained medieval sites. However not all HER sites that are in scheduled areas are cross referenced to the SAM, so the list of scheduled areas provided to the GAT HER by Cadw was searched for medieval SAMs. A search was also made of the HER for sites listed as medieval field systems, resulting in 44 sites being found. Of these sites those comprising a small number of elements or those that were probably not medieval were excluded from this study. Other sites have been added where they have been referenced in literature or have been drawn to the attention of the author of this report by other sources.

This methodology produced over 140 sites from which those most likely to have surviving remains were selected for inclusion in the study. Clearly this does not provide an exhaustive list of remains of possible medieval fields. There are many “enclosures” or field boundaries listed individually on the HER that have not been included. Some of these may be recorded as medieval but the majority are recorded as date unknown. Only an in-depth study could investigate the landscape context of these and suggest a likely date.

The method of data collection means many sites that might have met the criteria of the study have been missed. Scheduled areas with long huts either laying outside the area or not individually recorded as medieval sites have not been included. Davidson *et al* (2009, 26) describes Craig Ty’n y Cornel, Llanfihangel-y-Pennant (SAM Me167) as a remarkable landscape including a long-hut settlement as well as several roundhuts. This area with paddocks and a wandering field system was probably used into the medieval period and later but has not been included. Caer Fadog Uchaf (PRN 59870) in Cwm Pennant was only included at the last moment, too late for a site visit, because Crew and Musson (1996, 41) published an aerial photograph that showed that this area of medieval fields was too important to be missed.

Once the list of potential areas had been created they were subjected to an initial inspection on a Global Information System (GIS), in this case MapInfo, using the 25 inch County Series maps and the Next Perspectives aerial mapping data supplied under licence by Cadw to the GAT HER. Each area was assessed for the potential to have remains of surviving medieval field system. The vegetation type or presence of built up areas was also recorded. This enabled some areas to be ruled out as having a very low chance of surviving field systems.

Where field systems remains were seen or there was a possibility of their survival the areas were checked against the lidar data supplied to the GAT HER by the Environment Agency, where this was available. In some cases field systems were clearly visible on the lidar data and in these cases the outlines of the boundaries and lynchets were transcribed into MapInfo tables. Information on all sites within each individual area was extracted from the HER and National Monuments Record (NMR) using the GAT online HER. This was used to inform the interpretation of the field systems and to help date their use.

Aerial photographs were obtained of all areas to be studied from Cardiff Aerial Photographic Unit and these were used to transcribe ancient field boundaries in MapInfo and add to the composite plot of the field system in each area. Where lidar was available this gave the most accurate base for transcription and information from aerial photographs was added only where it contributed new information. Where there was no lidar data was available, field boundaries were transcribed from aerial photographs alone. In areas where both sources were available the aerial photographs were useful in picking up ridge and furrow that was not often detected on lidar.

An Access database was created of the medieval field systems identified, with a summary of the character of the areas, field notes, and where relevant scheduling recommendations. This is accompanied by MapInfo tables of transcriptions of archaeological features from lidar, aerial photographs and OS 25 inch maps. A table of polygons defining the outline of the surviving field system remains was also produced. These MapInfo tables were created to include the full range of metadata recommended by Gwynedd HER, as shown in appendix IV.

Appendix I gives a list of sites inspected on the ground, appendix II lists other field systems of probable medieval date, and appendix III lists sites that were considered but not investigated in detail for this project. Figure 1 shows the distribution of sites included in the study.

2.3. Fieldwork

Fieldwork was undertaken in January and February 2015, except for sites on Ynys Enlli, which were visited in June 2014. Field visits were rapid assessments of the character, current condition and possible threats to the field systems. They did not involve a thorough inspection of complete field systems or of each component element. Field inspection was carried out from public roads and footpaths and on open access land and permissive access areas. Where public access was limited the inspection was therefore similarly limited. Representative photographs were taken and information gained from the field visits was used to re-evaluate the aerial photographic and lidar evidence. Once ridge and furrow had been seen on the ground, for example, its recognition from these other sources could be more confident.

The only areas that were visited were those that were considered to have potential for scheduling enhancement. . Thirty one areas were visited in total but as these varied greatly in area, complexity and accessibility. This number, therefore, only gives a rough impression of the fieldwork involved. Primary Record Numbers (PRNs) were not allocated to individual elements of the field systems but site visits occasionally resulted in the discovery of a settlement or other site not recorded in the HER. These sites were given PRNs and details will be submitted to the HER in a database. See appendix I for a list of areas visited, with comments and notes.

2.4. Report

This report describes the background, methodology and results of the project, and discusses scheduling and future research. Part 2 of the report, which is confidential and for Cadw's use only provides specific recommendations for scheduling. Appendix I gives a list of sites inspected on the ground, appendix II lists other field systems of probable medieval date, and appendix III lists sites that were considered but not investigated in detail for this project. The Access database that accompanies this report is designed to aid input into the HER.

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3. HISTORICAL BACKGROUND

3.1. Open field system

The classic medieval field system is the open field system or "Midland System", best represented in the English Midlands. This was also known as "champion" countryside from *campus*, the Latin for field (Rippon 2008, 2; White 2012, 14). In this system, tenant farmers held their land in narrow strips; adjacent parallel strips were grouped into furlongs and the furlongs made up two or three large fields of approximately equal size (Lewis *et al* 1997, 170; Hall 1982, 9). The unit of cultivation was a strip, called a land, averaging in the English Midlands about 7m by 180m, but this could be very variable (Hall 1982, 5). Open fields were communal. Each holding had many lands (c. 40 to 80) scattered through the fields with preferably some in each furlong so the soils of different qualities were shared out within the community. As manure was relatively scarce, regular fallowing was necessary to return fertility to the land. This required a block of adjacent strips, usually a whole field, to be left fallow at the same time. The whole village had to arrange a cycle of crops and fallow grazing, and this determined the need to have strips in all the fields, so that some would still be under cultivation each year (Hall 1982, 17; Lewis *et al* 1997, 175)). The cultivators had common rights of pasture over the entire fields once they had been harvested or when they lay fallow, as well as common rights of grazing on permanent pasture, haymaking from the meadow and the right to fuel from the woodland (Lewis *et al* 1997, 172).

Clockwise ploughing of the lands or *selions* caused these to be ridged up to c. 0.3m high in the centre. The height of ridges related to heaviness of the soil not to the duration of use of the field (Beresford and St Joseph 1979, 23, 28). Ploughing caused a slight twist at each end of the land producing an elongated reverse S-shape or “aratral curve”, which is diagnostic of medieval fields. Where the plough turned at the end of the land and dropped some soil a “head” or “butt” built up. Where the first land of a furlong is made up of the heads of a furlong at right angles this is known as the “headland”. Triangular lands, called gores, were used to fill odd corners between furlongs (Hall 1982, 6; Beresford and St Joseph 1979, 23).

The length of a furlong was determined by distance a team of oxen could plough before tiring, so this would vary mainly with soil type. It appears that in many cases fields were extended a furlong at a time, so the oldest furlongs would be those closest to the village. This piecemeal expansion explains why furlongs are not all the same size or aligned in the same direction (Beresford and St Joseph 1979, 22-5).

There is some debate over the origins of the Midland System, with some suggestions that it began in the 9th or even 7th centuries (White 2012, 16), but it is likely to have developed over time. The common field system in the English Midlands was certainly in place in a fully developed form by the 12th and 13th centuries (Lewis *et al* 1997, 170, 176; Hall 1982, 37; Rippon 2008, 13). In a few places the common fields continued into the 19th and even 20th century, but generally by 15th century people in most areas were trying to bring their strips together into parcels and enclosing them, so making communal agriculture unnecessary (Beresford and St Joseph 1979, 23).

Traces of open fields are generally preserved as ridge and furrow visible in pasture fields. In parts of the English Midlands this can be very extensive and well-defined. The ridges seen on the ground only represent the pattern of agriculture at the time it was last ploughed, so some of the remains may be quite late, even in fields with medieval origins (comment by Chris Taylor in Hoskins 1988, 46). Medieval style ploughing is not the only cause of ridge and furrow. Victorian steam ploughing can produce very wide lands, up to 14m. The furrows are very straight and parallel to existing boundaries (Hall 1982, 11). This especially occurred where upland moors and former woodland was being brought into cultivation (comment by Chris Taylor in Hoskins 1988, 47).

While the full open field system is classically English a similar system of communal fields was cultivated in medieval Wales, although the Welsh open fields were on a smaller scale than the vast English ones and there were usually also large areas of common grazing (Rippon 2008, 19-20). The Welsh laws describe the use of open field systems before the Edwardian Conquest. *Tir gwelyog* (hereditary land) was held by a free kin group (*gwely*) and consisted of unenclosed arable fields farmed in scattered strips. *Tir cyfrif* (reckoned land) was similar but worked by unfree bondmen (*taeogion*), who paid dues to their lord and lived in the nucleated settlements of the *maerdrefi* (bond settlements connected to the commotal courts (*llysoedd*)). *Tir corddlan* (nucleal land) consisted of plots of cultivated land radiating around a settlement (Edwards 1997b, 6, 8). The communal open fields were referred to as *rhandroedd* (sharelands, the singular is *rhandir*), and the open field complex was the *maes* (Thomas 1980, 345). Each of the holdings (*messuages* or *tyddynod*) within the *tref* (township) had access to the open fields of arable *rhandroedd* (sharelands). Each tenant had strips or quillets (*lleiniau*) dispersed throughout the open fields like the Midlands system (Longley 2001, 48).

In the idealised world of the law texts each *tref* should consist of 256 *erwau* (customary acres) and of 64 *tyddynod* as each *tyddyn* theoretically had 4 *erwau*. However, this neat pattern rarely existed in reality (Thomas 2001, 184; 1975, 25). In 14th century *gwely* land might comprise c.6 arable plots scattered over separate hamlets and the hamlet land was often a variety of irregular and different sized lands or quillets in the open fields (Jones Pierce 1972, 335). In Aberffraw the average size of a land or quillet (*llain*) was under 0.5 acre (Longley 2001, 52). The quillets were often divided by unploughed balks (*sinachod*) (Jones Pierce 1972, 335).

Oats, barley, rye and wheat were grown in the fields. Oats were the main crop, the output of which was 5.5 times that of the second grain (wheat). Oats were used as human food but were also important as fodder for cattle and more oats were produced where more cattle were kept (Thomas 1968, 12; 1975, 26). In some upland areas, such as Penllyn, oats are the only crop mentioned in the documentation (Thomas 2001, 206). The arable fields were part of a mixed farming system, with each holding being small. Documentary evidence suggests that the median size of holding had 3 cattle, 2 oxen, 5-6 sheep and 1 horse (Thomas 1968, 5). Oxen did all the ploughing and four were needed for a team, so neighbours had to work together to plough the fields (Thomas 1975, 26).

The smaller open fields in Wales, with generally fewer cultivators than those in the English Midlands, were easier to enclose by agreement, and tended to be enclosed earlier than the English examples, which had to wait

for the enclosure acts of the 18th and 19th centuries (Rippon 2008, 4). By the start of the 17th century much of the arable in north-west Wales had been consolidated and enclosed as “closes”, although the parcels of land held by a tenant could still be widely distributed (Longley 2001, 43). During the 17th century the Crown Lands of Rhosyr were sold into private ownership and consolidated and enclosed (Longley 2001, 47), however on the Newborough tithe map of 1845 there are still over 30 unenclosed quilllets. The 1608 Crown Survey suggests that Aberffraw had a greater degree of consolidation and amalgamation than Rhosyr by this date. Some unenclosed quilllets, however, survived until 1845 (Longley 2001, 48, 52). In Llŷn, consolidation was still going on at the end of the 18th century (Thompson 1998a, 10). The quilllets that were enclosed late and not consolidated are generally the ones that have survived as enclosed narrow strips to the late 19th century or the present day. These indicate the former presence of the open fields, when most traces have been removed by 18th and 19th century replanning of field systems (Thomas 2001, 211). Open fields can also be detected in field and house names with the elements *erw*, *llain*, *tala*, *dryll* and *cyfer* (Thomas 1980, 345).

3.2. Upland Farming

In much of Gwynedd the uplands were an important part of the farming system. Townships of Ardudwy extend from coast to uplands, allowing arable and pastoral resources to be integrated (Thomas 2001, 182). Parishes along the north coast of Arfon, such as Llandygai, Llanllechid and Aber, are also long and narrow, taking advantage of the variety of land available. The uplands were critical to the support of livestock, and in parishes with mostly higher land the concentration was mainly on livestock rearing rather than arable farming. In Merioneth arable land occupied perhaps less than ten percent of the land surface, and *cytir* (common grazing) was much more important than *rhandir* (shareland) (Thomas 2001, 205-6). In the 13th century sheep were often more numerous than cattle but represented only about 1/6th of the value. Although most holdings were small, some were much larger with herds of up to 20 cattle being not uncommon, especially on uplands farms (Thomas 1975, 30, 31). In Penllyn and Llŷn cattle exceeded sheep in numbers as well as value (Thomas 2001, 207).

The uplands of north-west Wales are well known for the hafod/hendre system of transhumance. The livestock, both cattle and sheep, were taken to the hills in spring to take advantage of the upland grazing and so that the crops and hay in the valleys could grow undisturbed. Some of the family stayed in the hills with the animals to look after them, milk them and make cheese (Wiliam 1986, 8; Davies 1979, 20). The *hafoty* (plural *hafotai*) was the dwelling in the uplands where they lived during the summer and the *hafod* (plural *hafodydd*) was the upland pasture. The home farm in the valley was the *hendre* (Wiliam 1986, 83; Davies 1979).

In the medieval period *hafodydd* were largely synonymous with *ffriddoedd*. Although the term *ffridd* originally meant woodland or scrub it was largely applied in Wales to heathland and came to mean upland pasture, especially the summer pastures, i.e. *hafodydd*. The *ffriddoedd* were often *vaccaries*, i.e. cattle ranches, and it was not until the 18th century that they were particularly associated with sheep (Longley 2006, 75-6).

The true hafod/hendre system was essentially medieval and declined from the 16th century (Wiliam 1986, 8; Davies 1979, 18), although there was still evidence of its use into the 18th and even 19th centuries (Pennant 1883, 270, 339; Hyde Hall 1952, 18). Many of the 16th century hafotai became permanent dwellings and the *hafodydd* were extended further up the hills (Wiliam 1986, 9; Leighton 1997, 113). New farms were also established as part of the expansion into the “waste” with *ffridd* and marshes being converted to arable, and many of the small fields on the edges of the uplands date from this period rather than earlier.

However it cannot always be assumed that upland settlement and farming are related to *hafodydd*. Some arable agriculture is possible at high altitudes, and traces of ridge and furrow are seen in the uplands. Permanent farms expanded into the edge of the common mountain land in the late 15th and 16th centuries. *Hafotai* also became permanently occupied, and it is possible that evidence of upland cultivation, as well as many settlement remains, date to this period (Hooke 1997, 89-90). Some of these farms are quite distinctive, as they are generally surrounded by clusters of tiny walled fields (Thomas 1978, 276; 1993, 37), and often have “*ffridd*” related names, but others might be difficult to distinguish from medieval style long hut settlements.

The Napoleonic Wars (1793-1815) combined with poor harvests led to an increase in the price of arable products (Thomas, D, 1963, 3-7, 18) and “the maximum amount of suitable land, and a great deal that would normally have been considered unsuitable, was put under the plough” (ibid, 7). The price rises applied to barley, oats and potatoes that could be grown in the uplands, as well as wheat (ibid, 46), so it encouraged the creation of arable fields at a much higher altitude than was normal for the period. Some upland patches of narrow ridge and furrow are likely to date from this period (Hooke 1997, 92). In south Wales, on Mynydd Myddfai, upland

cultivation is recorded as late as 1926 where it occurred during a coal strike. This late cultivation is represented by narrow, sharply profiled parallel ridges, which were probably hand dug. Some of these late ridges may be related to the growth of market gardening in the 17th century (Leighton 1997, 31, 33).

Upland traces of cultivation are therefore often of a post-medieval date, but to assume that all are late is too extreme a position. Briggs (1985, 298) considers that “medieval origins [for upland plough ridges] remain a strong possibility”. The climatic upturn of the 11th to 13th centuries allowed agriculture to expand, including the development of permanent settlements on the uplands (Edwards 1997b, 1-2). There were upland farms in the early 13th century, where the homestead would be focused on c.1.7 acres of arable adjacent to the house, worked either as open shareland or in walled fields (Thomas 1993, 48). Upland arable was likely to be associated with scattered *tyddynod* rather than being open fields (Thomas 1980, 346). Tiny arable plots and gardens were also set within the common pastures, so on lower areas, some small patches of ridges may be related to this practice (Thomas 1975, 26). In contrast, some very narrow ridge and furrow on the hills of Northumberland has been proved to be prehistoric (comment by Chris Taylor in Hoskins 1988, 46). Crew and Musson (1996, 23) have identified ridge and furrow around an Iron Age roundhouse settlement in Cwm Prysor, which they believe may be contemporary with the settlement, and other examples of small groups of ridges may also be prehistoric in date.

An upland pastoral landscape was usual for Cistercian granges in north Wales. The lands donated to them were often royal *hafoddydd*, so they concentrated on the exploitation of agriculturally marginal lands. The grange at Penllyn, belonging to Basingwerk Abbey specialised in horses and the Cymmer granges on cattle and sheep (Thomas 2001, 205, 207). Late 13th-century Cymer lands concentrated on cattle, but some of their lands were arable, such as at Llanegryn (Beverley Smith and Butler 2001, 308).

In this study the specific criteria used to select sites has meant that the upland *hafodydd* have been largely excluded. The study of this landscape would require a project of its own but has already been partially covered by the deserted rural settlement project (Jones 1998 and 1999), as many upland long huts were *hafotai*. There are often paddocks and larger fields associated with these, the boundaries of which would be low walls or ditches (Thomas 2001, 205-6). There are numerous fragments of denuded walls across the uplands, many of which were probably related to medieval cattle management. These continued to be used into the 18th century and probably beyond; identifying the walls as medieval is therefore very problematic. In some cases upland surveys have considered the relationship between *hafotai* and field walls (Kenney 2014b) but generally this question has not been investigated either in detail or extensively. This lack of identification of medieval fields related to *hafodydd* has meant that the fields investigated in the present project are generally restricted to arable fields, often identified by ridge and furrow.

The only field system included in the project that is probably part of a *hafod* landscape is that around the deserted settlement of Clogwyn yr Eryr, Caerhun (PRN 59884, SAM CN319). The denuded walls are fairly fragmentary and run between outcrops. There are also areas of peat cutting, some quarrying and several sheepfolds. It is unclear whether this is purely a *hafod* with *hafotai* or whether the settlement may have also been related to the quarrying. If the latter was the case the site could be interpreted as being relatively late.

4. RESULTS

4.1. Introduction

Field systems tend to be overlooked by archaeological projects that concentrate on individual sites. The impressive earthworks of fields surrounding deserted medieval villages that can be found in the English Midlands are very rare in north Wales. There are some equally impressive earthworks of field systems in our area but they tend to be prehistoric in origin. They have generally been considered in this context, with their later use rarely discussed. Earlier work relating to fields and field systems includes a study of field boundaries in the “Field Boundaries Project” (G1628 and G1666), funded by Cadw in partnership with the Countryside Council for Wales (Thompson and Roberts 2001; 2002). This focused on types of boundaries, rather than specifically on the fields themselves. In 2001 it was possible to say that no boundaries in Gwynedd have been dated to the medieval period by excavation (Thompson and Roberts 2001, 9). This is still the case and field systems are therefore dated by their association with settlements and other sites and by their form, rather than by direct dating. The Early Fields Project (G2077) (Smith *et al* 2011) also investigated some field systems that were clearly used into the medieval period. Direct dating was attempted in this project but the results were not

easy to interpret (see below). The current project has had to rely on many assumptions about the chronology of site types to determine which areas are included as medieval fields.

See figure 1 for the general location of sites discussed below.

4.2. Open field systems

Introduction

The physical evidence for open fields can be seen across north-west Wales, although in many places it is very fragmentary. Quillets (long thin fields created by enclosing a small group of lands) can be seen in many places on the first edition 25 inch OS maps and some are still used (Thompson and Roberts 2001, 9). Small areas of preserved quillets or curving field boundaries, reflecting the boundaries of furlongs, can be seen widely across the area, particularly on the Llŷn peninsula, e.g. around Rhoslan (SH 482 409) and Llanystymdwy. Part of the latter was recorded during work in advance of a gas pipeline (Kenney 2013) as PRN 34121. Similar fragmentary fossilised remnants of open fields can be seen elsewhere, particularly in association with former medieval townships, such as Dwygyfylchi (PRN 59903) (Thompson and Roberts 2002, 13), and Criccieth (PRN 34122, 37848, 55805). Curving boundaries around Llanfair (SH 577 290) hint at furlong boundaries but are not particularly clear and open fields here may have been quite small and irregular. The field system here is largely unchanged since the 1839 Llanfair tithe map, so is likely to reflect a pre-improvement period (Hopewell 2003), as confirmed by a small area of ridge and furrow visible on the lidar (PRN 13987).

In some cases two or three strips are enclosed, or were shown as enclosed on the 25 inch maps and the boundaries have since been lost. More generally, larger groups of strips have been enclosed and turned into roughly rectangular fields, although the curve of the boundaries still accurately reflects the curve on the original strips. These allow the general layout of the open fields to be seen even if individual strips are not preserved. Even where fields have straight regular boundaries, many seem still to follow the general alignment of the open fields. The tithe maps preserve evidence that has since been removed by development or agriculture and show that open fields were widely distributed (Thompson 1999, 3). However, across much of Arfon no quillets can be seen in the surviving fields or on the tithe maps, even around sites of medieval townships (Gwyn and Thompson 2000, 23). Although the upland margins may never have had open fields most of the coastal plain must have been farmed in this way and as fertile land close to the main towns it has received the most improvement and from an earlier date than elsewhere so that almost all traces have been extinguished.

Field names indicative of open fields include: *dryll* (strip or ridge), *talar* (headland), *lleiniau* (quillets/lines), *cyfar* and *erw* (measures of land, similar to acre) (Hooke 1997, 82-83). In Llanaber such names are concentrated on the coastal strip where the best arable land was. In the Conwy Valley they are mostly found in the main valley or valley side, but also extend as high as the area of Maen y Bardd. Extensive field systems can be seen here; although they are not typical of open fields (Hooke 1997, 83) the names suggest similar management. The tithe schedules often continued to use the terms *quillet* and the Welsh equivalent *llain*, referring to medieval style strip holdings (Smith and Hopewell 2003).

Llŷn Peninsula and Bardsey Island

It has previously been stated that north-west Wales has only two main concentrations of fossilised medieval strip fields, at Uwchmynydd (PRN 59888) near Aberdaron and around Morfa Nefyn (PRN 11535); both associated with known medieval townships (Uwch Sely and Morfa respectively) (Thompson and Roberts 2002, 13). However, while these are the best preserved there are other fairly extensive remains to be found elsewhere.

There is an extensive area of fossilised strips (PRN 11535) around Morfa Nefyn. These are preserved by field boundaries that are currently in use (figure 2, plates 1 and 2). This represents a largely complete medieval open field system. It appears that virtually all the present fields preserve, to some extent, the alignment of the open field system. This is not confined to those that are clearly small groups of enclosed strips. The ownership of scattered individual strips continued into the 19th century when they are shown on the 1839 Tithe map (Smith and Hopewell 2003).

The enclosure of the strips is related to the consolidation of holdings, probably after the 15th century. All of the existing boundaries are *cloddiau* (stone-faced earthen banks) (Thompson and Roberts 2002, 13; Bryne 1996, 189), but then *cloddiau* are very common in general on the Llŷn, and are not useful in dating the enclosure of this area. *Cloddiau* tended to predominate where there was not enough suitable building stone for drystone walls but plenty of available earth (Bryne 1996, 189).

Nefyn was the maerdref of the commote of Dinllaen, and a borough after the Edwardian Conquest (Thompson 1998a, 9). The strips are confined to land in the former borough of Nefyn (Thompson and Roberts 2002, 13), although this is not the main reason for their existence, as many other less important places had open fields. The survival of traces of these fields to the present day is probably more closely related to the devastation of the town in the Glyndŵr rebellion, from which it never recovered (Thompson 1998a, 9), leaving the area something of a backwater, isolated from the 18th and 19th century agricultural improvements.

The field system at Uwchmynydd (PRN 59888), near Aberdaron at the very end of the Llŷn Peninsula, is even more completely preserved. Here there has been less amalgamation of strip fields and many are still long and narrow and clearly defined (figure 3, plate 3). The boundaries are also *cloddiau*, which often have gorse growing on their tops. This may not be coincidental as they may originally have been topped with gorse to keep sheep out (Bryne 1996, 189). The preservation of this largely intact field system must be down to even more isolation than at Nefyn. Thompson (1998a, 20) calls this “a remarkable survival” that reflects “centuries of unchanging, low-key management based on grazing”. Just outside the field system on the south-western side is a series of six well-preserved long huts in a line (PRN 1668).

An outlying part of the Uwchmynydd field system can be seen in an area of well-preserved ridge and furrow (PRN 3631) around the site of St Mary's Church, near Mynydd Mawr (PRN 779, SAM Cn381) (figure 3). This is a small but very fine area of fields, easily seen by the visitor from above; if the bracken is kept clear (plate 4). The curving form of the narrow fields is very medieval in character. These fields were never enclosed but the remains suggest that the furlongs had grass baulks between them. It seems probable that the church was placed over a pre-existing field system, possibly on the site of a former farmstead. This presumably represents the expansion of the Uwchmynydd field system to make use of small areas of level, fertile land around the rocky headland.

Even further west than Uwchmynydd is Ynys Enlli/Bardsey Island, which despite being apparently more isolated than many areas on the mainland did receive the improving attention of Lord Newborough in the 1870s and most of its fields are quite regular. However, the Glynllifon 1790 estate map (Caernarfon Record Office XD64/447/1) shows several enclosed strip fields and is suggestive of a main open field running north-south along most of the lowlying part of the north island, with a smaller field with lands aligned south-west to north-east around Tŷ Pellaf. Remains of these fields can be seen today in the area of very broad ridge and furrow projecting beyond the modern fields at the north end of the island (PRN 4532) (plate 5) and in a small number of remaining enclosed strips (PRNs 59962-59964) (Kenney and Hopewell 2015b) (figure 4).

Other parts of the Llŷn Peninsula have more fragmentary remains of open fields, suggesting that much of the peninsula was farmed in large communal open fields. Small areas of these were recorded during work in advance of a gas pipeline (Kenney 2013). North of Pentrefelin there are fields with curving boundaries (PRN 55805) indicating groups of enclosed strips. This is supported by the reference to a ‘quillet’ in the tithe schedule (RSK 2010, RSK id. No. 620). To the north of Criccieth there are some long, slightly curving parallel boundaries (PRN 34122), that appear to be fossilised remnants of an open field and immediately north of Eisteddfa are fields that are regular in shape but part of a series of fairly narrow fields running along the slope (PRN 37848), which again may be enclosed strips. Remains of an open field (PRN 34121) are also preserved to the east of Llanystumdwy. In some cases the distinctive curve of the boundaries is now difficult to see where fields have been built over, so only the old OS maps preserve some of this evidence. Curving and parallel boundaries indicating fossilised remains of open field systems can be seen over a much wider area but the current project has not traced all these more fragmentary remains across the landscape.

A small area of surviving ridge and furrow at Llannor (PRN 59864) draws attention to parallel field boundaries that do seem to be fragments of an enclosed open field system, again supported by a place name as a farm nearby is called Llain-goetre (Kenney and Hopewell 2015a).

Anglesey

Anglesey must also have had extensive open fields but intensive agriculture and modern land improvements have removed most of the remains. Despite this, there are some surviving examples. A fairly coherent area of enclosed strips and furlongs can be seen around Newborough (figure 5). The medieval plan of Newborough with its long, narrow burgage plots is still very well-preserved in modern boundaries. The field system (PRN 59893) around the town is probably largely medieval in origin (Johnstone 1997). Some of the strips of the open fields are preserved in the modern boundaries and even where the fields are fairly large and rectangular their alignment probably reflects the orientation of the open field strips. A few additional boundaries can be seen on

the Ordnance Survey 25 inch maps that do not survive today, and these can add to the identification of relict strips (figure 5). The tithe map (figure 6) does not add much information as in many cases several fields with one owner are grouped together and only shown in outline. However some individual strips are indicated and the open fields are also indicated by house names such as “Llain Nest”. Llys Rhosyr (PRN 899) appears to have been located on the western edge of the open fields, although the tithe map does show some strips immediately the north and west of the llys site.

Small patches of earthworks or fossilised boundaries survive elsewhere on the island. A small area of ridge and furrow representing several small fields can be seen at PRN 81, Llangristiolus, Anglesey (plate 6). This has two small farmsteads within fields that have fairly wide ridges, mainly about 5.5m wide but up to 7m wide. However these are very straight lacking the typical medieval curve and may be fairly late in date. Another field with ridge and furrow (PRN 37212) on the opposite side of the A55 is probably part of the same system suggests that it may actually have been much more extensive than it currently appears.

More good evidence for open fields in Anglesey survives along the coast near Llanddona, west of Din Sylwy. Here there are two small areas of enclosed strips (PRN 59869), with an area of heath between them (figure 7). The boundaries are hedges, mainly hawthorn with some standard trees (plate 7). There are other occasional small survivals, many of which have not been picked up by this project. An example is at Stryd y Facsen, Llanfachreth where there are four enclosed strip fields/quillets still in use (PRN 59902). Each field is about 26m wide, and they have a gentle curve and clearly represent the enclosure of groups of lands.

Arfon, Arllechwedd and Creuddyn

While most evidence for open fields has been lost from Arfon due to agricultural improvements very occasional small fragments remain. A tiny area of ridge and furrow (PRN 4362) preserved at Carmel indicates the presence of an open field in an area that has otherwise been covered with small regular enclosed fields. Another small and isolated area of ridge and furrow (PRN 5221) is located next to Roman Camp/Pier Camp (PRN 2299) in Bangor, and presumably indicates open fields around the town.

Further east along the coast, some tithe maps indicate former remains of open field systems but in Dwygyfylchi some physical remains still survive (PRN 59903) (figure 8). Terraces are visible on the golf course in the lidar data and some remaining field boundaries further to the east preserve furlong boundaries. The latter are shown on the 1847 tithe map with some additional boundaries that have been lost (figure 9). They are named (from east to west) Erw'r Glyn, Erw Caregor, Erw Fain, Erw Rys, Dryll y Melwr and Wern. The strips under the golf course seem to have been incorporated into larger enclosed fields by the time of the tithe map. The tithe map also shows some unenclosed strips immediately south-west of the church. These are named Maes y Llan and were still held by different tenants. The boundaries of Maes y Llan and a neighbouring field still survive as boundaries. Maes y Llan is now a caravan site. Another area of unenclosed strips on the tithe map to north-west of the church is now entirely built over. Other consolidated fields still have names on the tithe map, again suggesting open fields.

Isolation from modern improvements has also enabled the preservation of fairly extensive remains on the Great Orme, on the eastern edge of our region, (PRN 839) (figure 10, plates 8 and 9). The field system around the double stone row known as Hwylfa'r Ceirw (path of the deer) (PRN 649) has been classed in the HER as prehistoric and so was nearly excluded from this study. The narrow strip fields with ridge and furrow are, however, medieval in character and well-preserved ridges south of the cemetery have distinct aratral curves. There are also settlements of medieval character within the field system (Hopewell 2013, Aris 1997). This is a good example of a well-preserved medieval field system with some of the best-preserved ridge and furrow in the area. Although the surviving fields are not as regularly laid out as in many large open field systems it seems likely that they are fragments of an open field system that once covered much of the Great Orme.

Not far away a field system survives around Degannwy Castle. The whole of the plateau between the castle and the line of rocky outcrops to the south is covered by a field system defined by banks and ditches (PRN 59895) (figure 11, plate 10). These are particularly well-preserved and up to 0.5m high, or occasionally higher. Some of these field boundaries are fairly straight but one major boundary is very sinuous. A hollow-way (PRN 30304) runs along the eastern boundary of the field system and leads to the castle, with which it seems to be contemporary. The field system is laid out in relation to this trackway and is therefore presumably also medieval in date. Some boundaries and narrow ridge and furrow to the north of the castle are late but some scarps are probably part of the medieval system and a geophysical survey suggested other buried boundaries just north of the castle (Kenney 2009a). One field contains 3m wide, straight ridge and furrow. This can be seen on aerial photographs and in the right light from the top of the castle but at less than 0.1m in height they are difficult to

identify on the ground. This is associated with a house platform (PRN 5777), and probably formed a small holding called Fattw and is mentioned in a 1764 Mostyn Estate rental (Mostyn Mss 5452). This small holding has been formed out of the corner of an earlier field, supporting the medieval date for the main field system.

4.3. Reuse of earlier field systems in the medieval period

Introduction

Most of the best preserved relict field systems in north-west Wales are on the uplands and are of a prehistoric date. Where settlements associated with these field systems have been radiocarbon dated they often date to the late first millennium BC or Roman period, although the field systems must predate this (Smith *et al* 2011, 3). The layout of these field systems in relation to prehistoric settlement sites means that there is little doubt about the antiquity of their origin. The presence of long-huts within the earlier fields systems also shows that they were used, in some cases with little alteration, in the medieval period. In some cases the prehistoric boundaries formed a significant part of the area of medieval field systems. They must therefore be included in this study.

Hoskins (1988, 25) suggested that “Celtic fields” in Cornwall were probably abandoned in the post-Roman period and re-occupied later in the medieval period rather than being used continuously. The climatic deterioration and upheaval of the end of the Roman period which led to an economic downturn and the abandonment of marginal agricultural areas in much of Wales, perhaps makes continuity in use of these fields unlikely in Wales as well (Edwards 1997b, 1). There are, however, some possible hints of continuity. Some of these field systems are still partially in use today with walls along the original prehistoric lines. The area around Muriau Gwyddelod, near Harlech (PRN 59879) is a particularly clear example as the field walls radiate from the Iron Age settlement and form a coherent system. Many of the walls wander in typical prehistoric style but are two metre-high post-medieval constructions. It is suggested that if these walls had ever been abandoned and had collapsed they would have been rebuilt on straighter, more convenient lines. It is probable that only continuous use would have ensured the maintenance and rebuilding of walls on the original foundations.

The distribution of these relict field systems corresponds closely to unenclosed mountain pasture or areas of current small irregular fields. Relict fields are by definition no longer used and are usually bounded by banks, lynchets and denuded walls (Thompson and Roberts 2002, 13), but extensive areas of current fields are probable also ancient in origin. The irregular fields still in use around Rhostryfan are possibly prehistoric fields (Thompson and Roberts 2002, 14) and the 1768 estate map shows the survival of what are certainly prehistoric enclosures around Moel y Ci, near Bangor, into the modern era (Williams and Kenney 2013). These fields are often sub-circular or irregular in shape and are in areas where there is a high density of late prehistoric and Roman period settlements. This study has included only those areas where medieval sites and scheduled areas coincide, so a large number of these ancient fields are not listed here. As fields still in use they have also tended not to be included in studies of prehistoric fields and perhaps need more detailed study in their own right. These small prehistoric fields are easily confused with small fields created from the 16th century as common land and waste was enclosed (Thompson and Roberts 2002, 14). These later fields are sometimes more regular in shape but are often curving and sub-circular, gathering round a farmstead in a way that resembles the arrangement of late prehistoric fields around an Iron Age homestead.

Settlements within the field systems are usually dispersed with few nucleated settlements surviving on the uplands, although others may underlie modern farms and settlement on the lowlands (Thompson and Jones 1996, 24). The Ardda township (PRN 6146) and Rhiw (PRN 59880) provide examples of loosely agglomerated settlement. The prehistoric fields sometimes appear to have been reused with little modification, but in many cases the rectangular earlier fields have been modified into strip fields presumably in the medieval period (Smith *et al* 2011, 3). Where massive terraces survive, it is not yet known whether they represent lynchets developed over long use or whether they were deliberately constructed to improve the ground (Smith *et al* 2011, 3). Some belong to the original layout but some appear more likely to be related to medieval ploughing. The excavation of a lynchet near Muriau Gwyddelod did show that, in this case, the main body of the feature was composed of ploughsoil that had been transported downslope by ploughing. It had a wall built against its face but the wall had been built only after the lynchet had developed, perhaps to revet it as it became larger (Gruffydd 1992). The wall construction could not be dated but it seems likely that it would have been an addition designed to stabilise the lynchet in the medieval period.

Dating

For this project dating the later use of both relict and active ancient field systems has relied on the presence of features generally classed as medieval, such as “house platforms”, “platform houses” and “long huts”. The terms for these sites are numerous and problematic (Thompson and Jones 1996, 24). Relatively few of these buildings have been excavated and their date and function is uncertain. The few that have been excavated suggest dates ranging from 12th to 18th centuries AD. It is probable that many are post-medieval in date, especially where sheepfolds or peat houses have been mistaken for long huts. Rectangular features of this sort could date from the late Roman period through to the 19th century (Thompson and Jones 1996, 3; Leighton 1997, 100, 109), so their presence cannot be taken as proof of medieval use of an area.

The only attempt to date these field systems was carried out by George Smith as part of the Early Fields project. He obtained radiocarbon dates for charcoal from buried soil beneath field banks in three areas. Charcoal samples from the buried soil under an excavated bank in Cwm Cilio gave dates of 1910 to 1740 cal BC (SUERC-33062) and 5210 to 4990 cal BC (SUERC-33063) at 95% probability. These may suggest clearance activity in the area in the late Mesolithic and Bronze Age but do little to date the original construction of the bank (Smith *et al* 2011, 13). A radiocarbon date from charcoal from a buried soil beneath a bank excavated in Cwm Ystradllyn gave a date of 1310 to 1050 cal BC (SUERC-33059) at 95% probability, this is again probably related to a clearance phase rather than the construction of the bank itself (Smith *et al* 2011, 20). At Muriau Gwyddelod charcoal from the buried soil under a bank produced a date of 3250 to 3100 cal BC or 3360 to 3260 (SUERC-33060), but this was cut by a pit containing charcoal dating to the Mesolithic period (7190 to 7060 or 7300 to 7220 cal BC (SUERC-33061)) (Smith *et al* 2011, 28), suggesting mixing of material or some other problem with the selection of dating material. These dates suggest the field boundaries were created during the Bronze Age. The work also demonstrates that stages in the development of early field boundaries are very difficult to date.

The reliance on ridge and furrow to indicate medieval arable fields in the uplands should be treated with some caution. Straight narrow ridge and furrow may be late, dating to the Napoleonic Wars or after, although this ploughing may have taken place in previously ploughed fields, obliterating earlier evidence. However, the straightness of the ridges cannot be taken as a reliable chronological indicator, especially in the uplands where ploughing techniques and equipment are likely to vary from the lowland open fields. Several sites in this study had straight, narrow ridge and furrow, although it was not possible to prove a late date. Narrow ridge and furrow was seen on 1945 aerial photographs at Bronydd Isaf, Llanllechid (PRN 69), although it is no longer visible on the ground. It is also found at Ty Coch Farm, Betws Garmon (PRN 948) and above Llyn Cwmystadllyn, Dolbenmaen (PRN 3406). In some cases there are direct stratigraphic relationships that suggest the narrow ridges are not necessarily very late. At Garreg Fawr, near Betws Garmon, narrow ridge and furrow (PRN 6126) runs under field walls related to a post-medieval expansion into the common land, and so could be medieval.

There is also the possibility that some narrow ridge and furrow may be earlier than the medieval period. There is a collection of ridge and furrow at Cae'n y Bwlch Uchaf, Talsarnau, at a height of about 270-290m OD (PRN 59868). The ridges are about 2.5m wide and curving but they run in small groups in a variety of different directions. Within this area is a circular enclosure that may be an Iron Age enclosed settlement, and it is possible that the ridges are spade dug cultivation ridges associated with this. Much wider ridges or terraces to the south (PRN 17306) have been interpreted as post-medieval because they fit entirely within a late field, but these are considerably lower at 210m OD and adjacent to the current improved pastures. Crew and Musson (1996, 23) found similar ridge and furrow around a roundhouse settlement (PRN 1604, SAM Me168), on Ffridd Bod y Fuddau, in Cwm Prysor (plate 11). This is at 400m OD and small groups of ridges run in different directions surround the roundhouse settlement, with which Crew and Musson believe they may be contemporary. Similar small groups of narrow ridges have also been noticed around a roundhouse settlement (PRN 1004) near Moel y Gerddi, east of Harlech (Kenney 2009b, 9).

Conwy Valley

The area around Maen y Bardd in the Conwy Valley is known for its well-preserved field systems (PRN 4691 and 59872) (figure 12). The origin of this field system could be very ancient. There are two chambered tombs here (PRNs 529 and 530), so it is possible that there were Neolithic fields in the area. There are several hut circle settlements and the origin of the field system as it survives today was probably the Iron Age. The fields must have been in use when the Romans built a road through the middle of the area. The best preserved fields are within the scheduled area CN157. The height of some of the lynchets and banks here, up to 3m high, may suggest a very long period of use (plate 12). However many of the large lynchets probably follow natural scarps and must have been constructed to some extent as ploughing could only cut a limited amount into the slope before bedrock was reached. A particularly well-defined field (PRN 546) with terraced boundaries both along

and down the slope certainly seems to have been deliberately created and its sharp definition in comparison with some of the other terraces may suggest a more recent, possibly medieval, date (plate 13).

Use into the medieval period is suggested by several long huts and rectangular house platforms present throughout the field system. One of the best preserved is PRN 503, where the remains of two buildings are found within a small enclosure, which also includes a small area that has ridges that appear to be the remains of spade cultivation. As with all long huts, the date of this is uncertain and the spade cultivation could indicate the growing of potatoes and a late date. Medieval use is supported by other elements in the field system such as PRN 504, with two well-preserved long huts in an enclosure. There are also many areas of ridge and furrow suggesting medieval or later ploughing. These are mostly fairly straight but there are some curving furrows and some ridges seem to continue under more recent field boundaries. Although some of this might be 19th century ploughing, it seems probable that much of it is medieval.

The relict fields in the adjacent SAM area (CN181) are more fragmentary but there is a good group of parallel boundaries south-west of Tyddyn Du defining narrow parallel fields (plate 14). To the north-east beyond the scheduled areas there are extensive field systems (PRN 59887), some apparently overlying each other, and this area also contains ridge and furrow (plate 15). There are several well-preserved long-huts within this field system (PRN 505, 566 and 4692) and a platform house on the edge of the Caer Bach scheduled area (PRN 569). Across much of the area there are substantial terraces running both across and down the slopes. There is ridge and furrow visible in many places on aerial photographs, although this is difficult to spot on the ground. Much of it is narrow so it is possibly late. There are several boundaries running downhill suggestive of narrow strip fields (plate 16), which were probably not enclosed but are defined by low terrace scarps, and suggest medieval cultivation.

Other areas of medieval fields might be expected along the side of the valley at a similar altitude, but few were detected by this study, largely due to the limitations in identifying sites. There is a notable area above Dolgarrog, which is discussed below in the section on monastic landscapes. There is also a small area of ridge and furrow (PRN 59886) east of a possibly medieval settlement near Tyddyn Wylm, above Trefriw. The settlement (PRN 7525) contains three rectangular platforms for long huts and an enclosure. In addition to the ridge and furrow, there are some early field boundaries but they do not form a coherent system (Carver *et al* 1994). Another probable medieval settlement (PRN 10796) lies under the remains of Ffridd Uchaf farmstead to the south and within the area of early boundaries. Next to this is a field with distinctive curving boundaries suggestive of an enclosed arable furlong. This could have been associated with either the medieval settlement or the later farmstead.

It is difficult to tell whether the settlements and the fields in this area are early post-medieval rather than medieval without excavation. There was an expansion into the uplands above Dolgarrog, and presumably also Trefriw, in the 16th century (Hooke 1997) and there are several ruined farmsteads surrounded by small fields probably dating from this period. The area above Dolgarrog is covered by a map from the Newborough estate dated 1788, which shows these farms and their fields. However one area of relict fields (PRN 55886), south of a small cottage called Coed Sadwrn, is not shown on the estate map and is presumably earlier (Evans and Kenney 2011), demonstrating the survival of some fragments of early fields.

North-eastern coastal hills

A very extensive area of the lower north-western facing slopes of the Carneddau from Llanfairfechan to Llanllechid is covered with relict field systems, many of which are in very good condition (figure 13). Most of these clearly originated in the late prehistoric period and are full of roundhouse settlements, but there are also long huts and rectangular hut platforms.

The reuse of early fields is clearly shown around the small hillfort of Dinas (PRN 392), Llanfairfechan (figure 14). The distinctive terraces (PRN 8039) that surround it must be related to the hillfort but presence of long huts and ridge and furrow suggests medieval reuse.

At Cae'r Haidd, south of Llanfairfechan, there is a fine series of terraced fields (PRN 7443) around a scheduled medieval settlement site (SAM CN330, PRN 372) (figure 14, plate 17). There are also roundhouse settlements (most notably PRN 256), so this area also probably was laid out in the Iron Age. The most clearly defined boundaries surround the medieval settlement suggesting a re-use of the earlier system. The different phasing of the field system can be seen best on the plateau above where 1945 aerial photographs show ridge and furrow crossing earlier boundaries associated with a circular enclosure that is probably an enclosed roundhouse

settlement (PRN 7448). Another interesting relationship is between a group of relict field boundaries and the slight remains of a Roman road (PRN 17888). As the field system does not reflect or respect the road the latter must have been out of use and barely visible when the field system was laid out, and some of the boundaries can be seen to cross the road. The area was also a golf course, as shown on the 1914 25 inch map, and some tees are still visible as earthworks (e.g. PRN 7445).

Across a small valley, but nearly continuous with this area, are more terraced fields (PRN 59873) on the side of Garreg Fawr (figure 14). In this case there may have been less medieval alteration to the prehistoric fields as the settlements within this area are mainly prehistoric with only one long hut (PRN 7460), and no evidence of ridge and furrow. To the south of Garreg Fawr, ridge and furrow at up to 370m OD (PRN 59896) on Ffridd Newydd (plate 18) may be an example of Napoleonic arable expansion but the presence of hut platforms of probably medieval date nearby does suggest that this could have been medieval ploughing.

On the eastern slopes of the Aber Valley, up the lower Anafon Valley and over the hill into Nant y Felin Fach is a very extensive field system, or range of field systems of different periods (figure 15). The northern part of this area is around the medieval township of Bodsilin (PRN 6810), and although there are many prehistoric settlements, some quite complex and well preserved, the area was clearly used in the medieval period. This is supported by the presence of long hut settlements (PRN 4088, PRN 325 (CN286), and PRN 347(CN137)). The hut group near Hafod y Gelyn (PRN 320, SAM Cn135) is on the HER as a medieval site but the main settlement is a late prehistoric roundhouse settlement; however, there is a later rectangular building overlying it that is probably medieval (RCAHMW 1956, 10).

This area has been split into two fairly arbitrary PRNs (59878 and 59882) separated by a trackway, but the field systems are continuous between the two areas. Different styles of surviving boundaries could have led to the areas being sub-divided, but the differences are largely related to preservation and topography and in most cases they are still part of the same system.

This is quite a varied area containing different styles of field boundary and variations in survival but it still appears to be a coherent and connected system and many of the boundaries across the area must have been in use simultaneously. Ridge and furrow is visible on the level heathland where there is no gorse and the sheep have kept the grass very short (around SH 6769 7196). This is slight and the ridges are about 2m wide. Around the long house settlement (PRN 325, Sam CN286) there are significant terraces, some rounded by ploughing but some still possessing denuded stone walls on top (plate 19). Around SH 6767 7217 is a series of sub-rectangular fields defined by denuded walls. In some cases the walls are little more than lines of stones but in other cases they survive to full width at foundation level (plate 20). A site described as a roundhouse settlement (PRN 323, CN285) occupies the corner of one of these fields and another complex roundhouse settlement (PRN 321, CN136) lies just outside, so their origin is likely to be prehistoric. The character of the fields and the survival of the walls suggest that they were also used into much more recent periods, including the post-medieval period. Further north the boundaries are less well-preserved and more ploughed out, with stone surviving only along what appear to be quite late, probably 18th or early 19th century boundaries. In some cases oaks grow along the line of the field boundaries suggesting that some had hedges with standard trees, and only the latter survive. Most ridge and furrow has been lost in this northern area and cannot be seen even on the aerial photographs. A small area at SH 6728 7266 is an exception; this can be seen on aerial photographs and can just be detected in the ground. The ridges are about 2.5m wide.

There are very well-defined terraces in open oak woodland around SH 6680 7206 (plate 21). These are up to 3m high and have considerable amounts of stone on their faces, which might partly be due to revetment, as well as field clearance. These fields may be related to the long hut settlement just above (PRN 348, CN137).

Further up the Anafon Valley, there are numerous medieval structures and settlement evidence but only slight traces of field systems, including some ridge and furrow and some field boundaries (PRN 59883). There are small enclosures associated with some of the long huts and one large enclosure (PRN 3889) defined by a stony bank on the north side of the river. The enclosure boundary (PRN 3889) was hard to follow on the ground in places. For much of its length it is defined by a path and the boundary seems to be largely the result of clearing stone from this path. The path leads to a sheepfold built from a long hut (PRN 349), suggesting that the path itself is probably of some antiquity. Where the boundary runs downhill at the eastern end it is much clearer and appears as a stony bank up to 0.5m high (plate 22). The date of the boundary is unknown, but its association with a long hut suggests a possible medieval date. A sub-circular enclosure with other enclosures radiating off it (PRN 350) located towards the western end of the valley is probably prehistoric.

An extensive field system (PRN 59871) on the western side of the Aber valley seems to be mainly medieval in character, although the area is full of hut circles and other prehistoric settlement (figure 16). The fields are small and rectangular but they are elongated down the slope and resemble furlongs more than classic 'Celtic fields'. Ridge and furrow is clear in the southern part of the area around what is probably a medieval farmstead (PRN 59897), but many of the fields elsewhere have traces of ridge and furrow visible on aerial photographs and on lidar data (figure 17), with just a hint of these visible on the ground. The northern part of this area of fields is recorded in Caernarvonshire Inventory vol I (RCAHMW 1956, 8-9), where it is stated that some of this area was being "broken up by a heavy plough" when the investigators visited the site. It is possible that some of the narrow ridging in this northern area seen on the 1986 aerial photograph is from this modern ploughing.

On Ffridd Ddu, south of Aber, is an area of small terraced fields of prehistoric type associated with very fine medieval ridge and furrow (PRN 6617). This has the typical aratral curves and ridges about 3m wide (figure 16). There are several roundhouse settlements within the field system but the scheduled site at the eastern edge of the area (PRN 240, SAM Cn243) includes a long hut as well as round huts, and there are long huts just beyond the main area of fields (PRNs 241 and 317) and to the north (PRNs 75 and 59898) (RCAHMW 1956, 8-9). The terraces are rounded off by ploughing but the ridge and furrow can be clearly seen on the ground and is even better seen from the air (plates 26 and 27). The main area of ridges lies between 250 and 210m OD, and demonstrates that there is genuine medieval ridge and furrow at considerable altitudes.

Very substantial terraces near Bronydd Isaf, Llanllechid (PRN 69) are associated with two enclosed roundhouse settlements (PRN 67 and NPRN 408172) (figure 18, plate 28). Narrow, slight ridge and furrow within these fields could be related to Napoleonic ploughing and there are no recorded medieval settlements within the field system. The terraces continue along the slope further downhill (PRN 70) and the long, parallel fields have a medieval character. It seems likely that these were farmed in the medieval period, possibly from farms at the foot of the hill. Other similar terraces are seen near Llanfairfechan (PRN 7437).

There is a well-preserved Iron Age field system East of Llanllechid (PRN 59876) with lynchets and roundhouse settlements. It also contains some long huts (PRN 275, 276, 7530), and was probably used in the medieval period. This is entirely within the scheduled area (CN121), so this site has not been looked at in detail in this project, as no improvement of the scheduling can be suggested (figure 19).

The location of these fields in and around the Aber Valley may suggest a connection with the *llys* located there. Each commote had a *maerdref* (the *tref* (township) of the king's administrator) and a royal *ffridd* (Longley 1997, 42). The *maerdref* of Arllechwedd Uchaf was at Aber, with the *llys* (royal court) adjacent to the earlier medieval motte in the middle of the modern village. The royal *ffridd* was, unusually, immediately adjacent on the surrounding hills. The fields around the Aber valley must have formed part of the *maerdref*, and there is still a track running from the village, through the fields of PRN 59871 to what were the royal hafodydd in Pant Mawr and Cwm yr Afon Goch (Kenney 2014a, 15). The fields above Crymlyn may also have been part of the *maerdref* and those to the north near Llanfairfechan may have been influenced by the proximity of the *llys*, which must have been the economic focus of the area.

Many of these areas of fields seem to have a single main medieval settlement within them, in contrast to the multiple prehistoric settlements. This may indicate that farmsteads were more widely separated in the medieval period than the late prehistoric. It could alternatively be argued that the prehistoric settlements were not contemporary and that settlement sites moved over time. It is likely that detailed survey of these field systems would reveal more medieval sites as the area must have been wealthy and economically active in the medieval period. Alternatively, many of the uplands settlements could have been outlying, low-status farmsteads and most of the fields could have been farmed from the settlements in the valleys.

Ardudwy

The west facing hill slopes running south from Harlech to Barmouth are similar to those just discussed in that early field systems, both relict and still in use, are widely distributed above the more intensively cultivated coastal plain. The majority are very clearly prehistoric and their use in the medieval period has been largely ignored.

A particularly well-preserved Iron Age field system (PRN 59879) lies around the site known as Muriau Gwyddelod (Irishmen's Walls) (PRN 1055, SAM Me010), and extends in a more fragmentary condition for several kilometres, where it is identified by an irregular pattern of small fields often of wandering or curvilinear outline (Smith *et al* 2011, 24) (figure 20, plate 29). The best-preserved area of fields survives because it is on

poor and stony land. On the better land, between the scheduled areas, the early fields have largely been cleared although some traces of terraces survive (Smith 2010, Smith *et al* 2011, 23).

Medieval long huts were inserted into the field system and as many of the original Iron Age walls are still in use (though presumably repeatedly rebuilt) this area may have been used continuously into the medieval period and though to the present day. Some changes can be identified that can be attributed to medieval activity. Fields to the north-east of Muriau Gwyddelod appear as elongated rectangles, more like medieval furlongs than prehistoric fields, and a curvilinear enclosure (PRN 2902) to the east of Muriau Gwyddelod probably belongs to medieval or early post-medieval sheep pasturing (Smith 2010).

This area has been studied in detail for the Early Fields Project (Smith *et al* 2011, 21-29). It has been surveyed by Robert Johnson of Sheffield University and subjected to a detailed walk-over survey. Geophysical survey was also carried out. Investigations were undertaken near the Water Treatment Works at Rhiwgoch, including the survey of a long hut (PRN 29846) and investigation of a collapsed field wall (PRN 29252). A roundhouse (PRN 29854) was also excavated and dated to the late Iron Age or early Roman period with a possibly medieval shepherd's hut built within it (Kenney 2012).

Erw Wen (PRN 1036, Me188) to the north-east of Harlech, is a small-scale example of the reuse of prehistoric fields in the medieval period (figure 21). The settlement was excavated in 1980-81 and was predominately of first millennium BC date, with a timber roundhouse followed by a stone one. It was reused in the medieval period when a small stone structure was built, possibly a byre or sty, with a "ramshackle pen" (Kelly 1988, 128). It is surrounded by fields defined by low banks, terraces, and very denuded walls (PRN 59889) (plate 30), most of which seem too well preserved to be prehistoric in their final form, and like the settlement were very probably reused.

A little further north-east a platform house near Llidiart y Garw (PRN 1186, SAM Me112) has well-defined terraces (PRN 59877) immediately around it (figure 21, plate 31). The small, rather irregular fields around Llidiart y Garw may possibly also have been originally related to the platform house and only later used by the present farmhouse.

Many of the small fields in current use along the lower hill slopes to the south of Harlech probably have very early origins. The next well-preserved area of relict fields to the south is at Cors y Gedol, Dyffryn Ardudwy (PRN 59874, SAM ME128, plate 32). Here there are long narrow fields on the upper slopes and small irregular fields lower down, with clearance cairns within the fields, which shown clearly on the lidar (figure 22). This is obviously mainly a prehistoric landscape and most of the settlement sites are also prehistoric but there are some features described as long huts (NPRN 58182, 89011). There is ridge and furrow in the higher, long fields, which suggests use in the medieval period, and the elongated nature of these fields is probably due to alteration in the medieval period.

On the other side of the Afon Ysgethin from Cors y Gedol there are many small fields of probable ancient origin. There are roundhouse settlements amongst these fields around the Eithin Fynydd Water Treatment Works, Tal y Bont, (PRN 59891) (figure 23). Many of the fields also contain traces of ridge and furrow. These are visible on the 1986 aerial photograph (plate 33). This ridge and furrow is generally restricted to the fields as they currently survive, and do not continue under boundaries. The field to the north of the water treatment works was studied in advance of an extension of the works. This included an assessment, evaluation and geophysics (Evans and Berks 2009 and 2010, Hopewell 2009). This showed that the area contains two phases of field systems. The earlier, probably medieval, field system has a substantial lynchet surviving as an earthwork and other boundaries as sub-surface features, detected by the geophysical survey. There are numerous field clearance cairns and two possible (one detected by geophysics) and one definite building, apparently a medieval long hut. The second phase of field walls probably dates from the 19th century. There appeared to be three phases of ploughing. The western part of this area was levelled for a storage compound while the water works was extended, and is now covered in dumped soil and rubble. Much of the archaeology in this part of the field has therefore been lost but the long hut was avoided. Most of the ridge and furrow seems to have been lost to improvements since 1986, but south of a winding track (Hwlfa Porth Egryn) there are still some relict boundaries and the remains of what may be a medieval or early post-medieval farmstead (PRN 59905).

Another extensive field system with evidence for medieval use survives on Mynydd Egryn, Dyffryn Ardudwy (PRN 59866) (figure 24). It consists of an area of small irregular fields, defined by collapsed and denuded stone walls and banks, and also includes substantial terraces. Many of the fields contain clearance cairns and some have narrow ridge and furrow, with medieval, as well as prehistoric, settlement. A detailed survey of the

scheduled area (Me122) was carried out by Tanya Berks for project G1879 in 2006 but the drawings were never completed and a report was not produced. The results have been included in the present project, and her plans have formed the basis of figures 25 and 26. Parallel narrow fields in the southern part of the area appear more specifically medieval in character (plate 34). An interesting group of fields and paddocks (plate 35) around Pen y Dinas (PRN 1106, Me076) must have Iron Age origins but some of the boundaries can be seen crossing the entrance to the hillfort and are probably medieval, which is supported by traces of ridge and furrow in the area.

Hooke (1997, 85) considers it likely that the hut platforms in the Egryn area represent *hafotai* on medieval *hafodydd* as they are earlier than the Tudor encroachment onto the *ffriddoedd* and many lie above the current mountain wall. Kelly (1982, 158) also suggests that long huts with small paddocks are *hafotai* settlements, and this site type does seem a very likely candidate for a *hafoty*. However the ridge and furrow suggests that at least some of this area was used for arable and some dwellings may have been of a more permanent character. It is probable that the use of the landscape during the medieval period and into the early post-medieval period is multiphase and more complex than often suggested.

Rhiw

Relict field systems are rarer on the Llŷn Peninsula, but a relict and partially used ancient field system (PRN 59880) exists at Rhiw (figure 27, plate 36). It is quite a complex field system with many phases. There is ridge and furrow below a scheduled platform hut (PRN 1211, CN318) and around a settlement (PRN 3307) containing long huts and small enclosures. Many sites are recorded as "Roman" period but might be medieval. The church (PRN 1998), although probably 18th century in date, is built on earlier foundations (RCAHMW 1964, 97). The church yard has a distinctive curvilinear boundary, possibly suggestive of an early date and there is a holy well (Ffynnon Aeliw, PRN 1221) nearby. The whole appears to be a well-preserved medieval landscape.

The condition of the earthworks is quite variable. Land owned by Plas yn Rhiw has been improved and earthworks survive as slight scarps in these fields. Other fields are unimproved and here the archaeology is well-preserved. In the southern part of the area there are hut circle settlements and traces of terraces and other field boundaries. The fields probably originated in association with the settlements, although they clearly remained in use in later periods. Further north parallel terraces give a more medieval feel and small areas of ridge and furrow can be seen on the lidar. PRN 3307 is settlement with at least two long huts and small paddocks, all of which are well-preserved and easy to see when not obscured by bracken. This site lies in the middle of the relict field system which must have been associated with it. Whether the ridge and furrow around it is also associated is less clear as some of this crosses one of the early boundaries.

Cwm Pennant/Dolbenmaen

A relict field system at Caer Fadog Uchaf, Cwm Pennant (PRN 59870) (figure 28) is an important survival of upland medieval agriculture. There are several relict boundaries defining fields containing ridge and furrow, around a complex of settlement structures. The core of the settlement (PRN 174 and 2361), which includes several platform houses, were surveyed in detail by Gresham (1954, 35-36). He recorded that they had almost been destroyed by clearance. This may explain the lack of subsequent attention to this site. A 1986 aerial photograph shows that considerable remains survived the clearance and that other hut platforms are present that seem not to have been damaged. Crew and Musson (1996, 41) published a fine photograph of this area with ridge and furrow showing much more clearly than on the 1986 vertical photograph (plate 37). This shows remarkable preservation of the ridges and other elements of the field system.

There are several roundhouse settlements the area of the relict field system including PRN 177, which is scheduled (Cn313). This may indicate that the field system has earlier origins. The surviving earthworks are, however, very medieval in character and have probably largely obscured evidence for Iron Age fields. There is some suggestion from the aerial photographs that ridge and furrow crosses an earlier phase of boundaries.

This site was identified too late in the project to be visited, but needs close inspection on the ground. This seems to be a surprisingly neglected area, considering that it was studied by Gresham. Current condition would need to be checked on the ground but this seems to be a good candidate for scheduling.

An area above Penmorfa, little to the south of Caer Fadog Uchaf, contains extensive ridge and furrow (PRN 59885) associated with several medieval platform houses. Ridge and furrow (PRN 3406) above Llyn Cwmystradllyn is narrow and straight but there are hints that it continues under present field boundaries, possibly also suggesting medieval arable agriculture in this area at fairly high altitudes, in this case at 300m OD.

4.4. Monastic Granges

A Cadw grant aided project (G1630) studied the granges owned by Cistercian monasteries in north-west Wales (Davidson and Kenney 2002). This concentrated on looking at the possibility of reconstructing the landscape of two granges; one at Cwm, Clynnog and one at Dolgarrog, both belonging to Aberconwy Abbey. This work provides a background for some areas of surviving field systems identified in the present project.

Cwm Grange

The grange lies to the south and south-east of the mountain of Bwlch Mawr, east of Clynnog (figure 29). The main zone of settlement in the medieval period was almost certainly the lower hill slopes that were used for arable agriculture into the 19th century. The surviving platform houses fall within this area, and are widely spaced, giving a dispersed settlement pattern suited to the linear distribution of the arable land. The settlements were located within or on the edge of the arable fields, many of which were probably prehistoric fields used into the medieval period.

The uplands were used for sheep pasture, and remains of boundaries on the high moors, which do not follow the recent field system, probably relate to the medieval exploitation of the uplands. The remains are, however, too fragmentary to reconstruct medieval sheepwalks. Many of the more denuded sheepfolds and shelters may have been constructed in the medieval period. Where the grange's boundary crossed the open fell it was marked by a substantial bank (PRN 86) with flanking ditches. This was known as Clawdd Seri by the 12th century (Gresham 1939 and 1983).

The best preserved area of ancient fields is on the north-eastern side of Cwm Cilio, north-west of Tyddyn Mawr. This field system (PRN 59875), is partially scheduled (CN112), but the field system and even long huts extend beyond the boundaries of the SAM (figure 29). This is a discrete group of roughly rectangular terraced fields, overlaid by later walls (plate 38), with a well-preserved late prehistoric enclosed settlement and numerous outlying roundhouses. There is also an enclosed rectangular platform house settlement. Smith *et al* (2011, 8) suggest that the field system may have been abandoned after the Roman period and reoccupied in the medieval period.

The fields lie on the upland margins at 220 to 270 m OD on a narrow band of better land between the stony hill slopes and marshy valley floor on a south-west facing slope (Smith *et al* 2011, 9). The terraces are in places up to 3m high, and some of the recent stone walls partly follow the ancient terraces. A geophysical survey suggested that the terraces were constructed features rather than accumulations of ploughsoil. A small assessment trench was excavated across a boundary bank. The bank was found to be made of stone and appeared to have developed as field clearance stones were added over time (Smith *et al* 2011, 9-13).

Smith's work as part of the Early Fields Project (Smith *et al* 2011, 31) suggests that the boundaries were not originally designed to enclose or exclude stock but were largely to accommodate field clearance stones. However they seem to have been deliberately laid out and some were quite carefully built and not just stone dumps. There was some evidence that a contour-terrace post-dated a stone bank boundary and might have been the result of medieval ploughing (Smith *et al* 2011, 32), so in this area at least the terraces may have been mainly medieval in date.

At the heart of the grange, to the west and north-west of Cwm Farm, there are remains of a field system (PRN 59894) defined by lynchets and denuded walls (figure 29). A scheduled roundhouse settlement (PRN 96, CN310) sits on one of the lynchets so their origin is probably Iron Age but there is also a platform hut (PRN 95, CN309) and a more complex but unscheduled long hut settlement (PRN 13157). A little further north, to the west of Hengwm, is an area of small fields (PRN 12922) defined by denuded walls around a group of rectangular hut platforms (PRN 14556, 14557, 14560, 14561).

It is difficult to relate these remains directly to the monastic grange and there seems to be little difference here to other areas where prehistoric field systems have been reused in the medieval period. There is no obvious monastic character to the settlements or fields, which would have been worked by lay brothers.

Ardda Township

The grange of Ardda and Darlas lay on the western bank of the river Conwy, extending west from the river to the summit of Pen Llithrig y Wrach. The township is referred to in the late 12th century Aberconwy Charter as Arddau and Darlas, although it was always a single district, and after the Dissolution it became the manor of Arddau (Gresham 1983, 341, 342; Hays 1963). The main settlement of the township seems to have been the

rather loose agglomeration of farmsteads (plate 39) on the south-eastern slopes of Penardda. It is possible that the present farm of Tai Isaf Ardda (PRN 12956), simply called Ardda in the 1780s, is either on the site of the principle farm of the Grange, or could be interpreted as a more compact settlement nucleus (Gresham 1983, 341). The township of Ardda is mentioned in a mid-15th century manuscript (Bangor MS. 1939), and was occupied into the 18th century, so many of the surviving remains are probably post-medieval in date (Evans and Kenney 2011).

The farmsteads are within a field system (PRN 6146) composed of well-preserved banks and lynchets with extensive areas of ridge and furrow (figure 30). Some boundaries are collapsed walls, others are terraces up to 2m high (plate 40), while others are very slight scarps less than 0.5m high. The difference in boundaries may not reflect the date of their origin but almost certainly reflect how recently they have been in use. Some, mainly those that are collapsed walls, are shown on the 1889 25 inch map but most are not. It seems probable that the field system and many of the settlement sites within it originate in the medieval period. There are no known roundhouse settlements within the field system so, unlike most in this area and at this altitude, it does not seem to have been a reused ancient field system. Some of the fields are slightly larger than prehistoric fields and only a few are defined by high terraces, but otherwise there is little difference between this field system and the many described above that originated in the Iron Age.

This area was partially included in work in advance of pipe replacement for the Dolgarrog Hydro-electric Works (GAT project G2158). The area was inspected for a desk-top assessment (Evans and Kenney 2011), and further features were added in an extension to the assessed area (Kenney 2011). The field system adjacent to the modern track running through the area was surveyed (McNicol 2013). This information has been used in the present project.

5. DISCUSSION

5.1. General

Medieval field systems are difficult to identify in the HER, largely due to the concentration on individual sites and the only recent use of polygons to define areas. There is also a significant problem in that many elements of field systems are not identified as medieval due to lack of detailed research or lack of confidence or knowledge by the person making the record. Even where field boundaries or enclosures are identified as medieval they are very difficult to manage in a regional study of field systems, such as this. Much more work is needed to pull these disparate elements together to identify other medieval field systems not covered in this project.

This project has however identified 73 areas of varying sizes where remains of field systems survive, many of them not previously recorded on the HER. It has shown that remains of open fields survive more widely than has been suggested in previous work, although most surviving areas are small or fragmentary. It also indicates that a more thorough search of the 25 inch maps would allow additional areas to be identified. The project has also highlighted the importance of prehistoric fields that were reused for medieval agriculture and has hopefully raised the profile of these areas that are generally only considered of interest in prehistoric studies. The use of these areas in the medieval period and how they were integrated with agriculture on the lowlands needs to be studied by archaeologists as well as historians.

5.2. Scheduling

Although 33 sites were identified by their proximity to scheduled ancient monuments only 10 are either entirely or largely within scheduled areas. Of those only the field system at Cors y Gedol (PRN 59874, SAM ME128) and that near Llanllechid (PRN 59876, SAM CN121) have boundaries to the scheduled area that cover all the evidence of ancient field boundaries that could be seen on aerial photographs and lidar.

Not all the 73 sites included in this study are worthy of scheduling but many are worth considering and some are clearly of national importance and it is surprising that they have not previously been considered. A well-preserved field system around a scheduled site adds to the understanding of the site and provides it with a landscape context. Farmsteads would have functioned in an intimate relationship with the fields around them and cannot be sensibly divorced from these them.

It appears that this understanding of landscape has been influential in the scheduling of prehistoric sites. This has not been extended to their medieval equivalents and most scheduled agricultural landscapes are prehistoric. The previous lack of interest in medieval field systems demonstrates the importance of the present project to highlight these areas, and to take the perspective away from single sites and on to the wider landscapes.

Communal value, one of the criteria for scheduling (Cadw 2011), is often not given much consideration in the scheduling assessments. This has particular importance to field systems because of the large areas of land that they cover. Many of the sites in the upland areas that were examined in the study have public footpaths running through them and the nature of the fields dictate the type of landscape that the walker experiences. Even relict field systems have modified the landscape and they are often a clear indicator of the past history of an area for anyone that takes the trouble to notice. Fossilised field systems are more obvious and are often the main determinant of the character of an area. The narrow fields of Uwchmynydd define and shape the landscape. The hedges along the coast at Llanddona give a very distinctive feel to this area that is quite different to that of the higher plateau just a few hundred metres away. The majority of the sites in this project lie within Landscapes of Outstanding Historic Interest as defined by Cadw (Cadw 1998). Eleven sites lie within the Lleyn and Bardsey Island landscape (HLW (Gw) 8), 9 are within the Ardudwy landscape (HLW (Gw) 2) and 10 are within the North Arllechwedd landscape (HLW (Gw) 12), with smaller numbers in other outstanding landscapes. In many cases a threat to these areas of field systems is a significant threat to the outstanding landscape as a whole.

Field systems can be very vulnerable, even though they often survive in fairly isolated locations. Agro-environment schemes, such as Tir Gofal, have reduced the pressure on these marginal areas to some extent (Smith *et al* 2011, 4), but they often do not prevent the moving of stones to improve land. The prevalence of earth moving equipment means that it is relatively easy and quick to clear stones from a previously unimproved area of upland, so removing ancient field systems almost overnight. In 2012 an area of a hill to the north-east of Harlech that is crowned by the hill fort of Moel Goedog was improved in this way causing the loss of fragmentary field boundaries plotted by Kelly (1988, 102) (plate 41). As the scheduled areas were not damaged no offence had been committed. The clearance had, however, seriously affected the wider prehistoric landscape and produced a major impact on the setting of the SAM.

Improvement of fields often results in the creation of modern field clearance cairns. There are numerous recent field clearance cairns in the northern part of the area around the Eithin Fynydd Water Treatment Works, Tal y Bont (PRN 59891). These cairns are not visible on a 1947 aerial photograph (Lib No. 4707, sortie CPE UK 1939, frame 4026, date 19/01/1947) but can be seen by 1986 (Lib No. 8606, sortie J A Story, frames 67_86_0200; 68_86_0019, date 01/10/1986), giving a rough date for their creation. Some are carefully built (plate 42) and some include very large stones that could only have been moved using machinery (plate 43). The stone clearance has reduced visibility of field boundaries in this area compared with the 1947 photograph, but some boundaries are still visible on the ground. Others were seen on Ffridd Ddu (PRN 6617) south of Aber. The date of this field clearance is unknown, but the size of some of the boulders that appear in these cairns suggests the use of machinery and a very recent date (plate 44).

Early fields can also be threatened by forestry. An extensive long hut settlement with associated fields (PRN 621) above Nant Gwrtheyrn was planned by the Royal Commission (RCAHMW 1964, 94-95) but the site is now under forest and it is assumed that little survives. At least any new forestry should now receive archaeological attention before such damage occurs.

Where the field system is fossilised by later enclosures and these are still in active use, scheduling becomes problematic. However the survival of extensive fossilised open field systems in this area is very rare (Smith and Hopewell 2003), with that at Uwchmynydd (PRN 59888) being the “largest known area of survival of this type of landscape in north-west Wales” (Thompson 1998b, appendix IV). The preservation of this field system from future alterations is a priority and statutory protection of some sort would seem to be necessary.

Medieval field systems are significantly under-represented in both the HER and in the type of areas that are scheduled. It is hoped that the present project might go some way to correcting that.

5.3. Future research

There is great scope for further work on medieval fields in north-west Wales. This study has demonstrated the range of features that do survive and some areas, especially in the uplands, have been surveyed. Many areas would benefit from further survey. Detailed survey would be particularly useful, allowing the development of

the landscape to be examined in greater depth. This would be especially fruitful in combination with aerial photographs, perhaps making more use of oblique photographs than in this project.

For lowland sites study of tithe maps and estate maps may provide indications of the extent of open fields and possibly lead to the identification of some boundaries that still survive but that are not immediately obvious as fossilised furlong boundaries. A methodical study of map evidence for the whole region would be a massive but worthwhile undertaking.

Excavation of settlement sites within field systems would aid in otherwise very difficult process of dating the fields themselves. Geophysics might, in some cases, be able to detect boundaries that no longer survive as earthworks, again adding to the understanding of the development of a field system.

Palynological studies would be very valuable in understanding the use of these field systems. Many of the upland areas where ridge and furrow suggests arable agriculture are close to marshy areas that would preserve pollen and could give a full vegetational history that could clarify when arable agriculture began, and how continuous it was. To study the crops being grown the best evidence comes from charred plant remains on excavated sites, so excavation, even small trial trenches, in a variety of areas and at various altitudes could potentially increase the knowledge of medieval farming considerably. Work of this nature is being carried out in the lowlands as the result of the discovery and analysis of sites, particularly corn driers, found during developer funded excavations. In contrast, upland sites are rarely threatened and therefore rarely dug.

6. ACKNOWLEDGEMENTS

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8. APPENDIX I: LIST OF SITES VISITED

PRN 69

Field System (terraces), above Bronydd Isaf

NGR: SH62807050 Llanllechid, Gwynedd

Period: Medieval; prehistoric

HER description

Terraces on the slopes above Bronydd-isaf have been partly destroyed by later ploughing bounded by earthen banks, probably of medieval date, and only the lower terraces are at all pronounced. <1>As described.

<2>Complex may be more extensive than previously thought. <3>

NMR description

Earthworks of a well-preserved multiperiod field system survive on the hillslopes to the east and north-east of Bronydd Isaf farm. Two settlement enclosures have been identified within it (NPRN 302858 and NPRN 408172). Recorded during RCAHMW aerial photography. T. Driver, RCAHMW, 4th September 2008.

G2156 Notes

Very substantial terraces running along the contours. Ridge and furrow visible on 1945 AP. This seems very straight and narrow, almost suggestive of steam ploughing but the 25 inch maps give no indication of ploughing here in the early 20th century. Possibly the ridges are from Napoleonic ploughing, but the terraces are obviously a lot earlier. There are two enclosed roundhouse settlements (PRN 67, NPRN 408172) in this area and no long huts or similar medieval sites. However it is likely the fields were used in the medieval period. Part of the area where terracing could be seen in 1945 is now under woodland.

Sources

Site visit notes

Visited 21/01/2015

Short grass, easy to see features but no trace could be seen of any of the ridge and furrow seen on the 1945 AP and it is assumed that this has been lost to ploughing. Some of the boundaries are low, subtle banks no more than 0.5m high, but others are high, distinct terraces up to 3m high. Although it is not entirely clear it appears that the field boundary overlies the edge of the roundhouse settlement NPRN 408172, suggesting some of the fields have a later origin. There has been some field clearance as there is a heap of stones on a natural rock outcrop, but this does not seem to be very recent.

Aerial photo references

NextPerspective APs (HER); Lib No 4545 (M2074), sortie 106G / LA 97, frame 2035, date 14/01/1945

PRN 70

Field System, Coed Ty'n yr Hendre

NGR: SH62707080 Llanllechid, Gwynedd

Period: Medieval

HER description

Terraces and old field walls are visible in the ffridd immediately above Coed Ty'n-yr-Hendre. <1>As described. <2>

NMR description

G2156 Notes

Very substantial terraces running along the contours. There are no long huts or similar medieval sites identified within this field system but its character seems quite medieval. There are slight traces of ridge and furrow on the lidar in the terraced fields in the SW part of the area. It is likely that the fields were farmed from medieval settlements just below. Traces of ridge and furrow on NextPerspective APs just above and running under woodland.

Sources

Site visit notes

Visited 21/01/2015

Well-defined terraces up to 2m high in places. Some stone can be seen in the faces of the terraces, but it may just be field clearance rather than evidence for revetments. The fields between the terraces are neat and level. Building platforms (PRN 59900) noted in natural slope forming part of field system and these may be related to the medieval use of the fields.

Aerial photo references

NextPerspective APs (HER); Lib No 4545 (M2074), sortie 106G / LA 97, frame 2035, date 14/01/1945

PRN 81

Field System, Tyddyn Bleddyn, Llangristiolus

NGR: SH44807370 Llangristiolus, Ynys Môn

Period: Medieval

HER description

Field system with many small boundaries. <1>Visible on aerial survey. <2>Features ill-defined.

NMR description

There are well preserved earthworks of a rectangular house platform at Tyddyn Bleddyn along with a hollow way and field systems. Recorded during RCAHMW aerial reconnaissance on 20 March 2005. T. Driver, RCAHMW, 23 November 2006.

G2156 Notes

Ridge and furrow visible on lidar in several small fields. Ridges generally about 5.5m wide but very straight so do not look like typical medieval ploughing. Two house platforms with paddocks within or on edge of field system (NPRN 405413, 405415). RCAHMW 2005 APs are very clear but the lidar data and earthworks on the ground do not appear to be as well-defined as the 2005 APs suggesting that there has been some reduction of the earthworks by ploughing in recent years.

Sources

Site visit notes

Visited 23/01/2015

Access to the site was not possible as the entrance to the footpath was overgrown with brambles but some features could be seen from the road round the site.

Field covered in short grass.

The earthworks are fairly well-defined. The hollow-way running through the middle of the site is very well-defined at the eastern end where it is up to 1.5m deep. No ridge and furrow could be seen on the ground.

Traces of a possible house platform can be seen in the SE corner of the field (NPRN 405415), with scarps up to 0.5m high.

Aerial photo references

NextPerspective APs (HER)

PRN 3631

Field System, Mynydd Mawr

NGR: SH13932533 Aberdaron, Gwynedd CN381

Period: Medieval

HER description

An area of ridge and furrow cultivation, which is well preserved, measures 180.0m NW-SE, and extends some 200.0m to NE and 120.0m to SW of the church. <1>A layout of field banks and ridge and furrow on a level area between Mynydd Mawr and Mynydd Gwyddel. The most obvious banks are those of the square enclosure surrounding the ruins of St. Mary's Church (42021) which are 1m high, 2m wide and

heavily overgrown with bracken. Surrounding this enclosure are several less obvious banks which are probably invisible in the summer when the bracken is high. These are 20-50cm high and 1.5-2m wide. Two groups of banks were identified, the first orientated NW-SE and the second SW-NE. The enclosure surrounding the church is part of the latter. To the S of the church is an area of well-preserved ridge and furrow. The furrows are approximately 1m apart and 5cm deep and are found both between the field banks and beyond the present limit of the field layout. A dense growth of bracken prevents the exact definition of this ridge and furrow. The date of these banks is unknown. An early C19th description of the church suggests that the 'plain in which it is situated is divided into a vast number of Quillets which belong to as many different proprietors' (Williams, 1814, quoted in Fenton 1804-1813 *Tours in Wales*, Appendix III, Ed. J. Fisher, 1917, p.329). In addition late C18th and early C19th legal documents referring to the area (for example those in the Harri Williams Deposit, NLW) discuss 'fields and parcels of land' which may imply the existence of small field divisions such as those preserved here. However as only the enclosure around the church is shown on the 1844 Tithe map and on the early editions of the OS maps it seems likely that the walls were abandoned in the first half of the C19th. No evidence of the date of construction was discovered, though a medieval date is likely. <2>

NMR description

G2156 Notes

An area of well-preserved ridge and furrow cultivation around the site of St Mary's Church (PRN 779), with other fields in areas of more level ground in the hill slope to the NE. A small but very fine area of fields, easily seen by the visitor from above if the bracken is kept clear. The curving form of the narrow fields is very medieval in character. It seems possible that the church may have been placed over a pre-existing field system, possibly on the site of a former farmstead.

Sources

Site visit notes

Visited 22/01/2015

There has been bracken clearance over much of the area and the field system was very clear in short grass. The strips are divided into furlongs by low baulks, some of which form slightly terraced boundaries. It is likely that these were never enclosed but represent grass baulks. The terraces are no more than 0.5m high. The ridges are generally about 1.5m wide but where they run along rather than down the slope they reach about 3m wide. The ridges are rarely more than 0.1m high. To the SE of the church site a bank or headland is seen with later ridges running over it, showing that there is more than one phase of use or development of the field system.

Aerial photo references

Next Perspective APs (HER)

PRN 4532

Field System, Trwyn y Gorlech, Ynys Enlli

NGR: SH11872253 Aberdaron, Gwynedd

CN186b

Period: Medieval

HER description

Long houses, enclosures and field systems. <1>Field system near long hut (PRN 4531). Broad ridges with furrows every 10m trending NNW-SSE. Ridges raised c.1m above furrows. <2>Aligned north-south and running down to the northern shore. At the south-eastern extent the ridges stop at the base of a rocky terrace. The ridges run beneath an adjacent field bank, the only place on the island where such a relationship is visible. <4>

NMR description

G2156 Notes

Broad, straight ridges aligned SE-NW running down slope towards the coast. No good APs available. These are the only convincing broad ridges on the island, as opposed to parallel drainage features, which can look superficially similar. There is an extensive area of narrow ridge and furrow on the southern end of the island

but this appears to be post-medieval.

Sources

Site visit notes

Visited 18/06/2014

Short grass and good visibility over most of the area. Part under gorse.

Broad, straight ridges aligned SE-NW running down slope towards the coast. Most of the ridges are about 10m wide, but most no more than 0.2m high. Those in the western end of the area are more defined and are up to 0.3m high, and also narrower at about 7m wide. The ridges are very straight with no evidence for a curve at the ends.

Aerial photo references

NextPerspective APs (HER)

PRN 4691

Field System, near Maen y Bardd

NGR: SH741720 Caerhun, Conwy

CN157

Period: Prehistoric; Medieval

HER description

Centred at SH 74007200 is a field system dating from prehistoric to modern times. The boundaries are in good condition and are associated with nearby round huts, long huts and farmsteads. The field boundaries are fairly well preserved and although often robbed of stones for modern walls the terraces still reach to a height of 6ft. The diversion of dwelling sites suggests that the area has been under cultivation for a long period. <1>

As described by RCAHM. Surveyed at 1:2500. <2>

Plans are being produced of the field systems, about 15% of the remains were covered this year and work is to proceed each year until at least 1981. <3>

The survey programme begun in 1977 continued but was greatly hampered by adverse weather. A record was made of a previously un-noted open hut group at SH 736715. <4>

Field survey work continued and was supplemented in 1979 by a pedological survey. A survey of earlier cartographical material has also been completed. <5>

Extensive complex of terraced fields, crossed by a Roman road. <6>

NMR description

G2156 Notes

Very well-preserved field system with medieval long huts (PRN 503, 507, NPRN 309192) as well as prehistoric settlement. Certainly used into the medieval period. Also includes the long hut settlement PRN 504 and other long huts.

Sources

Site visit notes

Visited 05/02/2015

Fine terraced fields, some with terraces up to 3m high. These must be partially natural but are clearly enhanced by the creation of the fields.

There are some field boundaries and traces of ridge and furrow to the north-west of the scheduled area. Some of the ridges are very narrow (only 1.5m wide), although others are 3 to 4m wide. The narrow ridges may be late. Generally the earthworks in this area are less well-preserved than in the scheduled area.

Aerial photo references

Next Perspective APs (HER); Lib no. 6921, sortie BKS 3918, frames 635421 and U 016788, date 09/10/1969; Library No. 8606, frames 54 86 51, 54 86 35, date Oct/Nov 1986.

PRN 6146

Field System, Ardda

NGR: SH764663 Dolgarrog, Conwy

Period: Medieval

HER description

None

NMR description

Area of former field system delineated by cultivation ridges on NE-SW axis. Ridges clearly visible on RAF vertical AP 3G/TUD/UK/34 part IV -5376.(JONES.RS/CAP/2003).

G2156 Notes

Well-preserved banks and lynchets with extensive areas of ridge and furrow. Settlements and house platforms are set within the field system.

These are the remains of the medieval township of Ardda, mentioned in a mid-15th century manuscript (Bangor MS. 1939). The settlement was occupied into the 18th century, and the surviving ruined buildings, consisting of single long huts, field walls, banks and enclosures are probably mainly post-medieval in date. It does seem likely that some of the field boundaries and buildings are medieval in origin, dating from when this area was a monastic grange (GAT report 928). Further features were added to this area in GAT report 975.

Part of this area was surveyed for G2158 (GAT report 1114). This survey has been used in this project.

Sources

Evans, R. and Kenney, J., 2011. Dolgarrog Hydro-Electric Works: Dolgarrog, Conwy; Desk Based Assessment, unpublished GAT report 928; Kenney, J., 2011. Dolgarrog Hydro-Electric Works: Dolgarrog, Conwy; Assessment of Access Routes, unpublished GAT report 975; McNicol, D., 2013. Dolgarrog Hydro-Electric Works: Dolgarrog, Conwy; Survey, unpublished GAT report 1114

Site visit notes

Visited 05/02/2015

Some boundaries are collapsed walls, others are terraces up to 2m high while others are very slight scarps less than 0.5m high. The difference in boundaries may not reflect the date of their origin but almost certainly reflect how recently they have been in use. Some, mainly those that are collapsed walls, are shown on the 1889 25 inch map but most are not.

Aerial photo references

Next Perspective APs (HER); Lib No. 4211 (M2630); sortie 140 / AC / 31, frames 11 and 12, date 16/04/1942; Library No. 8606, sortie J A Story, frame 54 86 0108, date 01/10/1986

PRN 6617

Field system, Ffridd Ddu

NGR: SH64907130 Aber, Gwynedd

Period: Medieval; prehistoric

*HER description**NMR description**G2156 Notes*

Well-preserved lynchets and ridge and furrow around a multiperiod scheduled settlement including two long huts (PRN 240, 7541, CN243). There are several roundhouse settlements within the field system but also some long huts just beyond the main area of fields (PRN 241, 317) and to the north (PRN 75, 59898) where fragments of boundaries survive. Recorded in Caernarvonshire Inventory vol I (p8-9, (17-30)). The lynchets and terraces seem to have originally been associated with roundhouse settlements, but the extensive ridge and furrow is very medieval in character. The RCAHMW describe the terraces and settlements amongst them as

having been damaged by ploughing. However they are still very visible on oblique APs (see NPRN 24295 on Coflein).

Sources

Royal Commission on the Ancient and Historical Monuments of Wales 1956. Inventory of Caernarvonshire: East, volume I, p8-9

Site visit notes

Visited 21/01/2015

Short grass over all the area, though there would be some problem with bracken in summer.

The main terraces are up to 3m high but appear very rounded and ploughed over. The ridge and furrow seen on the APs was not easy to see in this area. The remains to the north, enclosure (PRN 5478), traces of field boundaries with some orthostats still in place and long huts (PRN 75 and 59898) were fairly well preserved although there were modern heaps of field clearance stone suggesting that some stone had been removed from boundaries in this area. The ridge and furrow in the SW part of the area (PRN 7487) are still very well preserved. They are generally about 3m wide and up to 0.3m high. A hollow-way (up to 1.5m deep), runs through this area, curving steeply uphill.

Aerial photo references

Library No. 8606, sortie 'J A Story, frame 53 86 0039, date 01/10/1986

PRN 7437

Field System, S of Gwyllt Road

NGR: SH68057365 Llanfairfechan, Gwynedd

Period: Medieval

HER description

None

NMR description

G2156 Notes

Curvilinear terraces running SW-NE along hill slope with traces of ridge and furrow. The boundaries are on the same alignment as existing walled fields and it is probable that the walls preserve the outline of the original narrow strip fields.

Site visit notes

Visited 27/01/2015

Fairly well-defined but ploughed over terraces up to 1m high. An oak tree on one boundary shows that there may have been a hedge along the boundary. The ridge and furrow suggested on the lidar data could not be seen on the ground and may have been removed by recent ploughing.

Aerial photo references

NextPerspective APs (HER)

PRN 7443

Field system, Cae'r Haidd

NGR: SH68157319 Llanfairfechan, Gwynedd CN330

Period: Medieval

HER description

None

NMR description

Extensive preserved system of terraced fields, on north-west facing coastal hillslopes. The remains comprise sinuous, curving field boundaries and circular hut groups likely to be prehistoric in origin, later incorporated in more regular terraced fields with rectangular huts and deserted settlements, likely to belong to the medieval

or later periods. T. Driver, 4th September 2008.

G2156 Notes

Extensive preserved system of terraced fields surrounding the well-preserved medieval settlement of Cae'r Haidd (PRN 372). The field system clearly has an early origin as there are roundhouse settlements amongst it but Cae'r Haidd is in the middle of the system and it must have been used by this settlement. There is some ridge and furrow visible on the 1945 AP and some of this crosses earlier boundaries, particularly around PRN 7448, which seems to be an enclosed Iron Age settlement. There is also a complex roundhouse settlement in the lower, northern part of the area. While some of the boundaries may have originated in the Iron Age the main layout of the field system seems to be medieval. This is supported by the fact that it seems to overlie the slight remains of a Roman road (PRN 17888). As the field system does not reflect or respect the road the latter must have been out of use and barely visible when the field system was laid out. The area is shown as a golf course on the 3rd edition 25 inch map and some tees are visible on the 1945 AP, some of which are still visible as earthworks e.g. PRN 7445.

Sources

Site visit notes

Visited 27/01/2015

A fine series of terraces. Some are fairly heavily ploughed but those around the settlement site (SAM CN330, PRN 372) are still clearly defined scarps about 1m high running up the slope and scarps up to 2m high running along the slopes. There is stone visible in the faces of some of the terraces, but it is not clear whether this is field clearance stone or traces of revetment.

Further up the slope the field boundaries are generally slighter but traces of ridge and furrow survives here. Some of this is very difficult to see on the ground but some is visible.

Aerial photo references

Library No. 4545 (old no M2074), sortie 106G/LA97, frame 1009, date 14/01/1945

PRN 8039

Area of Cultivation, E of Dinas Hillfort

NGR: SH70457386 Llanfairfechan, Gwynedd

Period: Medieval; prehistoric

HER description

A cultivated field of reasonably defined ridge and furrow, which runs downslope on a north-east to south-west alignment. The ridges measure approximately 0.15m high by 1m wide with a furrow of 3.5m wide. <2>

NMR description

G2156 Notes

Terraces and fields to E of Dinas. Well-preserved extensive area with long huts as well as earlier settlements. It seems likely that the large terraces are of prehistoric origin but that these were used in the medieval period, as is confirmed by the presence of ridge and furrow.

Sources

Site visit notes

Visited 27/01/2015

No access directly onto the area. Western part under short grass and terraces very clear, eastern part under rushes and rough grazing and boundaries hard to see. Some ridge and furrow was visible in the eastern area. The main terraces are up to 2m high but quite rounded with ploughing.

Aerial photo references

NextPerspective APs (HER)

PRN 11535

Medieval Field System, Morfa Nefyn
 NGR: SH29204000 Nefyn, Gwynedd

Period: Medieval; Post-Medieval

HER description

The fields within the area marked on Fig. 1 retain many features of an earlier field system. The fields are characteristically long and curving because they were originally divided into long narrow strips in the medieval open field system. In most places in Britain, these strips were gradually amalgamated into larger, more efficient holdings, and the field patterns eventually changed dramatically. Here, however, the ownership of many of these strips continued up to the 1839 century when the Parish Tithe maps (Fig. 5) were drawn up. The tithe schedule still used the terms quillet and the Welsh equivalent *llain*. Both terms refer to medieval style strip holdings. The quilllets have mostly been amalgamated into somewhat larger fields but enough of the boundaries remain to allow the original layout to be traced. The survival of elements of this type of field system is very rare. The level of subsurface survival of the original strip fields is not known but it is likely that elements would be preserved at the topsoil/subsoil interface. Topsoil clearance along the pipeline easement would probably destroy this evidence. (Hopewell & Smith 2003). PRN 11570: Narrow lane with earth banks on either side. Probably post medieval although possibly retaining some medieval features. (Hopewell & Smith 2003)

*NMR description**G2156 Notes*

Extensive area of relict strips preserved by field boundaries currently in use. This represents a largely complete medieval open field system. It appears that virtually all the present fields preserve to some extent the alignment of the open field system, not just those that are clearly small groups of enclosed strips. Includes PRN 11570.

*Sources**Site visit notes*

Visited 22/01/2015

The boundaries are cloddiau mostly with hedges, although the hedges are not always well maintained. Some of the cloddiau are well-preserved but some are collapsing. Many of the intermediate boundaries have been removed so the fields look rectangular and in many areas do not have a strong character of strip fields.

Aerial photo references

Lib No 7820, sortie BKS, frames 2733_70, 71, date 09/08/1978

PRN 59866

Field System, Mynydd Egryn
 NGR: SH604202 Dyffryn Ardudwy, Gwynedd ME122

Period: Medieval; prehistoric

HER description

PRN 2922: On the same slope but without any clear associations with the enclosure are small fields and small rectangular buildings. These seem to be part of a system of medieval or post medieval agriculture. <1> Enclosure noted by OS surrounded by a field system, dwellings (both rectangular and circular), clearance cairns etc. <2> Scheduling details. <4> An approximately oval enclosure defined by a field bank which is continuous apart from a possible entrance at the SW. The bank is up to 1.10m high and some 2.00m wide. Overall dimensions 39.0 m NE-SW x 34.0 m NW-SE. The only internal feature is a low bank running NE-SW. Whether this is continuous or whether in fact there are other features within the enclosure was difficult to determine because of dense bracken at the time of the visit. <4> See PRN 1102 for SMR6 info. PRN 2924: See PRN 1102 for smr6 info. Probably medieval/post-medieval system of paddocks, fields and steadings cover an area about 1000m long and 100m-250m transversely on gently sloping land between about 600-750ft. The fields tend to be irregular in shape and vary considerably in size though most

seem to be less than 100m in length. The field walls are usually rough stone, occasionally orthostatic, and rarely more than 0.5m high. The steadings are of more substantial construction and seems generally to consist of two or three small adjoining rectangular structures, either huts or rooms, with an adjacent paddock. Many similar steadings, either with or without paddocks or adjoining fields are to be found in this part of Merioneth. <1>Scheduling details. <2>RSK (<3>) has rectangular structures at SH60612047, and also 6074 2006 approx. An unidentified stone feature at 60612018. He particularly mentions walling etc in the area around 60402035. <3>

NMR description

G2156 Notes

Extensive field systems with medieval as well as prehistoric settlement. Small irregular fields many with clearance cairns within them and some with narrow ridge and furrow. The fields are often less than 100m in length, and are defined by collapsed and denuded stone walls and banks, occasionally orthostatic, and rarely more than 0.5m high. There are also terraces or lynchets. The settlements seem to be small farmsteads with two or three small adjoining rectangular structures, and an adjacent paddock. Crew and Musson (1996, 7) suggest that the settlements with rectangular buildings are "most likely to be of 13th or early 14th century date" but some of the remains could be from later encroachment.

Includes PRN 2922.

A detailed survey of the scheduled area was carried out by Tanya Berks for project G1879 in 2006 but the drawings were never completed and a report was not produced. The results have been included in the present project.

Sources

G1879

Crew, P. and Musson, C., 1996. Snowdonia from the Air, Snowdonia National Park Authority, Penrhyndeudraeth

Site visit notes

Visited 04/02/2015

The scheduled area is very well-preserved with very denuded field walls, some orthostatic, which are up to 0.5m high, forming small irregular fields. Some also defined by terraces. To the south of the scheduled area field remains continue, but they are generally less well-preserved. There are some parallel terraces running down the slope associated with ridge and furrow. These appear medieval in character.

There are some well-defined terraces (up to 1.5m high) on the hill slope to the west of the scheduled area, and it is likely that some of the rather wandering walls of present fields may have originated as part of this system. These are probably related to the Iron Age settlements (PRN 1079 and 1080) but could have been used later.

Around Pen y Dinas (PRN 1106, Me076) are numerous field boundaries and other remains forming small fields and paddocks. These are defined by very denuded walls and some low terraces. They seem to be associated with a platform house (PRN 2916), but there are also roundhuts in this area and it is probable that the field system originated in the Iron Age and was adapted in the medieval period.

There are numerous fairly recent field clearance cairns in the fields just west of Pen y Dinas.

Some of the present field walls in this area appear to have early origins, especially the very wandering walls radiating out from a semi-circular curve in the mountain wall.

Aerial photo references

Library No. 8606, frame 67 86 0198, date 01/10/1986; NextPerspective APs (HER)

PRN 59869

Field system, W of Din Sylwy, Llanddona
NGR: SH57868164 Llanddona, Ynys Môn

Period: Medieval

HER description

NMR description

G2156 Notes

Two small areas of enclosed strips survive along the coast west of Din Sylwy, with an area of heath between them. These are clearly part of an open field system that is not otherwise well-preserved and are shown on the 25 inch maps.

Sources

Site visit notes

Visited 23/01/2015

The boundaries are hedges, mainly hawthorn with some standard trees. Although some of the boundaries in the northern part of the area have lost their hedges most are well maintained. Some of the boundaries, especially along the tracks are cloddiau with hedges on top but most of the hedges do not seem to have had cloddiau. The area was difficult to inspect because of the height of the hedges and the scarcity of footpaths running through the area.

Aerial photo references

NextPerspective APs (HER), David Longley AP

PRN 59871

Field system, western side of Aber valley

NGR: SH65927115 Aber, Gwynedd

Period: Medieval; prehistoric

HER description

NMR description

G2156 Notes

An extensive field system with fairly regular, small rectangular fields. Several round hut settlements lie within the field system and it clearly originates in the Iron Age or Roman period but there are also some long huts within the field system. Its proximity to the llys at Aber also makes it very likely that this field system was used in the medieval period. Many of the field boundaries survive to a significant height, even though they are only banks rather than walls, again making use into the medieval period likely.

There is extensive, although not always well preserved ridge and furrow, some of which seems to cross earlier boundaries. The curving furlong-like character of the fields suggests a medieval date and if the origin of the fields is early they have been extensively adapted for medieval use. Good lidar coverage and aerial photographs.

The northern part of this area of fields is recorded in Caernarvonshire Inventory vol I (p8-9, (17-30)), where it is stated that some of this area was being "broken up by a heavy plough" when the investigators visited the site.

Sources

Royal Commission on the Ancient and Historical Monuments of Wales 1956. Inventory of Caernarvonshire: East, volume I, p8-9

Site visit notes

Visited 21/01/2015

The grass was short when visited and the bracken well broken down but there will be considerable problems of visibility in summer due to bracken. Snow on ground but not enough to obscure features. The boundaries are either stony banks where they run downhill or terraces where they run across the hill. Occasionally terraces run down the main slope but have been created as the cross a minor slope running in another direction. The banks are generally no more than 0.5m high but the scarps are up to 3m high. Slight hints of ridge and furrow, confused and flattened by sheeptrods, can be seen across much of the area but these are clearest in the southern part of the area where they are within small fields that surround a probable farmstead site not previously identified. In some fields the ridges are c.1.5m wide and in some they are 3m wide.

Aerial photo references

Library No. 6921, frames U016778, date 30th November 1969; Library No. 8606, frame 53 86 0039, date Oct/Nov 1986

PRN 59872

Field system near Maen y Bardd

NGR: SH737716 Caerhun, Conwy

CN181

Period: Medieval

HER description

NMR description

G2156 Notes

Field system not particularly well-preserved, although some boundaries are clearly visible. Includes long huts and house platforms as well as prehistoric or Roman period settlements. Good lidar coverage over part of the area.

Few boundaries can be seen in the north-western part of the area but there are several roughly parallel boundaries in the south-eastern part suggesting narrow strip fields.

Sources

Site visit notes

Aerial photo references

Next Perspective APs (HER); Library No. 8606, frames 54 86 51, 54 86 35, date Oct/Nov 1986.

PRN 59873

Field system, Garreg Fawr

NGR: SH685734 Llanfairfechan, Gwynedd

Period: Prehistoric; medieval

HER description

NMR description

An area of field walls and terracing, set on gentle W facing slopes, occurring over an area, c.850m N-S by 560m.

(source Os495card; SH67SE2.5)

Associated with:

Settlement features (Nprn301028; 302991; 308678; 308679; 308680) J.Wiles 04.09.03

G2156 Notes

An extensive area of well-preserved field systems. These are probably of prehistoric date and have hut circle settlements within them but there is one recorded long hut (PRN 7460), and as other field systems to the south-east were used in the medieval period it is likely this was as well.

Sources

Site visit notes

Visited 27/01/2015

The SE part of the area is densely covered with bracken even in mid-winter. There are some distinct boundaries but they are less dense here than in the scheduled parts. Much of the area is heavily covered by gorse. Quite prominent boundaries lie just beyond the edge of the scheduled area.

Aerial photo references

Lib No. 8606, sortie J A Story, frame 53_86_0115, date 01/10/1986; Lib No. 4545 (M 2074), sortie 106G / LA 97, frame 1009, date 14/01/1945

PRN 59878

Field system north of Wern y Pandy
NGR: SH675718 Aber, Gwynedd

Period: Medieval; prehistoric

HER description

NMR description

G2156 Notes

Extensive area of fields, some terraced. These are probably of prehistoric origin and there are hut circle settlements within this area but there is a long hut (PRN 4088) and the scheduled site (CN286), which includes a long hut (PRN 325), which demonstrate use of the area in the medieval period. The Bodsilin Medieval Township (PRN 6810) also falls within the edge of this area and these fields were probably used by the township. There are also long huts and house platforms (PRN 326, 29526) just beyond the area of well-defined field boundaries.

The hut group near Hafod y Gelyn (PRN 320) is on the HER as a medieval site but the main settlement is a late prehistoric roundhouse settlement, however there is a later rectangular building overlying it that is probably medieval and may suggest medieval settlement in this area. The remnant fields around this site must have been used in later periods.

This is quite a varied area with different styles of field boundary and variations in survival but it still appears to be a coherent and connected system and many of the boundaries across that area must have been in use simultaneously.

*Sources**Site visit notes*

Visited 27/01/2015

Ridge and furrow is visible on the level heathland where there is no gorse and the sheep have kept the grass very short (around SH 6769 7196). This is slight and the ridges are about 2m wide. Around the long house settlement (PRN 325) there are significant terraces, some rounded by ploughing but some still possessing denuded stone walls on top. Around SH 6767 7217 are a series of sub-rectangular fields defined by denuded walls. In some cases the walls are little more than lines of stones but in some cases they survive to full width at foundation level. A site described as a roundhouse settlement (PRN 323, CN285) occupies the corner of one of these fields but the character of the fields and the survival of the walls suggests that they were used into much more recent periods. Some of the fields were probably used into the post-medieval period. However the presence of another complex roundhouse settlement (PRN 321, CN136) just outside the fields suggests they had an early origin. Further north the boundaries are less well preserved and more ploughed out, with stone surviving only along what appear to be quite late, probably 18th or early 19th century boundaries. In some cases oaks grow along the line of the field boundaries suggesting that some had hedges with standard trees, and only the latter survive. Most ridge and furrow has been lost in this northern area and cannot be seen even on the APs, however a small area at SH 6728 7266 can be seen on APs and can just be detected in the ground. The ridges are about 2.5m wide.

Aerial photo references

Library No. 6921, sortie BKS 3918, frames U016778, date 30th November 1969

PRN 59879

Field system east of Harlech around Muriau'r Gwyddelod
NGR: SH586303 Harlech, Gwynedd

Period: Prehistoric; medieval

HER description

NMR description

G2156 Notes

Very extensive area of field systems, clearly originally Iron Age or possibly even older, with Iron Age

settlements (ME010, ME095 and ME158) distributed throughout. However there are also medieval long huts that have been fitted into the field system and as many of the original Iron Age walls are still in use (though presumably repeatedly rebuilt) this area has probably been used continuously into the medieval period and though to the present day.

A curvilinear enclosure (PRN 2902) on the eastern side of this area probably belongs to medieval or early post-medieval sheep pasturing (Smith 2010).

This area has been studied in detail for the Early Fields Project (Smith et al 2011, 21-29). It has been surveyed by Robert Johnson of Sheffield University and subjected to a detailed walk-over survey.

Geophysical survey was also carried out.

Most of the area has an irregular pattern of small fields often of wandering or curvilinear outline (Smith et al 2011, 24).

Sources

Smith, G., 2010. The conservation of prehistoric settlements and field systems at Muriau Gwyddelod, Harlech, unpublished GAT report 892; Smith, G., Caseldine, A., Hopewell, D. and Macphail, R., 2011. The North West Wales Early Fields Project, unpublished GAT report 933

Site visit notes

Visited 04/02/2015

Aerial photo references

OS 71 234, frame 180, date 21/05/1971

PRN 59880

Field system near Plas yn Rhiw

NGR: SH23322842 Aberdaron, Gwynedd

Period: Medieval; prehistoric

HER description

NMR description

G2156 Notes

A complex field system obviously with many phases. There is ridge and furrow below the scheduled platform hut (PRN 1211, CN318) and around a settlement (PRN 3307) with long huts and small enclosures. Many sites are recorded as "Roman" period but might be medieval, the church, although listed as post-medieval, has a distinctive curvilinear boundary and there is a holy well nearby. This looks like a well-preserved medieval landscape.

Sources

Site visit notes

Visited 22/01/2015

Condition of earthworks is quite variable. Land owned by Plas yn Rhiw has been improved and earthworks are slight scarps, other fields are unimproved and features are well preserved. In the S part of the area are hut circle settlements and traces of terraces and other field boundaries probably originated in association with these though they have clearly remained in use later. The whole field in which settlement PRN 3307 is located has well-preserved field system remains including ridge and furrow.

Aerial photo references

NextPerspective APs (HER)

PRN 59882

Field system east of Maes y Gaer

NGR: SH666722 Aber, Gwynedd

Period: Medieval; prehistoric

HER description

NMR description

G2156 Notes

Extensive field system south-east of Maes y Gaer hillfort. The medieval homestead (CN137, PRN 347) lies in the middle of the field system, although it has earlier origins as there are also hut circle settlements.

Sources

Site visit notes

Visited 27/01/2015

Access to the area was fairly limited due to few footpaths. Some fairly straight and regular walls appear fairly late, despite being very denuded. These are not shown on the 25 inch maps but could be 18th century in date. Some of these have traces of ridge and furrow on the lidar, but generally ridge and furrow has been confused or destroyed by later ploughing. The older boundaries are concentrated on the NW and SW parts of the area on steeper slopes. Around SH 6680 7206 there are very well defined terraces in open oak woodland. These are up to 3m high and have considerable amounts of stone on their faces, which might partly be due to revetment, as well as field clearance. These fields may be related to the long hut settlement just above (PRN 348, CN137).

Aerial photo references

Library No. 6921, sortie BKS 3918, frames U016778, date 30th November 1969

PRN 59883

Field system in Anafon Valley

NGR: SH696706 Aber, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

There are numerous medieval structures and settlement evidence in this area but only slight traces of field systems, including some ridge and furrow and some field boundaries. There are some small enclosures associated with some of the long huts and other settlement features. There is one large enclosure (PRN 3889) surviving as a stony bank on the north side of the river. Its date of this is unknown, but its association with a long hut suggests a medieval date. A sub-circular enclosure with other enclosures radiating off it (PRN 350) located towards the western end of the valley is probably prehistoric.

Sources

Site visit notes

Visited 21/01/2015

Bracken largely flattened but still obscures some areas. Very misty so higher areas were not inspected. The enclosure boundary (PRN 3889) was hard to follow on the ground in places. A path runs along it and for much of its length is seemed to be this that the lidar was detecting. Where the path crossed stony ground there was a line of stones along the downward side suggesting that the boundary was largely due to clearing the route of the path. The path lead to a sheepfold built from a long hut (PRN 349), suggesting that the path itself is probably of some antiquity. Where the boundary ran down hill at the eastern end it was much clearer as a boundary and was particularly clear below the track. Here is was a stony bank up to 0.5m high. Genuine, low, narrow ridge and furrow can be seen close to the multi-cellular sheepfold but parallel lines of bracken seen across the hills slopes seem to be the result of bracken cutting as no surface remains were associated with them. There are slight hints of ridge and furrow on the lidar in enclosure PRN 3889 but these were not confirmed on the ground due to there being too much vegetation.

Aerial photo references

Lib No. 8606, sortie J A Story, frames 5386_0117, 0182, date 01/10/1986

PRN 59887

Field system south-east of Caer Bach

NGR: SH7467722 Henryd, Conwy

Period: Medieval; prehistoric

HER description

NMR description

G2156 Notes

Extensive area of field systems, some apparently overlying each other, including ridge and furrow. There are three well preserved long-huts within this field system (PRN 566 and NPRN 309193) and a platform house on the edge of the Caer Bach scheduled area (PRN 569). Other medieval settlement features are likely.

*Sources**Site visit notes*

Visited 05/02/2015

Much of this area was not accessible to visit but some could be seen from the footpath.

Across much of the area there are substantial terraces running both across and down the slopes.

There is ridge and furrow visible in many places on APs although this is difficult to spot on the ground.

Much of it is narrow so it is possibly late.

There are several boundaries running downhill suggestive of narrow strip fields. These were probably not enclosed but are defined by low terrace scarps. These appear suggestive of medieval cultivation.

Aerial photo references

Library No. 4211 (M 2630), sortie 140 / AC / 31, frames 6 and 7, date 16/04/1942

PRN 59888

Field system, Uwch Mynydd

NGR: SH14892553 Aberdaron, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Very extensive area of relict strips preserved by field boundaries currently in use. This represents a largely complete medieval open field system. It appears that virtually all the present fields preserve to some extent the alignment of the open field system, not just those that are clearly small groups of enclosed strips.

Just outside the field system on the south-western side is a series of 6 well-preserved long huts in a line (PRN 1668).

*Sources**Site visit notes*

Visited 22/01/2015

The fields are defined by cloddiau, some with facing stones still intact but many appear as earthen banks.

Although many have gorse growing on top there is little evidence that there have been proper hedges on the banks. The long, narrow boundaries are still a prominent part of the character of the landscape.

Aerial photo references

Lib No 8802, sortie MAFF 368, frame 8805_61, date 05/04/1988

PRN 59889

Field system around Erw Wen
NGR: SH606322 Harlech, Gwynedd

Period: Medieval; prehistoric

HER description

NMR description

G2156 Notes

Erw Wen (PRN 1036, Me188) was established in the Iron Age but reused in the medieval period and the fields around were presumably similarly reused. There are several well-preserved banks and lynchets in the field around the settlement.

*Sources**Site visit notes*

Visited 04/02/2015

While some of the boundaries are fairly well-preserved collapsed walls others are slight scarps and banks. Short grass and good light to see earthworks.

Aerial photo references

Lib No. 4206 (M 2324 (1)), sortie HLA / 489, frame 72, date 15/04/1942; Next Perspective APs (HER)

PRN 59891

Field system, Eithin Fynydd
NGR: SH599217 Dyffryn Ardudwy, Gwynedd

Period: Medieval; prehistory

HER description

NMR description

G2156 Notes

This whole area is covered by small, irregular fields with roundhouse settlements, suggesting the current field system may have had an Iron Age origin. In many of these fields there are clearance cairns and also in some traces of ridge and furrow, that is generally restricted to the fields as they currently survive, not continuing under boundaries.

The field to the north of the water treatment works was studied in advance of an extension of the works. This included an assessment, evaluation and geophysics (GAT reports 831, 856, 997). This showed that the area contains two phases of field systems. The earlier, probably medieval field system has a substantial lynchets surviving as an earthwork and other boundaries as sub-surface features, detected as by the geophysical survey. There are numerous field clearance cairns and two possible (one detected by geophysics) and one definite building, apparently a medieval long hut. The second phase of field walls probably dates from the 19th century. There appeared to be three phases of ploughing.

The western part of this area was levelled for a storage compound while the water works was extended. Much of the archaeology in this part of the field has therefore been lost but most of a long hut was avoided.

Sources

Evans, R. and Berks, T., 2009. Eithinfynydd Water Treatment Works, Tal-y-Bont, Gwynedd:

Archaeological Assessment, Unpublished GAT Report 831;

Evans, R. and Berks, T., 2010. Eithinfynydd Water Treatment Works, Tal-y-Bont, Gwynedd:

Archaeological Evaluation, Unpublished GAT Report 856;

Hopewell, D., 2009. Eithinfynydd Water Treatment Works, Tal-y-Bont, Gwynedd: Geophysical Survey, Unpublished GAT Report 997

Site visit notes

Visited on 04/02/2015

All western edge of field to the north of the water works has been used as a storage compound and is now covered in dumped soil and rubble.

No sign on the ground of most of the ridge and furrow seen on the 1986 AP. Some of the fields have been heavily improved since then. There are numerous relatively recent field clearance cairns in the northern part of the area but early field boundaries are still visible on the ground. South of the winding track (Hwlfa Porth Egryn) there are still some boundaries and the remains of what may be a medieval or early post-medieval farmstead (PRN 59905).

The scheduled settlement (PRN 5069, Me202) is now heavily over grown with bracken and scrub.

Aerial photo references

NextPerspective APs (HER); Lib No. 4707, sortie CPE UK 1939, frame 4026, date 19/01/1947; Lib No. 8606, sortie J A Story, frames 67_86_0200; 68_86_0019, date 01/10/1986

PRN 59895

Field System around Degannwy Castle

NGR: SH78357931, Conwy, Conwy

Period: Medieval

HER description

NMR description

G2156 Notes

Well-preserved medieval field system, especially to the south of the castle (PRN 2814, CN016) including trackway leading to the castle (includes PRN 30309). Also later medieval or early post-medieval ridge and furrow and house platform (PRN 5777) and a farmstead (PRN 2838) in the foot of the castle hill. Some boundaries and narrow ridge and furrow to the north of the castle are late but some scarps are probably part of the medieval system and a geophysical survey suggested other buried boundaries just north of the castle. The whole of the plateau between the castle and the line of rocky outcrops to the south is covered by a field system defined by banks and ditches (plate 5). These are particularly well preserved and up to 0.5m high, or occasionally higher. One field contains 3m wide, straight ridge and furrow. This can be seen on aerial photographs and in the right light from the top of the castle but at less than 0.1m in height they are difficult to identify on the ground. Some of these field boundaries are fairly straight but one major boundary is very sinuous. A hollow-way runs along the eastern boundary of the field system and this is described above (PRN 30304). Another hollow-way (PRN 30310) leads into the northern corner of the field system. The tithe map shows the boundaries around the southern foot of the castle hills and around the outer perimeter of the open, public access area much as they are today (figure 7). None of the other boundaries are shown and so they presumably pre-date the tithe map and are at least 18th century in date. The single field (field number 206) shown on the tithe map to the south of the castle belongs to a small holding called Fattw, with the house in the middle of the field. The 19th century house and yard (PRN 30315) seems to have been preceded by a house platform (PRN 5777) about 16m to the north-east. This is on a very straight field boundary that forms the western side of a field containing narrow ridge and furrow. This narrow, shallow, straight ridge and furrow is more typical of spade cultivation than ploughing. The house and field are probably contemporary and later than the other field boundaries in this area. They could be medieval but perhaps an early post medieval date is more likely. The large sinuous field boundary and boundaries running off it to the trackway to the castle are likely to be much older. The trackway, as discussed above (PRN 30304) seems to be contemporary with the castle and the sinuous field boundary seems to be related to this. It is likely that some of the fields, possibly all except the one with ridge and furrow, are contemporary with the castle, although they may have continued to have been used long after the castle was destroyed. The record for NPRN 400533 refers to the field system as Vardre south settlement but, with the exception of house platform (PRN 5777) they contain no evidence for settlement (Kenney 2009).

Sources

Kenney, J., 2009. Degannwy Castle, Degannwy, Conwy: Report on an archaeological assessment, unpublished GAT report 781

Site visit notes

Visited 6th February 2009 as part of project G2068. Condition checked and confirmed to be unchanged on 17th June 2014.

Aerial photo references

Library No. 4536, 106G UK 735, frame 4013, date 27/08/1945

Library No. 4707, CPE UK 1939, frame 4222, date 20/01/1947

PRN 59896

Field System, Garreg Fawr

NGR: SH69377274 Llanfairfechan, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Report on Llyn Anafon Raw Water Main Refurbishment (in Minor Reports File) notes "Field system of low stone walling" (PRN 5412). Longhuts PRN 5411, 5413 and 34777 lie nearby. There is also ridge and furrow in this area (PRN 5489 and NPRN 275,560 and 275,561). Area of narrow ridge and furrow and some fragmentary field boundaries with long huts nearby.

Sources

Site visit notes

Visited 27/01/2015

The ridge and furrow is real and about 2.5 to 3.5m wide. The ridges running quite steeply downhill in the southern part of the area are fairly well-defined.

Aerial photo references

NextPerspective APs (HER); Lib No 6921, sortie BKS 3918, frame 635120, date 09/10/1969

PRN 59962

Enclosed strip field, west of the abbey, Ynys Enlli

NGR: SH11872220 Aberdaron, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Narrow field bounded by cloddiau. Shown on 1790 estate map (CRO XD64/447/1). Probably a group of lands from the open field that have been enclosed.

Sources

Kenney, J. and Hopewell, D. 2015. Ynys Enlli Survey and Evaluation: Report on 2014-15 results, unpublished GAT report 1232

Site visit notes

Visited 18/06/2014

Improved fields bounded by cloddiau, indistinguishable from the other fields in this area except by shape. A scarp in the field next to Carreg Fawr shows where the western boundary continued.

Aerial photo references

NextPerspective (HER)

PRN 59963

Enclosed strip field, NW of Ty Pellaf, Ynys Enlli

NGR: SH11872146 Aberdaron, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Narrow field bounded by cloddiau. Shown on 1790 estate map (CRO XD64/447/1). Probably a group of lands from the open field that have been enclosed.

Sources

Kenney, J. and Hopewell, D. 2015. Ynys Enlli Survey and Evaluation: Report on 2014-15 results, unpublished GAT report 1232

Site visit notes

Visited 18/06/2014

Improved fields bounded by cloddiau, indistinguishable from the other fields in this area except by shape.

Aerial photo references

NextPerspective (HER)

PRN 59964

Group of enclosed strip fields, SW of Ty Pellaf, Ynys Enlli

NGR: SH11862119 Aberdaron, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

A group of narrow fields bounded by cloddiau. Shown on 1790 estate map (CRO XD64/447/1). Probably furlongs from the open field that have been enclosed.

Sources

Kenney, J. and Hopewell, D. 2015. Ynys Enlli Survey and Evaluation: Report on 2014-15 results, unpublished GAT report 1232

Site visit notes

Visited 18/06/2014

Improved fields bounded by cloddiau, indistinguishable from the other fields in this area except by shape.

Aerial photo references

NextPerspective (HER)

9. APPENDIX II: LIST OF OTHER PROBABLY MEDIEVAL FIELD SYSTEMS

PRN 839

Field System, Hwylfa'r Ceirw, Great Orme

NGR: SH76538399 Llandudno, Conwy

Period: Medieval; prehistoric

HER description

Huge field-system, probably multi-period and incorporating other archaeological features on top of the Great Orme. Centred roughly on Hwylfa'r Ceirw (actually part of a denuded field-boundary). Appears on No. of APs by various people. No proper attempt made to map it all actually. <1>

NMR description

G2156 Notes

GAT report 1125 (Hopewell 2013)

A field system including the double stone row, Hwylfa'r Ceirw (path of the deer) (PRN 649), which may be parallel denuded orthostatic walls. The area also includes two platform houses (PRN 796) possibly associated with the medieval township of Cyngreawdr.

The earliest fields in the survey consist of long ridges, mostly running down-slope with a spacing of about 2.5m. This is narrower than most ridge and furrow and is about a third of the width of the ridge and furrow to the east of St Tudno's church. Most of the ridges are also fairly straight. Overlying or cutting these fields are smaller plots of cultivation ridges with a 3m spacing along with steep cultivation terraces with a 6m spacing. Both phases of fields are delineated by earthen banks, the later examples incorporating orthostatic stones. A particularly pronounced area of cultivation ridges (PRN 15417), at the south of the survey cuts earlier ploughing but is again narrow with a spacing of 3.3m.

The sequence of enclosure seems to indicate the progressive use of ever more marginal land. The earlier fields are on relatively level ground whereas the later fields are smaller and required more terracing. Aris argues that the linear, relatively narrow, cultivation ridges in the plots were spade dug. This is likely in the larger fields and certainly seems to be the case in the smaller later enclosures and terraces which would have been too small or too steep to plough.

To the area recorded by Hopewell west of the cemetery can be added the area south of the cemetery recorded by Aris (Aris 1997), where a well-defined system of ridge and furrow divided by baulks runs down the hill slope. The ridges have the distinctive aratral curve and there are the remains of two settlements of medieval form.

Although PRN 839 has been included in the HER as a prehistoric field system and there are some hut circles within the area it appears to be large a medieval field system.

Sources

Aris, M., 1997. 'Aerial photography and historical landscape on the Great Orme, Llandudno', in Edwards (ed) 1997a, 71-78; Hopewell, D., 2013. Evaluation of Scheduling Proposals 2012-13, unpublished GAT report 1125

Aerial photo references

yes

PRN 948

Platforms/field System, Ty Coch Farm, Betws Garmon

NGR: SH53055642 Betws Garmon, Gwynedd

Period: Medieval?

HER description

Extensive medieval field system and platform scoops below prehistoric site 4207. <1>

NMR description

G2156 Notes

A couple of denuded field walls and some traces of straight ridge and furrow. With remains of a probable long hut.

Sources

Aerial photo references

NextPerspective APs (HER)

PRN 1327

Field System, Foel Mellteyrn

NGR: SH23253300 Botwnnog, Gwynedd

Period: Medieval?

HER description

Possible ridge and furrow in a field, noted by DJT and NT 16/1/90. Details in F.I .file. <1>

NMR description

G2156 Notes

The Foel Mellteyrn enclosure (PRN 1257) is a rectangular enclosure of unknown date. It is overlaid by ridge and furrow cultivation.

Fairly subtle E-W ridge and furrow can be seen on the lidar data but the area has recently been ploughed and it is unlikely that much survives to be seen on the ground.

Sources

Aerial photo references

NextPerspective APS (HER)

PRN 1818

Earthworks (Field System), W of Gwelfor, Rhoslan

NGR: SH48054122 Llanystumdwy, Gwynedd

Period: Medieval?

HER description

Field containing a number of apparent earthwork features (probably remains of removed field boundaries), photo by R. Kelly during SAM monitoring survey, immediately W of road in Rhoslan. Needs further investigation for clarification/rejection. (DT). <1>

NMR description

G2156 Notes

The lidar shows remains of field boundaries in this field but these are shown on the 25 inch maps.

Certainly there are traces in the fields around Rhoslan of enclosed strips indicating that parts of the present field system preserve evidence of an open field system and the curves in these earthworks do suggest they might be part of an open field but they are not typical strip fields.

Sources

Aerial photo references

NextPerspective APs (HER)

PRN 3367

Early Fields, Beudy Uchaf

NGR: SH58134733 Beddgelert, Gwynedd

Period: Medieval?

HER description

Remains of field walls of roughly piled stone extend for 100yds above the ffridd wall on the E side of Nant Cwmcloch. In the field E of Beudy Uchaf are two terraces running E-W, 1.0 to 1.3m high with orthostatic revetments in places. Condition: poor. <1>Generally as described. Surveyed at 1:2500. Field walls

delineated on 6" sheet. <2>

NMR description

A large field in which there are a number of approximately aligned boulders which probably represent the remains of a medieval field system of some kind. One alignment appears like the footings of a wall and continues for about 90m in a straight line approximately E - W. John Latham, RCAHMW, 30 August 2011. (from NT "Aberglaslyn West", 1987)

G2156 Notes

One boundary is shown on the 1889 25 inch map but not on later maps. This is built against mountain wall so it is unlikely to be medieval. The terraces may be earlier.

Sources

Aerial photo references

NextPerspective APs (HER); Library No. 8606, frames 5286_0130, date 01/10/1986.

PRN 3406

Field System above Llyn Cwmystradllyn
NGR: SH55904510 Dolbenmaen, Gwynedd
Period: Medieval?

HER description

Site first noted by DJT and MM during fieldwork project G2016. Area of ridge and furrow very clearly defined and well-preserved in a single 'modern' field (and fragments lower down) on the hill-slope N of Llyn Cwmystradllyn. Depth (r-f) of c.0.5m, and tops of ridges c.2m apart. Stand out clearly from a distance (to E) with low sunlight, but also visible at close range. <1>

NMR description

G2156 Notes

Traces of ridge and furrow, very straight and narrow and possibly post-medieval rather than medieval. Not easily seen on available APs.

Sources

Aerial photo references

NextPerspective APs (HER); Library No. 8606, frames 5286_0062, date 01/10/1986.

PRN 4362

Field System and Settlement, Maes Hyfryd, Carmel
NGR: SH49145500 Llandwrog, Gwynedd
Period: Medieval

HER description

Ridge and furrow, and possible house platform. <1>

NMR description

G2156 Notes

Ridge and furrow on two orientations meeting within this small field. May indicate former open field system in this area. Occasional curving field boundaries could also be relict remains of this field system.

Sources

Aerial photo references

NextPerspective APs (HER); Library No. 8606, frames 5286_0062, date 01/10/1986.

PRN 5221

Field System, Near Roman Camp, Bangor

NGR: SH58167292 Bangor, Gwynedd

Period: Medieval

HER description

Ridge and furrow cultivation traces running approx E-W across field to NE of 'Roman' camp. Extent uncertain due to scrub growth over part of site. Presumably medieval. <1>

*NMR description**G2156 Notes*

Fairly small area of quite well-preserved broad ridge and furrow adjacent to Roman Camp/Pier Camp (PRN 2299, CN073). The ridges are straight and about 5m wide. No settlement or other features are associated with them.

*Sources**Aerial photo references*

NextPerspective APs (HER)

PRN 6126

Field System - Garreg Fawr, Nr. Betws Garmon

NGR: SH54235813 Waunfawr, Gwynedd

Period: Medieval

HER description

None

*NMR description**G2156 Notes*

Narrow ridge and furrow runs across several fields in this area. It runs under field walls, so is earlier than the walls, which are related to a post-medieval expansion into common land.

*Sources**Aerial photo references*

Library No. 8606, sortie J A Story, frame 52 86 0021, date 01/10/1986; Next Perspective APs (HER)

PRN 7986

Field System, Castell Caeronwy

NGR: SH52255479 Llandwrog, Gwynedd

Period: Medieval?

HER description

Part of earlier field system preserved in 2 fields that haven't been ploughed in recent times. Includes cultivation ridges varying between 2m and 3m wide, becoming narrower towards the south. The west end of some of the ridges is defined by a low stony bank which curves in a semi-circle. In the south east corner of the field is the remains of a small rectangular structure (4m x 3m). In the north east corner is a fairly level area surrounded by lumps and bumps. It is defined to the north and east by a curving scarp and stony bank. A friend of the farmer, while digging in this area found a deposit of charcoal and it is possible that this is the site of a house. Traces of a bank run between the present gate and the possible house site. <1>

NMR description

G2156 Notes

Small area of ridge and furrow or possibly spade cultivation ridges seen on AP. There is an elongated feature visible on the AP in the western part of the area that may be a pillow mound. The existing fields represent post-medieval expansion onto the common land and it is possible that the earthwork remains are part of an early phase of this rather than being medieval. However it could be an outlying part of the field system covered by SAM CN179.

Sources

Aerial photo references

Library No. 8606, frame 5186 0173, 0174, date 01/10/1986

PRN 8499

Remains of Field System, Ty Newydd Isaf

NGR: SH69425125 Dolwyddelan, Conwy

Period: Medieval

HER description

The polygon marks an area of relict enclosures and terracing, overgrown with hazel, hawthorn & blackthorn. A number of small, grassed over clearance cairns are also visible.

NMR description

G2156 Notes

Small area of enclosures and terracing with long hut (PRN 8256) in the middle of it. Some possible hints of ridge and furrow.

Sources

Aerial photo references

NextPerspective APs (HER)

PRN 12145

Field System, Vaynol

NGR: SH54306945 Pentir, Gwynedd

Period: Medieval; Post-Medieval

HER description

When the area was converted to parkland in the early 1860s walls and hedges were removed, but the earthwork elements of the field boundaries remained untouched. These can still be clearly seen on the ground, and are also faintly visible on the aerial photographs. Taking into account slight errors in the estate maps each earthwork can be identified with a specific boundary on the maps. Long, narrow fields were successively subdivided into smaller, squarer fields, so that by the 1840s their original form can barely be discerned. The 1777 map shows the field relatively undivided and shows the land to the north to also be part of the same field layout. Long, narrow, gently curving strips are typical of medieval open fields, and it seems certain that these are the enclosed remnants of the open field system, which must have covered the whole area in the medieval period. This would explain the build-up of substantial lynchets on gently sloping land, as ploughing would have continued over centuries. As lynchets develop they preserve within themselves layers of soil which, under the right conditions, can contain artefacts and palaeoenvironmental evidence. It is possible that dating evidence to confirm the origin of these fields, and other information on the nature of the agriculture, may be preserved within these features. Excavation is the only way to recover this information. (Kenney 2001) C18th and C19th field boundaries. Features 1a and 1b are roughly parallel natural terraces, up to 1.4m in height, and aligned south-west to north-east. 1a is an outcrop of the limestone bedrock, and stones can be seen protruding from it. 1b is a largely natural terrace in the glacial clays, although the area between the two scarps may have been levelled off by ploughing. Although natural, the field boundaries on both the 1777 and 1832 maps follow these scarps, to create narrow fields (figure 5.7 (a) and (b)). The earlier map shows a track running along the western side of 1b. Feature 1c is a narrow ditch running from the

north-western side of Porthwell Covert to the southern tip of Cow Pasture Covert. The feature is c.3m wide and up to 0.5m deep. It can be seen on the aerial photographs, where the odd double curve of its route can be clearly recognised. This marks the south-western end of two narrow fields as shown on the 1832 map (figure 5.7 (c)). Trial trenching revealed that the surface feature was the result of an infilled ditch, 1.6m wide and 0.5m deep. In the south-western corner of field 1 is a curved scarp (feature 1d), 1m high, with linear hollow on its southern side. This appears to be the southern end of the western narrow field, as shown on the 1777 map, before it was shortened to 1c (figure 5.7 (d)). It was initially thought that the hollow was a trackway, as the 1777 map shows a track running along the boundary marked by scarp 1a. However, a trial trench showed that the hollow was caused by a ditch, now almost completely infilled, measuring c. 2m in width and 0.8m in depth. The main scarp is mostly natural, but again the map shows that it was used as a field boundary. Some 19th century pottery was recovered from the top soil over 1a, but there was no dating evidence from the ditches. The maps, however, can be used to date ditch 1c to between 1777 and 1832, and 1d to sometime before 1777 (Kenney 2001).

NMR description

G2156 Notes

Most of the area with remaining lynchets has now been built over.

Sources

Aerial photo references

PRN 12922

Field System, west of Hengwm

NGR: SH43574688 Clynog, Gwynedd

Period: Medieval

HER description

Between PRN 14556 and 12924 the aerial photographs reveal an area of small, sub-rectangular fields. While these could be related to 12924 they are not indicated on any of the maps, and seem more likely to be medieval in date.

NMR description

G2156 Notes

Area of small fields defined by denuded walls around a group of rectangular hut platforms (PRN 14556, 14557, 14560, 14561). In 1978 AP the area is badly cover by bracken.

Sources

Aerial photo references

NextPerspective APs (HER); Lib No. 7820, sortie BKS, frame 2893-062, date 09/08/1978

PRN 13987

Field System, Llanfair

NGR: SH57602890 Llanfair, Gwynedd

Period: Medieval; Post-Medieval

HER description

The field system around Llanfair Isaf and Pen-Sarn remains largely unchanged since the 1839 Llanfair tithe map. Most of the fields, particularly around the Artro estuary, probably date from 19th century enclosures of common land, although some elements of earlier boundaries could survive around Llanfair. The pipeline runs through this area on a similar alignment to an existing water pipe and it is therefore expected that new breaches to the dry-stone walls will be kept to a minimum. (Hopewell 2003)Medieval/Post-medieval Field system (SH57602890). The field system around Llanfair Isaf and Pensarn remains largely unchanged since the 1839 Llanfair tithe map. Most of the fields, particularly around the Artro estuary, probably date from nineteenth century enclosures of common land, although some elements of earlier boundaries could survive around Llanfair. The pipeline ran through this area on a similar alignment to an existing water pipe

and it was expected that any new breaches to the dry-stone walls would be kept to a minimum. Impact:
As predicted the route of the new pipeline followed closely to that of the previous pipe, enabling the reuse of, earlier breaches in the nineteenth walls that defined the post-medieval field system around Llanfair Isaf and Pensarn. (Berks, Davidson, Hopewell & Roberts 2005)

NMR description

G2156 Notes

Mainly post-medieval, but some boundaries do seem to preserve furlong boundaries. There are a few traces of ridge and furrow on the lidar but most fields seem to have been heavily ploughed with only modern ploughing marks visible.

Sources

Aerial photo references

NextPerspective (HER)

PRN 34120

Possible relict medieval field system, Tan yr Allt

NGR: SH38833627 Llannor, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Curving field boundaries on First Edition 25 OS map suggested as possibly a fossilised trace of a medieval field system. Boundaries recorded as PRN 37846 and 37847, but these have been rebuilt and the former has been straightened.

Sources

Kenney, J., 2013. Gas Pipeline Replacement, Pwllheli to Blaenau Ffestiniog: Report on archaeological mitigation, volume I, unpublished GAT report 1136

Aerial photo references

NextPerspective (HER)

PRN 34121

Possible relict medieval field system, Llanystumdwy

NGR: SH47933829 Llanystumdwy, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Curving field boundaries on First Edition 25 OS map suggested as possibly a fossilised trace of a medieval field system. Boundaries recorded as PRN 37866 to 37872, but these have been rebuilt, and some have been straightened. This is only part of the possible relict field system as many of the boundaries to the east of Llanystumdwy and probably to the north also appear to preserve the outline of strip fields.

Sources

Kenney, J., 2013. Gas Pipeline Replacement, Pwllheli to Blaenau Ffestiniog: Report on archaeological mitigation, volume I, unpublished GAT report 1136

Aerial photo references

NextPerspective (HER)

PRN 34122

Possible relict medieval field system, N of Criccieth

NGR: SH50043940 Criccieth, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Curving field boundaries on First Edition 25 OS map suggested as possibly a fossilised trace of a medieval field system. Boundaries recorded as PRN 37876 and 37880, but these have been rebuilt and straightened. Some of these boundaries continue further north and study of the area might identify many more that are related to the same field system.

Sources

Kenney, J., 2013. Gas Pipeline Replacement, Pwllheli to Blaenau Ffestiniog: Report on archaeological mitigation, volume I, unpublished GAT report 1136

Aerial photo references

NextPerspective (HER)

PRN 34937

Field System, N of Bryn Eira, Llanfairpwll

NGR: SH53647251 Llanfairpwllgwyngyll, Ynys Môn

Period: Medieval?

HER description

Visible on the ground as a break in slope forming a distinct large L-shaped feature, possibly natural. It may be related to site 7 (PRN 5759) below. (Davidson & Flook 1994) An L-shaped feature defined by a break of slope marks the edge of a field boundary that predates the present field system. A further series of low banks in the fields at the north of the development area appear to be the denuded remains of the banks and lynchets of a field system that predates the present layout. Unfortunately the 19th century tithe map does not show the field layout for Ty-mawr and Hen-dy. Fields in the southern part, and to the south, of the development area retain the basic shape of the fields on the tithe map but were modified in the mid to late 19th century to form rectangular fields. It seems likely that a similar process was carried out across the rest of the Ty-mawr land. The irregular field patterns on the tithe map may have continued across the development area and some or all of the features visible as earthworks could belong to this phase of land use. The field system pre-dates the modernising influence of the big estates in the 19th century and may have medieval or prehistoric origins. The fields form irregular terraces which are comparable in form to the prehistoric field system to the south-east and the carved head from Hendy demonstrates activity in the area at this time. (Hopewell 2008)

NMR description

G2156 Notes

Traces of earlier field system, possibly medieval.

Sources

Aerial photo references

NextPerspective APs (HER)

PRN 37212

Field System, S of Lledwigan

NGR: SH45297377 Llangristiolus, Ynys Môn

Period: Medieval

HER description

The whole of the field containing the lime kiln is covered with ridge-and-furrow, clearly visible from the air and, under certain conditions, on the ground, except for the north-west corner, which may contain traces of a field system of a different kind. The site of a former building located north of the quarry is also visible as low earthworks, with a track leading to it from the A5. Documentary evidence would suggest this building predates the quarry, but is not older than the 19th century. (GAT 1993)

NMR description

G2156 Notes

Area of well-preserved ridge and furrow with some small field boundaries.

Sources

Aerial photo references

NextPerspective APs (HER)

PRN 37848

Possible relict medieval field system, Eisteddfa

NGR: SH51933984 Dolbenmaen, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Field boundaries on First Edition 25 OS map forming strip fields running along contours, suggested as possibly a fossilised trace of a medieval field system. Boundaries recorded as PRN 37889 to 37891, but these have been rebuilt, and straightened. Other parts of this field system might be detected with further work.

Sources

Kenney, J., 2013. Gas Pipeline Replacement, Pwllheli to Blaenau Ffestiniog: Report on archaeological mitigation, volume I, unpublished GAT report 1136

Aerial photo references

NextPerspective (HER)

PRN 38042

Field System, Aber Geirch

NGR: SH26584040 Nefyn, Gwynedd

Period: Medieval?

HER description

Short lengths of low field banks, part of a system of small rectilinear fields. Field banks smaller than all existing examples suggesting of earlier date (medieval?). Possible association with nearby ridge and furrow although none seen here. (Riley & Smith 1993)

NMR description

G2156 Notes

Short lengths of field boundaries not shown on 1st edition 25 inch map. This appears to be fragments of enclosed strip fields, suggestive of an open field system in the area. This is supported by references to ridge and furrow nearby.

Sources

Aerial photo references

NextPerspective APs (HER)

PRN 55805

Possible relict medieval field system, Pentrefelin

NGR: SH52433990 Dolbenmaen, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Curving field boundaries on First Edition 25 OS map suggested as possibly a fossilised trace of a medieval field system. Boundaries recorded as PRN 37895 and 37897, but these have been rebuilt and straightened. Further work would probably detect other parts of this field system.

Sources

Kenney, J., 2013. Gas Pipeline Replacement, Pwllheli to Blaenau Ffestiniog: Report on archaeological mitigation, volume I, unpublished GAT report 1136

Aerial photo references

NextPerspective (HER)

PRN 55886

Field System, E of Pont Newydd

NGR: SH76026700 Dolgarrog, Conwy

Period: Medieval?

HER description

Possible terracing, field systems and boundary walls above Coed Sadwrn Cottage. This survives both sides of the track leading to Coed Sadwrn cottage. (Evans, 2010)

NMR description

G2156 Notes

Well-preserved field system S of Coed Sadwrn. Also other field systems in area. These are possibly early post-med rather than medieval as many of the boundaries are shown on the 1788 estate map, but those boundaries south of Coed Sadwrn are not shown and do seem to be earlier.

Sources

Evans, R. and Kenney, J., 2011. Dolgarrog Hydro-Electric Works, Dolgarrog, Conwy: Archaeological Assessment, unpublished GAT report 928

Aerial photo references

NextPerspective APs (HER)

PRN 59864

Field system east of Ty Newydd motte

NGR: SH34773835 Llannor, Gwynedd CN096

Period: Medieval

HER description

NMR description

G2156 Notes

Low but broad ridge and furrow runs NW to SE in the eastern part of the modern field. These are just visible on

the ground, but not on the lidar data. In the western part of the same field the lidar data suggests ridge and furrow running SW to NE but these are not visible on the ground. These ridges seem to overlie the corners of earlier fields as seen both on the ground and on the lidar data. Existing and recently removed field boundaries in this area seem to preserve traces of NW to SE aligned strip fields.

Sources

Kenney, J. and Hopewell, D., 2015. High Status Medieval Sites and their Environs 2014-2015, Tŷ Newydd Motte: Recording and Evaluation Excavation, unpublished GAT report 1223

Aerial photo references

Library No. 4535, sortie number 106G/UK 664, frame 3134, date 14/08/1945; Lib No. 7820, sortie BKS, frames 143-144, date 09/08/1978

PRN 59867

Field system east of Hafod y Garreg
NGR: SH734672 Caerhun, Conwy
Period: Medieval?

HER description

NMR description

G2156 Notes

A stony bank/denuded wall (PRN 10283) runs SW to NE across this area and there are traces of boundaries within the SAM (CN320) closely associated with the two long huts (PRN 697). Hafod y Garreg and the fields around it are clearly post-medieval encroachment, but presumably the long huts and walls here pre-date that encroachment. They are not shown on the 1889 25 inch map.

Sources

Aerial photo references

NextPerspective APs (HER)

PRN 59868

Field system, Cae'n y Bwlch Uchaf
NGR: SH62853515 Talsarnau, Gwynedd
Period: Iron Age?

HER description

None

NMR description

G2156 Notes

Well-preserved ridge and furrow running in different directions in numerous small areas (includes PRNs 6154 and 6156). No long huts or other medieval settlement recorded within the field system and nothing like this is visible on the APs. However there is a substantial circular enclosure, which may be an circular enclosed settlement (another smaller circular feature is a sheepfold). This may be an area of Iron Age settlement and fields with Iron Age ridge and furrow, possibly produced by spade cultivation rather than ploughing.

Sources

Aerial photo references

Library No. 8606, frame 6786 0130, 0212, date 01/10/1986

PRN 59870

Field system, Caer Fadog Uchaf

NGR: SH54644480 DOLBENMAEN, Gwynedd

Period: Medieval

*HER description**NMR description**G2156 Notes*

Important survival of upland medieval agriculture. Several relict boundaries defining fields with ridge and furrow, around a complex of settlement structures. The main settlement remains (PRN 174 and 2361), with include several platform houses, were surveyed in detail by Gresham (1954, 35-36), who says that they have been almost destroyed by clearance. This may explain the lack of attention to this site, but the 1986 photograph shows that considerable remains do survive and there are other hut platforms that seem not to have been damaged. Crew and Musson (1996, 41) have a fine photograph of this area with ridge and furrow showing much more clearly than on the 1986 vertical photograph. This shows remarkable preservation of the ridges and other elements of the field system.

There are several roundhouse settlements in this area including PRN 177, which is scheduled (Cn313), so the field system may have had earlier origins but the surviving earthworks are very medieval in character and have probably largely obscured the Iron Age fields. However there is some suggestion from the APs that ridge and furrow crosses earlier boundaries.

Sources

Gresham, C A, 1954 Platform houses in North Wales, *Archaeologia Cambrensis*, CIII, 18-53;

Crew, P. and Musson, C., 1996. Snowdonia from the Air, Snowdonia National Park Authority, Penrhyndeudraeth

Aerial photo references

Library No. 8606, sortie J A Story, frame 52 86 0008, date 01/10/1986

PRN 59874

Field system at Cors y Gedol

NGR: SH60962300 Dyffryn Ardudwy, Gwynedd ME128

Period: Medieval; Post medieval

*HER description**NMR description*

NPRN 89068: Multiperiod. Extensive surviving field system comprising well preserved hut groups within small enclosures, wider field divisions, linear boundaries, a bounded trackway and large number of clearance cairns located within discrete fields.

Duplicate NPRN 401827: General/Prehistoric/Medieval. An area of relict field boundary features, tumbled stone walls & lyncheting, extending over an area of south-west & south-facing slopes, at least 430m north-west to south-east by 200m. Griffiths (1958) shows the area of relict field boundary features as extending approximately 600m by 400m (see NPRN 24345, 89068). This area encompasses several clusters of settlement features, involving both curvilinear & rectilinear forms (NPRN 58184, 302753).

Duplicate NPRN 24345: Medieval. Abandoned field systems

G2156 Notes

Very well-preserved field system with long narrow fields on the upper slopes and small irregular fields lower down. Clearance cairns within the fields, all very clearly shown on the lidar. This is obviously mainly a prehistoric landscape and most of the settlement sites are prehistoric but there are some features described as long huts (NPRN 58182, 89011). There is ridge and furrow in the higher, long fields, which suggests use in the medieval period, which anyway seems likely. It is probable that detailed surveys would reveal more long huts within this area.

Sources

Aerial photo references

Lib No. 8606, sortie J A Story, frames 67_86_0200; 68_86_0019, date 01/10/1986

PRN 59875

Field System, Cwm Cilio

NGR: SH426451 Llanaelhaearn, Gwynedd CN112

Period: Prehistoric; medieval

HER description

NMR description

G2156 Notes

A discrete group of terraced fields with a well-preserved late prehistoric enclosed settlement and outlying roundhouses. There is also an enclosed rectangular platform house settlement. The terraced fields are overlaid by larger post-medieval fields defined by walls. The field system in this area may be associated with the use of the area as a grange by Aberconwy monastery.

This field system has been studied by George Smith as part of the Early Fields Project (G2077, report 933) (Smith et al 2011). The early fields are laid out with contour and cross contour boundaries and are roughly rectangular with some gently curving boundaries and rounded corners. The terraces are in places up to 3m high. Some of the present stone walls partly follow the ancient terraces. A geophysical survey suggested that the terraces were constructed features rather than accumulations of ploughsoil. A small trench was excavated across a boundary bank. This was made of stone and appeared to have developed as clearance stones were added over time. There was a slight primary earth bank under the stones.

Sources

Smith, G., Caseldine, A., Hopewell, D. and Macphail, R., 2011. The North West Wales Early Fields Project, unpublished GAT report 933

Aerial photo references

NextPerspective APs (HER)

PRN 59876

Field system East of Llanllechid

NGR: SH632685 Llanllechid, Gwynedd CN121

Period: Prehistoric; medieval

HER description

NMR description

G2156 Notes

Well-preserved Iron Age field system with lynchets and roundhouse settlements, but it also has some long huts (PRN 275, 276, 7530), and is probably used in the medieval period.

Sources

Aerial photo references

NextPerspective APs (HER)

PRN 59877

Field system around Llidiart Garw

NGR: SH611332 Talsarnau, Gwynedd

Period: Medieval?

HER description

NMR description

G2156 Notes

Well defined terraces immediately around the scheduled platform house (Me112, PRN 1186). It is possible but not certain that the small, rather irregular fields around Llidiart y Garw were originally related to the platform house and only later used by the present farmhouse. The NMR lists medieval fields in this area but gives no details (NPRN 24346).

Kelly (1982, 161) describes "traces of walls, possibly the remains of a contemporary field system, appear to the south and south west [of the platform house] and also across the modern track to the north".

Sources

Kelly, R. S., 1982. 'The Ardudwy Survey: Fieldwork in Western Merioneth, 1971-81', Journal of the Merioneth Historical and Record Society vol IX, 121-162

Aerial photo references

Lib No. 4206 (M 2324 (1)), sortie HLA / 489, frame 72, date 15/04/1942; Next Perspective APs (HER)

PRN 59881

Field system north-east of Llys Bradwen

NGR: SH65161389 Arthog, Gwynedd

Period: Medieval?

HER description

NMR description

G2156 Notes

Llys Bradwen (PRN 49) is a rectangular enclosure constructed with drystone walls that is traditionally regarded as the residence of Ednowain ap Bradwen, one of the heads of the legendary Fifteen Tribes of Wales, but Roman pottery has been found on the site so the date of the site is not confirmed as being medieval. There are fragmentary traces of fields to the north-east of the site with fairly extensive ridge and furrow. These may have an early origin although there are no prehistoric settlements amongst the field system. There are standing stones (PRN 2997) and a cupmarked stone (PRN 4242) within the area. There are no long huts or other firm evidence for use in the medieval period but the ridge and furrow suggests this. There is the post-medieval farmstead of Bwlch Gilbert on the north-east side of the area, which may account for some of the ploughing activity.

Sources

Aerial photo references

NextPerspective APs (HER); Lib No. 8606, sortie J A Story, frames 6786_0096, date 01/10/1986

PRN 59884

Field system around Clogwyn yr Eryr farmstead

NGR: SH723665 Caerhun, Conwy

Period: Medieval?

HER description

NMR description

G2156 Notes

There is a long wall running between rock outcrops on the lidar which is not shown on 25 inch maps but is similar to many walls in uplands. lidar has picked up large areas of what are probably peat cuttings. This is an area with some quarrying and several sheepfolds. There are some banks and another medieval settlement in the area. It is unclear whether this is purely a hafod with hafotai or whether the settlement may have related to the quarrying and be later.

Sources

Aerial photo references

Next Perspective APs (HER)

PRN 59885

Field system near Craig y Gesail

NGR: SH54664133 Dolbenmaen, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Extensive ridge and furrow with several medieval platform houses within it.

Sources

Aerial photo references

Next Perspective APs (HER)

PRN 59886

Field system near Tyddyn Wylm

NGR: SH77106542 Trefriw, Conwy

Period: Medieval

HER description

NMR description

G2156 Notes

Tyddyn Wylm has three rectangular platforms for long huts with an enclosure (PRN 7525). There is a small area of ridge and furrow east of the settlement and other early boundaries in the general area but not a coherent field system. Other fragments of boundaries extend south towards Ffridd Uchaf and south-west. An upland survey was carried out in this area (GAT report 92 (G1123)).

Sources

Carver, J., Dutton, L.A. and Muckle, P., 1994. Cefn Cyfarwydd, Trefriw, Upland Survey Report and Gazetteer, Unpublished GAT Report 92

Aerial photo references

Next Perspective APs (HER); Lib No. 4211 (M2630), sortie 140 / AC / 31, frame 13, date 16/04/1942

PRN 59890

Field system around Cyfannedd-Fach Homestead

NGR: SH631127 Arthog, Gwynedd

Period: Medieval?

HER description

NMR description

G2156 Notes

The site to the north of Cyfannedd-Fach (PRN 4915) is a small settlement with three rectangular buildings. It is set within a system of small fields, defined by stone walls, which are still in use and are shown on the 1st edition 25 inch OS map. Aerial photographs show traces of ridge and furrow and some denuded boundaries no longer upstanding or shown on the maps. Cyfannedd-Fach itself is surrounded by small rounded fields that radiate out from the farmhouse. This

probably represents expansion of a new farm onto common land beyond the limit of the medieval fields.

Sources

Aerial photo references

NextPerspective APs (HER); Lib No. 8606, sortie J A Story, frames 6786_0153, date 01/10/1986

PRN 59892

Field system around Ffridd Olchfa settlement

NGR: SH610185 Dyffryn Ardudwy, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

The settlement (PRN 1143) consists of two long huts and several small paddocks. These are within an irregular oval walled enclosure still in use. There are some hints of ridge and furrow and fragments of early boundaries to the north-west.

Sources

Aerial photo references

Lib No. 8606, sortie J A Story, frames 6786_0195, 0196, date 01/10/1986

PRN 59893

Field system around Newborough

NGR: SH419653 Rhosyr

Isle of Anglesey

Period: Medieval

HER description

NMR description

G2156 Notes

The medieval plan of Newborough with its long, narrow burgage plots is still very well preserved in modern boundaries. The field system around the town is probably largely medieval in origin. Some of the strips of the open fields are preserved in the modern boundaries and even where the fields are fairly large and rectangular their alignment probably reflects the orientation of the open field strips. A few boundaries can be seen on the 25 inch maps that don't survive today that can add to the identification of relict strips. The tithe map does not add much information as in many cases several fields with one owner are grouped together and only shown in outline. However some individual strips are indicated. The house adjacent to one surviving group of enclosed strips is called Llain Nest.

Johnstone 1997, fig 5.3 has been used to guide the outline of this area.

Sources

Johnstone, N., 1997. 'An Investigation into the Location of the Royal Courts of Thirteenth-Century Gwynedd', in Edwards, N. (ed.), 1997. Landscape and Settlement in Medieval Wales, Oxbow Monograph 81, Oxbow Books, Oxford, 56-69

Aerial photo references

Lib No. 4206 (M 2324 (2), sortie HLA / 489, frames 28, 29, date 15/04/1942

PRN 59894

Field system north of Cwm Farm

NGR: SH435460 Clynnog, Gwynedd

Period: Prehistoric; medieval

HER description

NMR description

G2156 Notes

Lynchets and denuded walls forming enclosures. A scheduled roundhouse settlement (PRN 96, CN310) sits on one of the lynchets so their origin is probably Iron Age but there is also a platform hut (PRN 95, CN309) and a more complex but unscheduled long hut settlement (PRN 13157). There are clearance cairns within some of the fields.

Sources

Aerial photo references

NextPerspective APs (HER); Lib No. 7820, sortie BKS, frame 2893-061, date 09/08/1978

PRN 59902

Enclosed strip fields, Stryd y Facsen

NGR: SH33248373 LLANFACHRAETH, Ynys Môn

Period: Medieval

HER description

NMR description

G2156 Notes

Four enclosed strip fields/quillets still in use. Each field about 26m wide. They have a gentle curve and clearly represent the enclosure of groups of lands that have been enclosed. Bounded by hedges. There are other hints of open fields in the field boundaries of this area but none as clear as this group.

Aerial photo references

NextPerspective (HER)

PRN 59903

Field System, Dwygyfylchi

NGR: SH73727686 Dwygyfylchi, Gwynedd

Period: Medieval

HER description

NMR description

G2156 Notes

Remains of an open field system. Terraces are visible on the golf course in the lidar and some remaining field boundaries to the east of the golf course preserve furlong boundaries. The latter are shown on the 1847 tithe map with some additional boundaries that have been lost. They are named (from east to west) Erw'r Glyn, Erw Caregor, Erw Fain, Erw Rys, Dryll y Melwr and Wern. The strips under the golf course seem to have been incorporated into larger enclosed fields by the time of the tithe map. The tithe map also shows some unenclosed strips immediately SW of the church. These are named Maes y Llan and were still held by different tenants. The boundaries of Maes y Llan and a neighbouring field still survive as boundaries. Maes y Llan is now a caravan site. Another area of unenclosed strips on the tithe map to NW of the church is now entirely built over. Other consolidated fields still have names on the tithe map suggesting open fields.

Sources

Tithe map for Dwygyfylchi parish 1847

Aerial photo references

NextPerspective (HER)

10. APPENDIX III: SITES CONSIDERED DURING THIS PROJECT BUT REJECTED

Below is a list of medieval scheduled sites that were inspected at the initial stage of the project but not investigated further.

SAM No.	SAM name	NGR	Community	Initial assessment	Chance of field systems	Vegetation	Aerial photos
AN001	Beaumaris Castle	SH607762	Beaumaris	Surrounded by town and parkland, the latter seems to have been ploughed fairly intensively. Fields completely reorganised for Baron Hill estate.	Low		
AN020	Aberlleiniog Castle	SH616793	Llangoed	Surrounded by ploughed fields and woods. No evidence of traces of relict field patterns.	Low		
AN029	Castell Crwn	SH331908	Cylch-y-Garn	Surrounded by ploughed fields. No evidence of traces of relict field patterns.	Low		
AN039	Bodafon Mountain Early Medieval Homestead	SH471846	Moelfre	Site is within forestry. Rough ground to N may contain evidence of field systems but quite overgrown.	Low		
AN047	Tre-Garnedd Moated Site	SH468746	Llangefni	Surrounded by ploughed fields and industrial development. No evidence of traces of relict field patterns.	Low		
AN057	Plas Berw	SH465717	Llanfihangel Ysgeifiog	Surrounded by ploughed fields, although some are rocky and less intensively plough. However no early field systems visible.	Low		
AN064	Tower & Remains of Church and Monastic Settlement on Puffin Island	SH651821	Llangoed	Most of island is scrub covered but lack of disturbance means that field system could survive. Nothing visible on initial AP but further investigation may reveal something. Not investigated further	Medium	scrub	yes
AN097	Hafoty Old Farm House	SH562781	Cwm Cadnant	Ploughed fields to S and E, rougher ground to N and W but no early field systems visible. Not investigated further	Med	Grass, gorse	yes
AN108	Hendai Medieval Farmstead	SH404637	Rhosyr	In forestry but with some open ground to SE. However dunes are likely to have covered any medieval fields.	Low		
AN124	Pen-y-Fynwent Enclosure	SH433888	Rhosybol	Surrounded by regular, recent, heavily ploughed fields.	Low		
CN004	Conwy Castle	SH783774	Conwy	Surrounded by town, river, ploughed fields and woodland.	Low		
CN007	Aber Castle Mound (Pen-y-Mwd)	SH656726	Aber	Surrounded by ploughed fields and village.	Low	Village, ploughed fields	no
CN015	Criccieth Castle	SH499377	Criccieth	Surrounded by town and sea.	Zero		

SAM No.	SAM name	NGR	Community	Initial assessment	Chance of field systems	Vegetation	Aerial photos
CN031	Tomen Fawr	SH454376	Llanystumdwy	Surrounded by ploughed fields that are regular and recent.	Low		
CN040	Dolwyddelan Castle	SH721523	Dolwyddelan	Surrounded by rough ground. Not investigated further	Medium	Moorland	yes
CN063	Dolbenmaen Castle Mound	SH506430	Dolbenmaen	Surrounded by ploughed fields.	Low		
CN066	Dolbadarn Castle	SH586598	Llanberis	Surrounded by rough wooded ground. Parc Bach to W but no other evidence of medieval fields or enclosures.	Low		
CN079	Caernarfon Castle	SH477626	Caernarfon	In the town.	Zero		
CN086	Penarth Fawr Medieval Hall	SH419376	Llanystumdwy	Surrounded by ploughed fields but in area with many medieval townships identified and some possible relict field systems. Not investigated further	Medium	Pasture	yes
CN092	Bryn Castell	SH785719	Caerhun	No evidence for schedulable field boundaries. Not inspected on the ground. APs are not very good and do not show any evidence of early fields. No lidar. No evidence that any schedulable field boundaries might survive.	Low	pasture, woods	Library No 4211 (M 2630), Sortie 140 / AC / 31, frames 53-55, date 16/04/1942
CN096	Ty-Newydd Mound & Bailey Castle	SH346383	Llannor	Surrounded by ploughed fields but township also in area. Map regression might be worthwhile.	Low		
CN129	Bwlch y Ddeufaen Standing Stones	SH714718	Caerhun	No evidence of early field systems on initial search, so not inspected on the ground. No lidar and APs are not very clear. Nothing to show that field systems survive here.	Med	Heather	Library No. 4545 (M 2074), sortie 106G / LA 97, frames 1013-1014, date 14/01/1945
CN144	Huts 90m N of Cil Twllan	SH637664	Llanllechid	Field boundaries within the SAM but little visible outside. However some of the boundaries in use look early and some rough ground in area. Some additional boundaries/lynchets on lidar, fields all small and possibly early. Not investigated further	Med	Bracken/gorse, some open areas	yes
CN156	Rectangular Earthwork 110m NW of Coed Ty Mawr	SH555664	Llanddeiniolen	Nothing visible. Surrounded by large regular fields but not all perhaps intensively ploughed. Not investigated further	Med	Pasture	yes, GAT APs available
CN173	Criccieth Castle, Outer Bank Defences	SH499377	Criccieth	In town	zero		
CN187	Huts on Mynydd	SH122215	Aberdaron	Very little in the way of field systems visible, although	Med	Bracken	yes

SAM No.	SAM name	NGR	Community	Initial assessment	Chance of field systems	Vegetation	Aerial photos
	Enlli, Bardsey Island			these should survive if present. Med date doubtful. None of the huts in this area is convincingly medieval, most are roundhuts of probable Iron Age date. Not investigated further			
CN196	Tomen y Castell	SH724521	Dolwyddelan	Trackway/boundary leading to motte. Immediate area is probably a flood plain, but worth checking. Not investigated further	Med	Pasture	yes
CN197	Castell Llanddeiniolen	SH569655	Llanddeiniolen	Immediate area heavily ploughed but 2 poss concentric boundaries may be worth map regression. Not investigated further	Med	Pasture	yes
CN210	Settlements & Enclosures on S & E sides of Moel Faban	SH636680	Llanllechid	Iron Age field system but no evidence of medieval activity. A deserted rural settlement (PRN 7556) is indicated here but this seems to be the settlement (NPRN 301042) interpreted as Iron Age in the NMR. No further investigation.	High	Rough pasture, gorse	yes
CN218	Enclosure & Associated Structures at Pen-y-Bryn	SH658727	Aber	Surrounded by wood and ploughed fields. No good evidence of field systems.	Low		
CN223	Llys Dinorwig	SH562631	Llanddeiniolen	Surrounded by ploughed fields and caravan park	Low		
CN239	Hut Group West of Cwm Mawr	SH549413	Dolbenmaen	Little visible but field boundaries seem likely on rough ground around SAM. See PRN 59885	High	Rough pasture	yes
CN253	Hut Circle Settlement in Cwm Gelli Iago (West)	SH636475	Beddgelert	Denuded walls in area, rough ground. Long hut within roundhouse settlement area. This seems to be a hafod and most visible walls are within the scheduled area. No extensive field systems visible.	High	Bracken, some open areas	NextPerspective APs (HER)
CN304	Ty'n y Ddol Medieval Long Hut	SH700514	Capel Curig	Building shown on 1st ed map, so probably not medieval. No fields visible but seems likely. Not investigated further	Med	Possible bracken problems	yes
CN305	Ffridd-y-Fedw Platform House	SH825450	Ysbyty Ifan	No evidence of field systems. Not inspected on the ground. Nothing convincing seen on the APs. No evidence of field systems surviving.	High	Wet, tussocky, may obscure features	Lib No. 8606, sortie J A Story, frames 5486_195, 5786_003, date 01/10/1986
CN307	Hafod-y-Wern Long Hut	SH526572	Betws Garmon	In woodland but some open areas. lidar penetrates the trees and shows a small enclosure and one possible boundary.	Low	Probable bracken problem	Prob not worth getting APs, site visit only.

SAM No.	SAM name	NGR	Community	Initial assessment	Chance of field systems	Vegetation	Aerial photos
				Another possible long hut in the area but survival of good field systems under trees and quarrying looks low.			
CN314	Cwm Caseg Deserted Rural Settlement	SH647664	Llanllechid	Field system not evident on APs. Not inspected on the ground. Upland hafod settlement with long hut (PRN 2493). Most boundaries and enclosures associated with the structure are within the scheduled area (CN134).	Med	Heather	NextPerspective APs (HER)
CN315	Cwm Brwynog Deserted Rural Settlement	SH594574	Llanberis	Field system not evident on APs. Not inspected on the ground. Group of hafotai in the uplands, most boundaries and enclosures associated with the structures are within the scheduled area (CN135).	Med	Rough grazing	NextPerspective APs (HER)
CN316	Ystrad Rural Settlement	SH544573	Betws Garmon	No evidence for fields seen. Not inspected on ground. Small enclosure associated with long huts but no firm evidence of wider field systems associated with this site from APs or lidar.	Med	probable bracken problem	Library No. 8606, sortie J A Story, frame 52 86 0020, 0049, 0050, date 01/10/1986
CN329	Ffridd Uchaf Deserted Rural Settlement	SH769649	Trefriw	See PRN 59886	High	Fairly clear	yes
ME016	Tomen y Bala Castle Mound	SH928360	Bala	Within town	Low		
ME020	Craig-y-Ddinas Camp	SH624230	Dyffryn Ardudwy	Prehistoric settlement with some medieval activity. Field systems possible but not clearly visible. Not investigated further	Med	Moorland, heather poss some bracken	yes
ME023	Castell y Bere	SH667085	Llanfihangel-y-Pennant	Within ploughed fields, not much chance of surviving boundaries. Possibility of survival on Meol Cae'r Berllan but nothing visible. Not investigated further	Med	Improved pasture, moorland	yes
ME042	Pen-Ucha'r-Llan Ringwork	SH938368	Llandderfel	Surrounded by ploughed fields, low chance of surviving boundaries. Not investigated further	Med	Ploughed fields, woods, bracken	yes
ME043	Tomen Las Castle Mound	SH697002	Pennal	Not much near mound but possible medieval plots at Pennal. Not investigated further	Med	Ploughed fields, pasture	yes
ME044	Harlech Castle	SH581312	Harlech	In town	Low		
ME045	Castell Prysor	SH757368	Trawsfynydd	No clear early field systems seen on either lidar or APs. Unlikely that anything worth scheduling survives, not visited on the ground.	Med	Rough pasture, bracken	Library no 4122 (M 3044), sortie S / 731, frames 89-91, date

SAM No.	SAM name	NGR	Community	Initial assessment	Chance of field systems	Vegetation	Aerial photos
							06/01/1941
ME049	Castell Carn Dochan	SH847306	Llanuwchllyn	Nothing visible. Not investigated further	Med	Moorland, bracken	yes?
ME054	Domen Ddreiniog	SH596036	Llanegryn	In heavily ploughed land. Not investigated further	Med	Improved pasture	yes?
ME067	Castell Gronw Castle Mound	SH930350	Llangywer	Some narrow ridge and furrow E of Bala but not much visible. Much of land ploughed. Not investigated further	Med	Improved pasture, wood	?
ME121	Castell Cynfal, Bryn Crug	SH615016	Bryn-crug	Surrounded by improved fields, some traces may be possible. Not investigated further	Med	pasture	yes
ME132	Cwm Moch Settlement	SH664362	Talsarnau	Nothing visible but fields possible. However probably hafotai, so fields not necessary. Not investigated further	Med	Moorland, bracken	yes
ME150	Cymmer Castle	SH731195	Llanelltyd	Fields seem too improved for field boundary survival. Not investigated further	Med	Improved pasture, woods	yes?
ME180	Hut Circle Settlement East of caer-Cynog	SH624275	Llanbedr	Some boundaries seem likely, some existing walls very wandering, but nothing clearly seen. Not investigated further.	Med	moorland, bracken	yes
ME189	Deserted Rural Settlement North of Llyn y Fedw	SH631334	Talsarnau	Any surviving field boundaries are within the scheduled area, nothing else of significance is visible on APs. Not inspected on the ground. The scheduled settlement (PRN 1174, Me189) is described as a hafoty with earlier, probably Iron Age settlement and field boundary remains under it. Little can be seen on the APs except one section of walling that seems too well-preserved to be very early.	Med	moorland	NextPerspective APs (HER); Lib No. 8606, sortie J A Story, frames 6786_0132, date 01/10/1986
ME190	Afon Cynfal Deserted Rural Settlement	SH751413	Maentwrog	Only a few boundaries extend beyond the limits of the scheduled area, not enough to be worth changing the scheduling. The settlement is a group of long huts with an enclosure and other boundaries but the APs do not indicate that extensive fields extend beyond the scheduled area (Me190).	Med	moorland	NextPerspective APs (HER); Lib No. 8606, sortie J A Story, frames 5486_0082, date 01/10/1986
ME191	Afon Goch Deserted Rural Settlement	SH753407	Maentwrog	No evidence of field systems. Any small paddocks adjacent to the long huts are within the scheduled area. An interesting collection of long huts, presumably hafotai, but the APs show no evidence of field systems associated with them.	Med	moorland	NextPerspective APs (HER); Lib No. 8606, sortie J A Story, frames 5486_0082, 5786_0175, date 01/10/1986

SAM No.	SAM name	NGR	Community	Initial assessment	Chance of field systems	Vegetation	Aerial photos
ME193	Pont Maesgwm Deserted Rural Settlement	SH635440	Llanfrothen	Up land group of structures, field wall by stream but no evidence of extensive field system. Not investigated further	Med/low	moorland	?
ME196	Maes Coch Deserted Rural Settlement	SH743153	Dolgellau	Seems probable that existing field walls are associated with long hut. No evidence of earlier boundaries. Not investigated further	Med	BRACKEN	yes
ME197	Bancian Duon Hut Circle Settlement and Deserted Rural Settlement	SH816328	Llanuwchllyn	Lots of long and round huts but no evidence of field systems. Not investigated further	Med	moorland	yes

11. APPENDIX IV: METADATA RECOMMENDED BY GWYNEDD HER OF MAPINFO TABLES

The table below sets out a minimum standard for files deposited with the Regional Historic Environment Record. Optional fields do not need to be used. Additional fields may also be included, those which provide more insight into the origins and intended use of the data are welcomed.

Required fields in GIS tables (M = Mandatory, O = Optional)

Unit of information	M/O	Reason for inclusion
Unique ID	M	A unique ID will need to be created for each spatial entity in order to allow for multiple entities to be attached to a single PRN. Where no autonumbering system is in place it is recommended that the project number followed by _001, _002 etc is used.
GAT HER PRN	M	In order to relate spatial entity to database record
PRN Type	M	This is to ensure the spatial feature is understood properly. For monument records this will be a default value of "Core". Event records should be recorded as "Event"
Spatial Feature Type	M	Eg Polygon, Line, Point (this can usually be generated by the GIS)
Area Type	M	To clarify whether a polygon is Known, Uncertain (<i>i.e.</i> not confirmed) or Discounted.
Data Capture Method	M	This clarifies how the object was captured (most likely "Heads Up Digitising" – ie looking at the screen while digitising with a mouse/tablet)
Data source	M	The source used to inform digitisation must be recorded, eg "OS 1 st Edition Map 1889". This field can be repeated where necessary, or multiple data sources added if relevant.
External Information System	O	Eg Mastermap TOID
External Information System Primary Reference Number	O	Eg Mastermap TOID reference number
Buffer Zone Width	M	Specify the extent in metres of any buffering (use 0 where no buffering has been undertaken)
Positional Accuracy	M	Eg approximate – based on OS 1 st Edition
Quality	O	Does the spatial entity require checking against any further sources or review?
X Coordinate	M	Centroid X coordinate
Y Coordinate	M	Centroid Y coordinate
Originating Organisation	M	Mandatory when object created by an organisation
Compiled by	M	It is important to know who created the spatial entity
Compiled on	M	It is important to know when the spatial entity was created
Last update by	M	Mandatory when object updated
Last update on	M	Mandatory when object updated
Copyright	M	Inclusion at object level facilitates data sharing
Notes	O	This field can be used to clarify access conditions, transformations from other projection systems or any other information useful to understand the data object.

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- Plate 33. Aerial photograph of field system (PRN 59891) around Eithin Fynydd, Tal y Bont (Lib No. 8606, sortie J A Story, frame 68_86_0019, date 01/10/1986, © Welsh Government)
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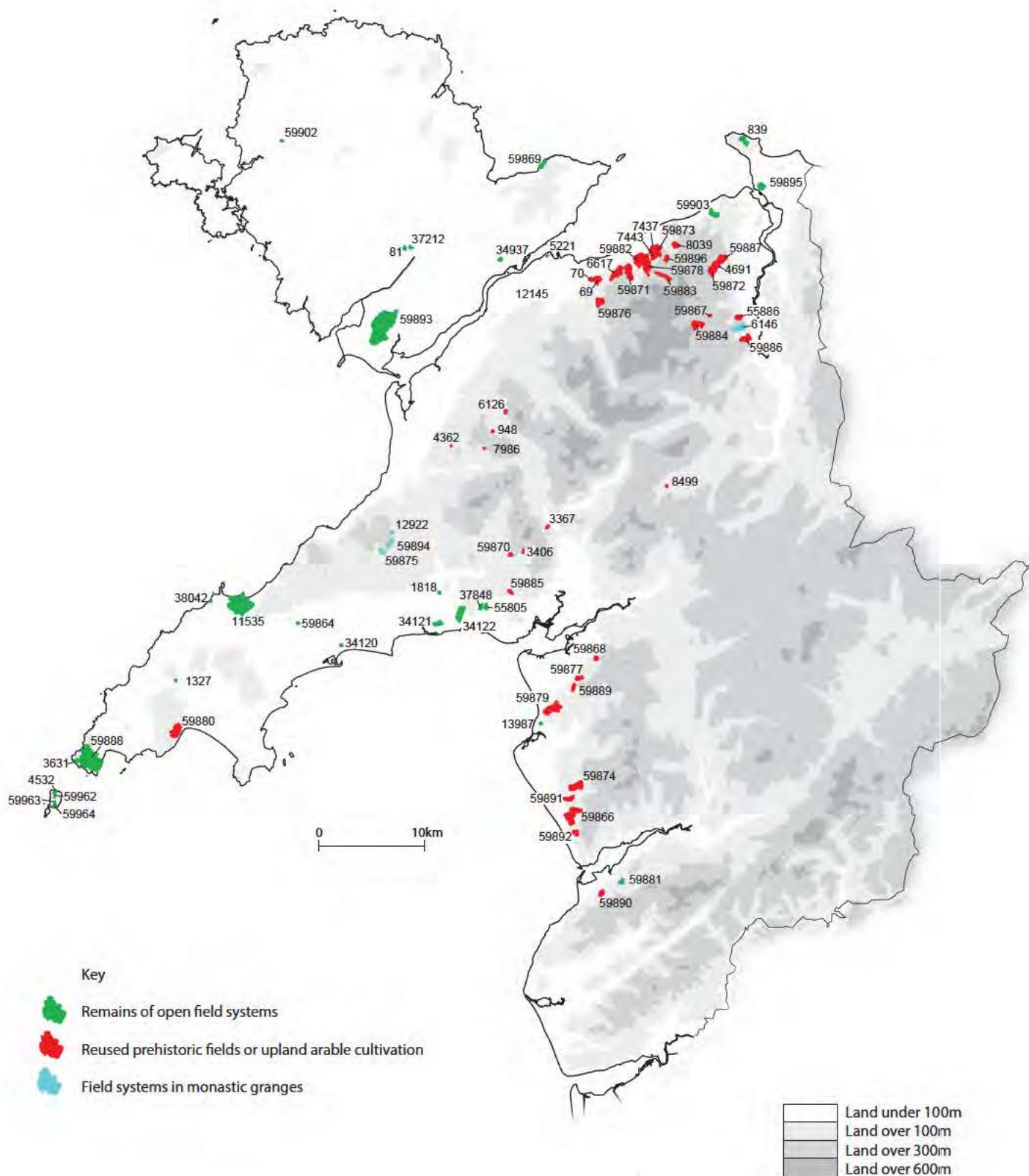


Figure 1. Distribution of probable medieval field systems in this study

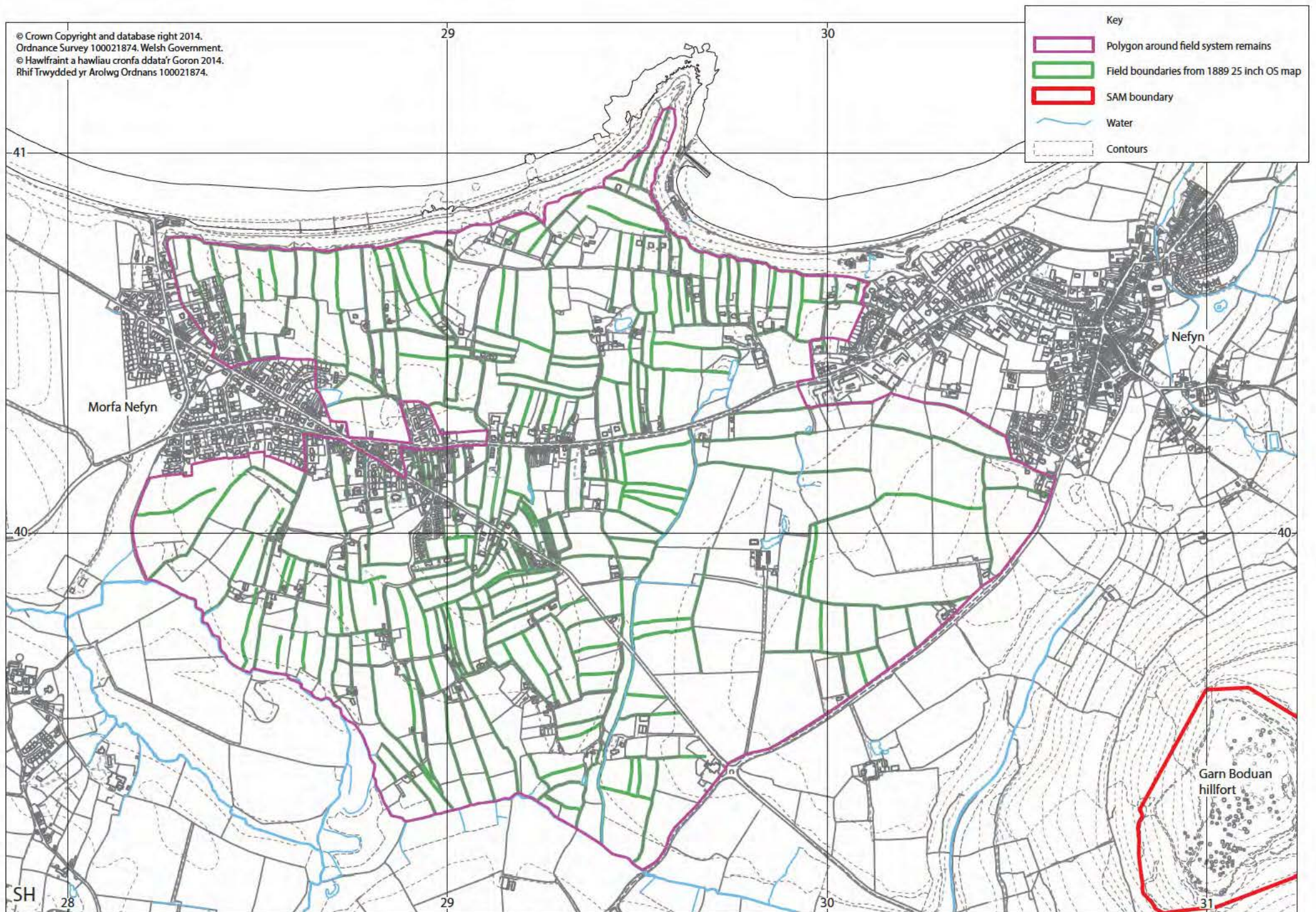


Figure 2. Morfa Nefyn showing enclosed strip fields (PRN 11535)

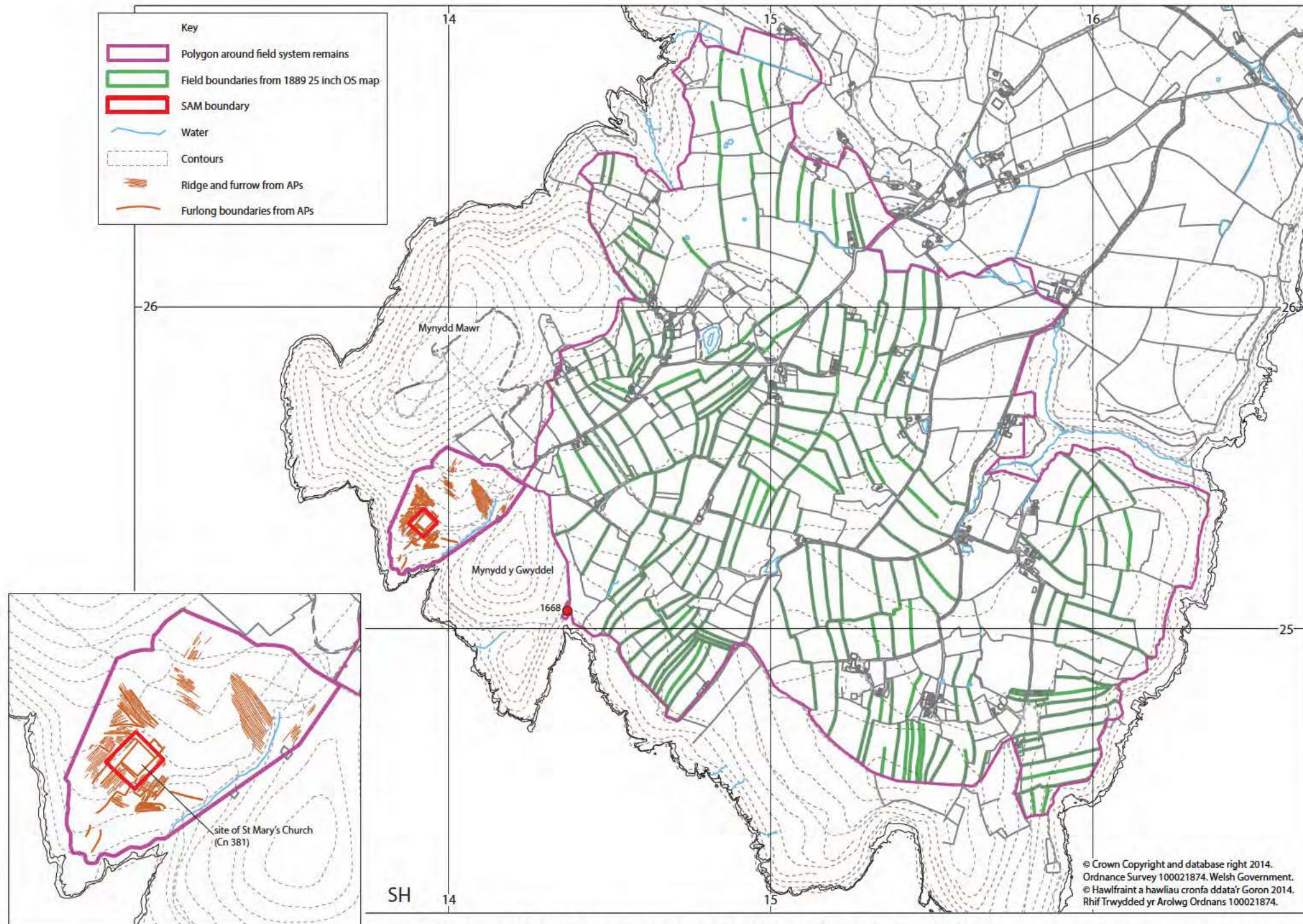


Figure 3. Uwchmynydd showing enclosed strip fields (PRN 59888) with detail of fields (PRN 3631) around St Mary's Church as inset

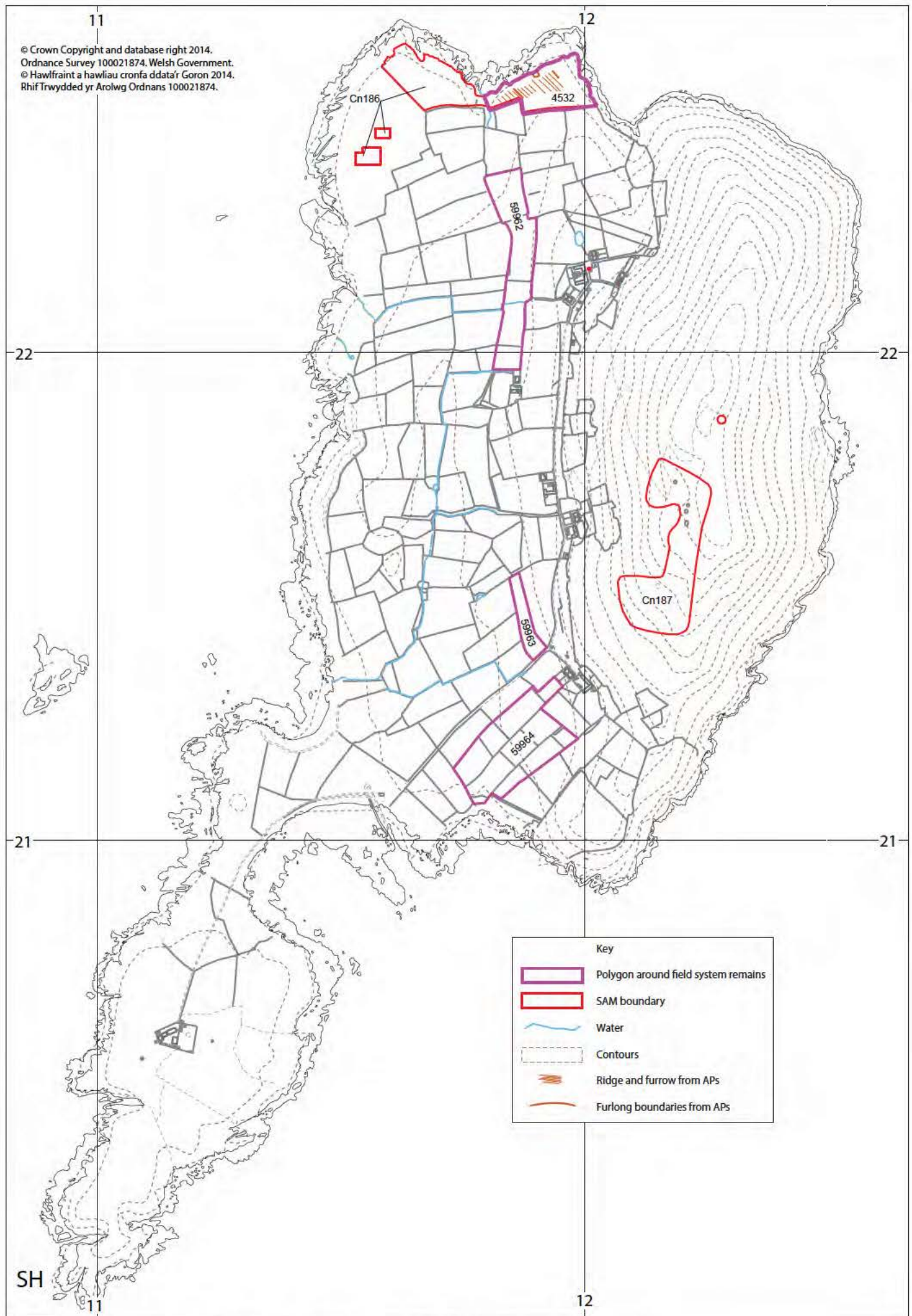


Figure 4. Bardsey Island/Ynys Enlli showing open field remains

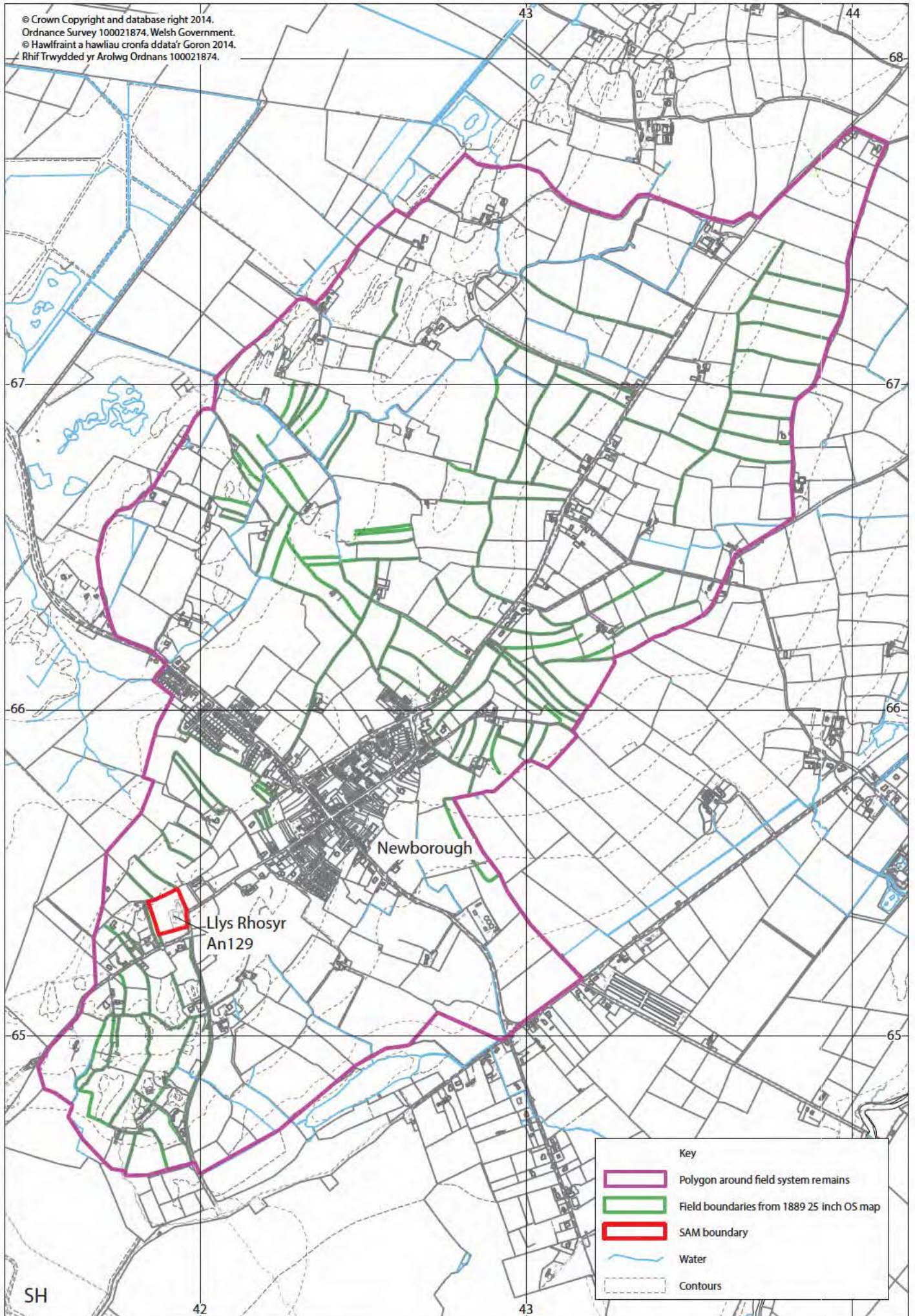


Figure 5. Newborough showing enclosed strip fields (PRN 59893)



Figure 6. Extract from Newborough title map

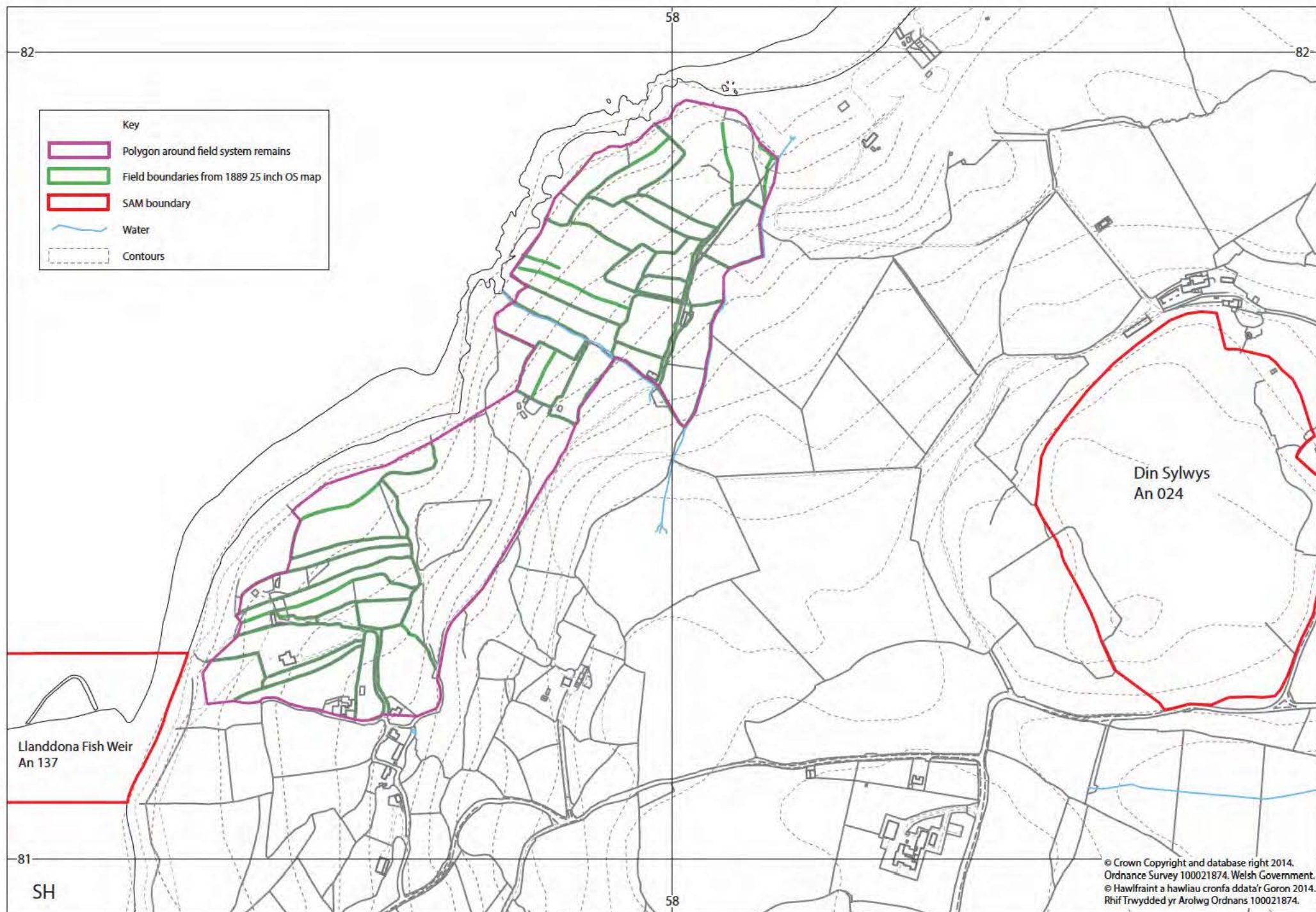


Figure 7. Enclosed strip fields (PRN 59869), near Llanddona

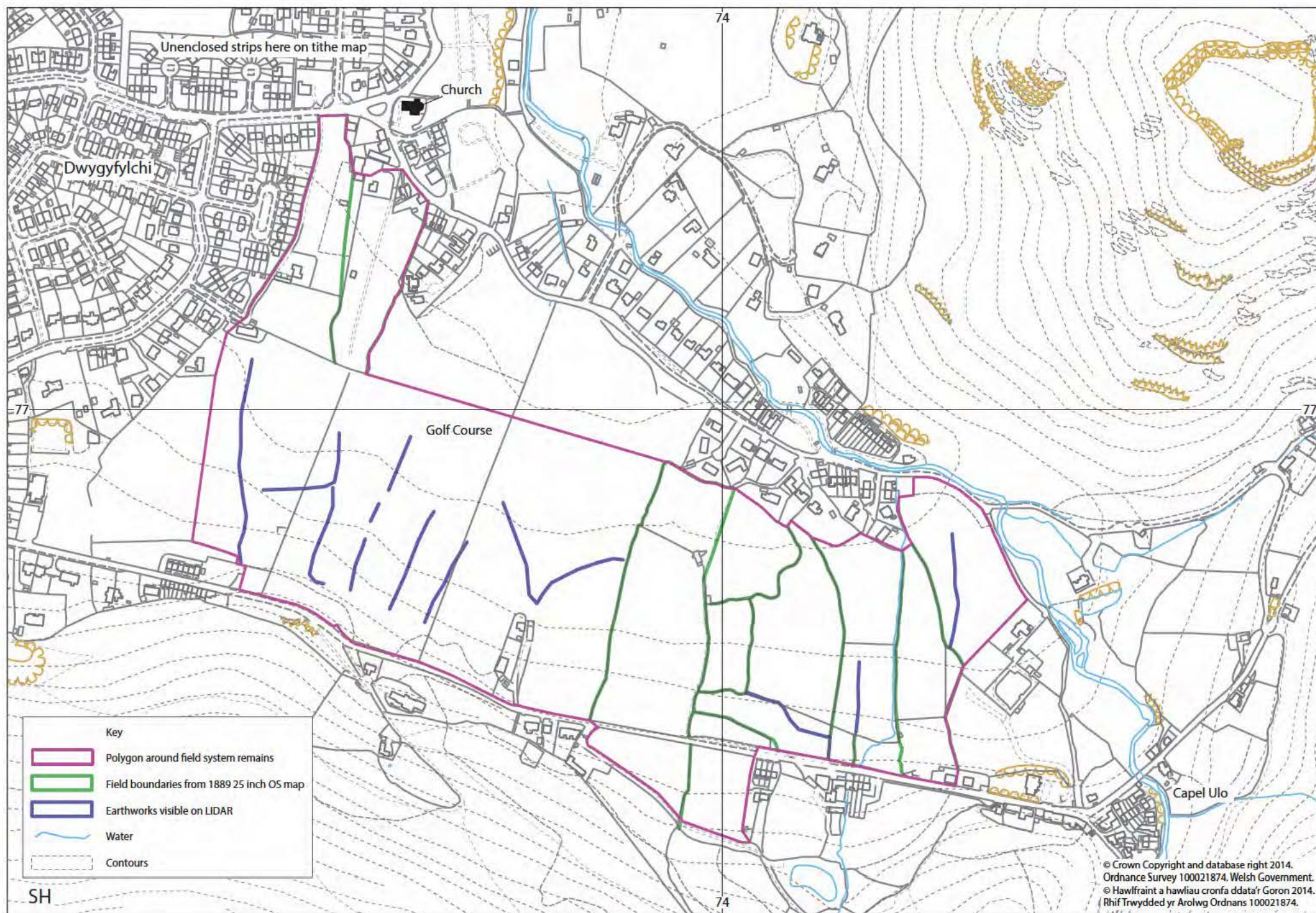


Figure 8. Enclosed strip fields and surviving earthwork furlong boundaries (PRN 59903), Dwygyfylchi

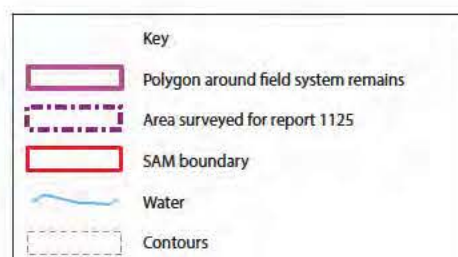
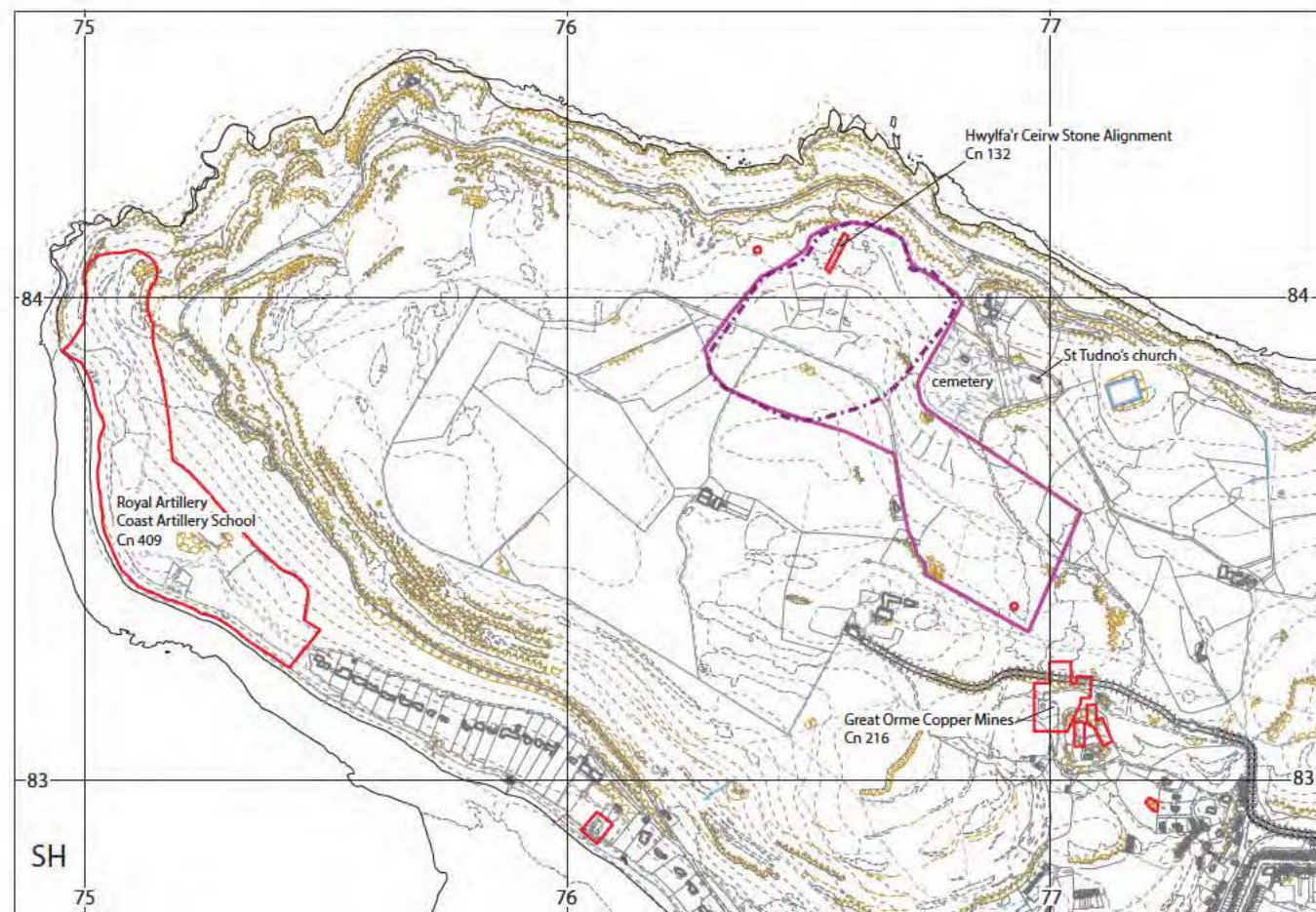


Figure 10. Hwylfa'r Ceirw Field System: transcription of aerial photographs and topographic survey (from Hopewell 2013, fig 9, GAT report 1125) with inset showing location on the Great Orme

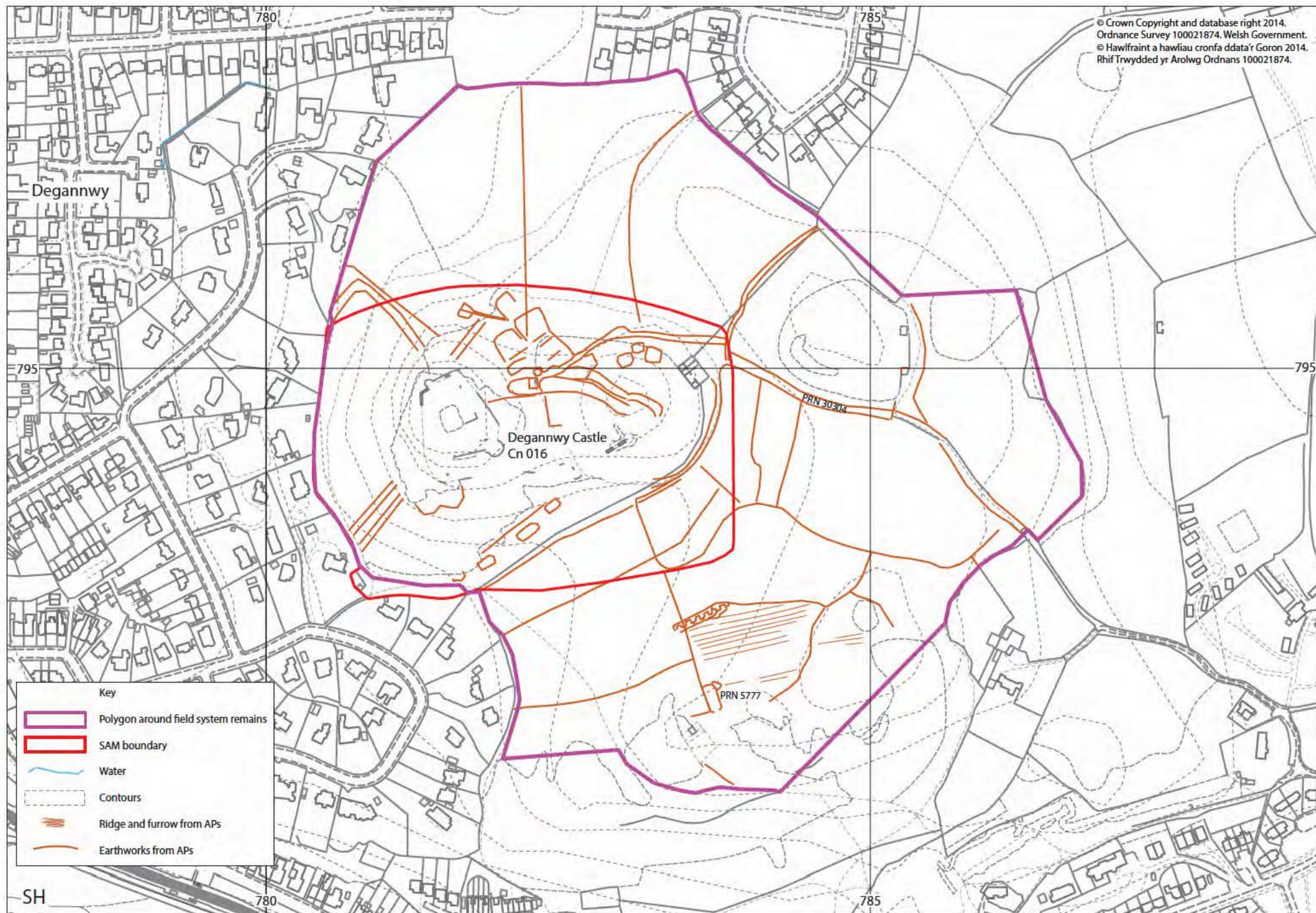


Figure 11. Field system around Degannwy Castle (PRN 59895)

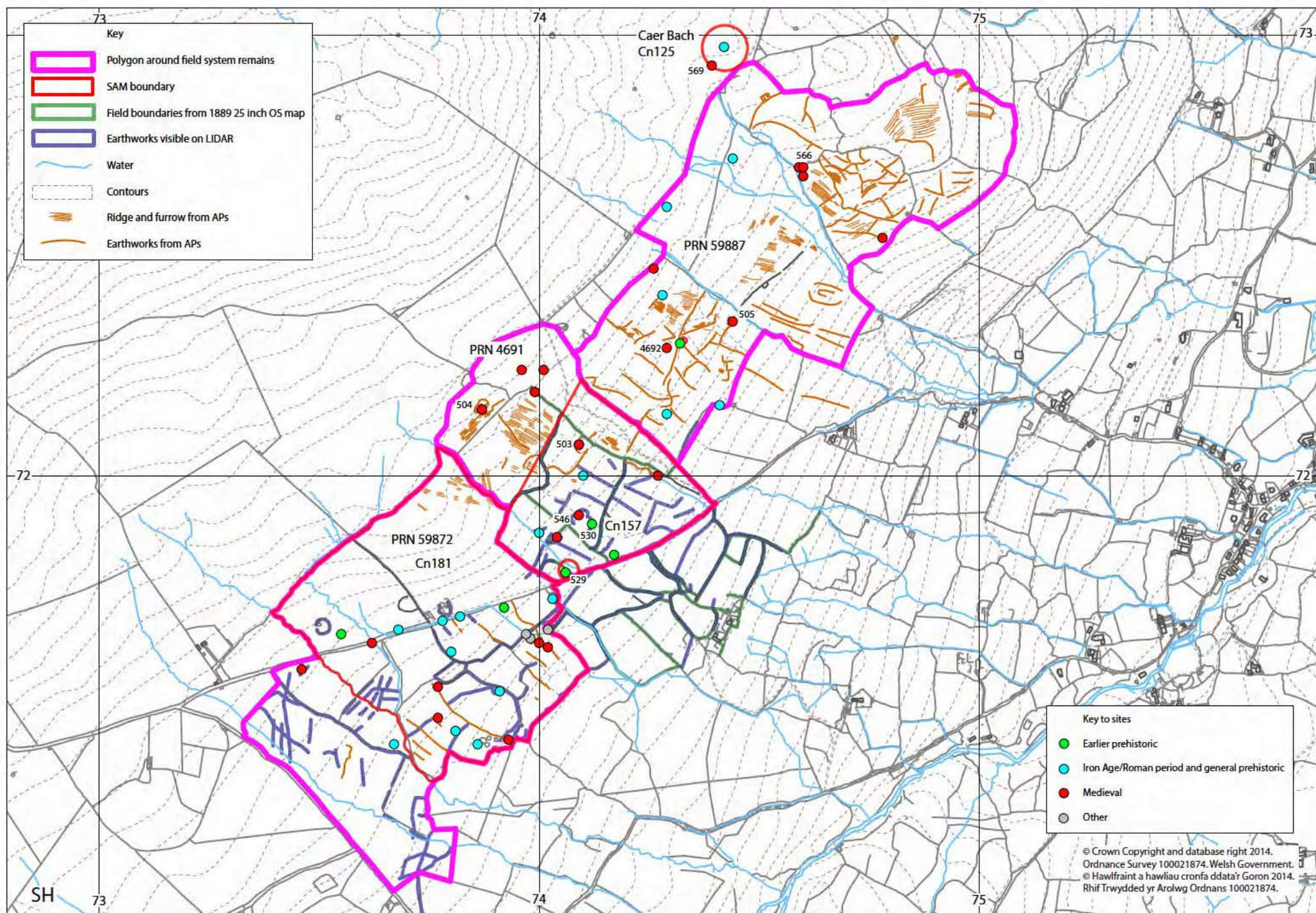


Figure 12. Field systems near Maen y Bardd, Conwy Valley (PRNs 4691, 59872 and 59887), showing HER sites within the studied areas

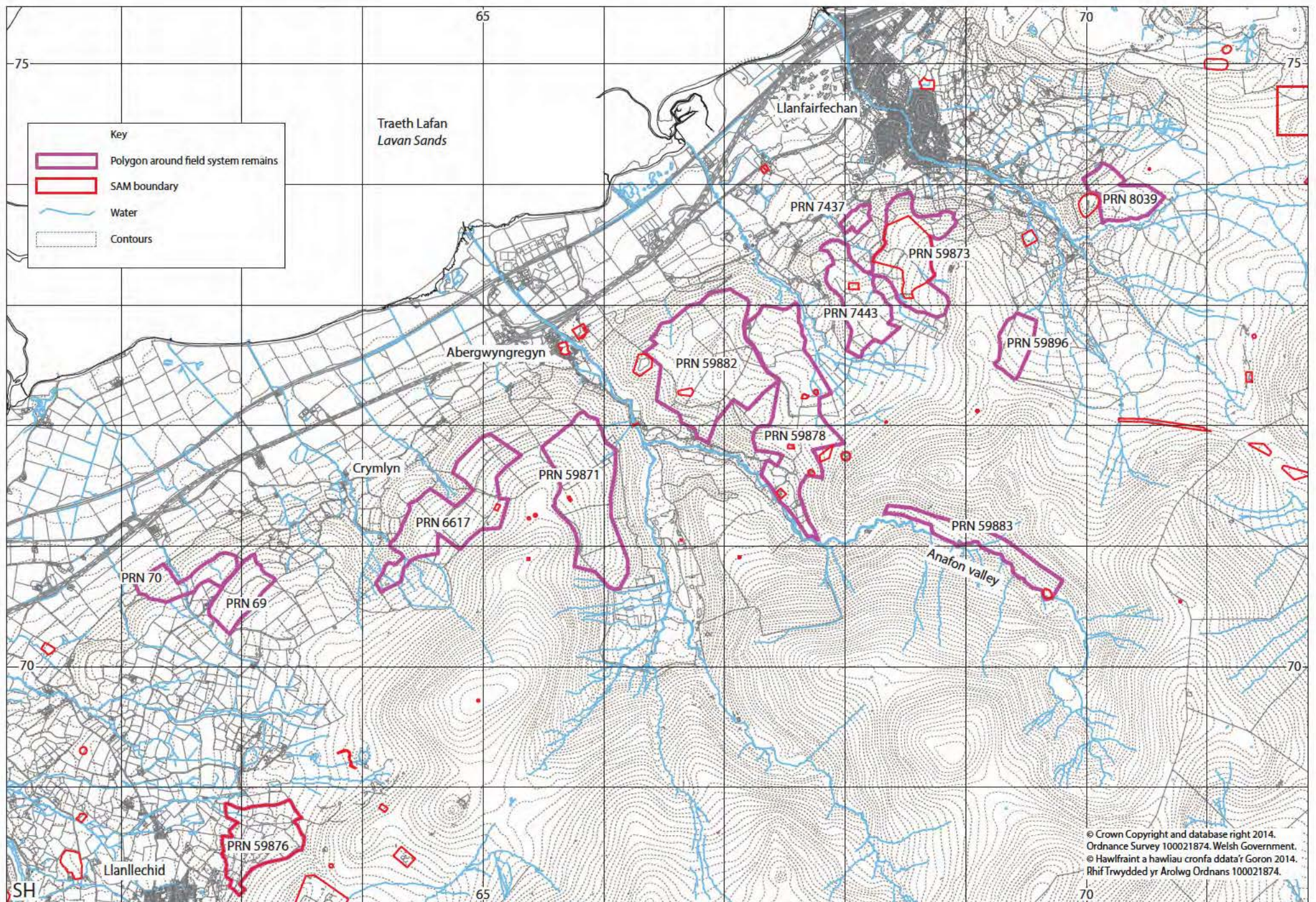


Figure 13. Field systems along the north-western side of the Carneddau

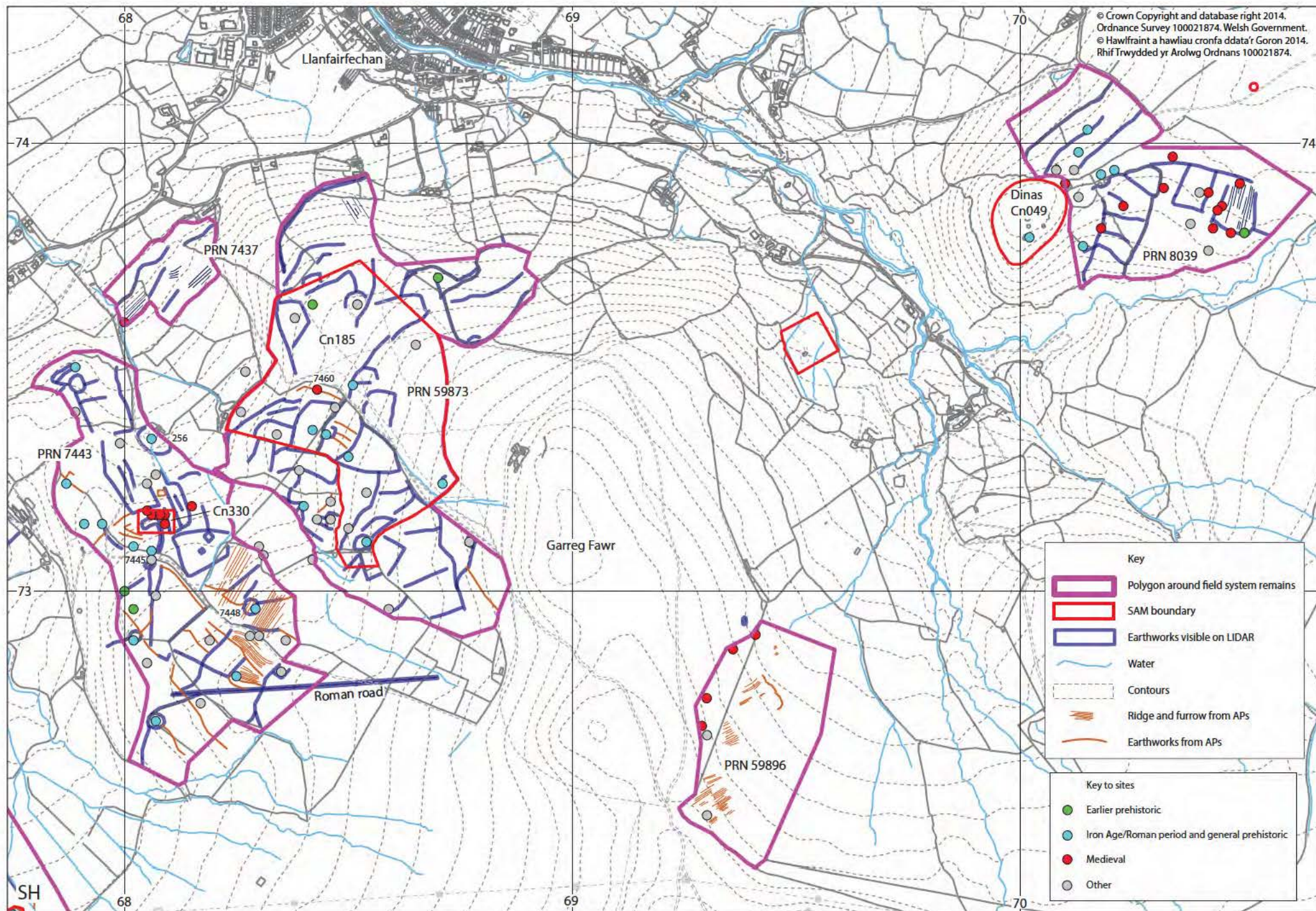
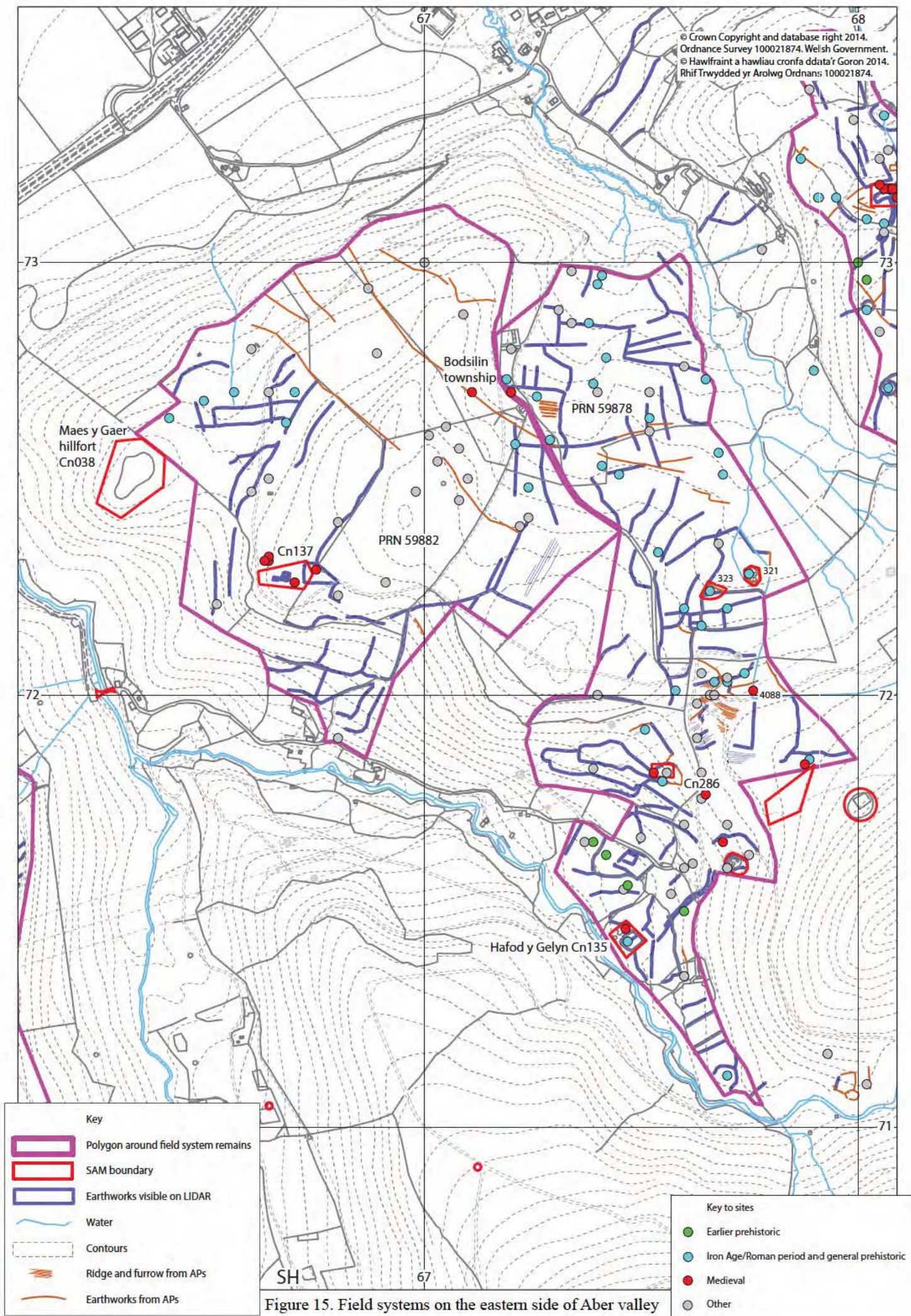


Figure 14. Field systems around Llanfairfechan with features transcribed from LIDAR and aerial photographs and sites from the HER



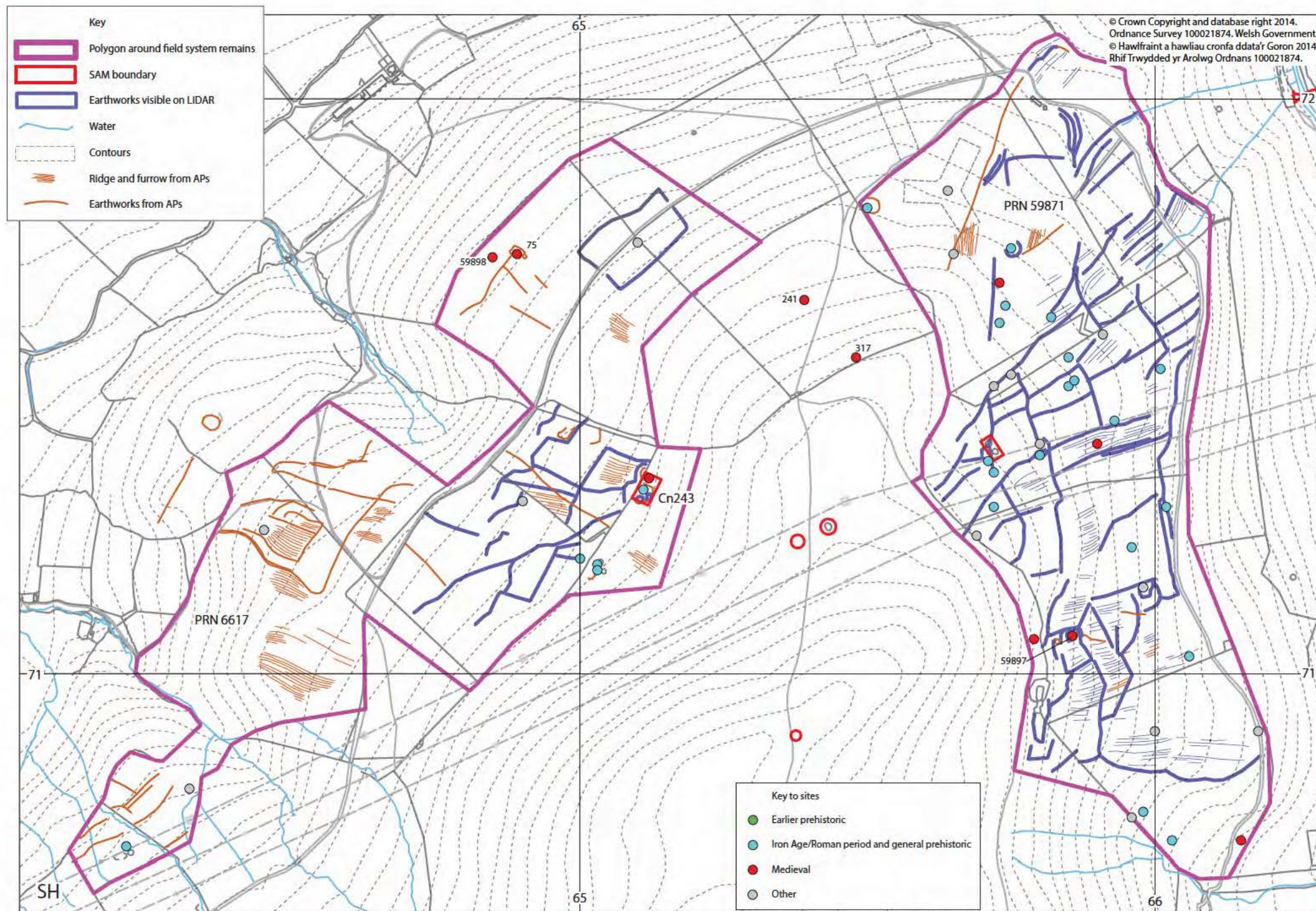


Figure 16. Field systems on the west side of the Aber valley and above Crymlyn

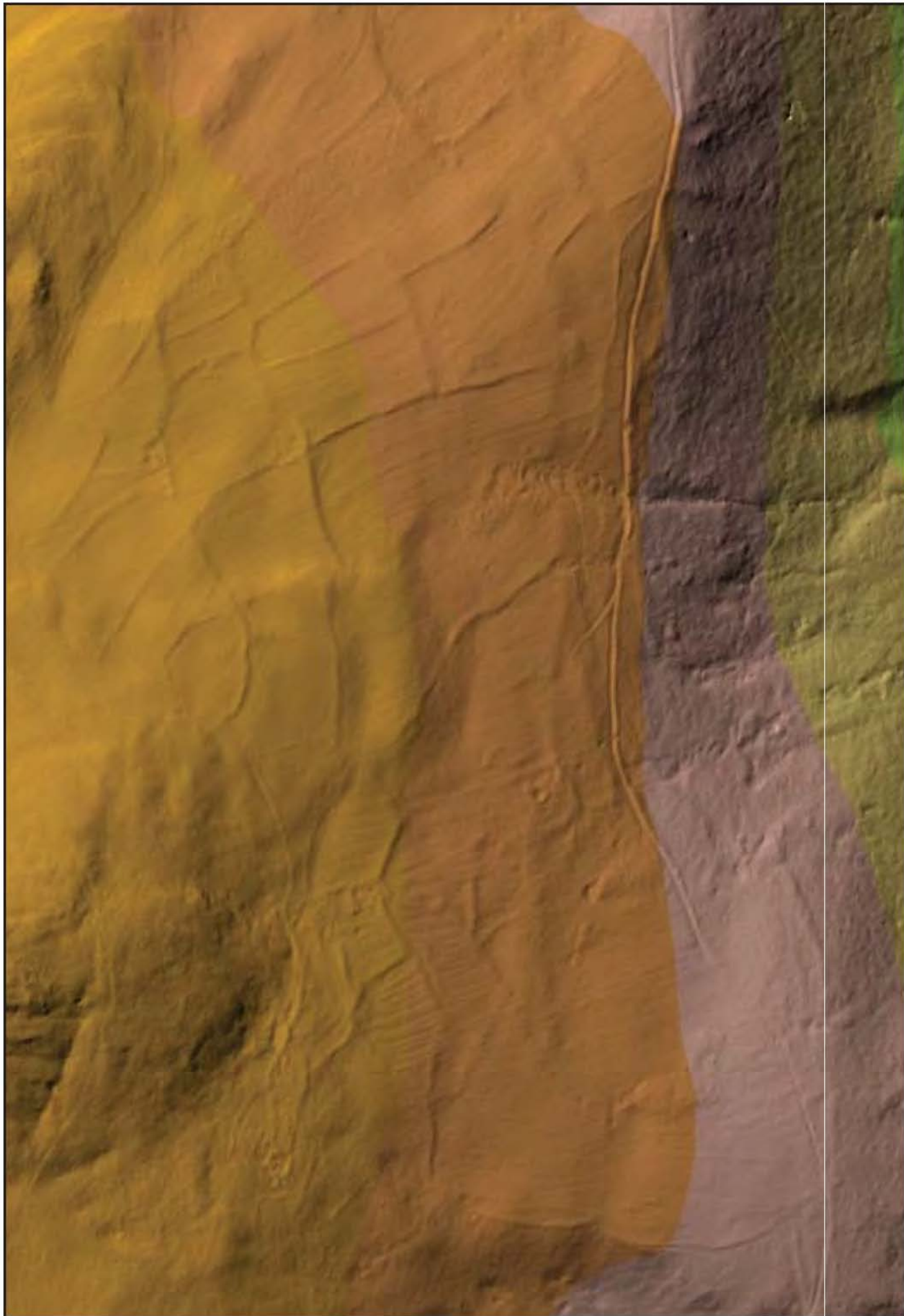
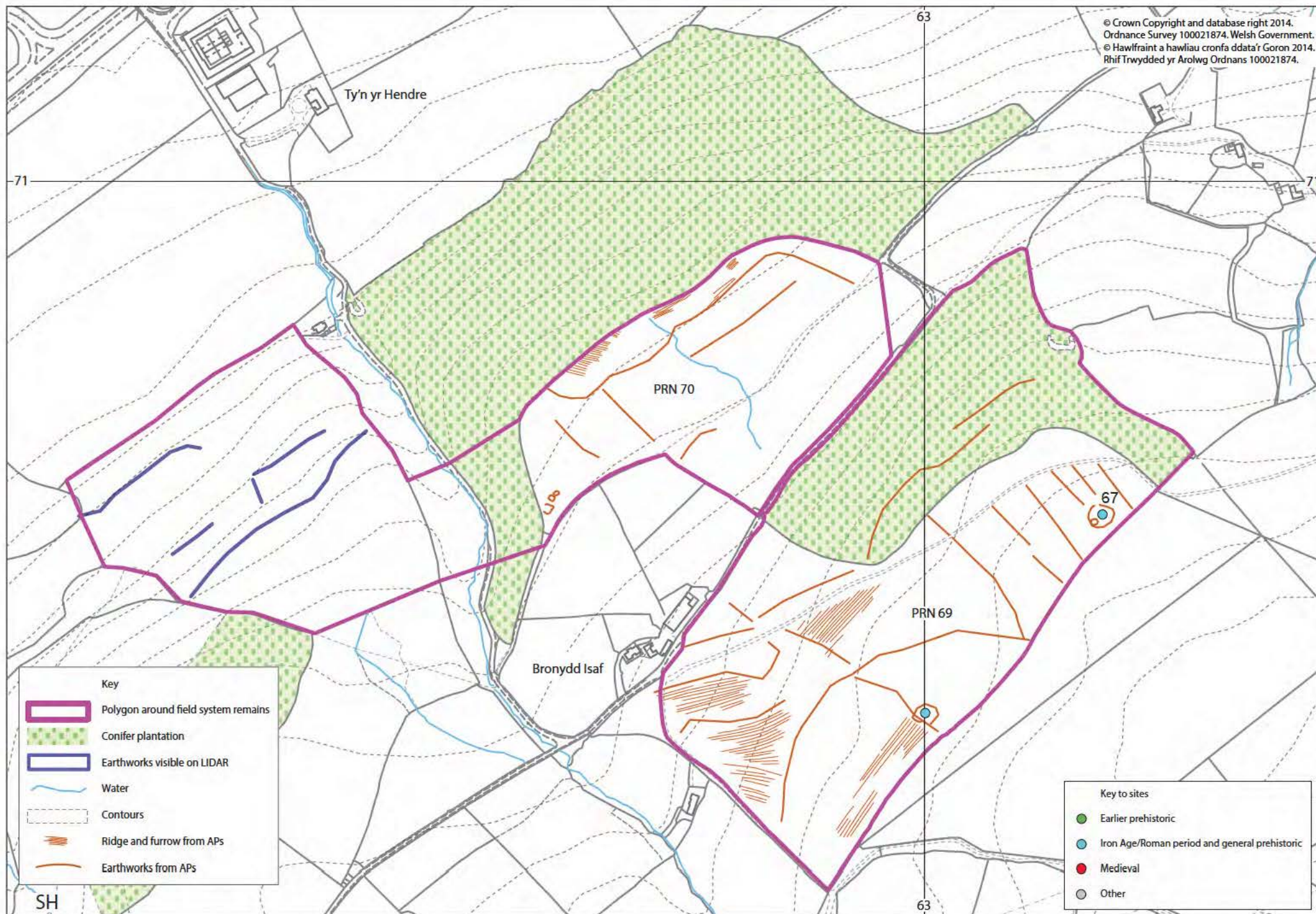


Figure 17. Lidar data for field system on western side of Aber valley (PRN 59871) © Environment Agency 2015



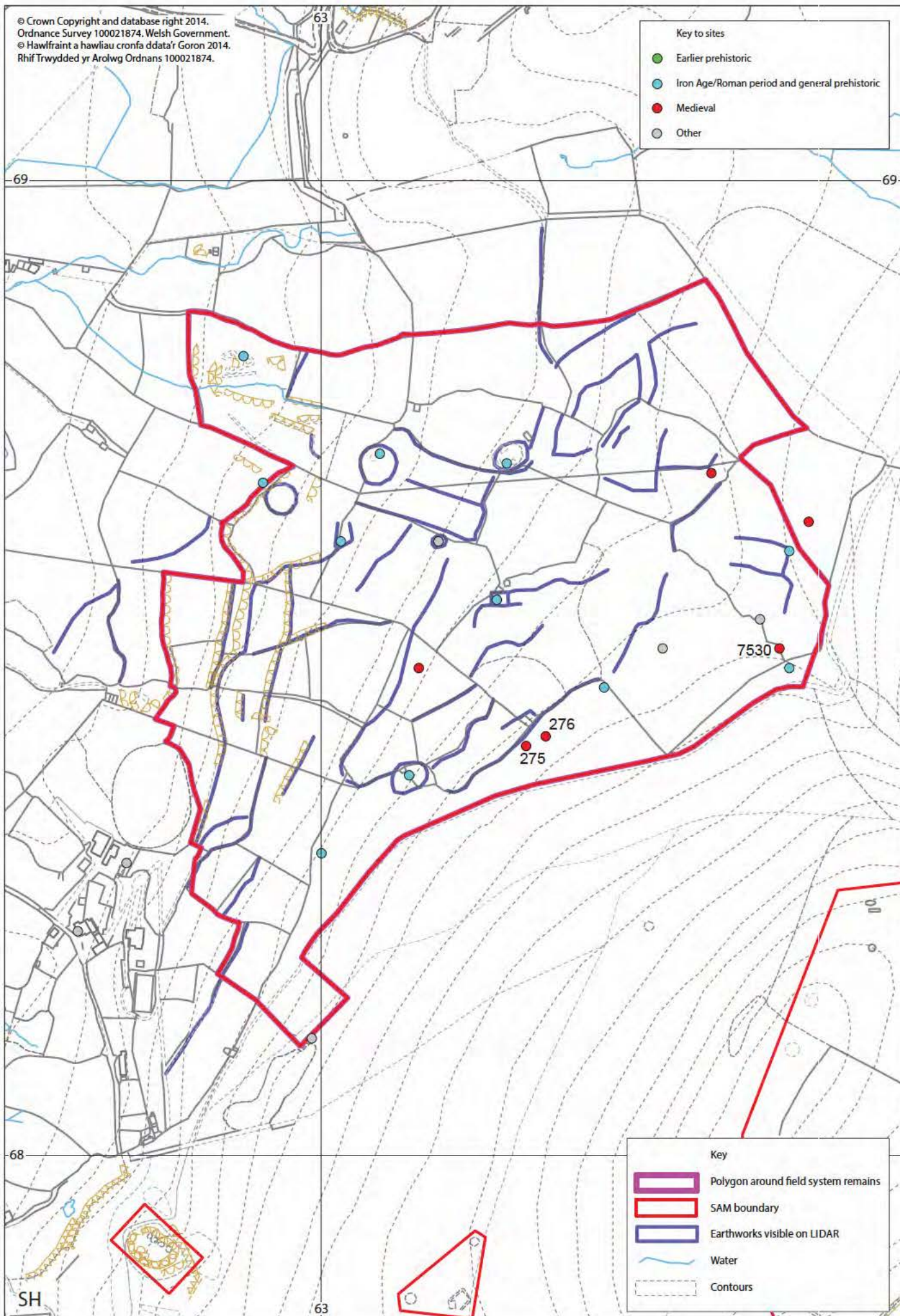


Figure 19. Field system (PRN 59876), east of Llanllechid (SAM Cn 121)

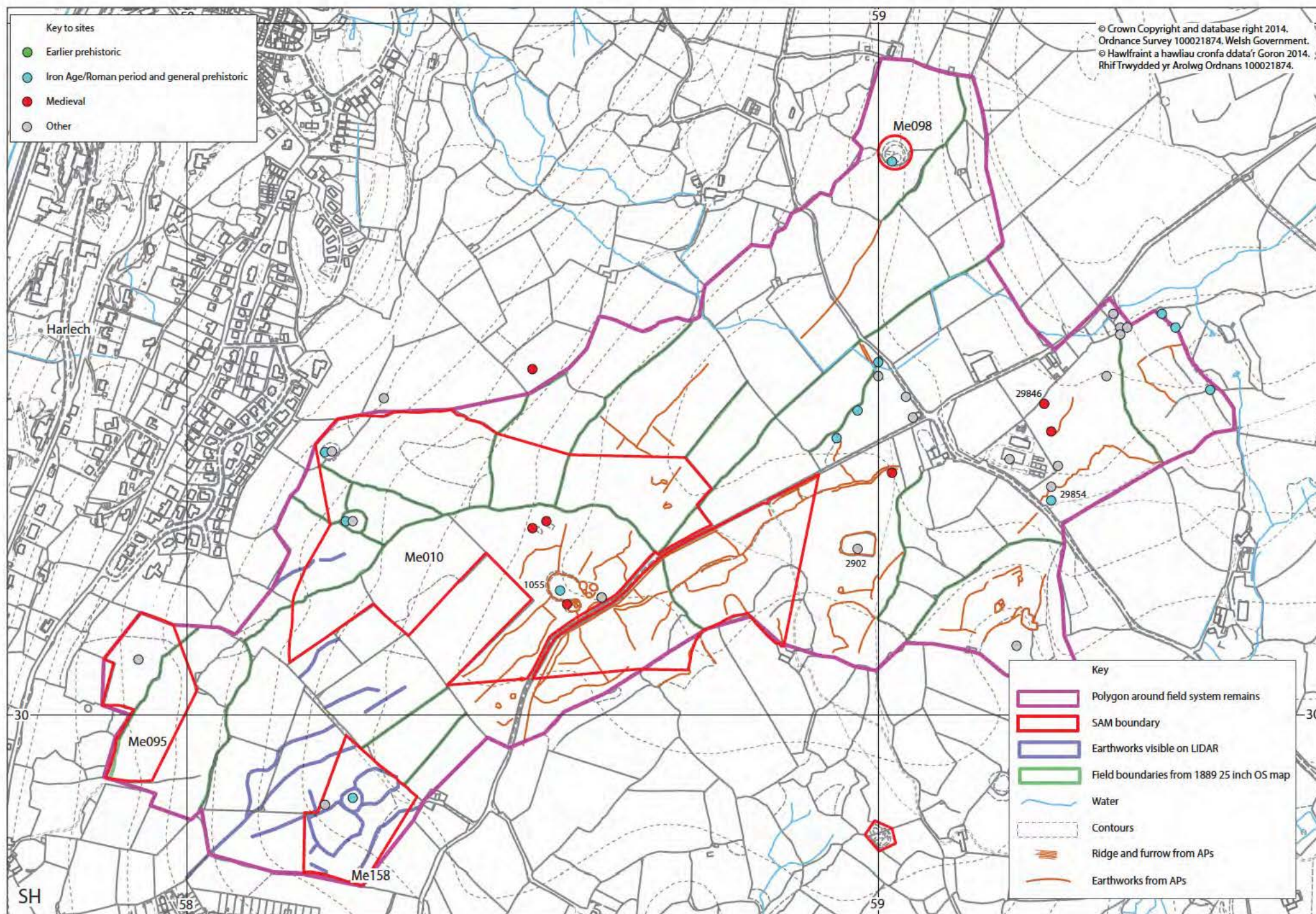


Figure 20. Field system (PRN 59879) around Muriau Gwyddelod

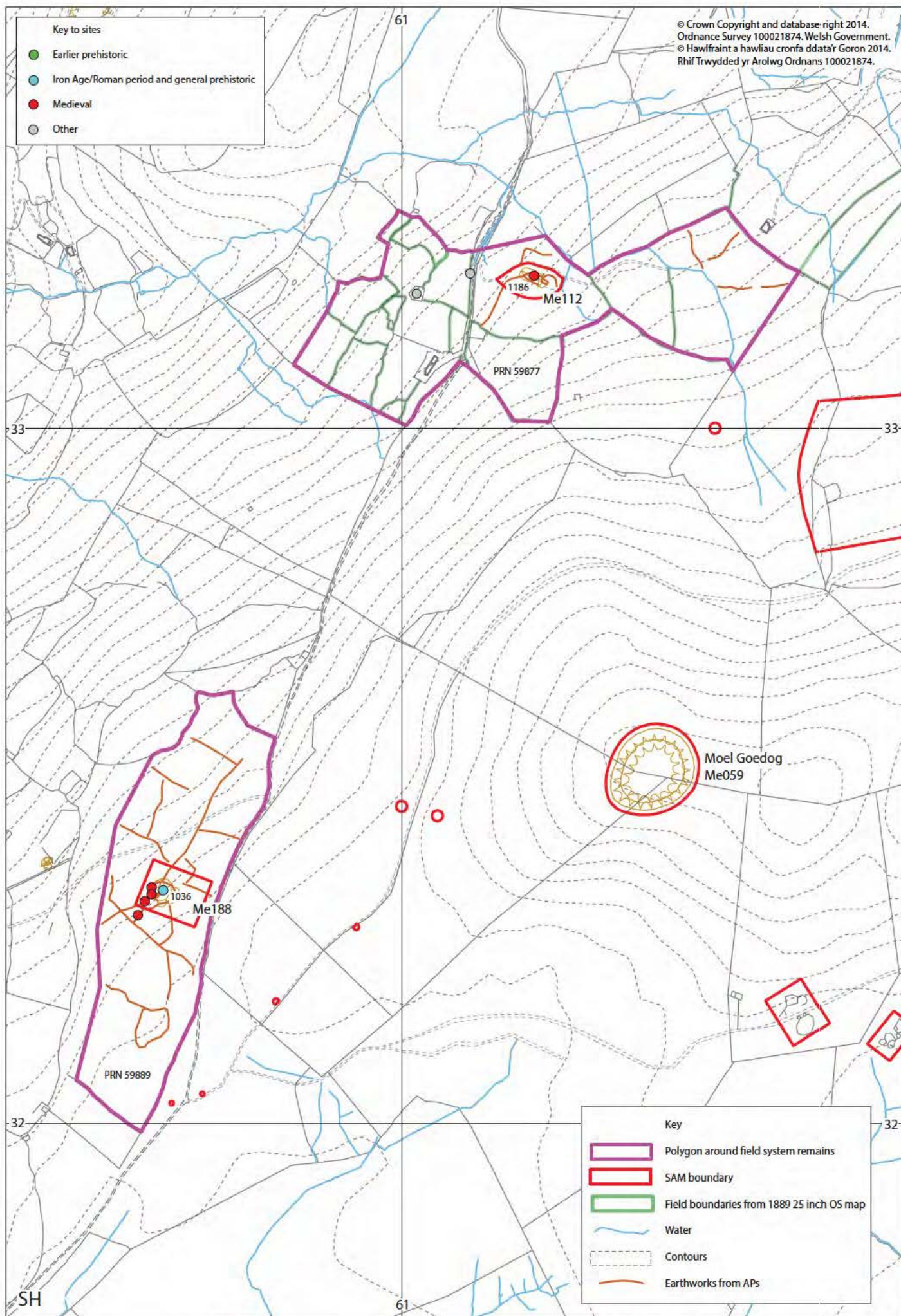


Figure 21. Field systems around Erw Wen (PRN 59889) and Llidiart Garw (PRN 59877)

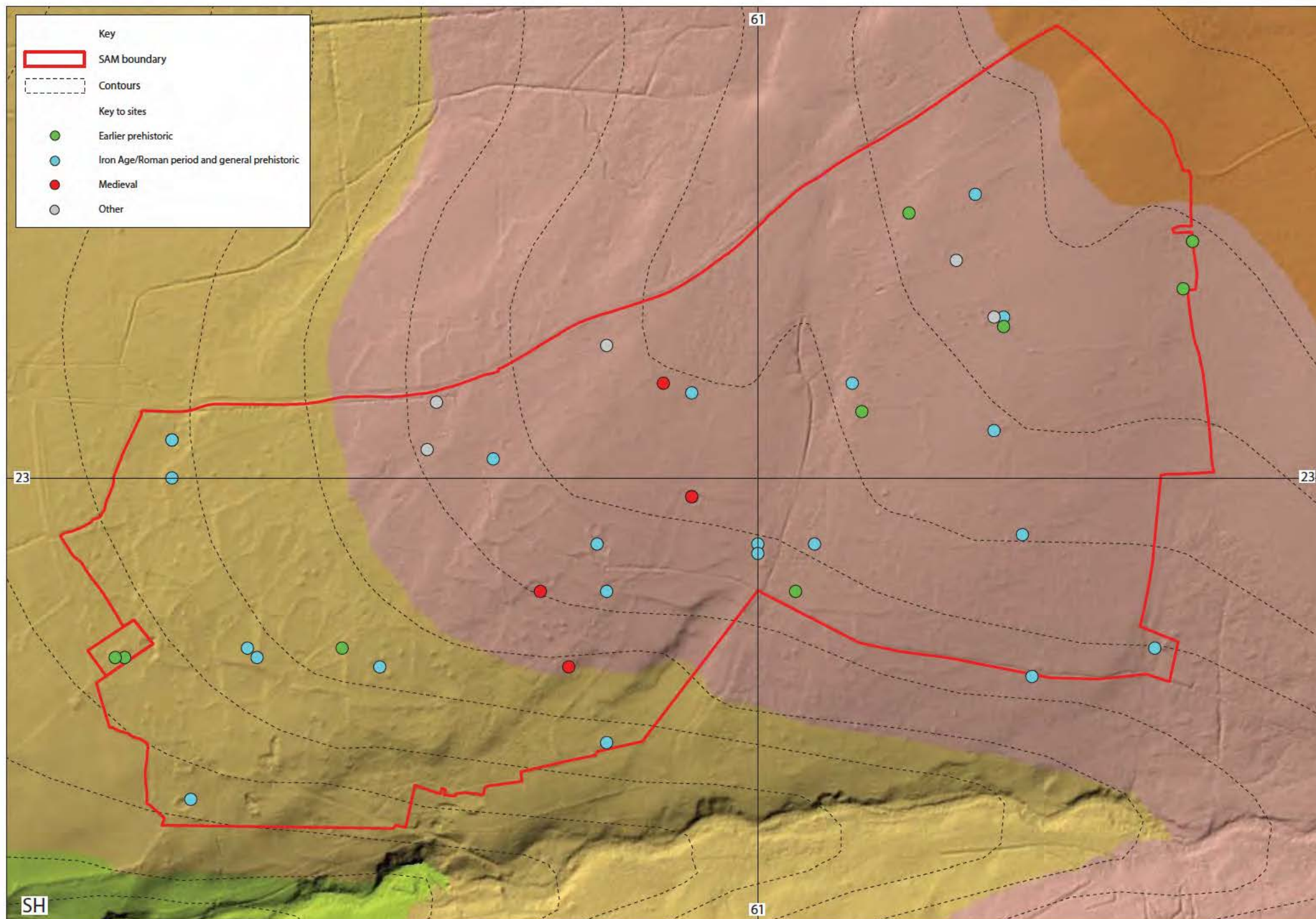


Figure 22. Lidar data for field system at Cors y Gedol (PRN 59874, SAM Me128) © Environment Agency 2015 with sites on HER

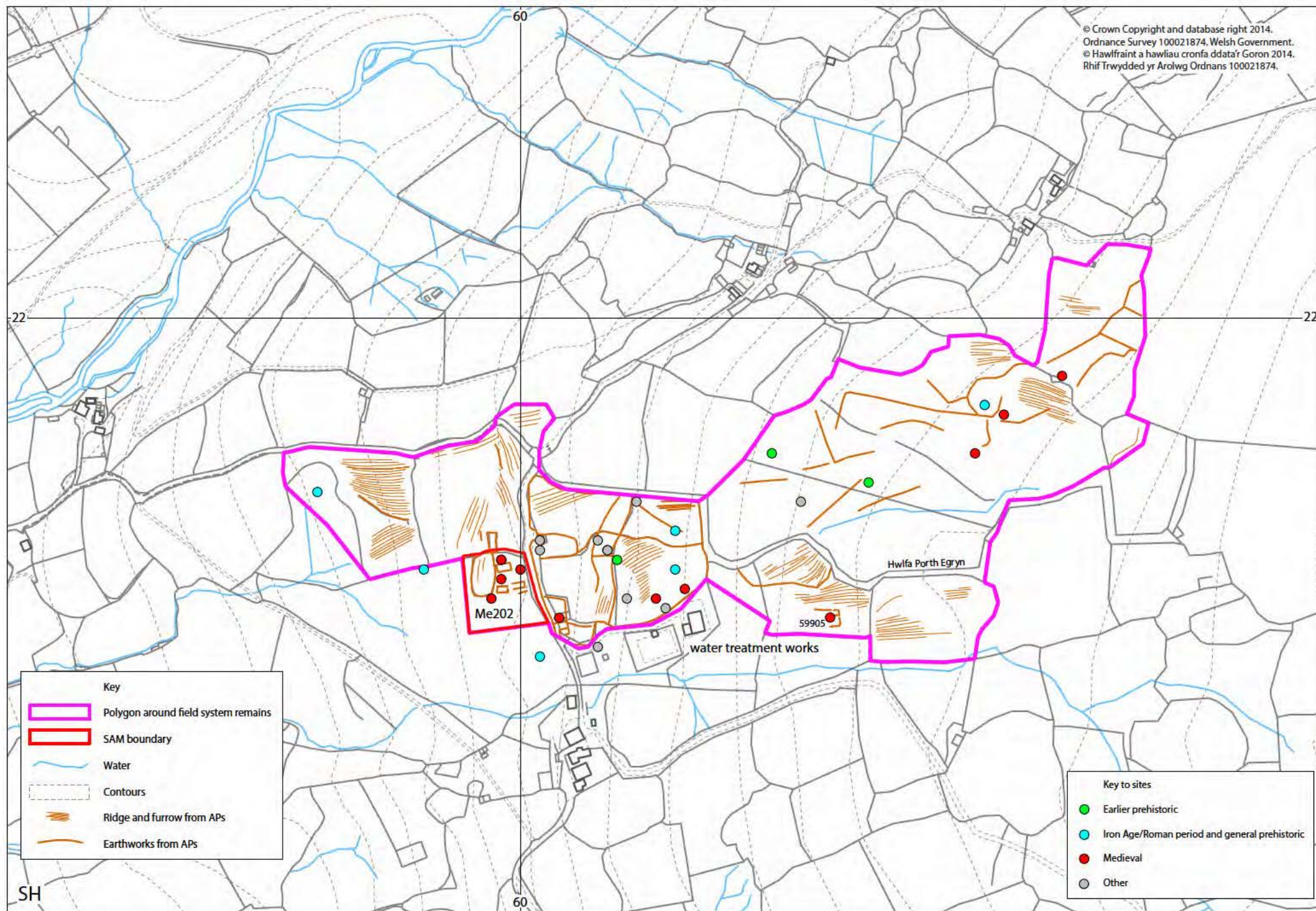


Figure 23. Field system near Eithin Fynydd Water Treatment Works (PRN 59891)

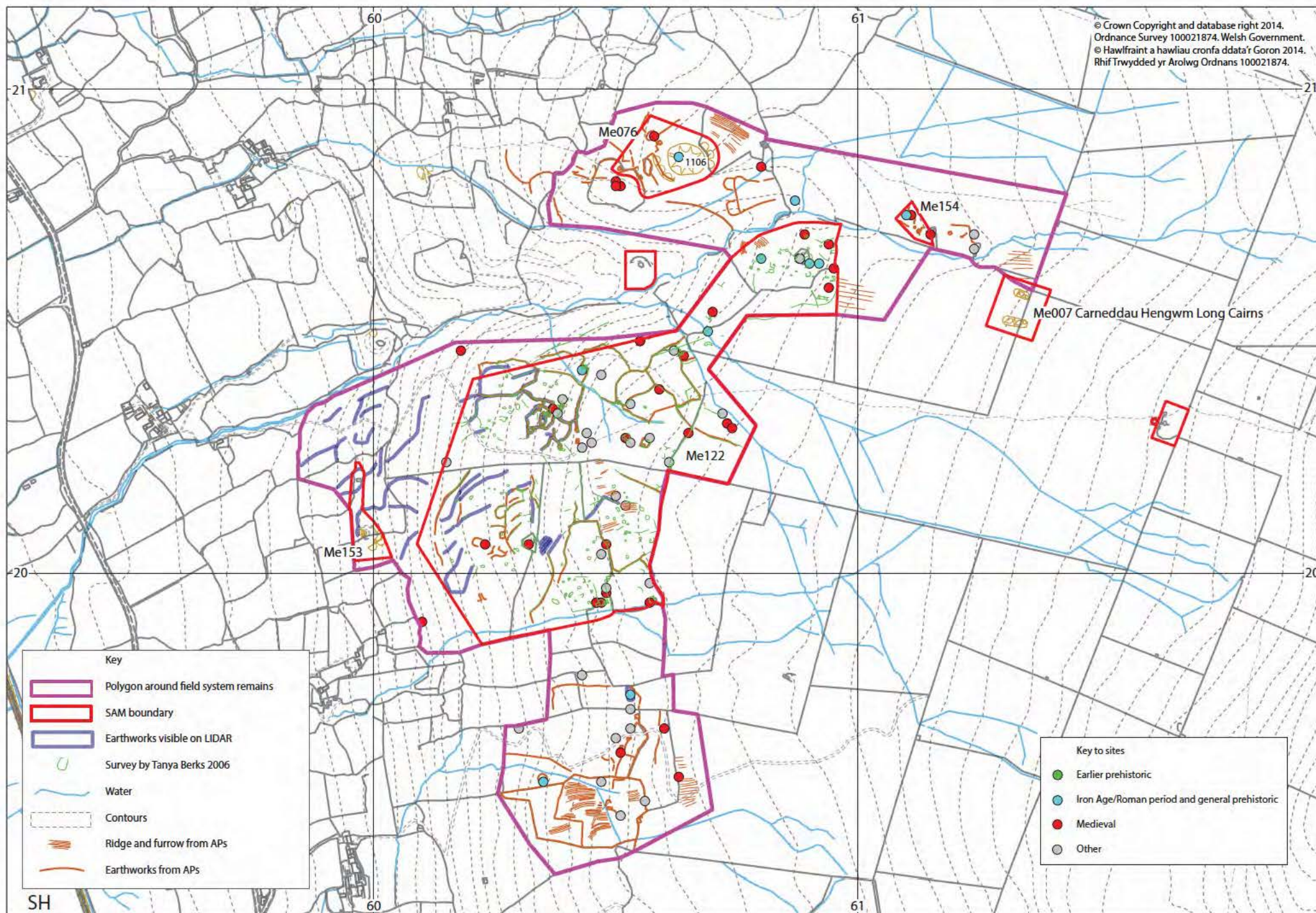


Figure 24. Field system on Mynydd Egryn (PRN 59866)

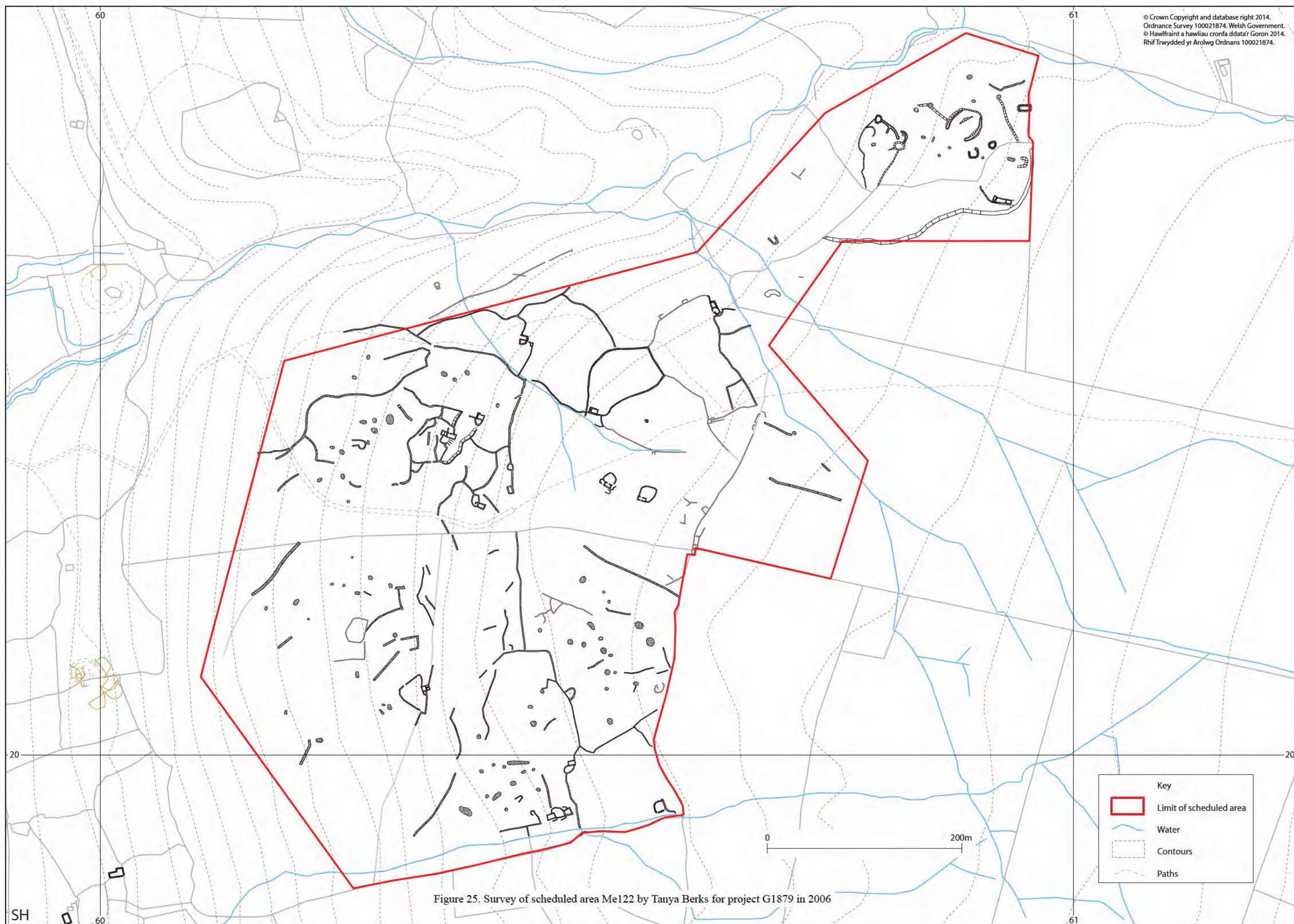
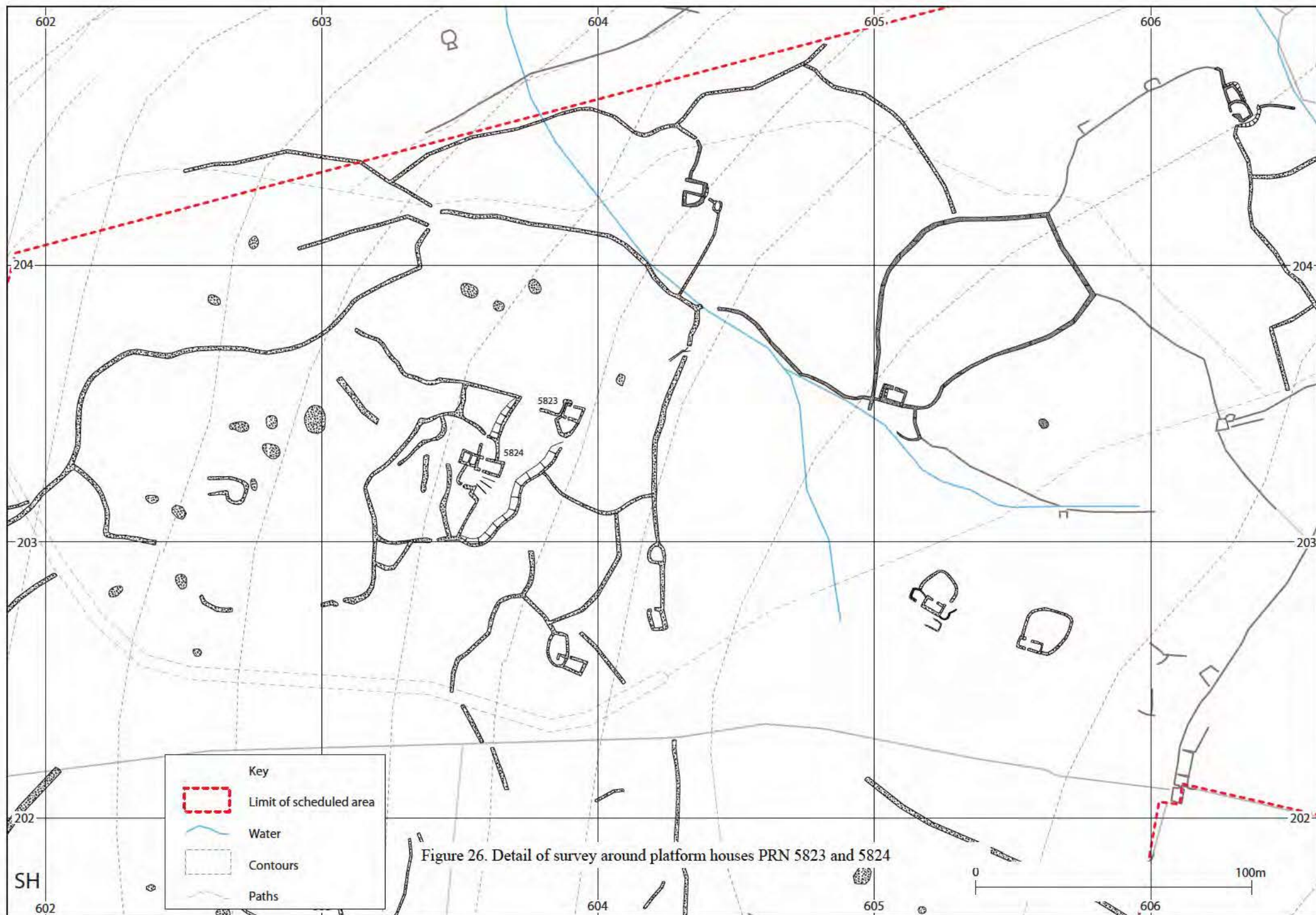


Figure 25. Survey of scheduled area Me122 by Tanya Berks for project G1879 in 2006



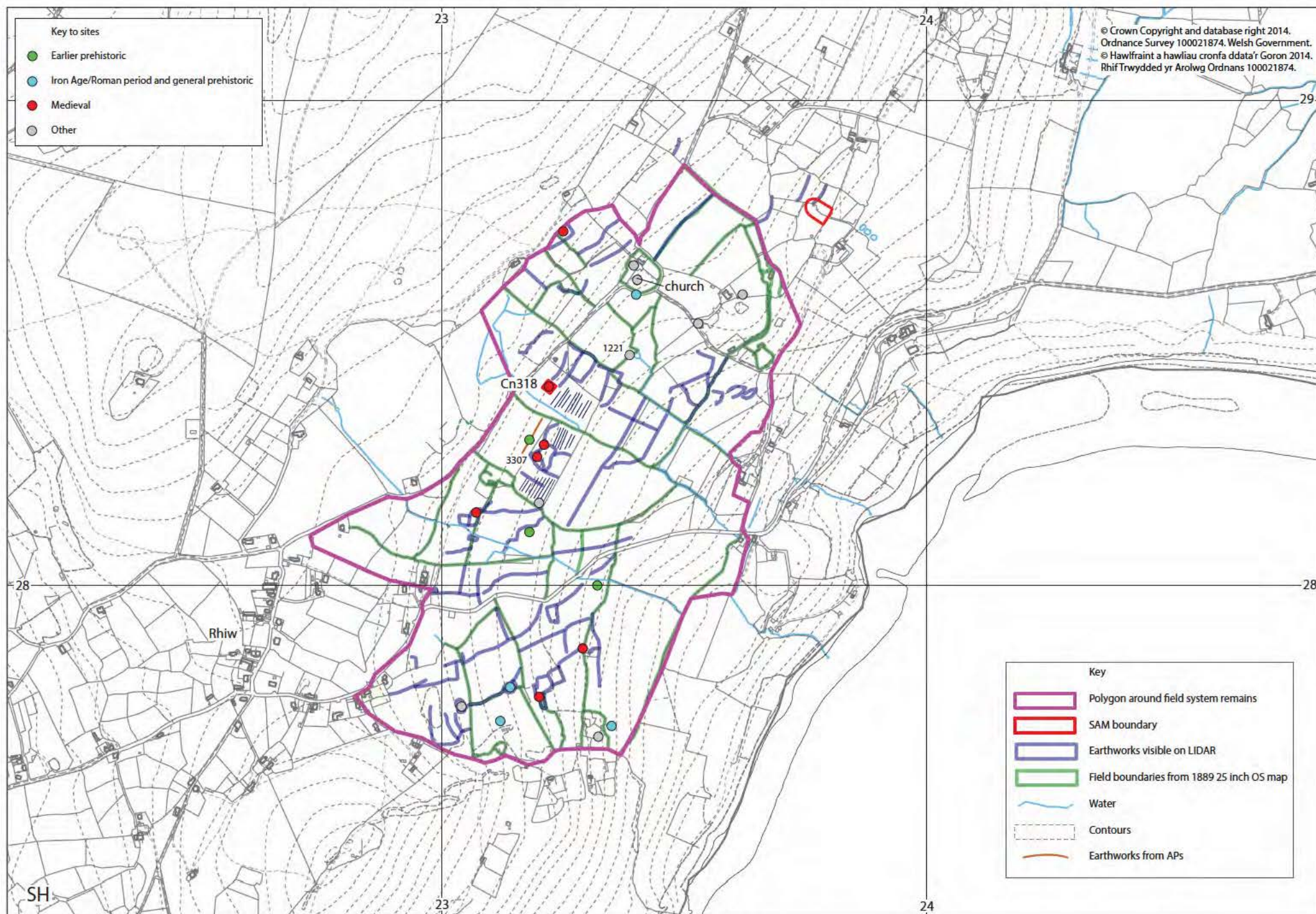


Figure 27. Field system (PRN 59880) at Rhiw

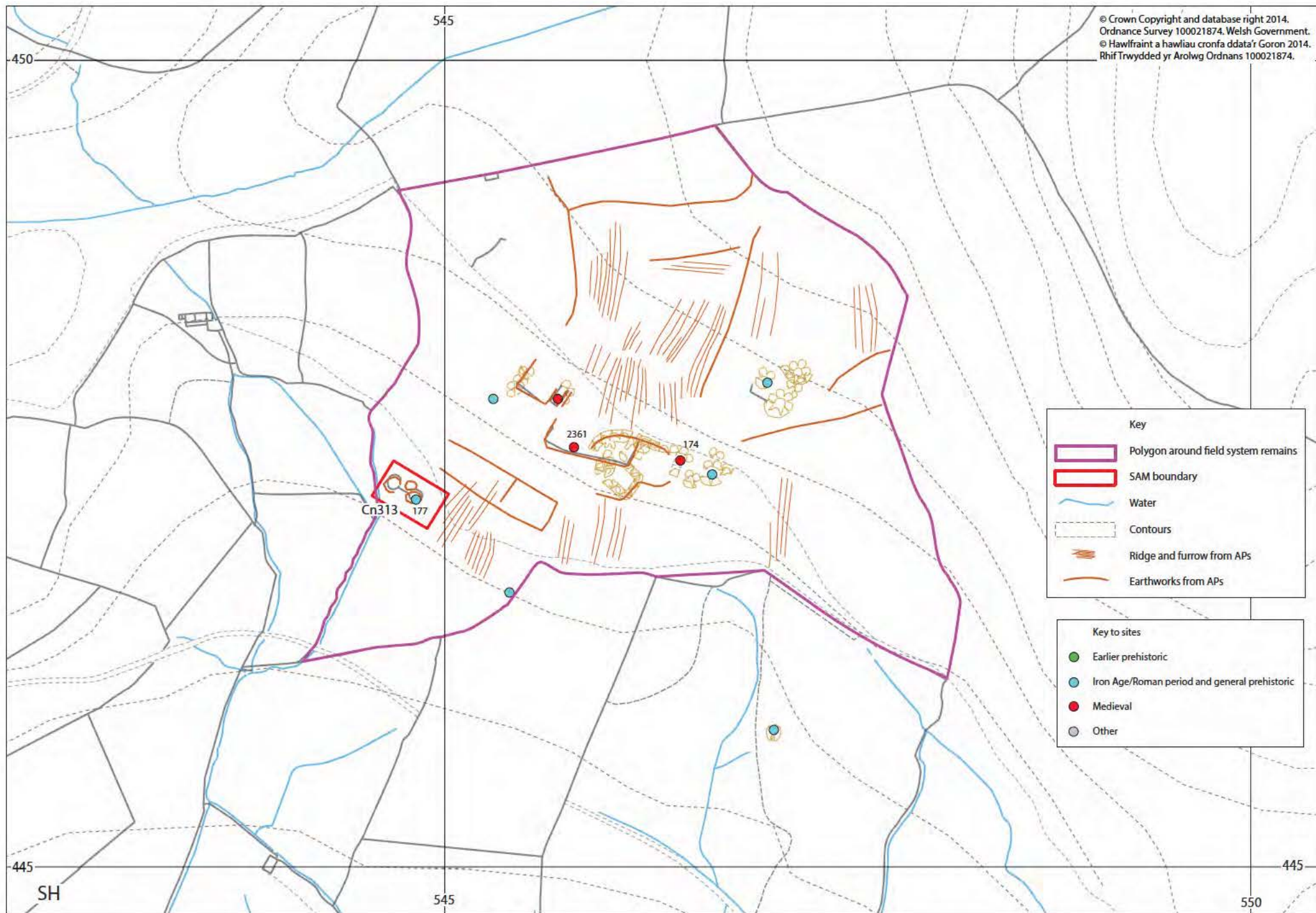


Figure 28. Field system (PRN 59870) at Cae Fadog Uchaf

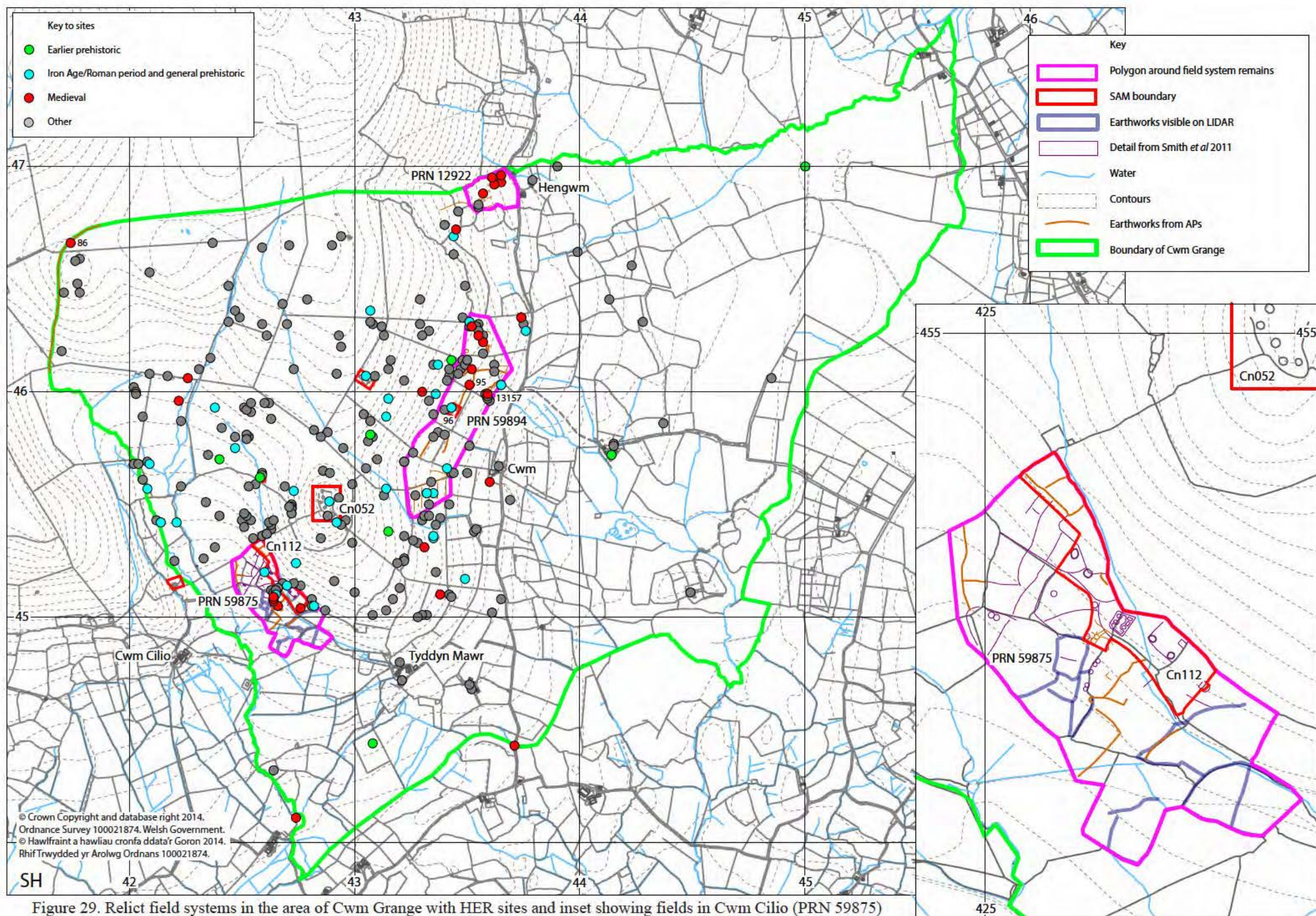


Figure 29. Relict field systems in the area of Cwm Grange with HER sites and inset showing fields in Cwm Cilio (PRN 59875)

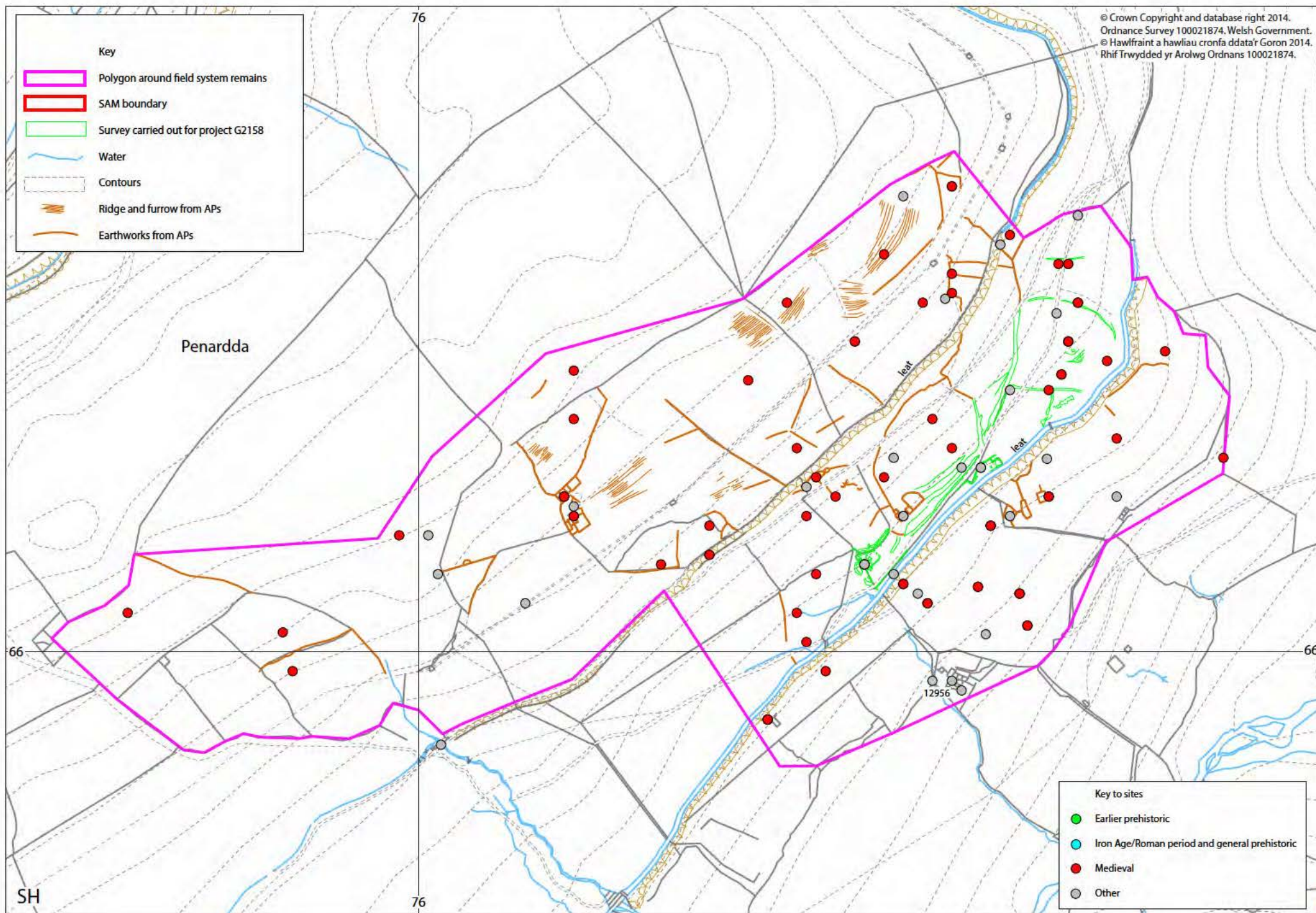


Figure 30. Field system (PRN 6146) associated with Ardda township



Plate 1. 1978 aerial photograph of Morfa Nefyn showing enclosed strip fields
(Lib No 7820, sortie BKS, frame 2733071, date 09/08/1978, © Welsh Government)



Plate 2. Oblique aerial photograph of Nefyn (AP_2006_4060)
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Plate 3. Oblique aerial photograph of Uwchmynydd showing enclosed strip fields (AP_2006_0542)
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Plate 4. Field system PRN 3631 around site of St Mary's Church, Uwchmynydd



Plate 5. Ridge and furrow PRN 4532
at north end of Ynys Enlli



Plate 6. Oblique aerial photograph of area of ridge and furrow (PRN 81) with farmstead earthworks near Llangristiolus, Anglesey (AP_2005_0296)

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Plate 7. Enclosed strip
fields (PRN 59869) on
the coast at Llanddona



Plate 8. Ridge and furrow (PRN 839) on the Great Orme (CPE/UK/1939/4218 20th January 1947)



Plate 9. Oblique aerial photograph of field system on Great Orme (GAT ref no. 26367409555; SAM flight no G100/86/02/17)



Plate 10. Part of air photograph showing field system around Degannwy Castle
(CPE UK 1939, frame 4222, date 20/01/1947 (© Welsh Government))



Plate 11. Ridge and furrow around roundhouse settlement PRN 1604 (GAT ref. no. 26365831234, date 17/12/2001)



Plate 12. Terraced fields near Maen y Bardd (PRN 4691)



Plate 13. Terraced field near Maen y Bardd (PRN 546)

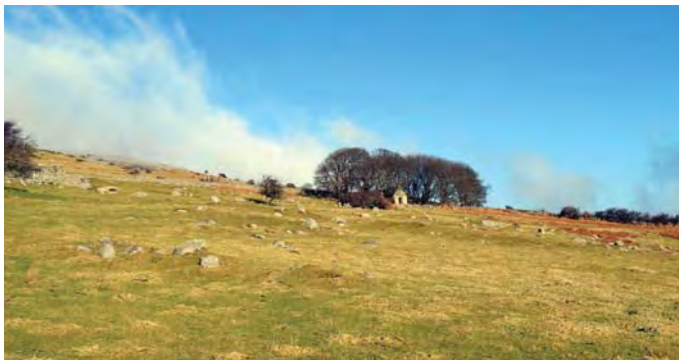


Plate 14 Terraced fields near Tyddyn Du (PRN 59872)



Plate 15 Terraced fields (PRN 59887) south-east of Caer Bach

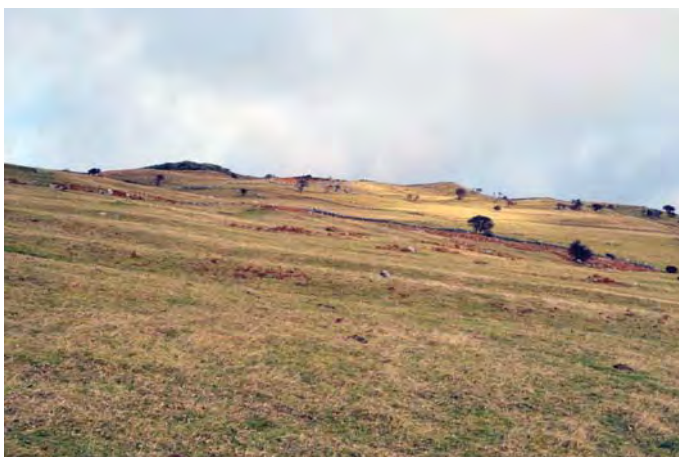


Plate 16 Terraced fields (PRN 59887) south of Caer Bach



Plate 17. Oblique aerial photograph of field system at Caer'r Haidd (AP_2005_2848)
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Plate 18. Ridge and furrow on Ffridd Newydd (PRN 59896)



Plate 19. Terraced fields (PRN 59878) on eastern side of Aber/Anafon valley (AP_2005_2858)
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 © Hawlfraint y Goron: Comisiwn Brenhinol Henebion Cymru



Plate 20. Denuded field boundaries (PRN 59878)



Plate 21. Terraced fields in woodland (PRN 59882)



Plate 22. Boundary of enclosure (PRN 3889) in Anafon valley



Plate 23. Bank boundary above Aber (PRN 59871)



Plate 24. Bank boundary above Aber (PRN 59871)



Plate 25. Ridge and furrow near farmstead (PRN 59897)



Plate 26. Oblique aerial photograph of field boundaries and ridge and furrow on Ffridd Ddu (AP_2005_2868)
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 © Hawlfraint y Goron: Comisiwn Brenhinol Henebion Cymru



Plate 27. Oblique aerial photograph of ridge and furrow on Ffridd Ddu (David Longley)



Plate 28. Oblique aerial photograph of terraced fields (PRNs 69 and 70) around Bronydd Isaf (AP_2005_2878)

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Plate 29. Aerial photograph of field system (PRN 59879) around Muriau Gwyddelod (date 1971)



Plate 30. Aerial photograph of field system (PRN 59889) around the excavated site at Erw Wen (GAT ref no. 26365772552, date May 1987)



Plate 31. Aerial photograph of Llidiart Garw Platform House (PRN 1186) with field system (PRN 59877) (GAT ref no. 26368193981, SAM flight no. G100/91/25/25)



Plate 32. Aerial photograph of field system (PRN 59874) at Gors y Gedol (GAT ref no. 26368662311)



Plate 33. Aerial photograph of field system (PRN 59891) around Eithin Fynydd, Tal y Bont (Lib No. 8606, sortie J A Story, frame 68_86_0019, date 01/10/1986, © Welsh Government)

Plate 34. Field boundary and ridge and furrow on Mynydd Egryn (PRN 59866)



Plate 35. Field system (PRN 59866) around Pen y Dinas (PRN 1106) (GAT ref no. 26368119657, date 13/03/1995)



Plate 36. Oblique aerial photograph of relict field systems at Rhiw (AP_2007_2942)
 © Crown copyright: Royal Commission on the Ancient and Historical Monuments of Wales
 © Hawlfraint y Goron: Comisiwn Brenhinol Henebion Cymru



Plate 37. Aerial photograph of relict field systems at Caer Fadog Uchaf
 (Library No. 8606, sortie J A Story, frame 52 86 0008, date 01/10/1986)



Plate 38. Field system at Cwm Cilio (PRN 59875)
 (aerial photograph obtained from RCAHMW for project G2077) (AP_2007_0245)
 © Crown copyright: Royal Commission on the Ancient and Historical Monuments of Wales
 © Hawlfraint y Goron: Comisiwn Brenhinol Henebion Cymru



Plate 39. Possible farmstead (PRN 59907)
 in Ardda township



Plate 40. High terraced boundaries
 in Ardda township



Plate 41. Ploughing and stone removal near Moel Goedog in August 2012

Plate 42. Well-built recent field clearance cairn near Eithin Fynydd, Tal y Bont



Plate 43. Recent field clearance cairns near Eithin Fynydd, Tal y Bont, including very large boulders

Plate 44. Recent field clearance cairn on Ffridd Ddu near Aber





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