The Burnt Mounds of Dyfed:
The 1997-8 Archaeological Assessment Survey

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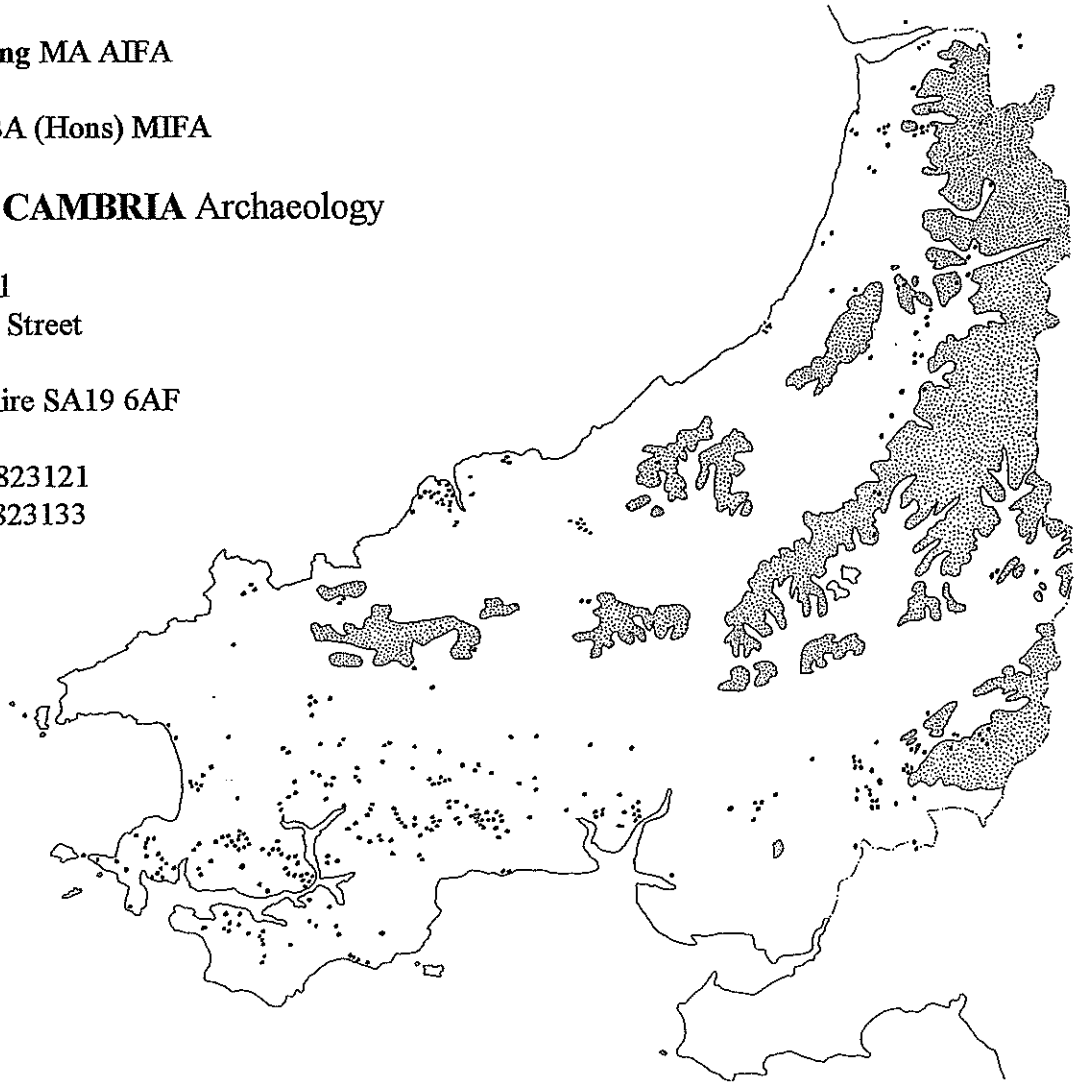

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SUMMARY

The 1997-8 survey assessed a total of 251 burnt mound sites, of which at least 89 could be demonstrated to be genuine burnt mounds. The remaining 167 sites were not available for assessment: either destroyed; inaccessible; borderline sites or simply not found. A total of 35 sites were assessed as either natural mounds or a separate monument class.
Survey results from the pilot survey in 1994-5 have been summarised and combined with the 1997-8 survey results to give an overall picture for those sites held in the Dyfed SMR

General trends recognised both within the region and elsewhere have been examined in the light of the new information. The general picture for the Dyfed burnt mounds is the same as observed elsewhere: the majority of mounds are within marginal land lying below 244m OD, within 100m of a source of water, usually a stream or spring. Unusually, in comparaison with mounds recorded in Ireland, Scotland and England, the majority of the mounds are oval/circular with only a small number of crescent/kidney/horse-shoe sites, mainly confined to the eastern half of the region. This may be related to changes in the geological conditions within the region, thought to be a factor in mound size, between the mixed igneous/sedimentary western half of the region with its small mounds and the mainly sedimentary geology of the eastern half characterised by larger mounds.

The lack of a large body of excavation data and the uneven pattern of past surveys makes the full investigation of these differences in trends difficult, both within and without the region. However, this is a common problem with studies from other regions, where the lack of consistent excavation and survey data still hampers the study and interpretation of this type of monument.

The criteria used in assessing the Dyfed burnt mounds for scheduling is discussed, of the 89 genuine burnt mounds, 8 mounds from 7 locations have been recommended for scheduled status:
2267; 3458; 3574; 3629/3630;9526; 13376 and **30513**.
A total of 12 mounds from 10 locations were considered to be borderline recommendations for scheduling:
2450; 3596; 3724; 3758; 3778; 3788; 3886; 13053; 3610 and **3807/3808/33793**.

A total of 14 other sites have been recommended for further fieldwork, mainly confined to the C14 sampling of severely stream eroded sites.

1. INTRODUCTION

1.1 Introduction, aims and objectives

The 1997-8 survey project is the final stage in the assessment of the burnt mounds within Dyfed, recently separated to its original components of Pembrokeshire, Carmarthen and Ceredigion. The project was started in 1994-5 by George Williams of Dyfed Archaeological Trust and commenced with a pilot assessment survey of 114 burnt mounds, grant-aided by Cadw. The majority of the mounds being located within the Northern Haven area of Pembrokeshire and the south-east corner of Carmarthenshire. Outside these areas, the survey included 21 mounds spread throughout the northern limits of the three counties, including a cluster of new sites in the St. Dogmaels and Ceredigion areas.

The fieldwork for the 1997-8 survey was carried out in a six week period in late April and May 1997 by the authors. Pete Crane covered all sites to the west of Whitland and Andy Manning covering the remainder in Carmarthenshire and Ceredigion. The survey assessed 251 sites, completing the assessment of all 365 sites held in the Dyfed SMR, one of the largest concentrations in mainland Britain and of national importance in our understanding of Bronze Age activities (Fig 1.).

The project came about as part of the rise of widespread interest and fieldwork which started in the 1970-80s in the subject of burnt mounds, the mounds of fire-cracked stone and ash debris, and other aspects of 'Hot Stone' technology. This burst of fieldwork cumulated in the first of a series of international conferences on the subject in 1988 (Buckley 1990). This led to a wealth of comparative archaeological data and ideas on the subject from many regions being made available, although it did highlight some of the deficiencies in the state of knowledge of the burnt mound sites in Dyfed. This resource in the early 1990s was still relatively poorly understood, with a large proportion of the information on the burnt mounds in Dyfed collected in the late 19th and early 20th century. Work by Dyfed Archaeological Trust in the 1970-80s, especially in the excavation of a number of mounds within different settings, did generate valuable information, but still left the vast majority of the sites unexplored. For these sites, little or no attempt had been made to further develop classifications or record individual attributes of sites in the years following their initial identification. The location of the mounds and their proximity and possible relationships with other elements of the landscape remained largely unknown.

Many of these sites proved difficult to trace in a OS survey in the 1960s, leading to a degree of uncertainty about the numbers surviving a well recognised host of threats. The dearth of information on individual sites and the characteristics of the resource as a whole meant that assessment of the importance of a particular site or cluster of sites was difficult, whether in a local, regional or nation sense. This had an obvious impact on the management and protection of the resource, there simply wasn't any. In particular, there was no statutory protection on any of the burnt mounds or management plans for those under threat.

The aim and objectives of the assessment programme was to locate, verify the genuine mounds and then record the size and nature of the burnt mounds listed in the Dyfed SMR, including their position with other monument classes within the wider archaeological landscape. Formal criteria for scheduling was adopted from those used by English Heritage and further developed to reflect local factors to enable the extending of statutory protection, conservation and management proposals where it was appropriate.

NB. Numbers given in the report, *i.e.* mound 3456 or 9876 refer to the monuments PRN within the SMR. Where numbers refer to a 'site code' or 'context number' this will be referred to in the text.

1.2 Archaeological background

As has been previously mentioned, a large proportion of the burnt mounds in Dyfed were initially identified and recorded in the first decade of this century. The work was carried out by the geological surveyors Cantrill and Jones who identified approximately 170 sites (Cantrill and Jones 1906; 1911). The focus of their geological work

was mainly restricted to two broad strips: one in southern Pembrokeshire and Carmarthenshire, approx. 60 km long and 20 km wide, running from Broad Haven to Llanstephan and a second, approx. 26 km long and 13 km wide within the Brecon Beacons, in the south-eastern corner of Carmarthenshire.
The present distribution of recorded burnt mounds in Dyfed still reflects this early work, with the majority of plotted sites being situated within these two areas. Further sites have been added, mainly in the past 30 years. A variety of lone fieldworkers and local groups have been useful in locating burnt mounds in many areas, both within the areas of Cantrill's activities and, perhaps more importantly, in areas which were previously blank or poorly represented. In particular, Dave Maynard's work in the St. Dogmaels area (Maynard 1993) and Jeffery Davies in Ceredigion (Davies 1997) continue to produce important data in areas outside the main recorded concentrations.

The formation of Dyfed Archaeological Trust in the mid-1970s and its subsequent involvement in regional survey and excavation, both research and commercial, has had a significant impact on the location and investigation of the burnt mound resource. Since 1977 8 burnt mound sites at Dan-y-Coed (Williams 1983), Carne (James 86), Felin Fulbrook. (Williams 1987), Morfa Mawr (Williams 1985), Stackpole Warren (Benson 1990), Afon Marmog (Page 1995), Pwll Glas (Murphy 1986) and Troedrhiwgwinau (Caseldine and Murphy 1989) have been the subjects of a rolling programme of rescue excavations, which has lead to the full or limited excavation of 13 burnt mounds. These excavations have provided a wealth of archaeological, environmental and dating information, aiding analysis of functional uses and have acting as the basis for experimental work (James *ibid.*).

1.3 The burnt mound SMR record: Problems and general distribution

Before the inception of the burnt mounds assessment project, approximately 348 mounds were listed on the Dyfed SMR, mostly on farmland or marginal land, close to water. Just under half were unverified discoveries by Cantrill and other early workers. As has been seen, the resource suffered from a lack of accurate information on the location of these mounds, coupled with the often sparse descriptions recorded and uneven areas of survey coverage. The study of the role of burnt mounds in the wider archaeological context with their associations with other monument classes also suffered from the same factors. Early attempts to verify the record rarely succeeded due to a combination of factors; including experience, knowledge of the site types and according to Williams, possibly even some prejudice against this type of monument (Williams *ibid.*).
A general survey was attempted in the 1960s by Ordnance Survey inspectors. This survey appears to have met with very poor results, a large proportion of sites were recorded as missing or natural, only to be located and verified as genuine at a later date, on or close to their given positions. Any degree of prejudice, if it existed, is unlikely to have been simply individual, and other factors such as experience in burnt mound recognition probably played a larger role in the poor results. A similar situation was noted in Scotland (Halliday 1990), where a lack of experience in OS surveyors was blamed for the omission of many burnt mounds, later found in the surveyed areas. This lack of recognition must also apply to archaeological surveys and indeed was assumed to have at least partly contributed to the uneven distribution pattern of burnt mounds during a survey in Wigtownshire, Scotland, when 80% of the total number of burnt mounds were found in the last few areas to be surveyed.

Certainly, the problems associated with the uneven distribution of sites has hampered confident analysis of the patterns inherent in form and nature of the burnt mounds within the Dyfed region. The extent of the destruction of many of the early recorded mounds was also uncertain. Differences in soil-types and climate (Soil Survey of England and Wales 1978) produce different patterns of farming within the region (Ministry of Agriculture, Fisheries and Food 1972). placing the majority of arable farming along the coastal fringes of Pembrokeshire. This could be assumed to lead to differential patterns of mound survival between this area and other areas of Dyfed which are predominately dairy/beef and sheep farming.

The fact remains that the sites which were excavated represent only 4% of the total number of recorded mounds in Dyfed and 15% of mounds shown to be genuine and represent only the tip of the iceberg. Extensive and systematic survey and selective excavation is still urgently needed in order to better understand the true distribution and possible functions of these monuments.

1.4 1994-5 Survey summary

The pilot assessment of the burnt mounds in Dyfed assessed a total of 114 mounds (Williams 1995). Of these, 59 proved to be genuine burnt mounds rather than natural formations or elements belonging to another monument class.

Within the Northern Haven area, 56 sites were visited, of which 40 were either not found, had no access or could be shown to have been destroyed. The majority of the genuine mounds were generally small, low and more often than not oval or sub-circular. It was a common feature that the mounds often appeared to have been badly plough-damaged.

Within south-east Carmarthenshire, 37 mounds were visited, of which 27 mounds were shown to be genuine (including an additionally newly discovered site). The mounds tended to be larger than the Northern Haven mounds, often up to 2m in height) with more variation in shape. The mounds and their environs tended to be well-preserved.

In other areas, a total of 21 sites mostly in St. Dogmaels and north Ceredigion were visited of which 14 were considered genuine. A further two sites were identified soon after the survey. The mounds were a mixture of oval forms with a small number of crescent mounds.

From the survey results, 27 mounds were put forward as candidates for scheduling and 6 as candidates for scheduling with some reservations. A further 13 sites were suggested for further fieldwork.

A number of general trends were identified:- The difference in size, preservation and variety of form between the two main areas surveyed which has already been mentioned; the location of mounds close to streams was noted (although this was an already well known characteristic); the basic agreement of the sites with Cantrill's records; the large number of paired or clustered burnt mound groups and the lack of buried soils below mounds with visible sections. Finally, together with the results from the excavation of mounds at Morfa Mawr, Williams identified a new type of burnt mound, which appears to have utilised previously existing natural glacial mounds.

2. SURVEY

2.1 Areas surveyed

For convenience, the region of Dyfed was separated into seven arbitrary areas. Of these, two had been covered in the 1994-5 survey, although others areas also contained isolated sites visited by George Williams as part of the same survey. (1997/8 Survey sites e.g. **9524** 1994/5 Survey sites 29904)

Survey area 1 Eastern Ceredigion (Fig 2.)

1938 1939 1975 **1980 19811982** 2010 2011 **4022 4023 4024 4025 40264030 4032 4138 4139 4140 4155 4828 5633 6174 6175 7807 8204 8526** 8895 **8983 8984 8993 8994 9524 9526** 9792 9793 9794 9795 9796 9797 9961 **11120 11876 12001 12772 12874 13049 13050 13053 13120 13239 13293** 13996 **143901439114392 14410 14416** 2990429906 **30153 34443**

Survey area 2 South-eastern Carmarthenshire (Fig 3.)

Area covered by 1994-5 survey but includes 2 new sites located by Rick Turner, Cadw **34446 34447**

Survey area 3 Western Ceredigion/North Pembrokeshire (Fig 4.)

1281 2088 2247 2267 2330 2331 2886-8 2886 28893957 39617803 8236 **8498 8499 9767 9784 9786 9787 9807 9808** 9823 9824 9922 **10565 10566 10567 11345** 11761 **1421314220-3 14218 14219 14224 14225 14226** 1422714228 **14229 14230 14231 14232 1423314234** 14235 **14954 14970 34444 34445**

Survey area 4 Central Carmarthenshire(Fig 5.)

916 2124 2138 2139 2152 2162 2176 2177 2178 2189 2190 2211 2212 2213 2214 2216 3651 3652 3778-81 3700 3714 3722 3723 3724 3726 3737 3738 3742 3743 3744 3757 3758 3767 3769 3774 3775 3776 3777 3786 3788 3789 3797 3798 3801 3802 3806 3807 3811-4 3808 3809 3810 3817 3834 3861 3865 3868 3886 3888 3889 3890 3892 3893 3894 3895 3896 3903 13376 34441

Survey area 5 Central Pembrokeshire (Fig 6.)

1340 1404 1405 2434 2450 2779 2805 3108 3119 3120 3121 3122 3123 3129 3305 3319 3332 3333 3458 3459 3460 3482 3540 3545 3546 3549 3550 3552 3553 3560 3574 3588 3596 3597 3608 3609 3610 3623 3624 3626 3627 3629 3630 3633 3759 3760 3761 9785 11913

Survey area 6 Northern Haven (Fig 7.)

Covered by the 1994-5 survey

Survey area 7 South Pembrokeshire and Carmarthenshire (Fig 8.)

574 581 585 2963 3074 3222 3230 3231 3232 3233 3234 32393249 3251 3252 3253 3254 3266 3267 3486 3506 3509 3512 3537 4190 4191 4192 4214

2.2 Project methodology

The various attributes of the mounds were recorded from a combination of field visits, published excavation reports or details held in the SMR. The greater majority of the sites were visited. During field visits, located mounds were recorded by means of a pre-printed form (Appendix E) on which the main criteria could be scored, together with a space for a free description of the monument and its environs. In addition to the written record, a space was available for an accurate scaled sketch plan of the mound, if appropriate.
As with the previous 1994-5 survey, the un-photogenic nature of most of the meant sites were only photographed if deemed worthy of scheduling or contained features or environs of interest. Before recording, all mounds were hand augered to verify the burnt mound and to give some indication of plough-damage to the mound.

Those sites which had been recently discovered, i.e. in the past 15 years, were assessed from detailed excavation/evaluation records or by a field visit if records were not available. Additional desk-top work was carried out to assess scores for associations with other burnt mounds and other monuments classes.
The final stage of the assessment was addition of newly assessed sites onto the database set up after the previous 1994-5 survey and which is supplied separately. The project archive will be located within the Dyfed SMR, Llandeilo. A list of the archive contents is given in Appendix C.

2.3 Criteria used for assessment

The basic criteria used by George Williams by for the 1994-5 pilot assessment survey of the burnt mounds of Dyfed was adopted and adapted from English Heritage's '*Monuments Protection Programme Single Monument Class Description for Burnt Mounds*' (Raymond and Darvill 1988). Increased interest in the subject in the mid to late 80s led to a wealth of new data and ideas which led to the first two of a series of international conferences on the subject of burnt mounds (Buckley 1990 and Hodder and Barfield 1991).
This new additional information was taken into consideration as well as Cadw's own general criteria for the scheduling of ancient monuments in Wales. These sources were used to produce a formal scheduling criteria which was felt to reflect local factors in density, form and condition within the Dyfed survey area.
A full and detailed account of the scheduling criteria used with discussion on their development was included within the pilot assessment report (Williams 1995). This continued to be used for the assessment of the remaining sites in 1997-8, albeit with a few minor changes.
The main criteria used were:-Group value (association); Survival/condition; Documentation; Group value (clustering); Potential (immediate features) and Diversity (features).

A number of newly developed categories were added to the 1994-5 survey which had not been included within the English Heritage criteria. These included:-Potential (environment); Period; Diversity of form and location and Fragility/vulnerability. Monuments were scored for each criteria on a scale of 0 (low), 1 (medium) or 2 (high), except for those dealing with diversity of features, period and diversity of form and location where either 0 (low) or 2 (high) was felt more appropriate.

Group value (association)

The number of recorded instances of burnt mounds associated with other classes of broadly contemporary monuments is small. The scoring used in the 1994-5 survey for a particular site initially followed the English Heritage's criteria in scoring high for more than one association up to 250m away, medium for one association within 250m and low for no associations within 250m.

After the 1994-5 survey, it was felt that greater emphasis was needed on associations between burnt mounds and other monuments in close proximity (*i.e.* 100m or less). The 1997-8 scoring system reflected this by scoring high for associations with one or more other monuments up to 100m and in view (to take account of topology), medium for one or more associations within 1000m or within 100m and not in view and low for no associations within 1000m.

Survival/condition

While English sites are scored on the percentage of the mound destroyed, the 1994-5 survey recognised that for many Dyfed mounds any damage was often more subtle and difficult to estimate. In a number of cases during the survey, mounds which appeared to be well-preserved were often shown to be plough-damaged on augering (e.g. 898, 3178, 2010 and 2012).
The survey adopted a more general scoring system in which from surface examination and augering the mound scored high where sites had not been ploughed and any damage appeared minimal or non-existent, medium for ploughed sites, or otherwise, where damage was moderate and low for those sites which were considerably damaged. This system continued to be used in the 1997-8 survey.

Documentation

A majority of the Dyfed mounds had some degree of documentation, be it from the work of Cantrill and co-workers, the Ordnance Survey or recent fieldwork and rescue/research excavations and watching briefs by Dyfed Archaeological Trust and other local fieldworkers. Because of this wealth of background information, the 1994-5 survey again developed a different scoring system from English sites. In the case of Dyfed, those sites with old or brief excavation accounts where less than 40% of the site remains would score low, those sites with more recent and detailed accounts or excavated sites where 40-70% of the site survives would score medium and excavated sites (with detailed recording) where more than 70% of the mound still survives would score high. This system continued to be used in the 1997-8 survey.

Group value (clustering)

English Heritage recognise sites of the same class which are less than 1000m from their nearest neighbour as clustered. Previous fieldwork to the 1994-5 survey had demonstrated that in Dyfed, the close clustering of burnt mounds was very much more common than elsewhere. To reflect this greater density of sites, the 1994-5 survey adapted the scoring system of high where the nearest neighbouring site was under 100m, medium where it was within 1000m and low if no other sites with 1000m.

As with the category of Group value (association), the 1997-8 survey scoring system refined the high and medium scores by taking account of topology. This led to a high for one or more other mounds up to 100m and in view and medium for mounds within 1000m or within 100m and not in view.

Potential (immediate features)

Prior to the 1994-5 survey, the handful of sites that have been associated with features (troughs and pit features etc) had mainly been the subjects of excavations (such as at Stackpole Warren, Felin Fulbrook and Carne) rather than from casual observations of surface traces. Since it was felt that the assessment of associated buried features and land surfaces was difficult even under the best conditions this criterion was weighted in favour of the condition of the site. In practise, the site was scored between low, medium and high on the presence/absence of plough-damage and the probable survival of any buried land surfaces and/or features. This system continued to be used in the 1997-8 survey.

Diversity (features)

Related to the previous criterion, this section scored the site on the possibility of the existence of an associated feature. Due to the very small number of instances this was scored as either high or low and continued to be used in the 1997-8 survey.

Additional criteria used other than that adopted by English Heritage

Potential (environment)

This is a simple extension of the previous criterion covering the potential survivability of features in the proximity of the burnt mound, but extended over a wider area to include possible settlement traces and/or good sources of environmental evidence. Although not part of the criteria used by English Heritage, it was adopted for use in the 1994-5 survey and was retained for the 1997-8 survey. Sites were scored high if they and their environs lay on land which had never been cultivated, medium where cultivation had not been intensive and low if the land was intensively cultivated.

Period

This was included to add weight to those rare sites which had provided datable evidence. As with diversity (features), this was scored as high or low if finds were present/absent.

Diversity of form and location

During the preparations for the 1994-5 survey, the scoring was weighted in favour of rare forms to enhance the scheduling selection of a wide range of different shaped and positioned mounds. Following the survey, it was felt that it was not appropriate given the wide variety of sizes and shapes located during fieldwork. Within the 1997-8 survey, the criterion was limited to scoring the relative position of the site to its nearest water source, i.e. high if within 100m and low if not.

Fragility/vulnerability

This criterion was included to add weight to those site felt to be under threat. Well-preserved sites with no apparent threat from plough-damage or other forms of erosion scored low, those suffering continuing gradual damage scored medium and those under serious and immediate threat scored high.

Secondary selection criteria

Following the 1994-5 survey, those burnt mounds scoring 7 or more were recommended for scheduling and borderline recommendations were made for those scoring 5 and 6. In practise, while the high scores often reflected the nature of the preservation of the mound and its environs, many severely damaged sites also fulfilled the criteria for scheduling and professional judgement was exercised in their recommendations. In a comment attached to the recommendations for scheduling, George Williams did entertain the notion that the criteria used may be over-complicated. A secondary selection criteria based on more conventional scheduling considerations was given, which while being considerably simpler still echoed some of the elements of the main criteria:

- **A)** Not Found
- **B)** Destroyed
- **C)** Very Damaged, usually by ploughing which usually includes the environs of the mounds. Inform owner, No further action.
- **D)** Damaged mounds with environmental potential-borderline case for scheduling.
- **E)** Well preserved mounds, with environs damaged, usually by ploughing-borderline case for scheduling.
- **F)** Well preserved mounds, with well preserved or moderately well preserved environs-recommended for scheduling.

The 1997-8 survey identified 48 mounds which scored 7 or greater, which under the main criteria made them worthy of scheduling. Consideration of the secondary selection criteria in conjunction with the main criteria was felt to give some flexibility in considering the relative merits of the sites value and exercising of professional judgement. In the event, 27 of these sites, all badly damaged, were not recommended, often on the basis that the score reflected a combination of close associations with other monument classes and good documentary evidence rather than a reflection of the potential value of the monument and its environs.

3. GENERAL RESULTS

3.1 Introduction

In all, out of the 246 sites to be assessed, 216 were visited (88% of the total), the remaining 30 had no access to the site. Five mounds excavated by George Williams at Stackpole Warren (**35841-35844**) and Dan-y-Coed enclosure (**35845**) were also were given PRN numbers and added to the project database, giving a total of 251 sites. Also included are 15 new sites **33790, 33791, 33792, 33793, 334441, 34444, 34445, 34446, 34447 and 35413**. The first seven were noted during site visits, 34446/7 were noted by Rick Turner of Cadw and the last noted by Jeffery Davies, Aberystwyth, University of Wales (Davies 1997). A full list of sites and their main attributes is given in Appendix A.

The general results can be summarised as:

Sites tested	126/251 = 49 % of total	
	Positive	89/251
	Negative	30/251
	Unclear	2/251
	Other function	5/251
Sites untested	125/251 = 51 % of total	
	No access	30/251
	Destroyed	63/251
	Not found	32/251

The use of the auger allowed an accurate verification of the presence/absence of fire-cracked stone and charcoal. Where a mound initially gave a negative result, it was retested a number of times in other locations, in case it was an example of a natural and burnt mound combination. Using the auger, 30 mounds produced no burnt material and were assumed to be natural. A further two sites, 3742 and 3781 only produced faint traces, although it would seem likely that these sites may simply be very badly plough-damaged.

Of the five sites assigned to another function, three sites 11913/12788, 14231 and 14225 were viewed by George Williams and assessed as likely bonfires features. A fourth site 14416, found during a chance observation, appeared to be a Palaeoenvironmental deposit. The fifth site 3609, closely associated with a post-medieval furnace, appears to be a mound of slag material.

While it initially appears that a disappointingly high number of sites remained untested, some factors do help to mitigate this. Over half of the untested sites (25% of the total) can be shown to have been destroyed, either from information from documentary sources or visible surface traces. Sites which were recorded as not found may include: destroyed sites (without firm evidence) and natural mounds (with doubts about the location of the previously recorded mound). A quick examination of the factors behind how sites were destroyed shows that the overwhelming majority appear to have been destroyed by farming related activities.

Land Improvement	10	Animal action	1
Arable farming	32	Reservoir	2
Drainage and Piping	4	Cliff Erosion	7
Garden	2	Not known	2
Construction	3		

Perhaps unsurprisingly, when the locations of these sites are considered in terms of arable farming they are mostly restricted to the southern reaches of Pembrokeshire and Carmarthenshire. Patterns of land improvement of marginal land are more evenly spread.

Sites assessed as destroyed through land improvement and arable farming

	Arable farming	Land improvement
Area 1 Eastern Ceredigion	2	4
Area 3 Western Ceredigion/North Pembrokeshire	3	0
Area 4 Central Carmarthenshire	4	2
Area 5 Central Pembrokeshire	11	3
Area 7 South Pembrokeshire and Carmarthenshire	12	1

3.2 Assessment of early fieldwork

Some attempt was made during the pilot survey to assess the value of Cantrill's early fieldwork (Williams 1995). The general impression from the small sample examined was that in a majority of cases his identification of burnt mound sites was correct, although a number of mistakes were made, often relating to location. Now that all of Cantrill's (and co-worker's) sites have now been assessed, we are in position to better assess the relative accuracy of their work.

Total sites located by Cantrill, Jones and Leach = 170 sites

Positive	50/170
Negative	25/170
Uncertain	2/170
No access	25/170
Destroyed	48/170
Not found	20/170

The overall impression, which almost perfectly mirrors that of the combined 1997-8 survey information, would seem to indicate that Cantrill's fieldwork was slightly less successful than was first thought, with a large number of negative mounds entering the record. However, as with the 1994-5 survey, it was been thought by the authors that many of the mistakes may be attributed to differences in methodology between Cantrill himself and his co-workers. Certainly, where exposed sections were not available, Cantrill was not adverse in using a walking stick as a primitive auger in assessing the underlying deposits which would have lead to a better determination of genuine mounds.

3.3 Associations and trends

Location

By far the most common location of the genuine mounds was on marginal land, either pasture or rough pasture, followed by rough woodland or scrub, all predominately below 244m OD. The pattern is again repeated, if the details from all sites (except those shown to be negative) are taken to be correct.

Genuine sites only (89 sites)

Pasture/Rough pasture	56 sites
Marsh/boggy ground	1 site
Heath	1 site
Woodland	9 sites
Forestry	4 sites
Scrub	8 sites
Arable	1 sites
No details	9 sites

All categories except 'negative' and 'other function' (216 sites)

Pasture/Rough pasture	108 sites
Marsh/boggy ground	1 site
Heath	2 site
Woodland	12 sites
Forestry	6 sites
Scrub	26 sites
Arable	6 sites
No details	55 sites

Water sources

In terms of water source, there is a clear preference by the genuine mounds for streams, with a further significant number associated with springs. Of the 89 tested sites which proved positive, the majority were within 100m of streams (59 sites), compared to 21 sites which relied on natural springs. One site contained both springs and a stream in close proximity (mound 3588) One site, mound 13376, had no obvious water source within 100m. Details from the remaining seven recently documented sites contained no details of water source.

Taking the whole assessment sample and excluding those sites shown to be natural in origin, or used for another function, the remaining 211 sites examined show a similar trend to that displayed by the positive sites. Two sites, mounds which were not located; 3834 and 4214, possibly both destroyed by coastal erosion had no obvious fresh water source, although the place name for 3834, 'Payetts Well', may well have indicated a spring nearby. A second site, mound 6175, had no water source within 100m.

The general pattern of proximity to water is well known and by the nature of the activities traditionally associated with the functions of burnt mounds perhaps only to be expected. The results and their approximate proportions reflect closely those gained from other areas, even when taking into account the suspicion of bias inherent in the nature of Cantrill's work, which would have focused on geological exposures in stream beds. One noticeable difference is that of the low incidents of marsh/bog as water sources, which are often a more common source of water in parts of Ireland than seen here (Power 1990).

Positive sites only (89 sites)

Stream	59 sites
Spring	21 sites
Both	1 site
None	1 site
Sea	0 sites
No details	7 sites

All categories except 'negative' and 'other function' (216 sites)

Stream	108 sites
Spring	61 sites
Both	1 site
None	2 sites
Sea	1 site
No details	43 sites

Shape and structure of mounds

There are a wide variety of shapes present within the region. The main three types of oval/circular, crescent and kidney are taken from the English Heritage document, but have been supplemented by two other forms; platform (perhaps really representative of a particularly large oval mound) and horse-shoe, often used in the descriptions of Cantrill as distinct from crescent. For this survey, definitions for the different non-oval classes are given as:- kidney (indent, no clear horns); crescent (clearly shaped indent and horns not parallel to each other) and horse-shoe as crescent but horns fairly parallel to each other.
As with the selected areas in the 1994-5 survey, the majority of sites are circular or oval, whether as a comparaison of between genuine sites or recorded details from all catagories excluding natural/function mounds.

Positive mounds only (89 sites)

Oval/circular	(Raymond 1987 type 1)	60/89
Crescent	(Raymond 1987 type 2)	5/89
Kidney	(Raymond 1987 type 3)	2/89
Platform		6/89
Horse-shoe		0/89
No details		13/89
	(Details unavailable from Documented sites *etc*)	
Ill defined mound		3/89

All categories except 'negative' and 'other function' (216 sites)

Oval/circular	(Raymond 1987 type 1)	71/211
Crescent	(Raymond 1987 type 2)	10/211
Kidney	(Raymond 1987 type 3)	2/211
Platform		7/211
Horse-shoe		0/211
No details (Details unavailable from Documented sites *etc*)		123/211
Ill defined mound		3/211

Combined total for genuine mounds only from 1994/5 and 1997/8 surveys

Oval/circular	(Raymond 1987 type 1)	92/148
Crescent	(Raymond 1987 type 2)	15/148
Kidney	(Raymond 1987 type 3)	7/148
Semi-circular		3/148
Platform		12/148
Horse-shoe		0/148
No details (Details unavailable from Documented sites *etc*)		13/148
Ill defined mound		6/148

Comparisons between the different areas also have continued to highlight the fact that crescent or kidney-shaped mounds are concentrated in areas of Carmarthenshire and east Ceredigion, with only 2 examples found in the 1997-8 survey within Pembrokeshire (Mounds 3574 and 3629).

Shape of genunine sites assessed

	Oval/Circular	Platform	Kidney/Crescent
Area 1 Eastern Ceredigion	13	1	6
Area 3 Western Ceredigion/North Pembrokeshire	14	1	0
Area 4 Central Carmarthenshire	14	4	3
Area 5 Central Pembrokeshire	17	0	2
Area 7 South Pembrokeshire and Carmarthenshire	1	0	0

Burnt mounds: structure, associated features and finds

While burnt mounds are fairly commonly associated with trough and other features elsewhere, the evidence from Dyfed is still rather sparse and confined mainly to excavated sites. A stone trough was recorded next to mound 35843 at Stackpole Warren, with traces of wooden and stone troughs at Brongwy, mounds 2087, 2088 and 2089, Meidrim, mound 2247 and Tan-y-Glogau, mound 9961. A limited number of pits have also been associated with excavated mounds at Carne and Felin Fulbrook.

During the 1997-8 survey, no clear evidence was found for visible signs of features with any mounds, except for mound 3596 at Nash farm. The feature appeared to have a possible trough/trench feature between it and the stream but may prove to be a modern unrecorded excavation trench. Two further sites, mound 34445 at Celan y Mor and 34447 at Capel Gwynfe, have been recently discovered and both appeared to have some degree of kerbing associated with them.

Finds have been recorded on or very close to a number of sites, although never stratified. Flint arrowheads have been recovered from mound 8983 at Felin Fulbrook and 8984 at Blaenpennal, Mynydd Bach. A general mix of Mesolithic and Neolithic flints were recorded within 100m of mound 2963 at St. Ann's Head, although their date may suggest a local flint working floor rather than any association with what is generally a later feature.

3.4 Relationships of mounds to other recorded monuments

One of the common features noted by Cantrill *et al* (Cantrill and Jones 1906; 1911) were the large number of burnt mounds which occured in close clusters, occasionally numbering up to 6-7 mounds. Since the association of mounds to other monuments, within a distance of 1 km, was noted and included in the selection criteria it is worth having a look at the general results.

Mounds associated with other burnt mounds

Of the 89 genuine sites recorded in the 1997-8 survey, 61 mounds had at least one burnt mound within the surrounding 1000m. Of these, 45 were within 100m of another mound or cluster of mounds. These figures are similar to those recorded in the pilot survey. Of the 59 mounds shown to be genuine, 48 were within 1000m of at least one other burnt mound, 18 were within 100m of another burnt mound.

The associations tend to fall into one of two types: a linear arrangement of mounds situated along one side of a stream bank such as mounds 3811-3814 at Tavenspite or simply tightly clustered together around a common water source, such as mounds 14226, 14224, 14219, 14218 which lie within 100m of a separate cluster of mounds 14220-2.

At one site at Penrhyn (mounds 4022-4), two linear arrangements of burnt mounds could be seen on both the north and south banks of the stream. However, access was not allowed to assess those mounds on the north bank.

A combination of these gives the final result that:

75% of genuine mounds are within 1000 m of another burnt mound

43% of genuine mounds are within 100m of another burnt mound

Mounds associated with other monument types

While a great deal of work has focused on the mounds themselves, comparatively little has dealt with the possible associations between the burnt mounds and other monument classes close-by. The series of excavations by DAT on settlement sites and Dan-y-Coed located a total of 5 burnt mounds within the complexes themselves (Benson 1990; Williams 1983). It is probable that many other seemingly isolated burnt mounds are also closely related to other settlement sites, as yet untraced. Since the majority of burnt mounds are located on uncultivated marginal land, this greatly increases the potential preservation of these sites and our understanding of burnt mounds in a domestic context.

In contrast to their relationship to each other, associations with other monument classes are viewed as relatively uncommon. Williams's 1994-5 survey report did identify three close associations with standing stones, but this is a rare occurrence. In each case the standing stones are either directly siting on the mound or surrounded by the mound, although in one case the stone in question may be a recently inserted rubbing post (Maynard *pers. comm.* to Williams*)*. A second good example, 35843, was excavated within the settlement at Stackpole Warren, in association with a stone trough, which may potentially be good evidence for ritual use within the settlement.

Ten mounds are within 100m of 23 recorded monuments, ranging from Bronze-Age round barrows, cairns and settlement to medieval field systems and longhuts. In the case of one particularly spectacular mound 30513 (Myndydd Mallaen), the mound lies on a stream bed at the base of the valley bottom and very close to both well-preserved Bronze-Age and medieval settlement traces.

Associations with monuments types within 1000m do seem to follow roughly the same patterns and proportions as those within 100m. Comparisons of both set of figures with the very approximate numbers of each class held in the SMR also does not appear to show any preference for any particular monument class.

Associations between burnt mounds and other monument classes

	within 100m	within 1000m	Dyfed SMR total
Standing stones/Standing stone placenames	6	12	814
Prehistoric settlement/field systems	5	10	656
Cist/Cairns/Round barrows	7	19	619
Flint working floors	0	8	147
Medieval settlement/field systems	5	3	194

3.5 A new burnt mound type?: Burnt and natural composite mounds

During the course of the 1994-5 survey, George Williams noted the identification of a new burnt mound type:- that of a composite burnt mound on top of a natural glacial mound. A total of 8 mounds were identified as belonging to this class, mounds 1412, 1982, 2920, 2989, 3345, 9724, 9725 and possibly 14220. In some of the cases, the reason for the use of natural mounds appears to have been because they provided dry ground elevated above the surrounding boggy/marshy ground (mounds 1982, 2920, 2989), but does not appear to be the cases with the other sites. To these sites, Williams added the six sites at Morfa Mawr, mounds 9792-7, excavated by himself in 1981.

The 1997-8 survey identified at least a further 7 mounds which seemed to combine natural and burnt mounds. All these mounds were mostly damaged with clearly visible stream sections, allowing a good opportunity to recognise these features for what they were. These sites were; mounds 2177, 2983, 3345, 4023, 7524, 7525 and 33793. Mound 2177 (Llandeilo Abercowin) was unusual in that, the natural mound was far larger than the burnt mound resting on the top. In mound 33793, the burnt mound element formed only 0.30m of the total height of 1m.

4. DISCUSSION OF RESULTS

4.1 Introduction

A total of 251 sites were assessed during the course of the 1997-8 survey, bring the total number of sites assessed to 365 sites. A total of 89 mounds were shown to be genuine burnt mounds, an additional 2 mounds were shown to be doubtful, although it may be that they are very badly plough-damaged. Combined with George Williams's pilot survey, a total of 148 mounds were shown to be genuine mounds.

Since the main aim was to investigate recorded mounds in what were well covered areas, the number of new mounds discovered has been relatively low. Only 7 mounds from this survey, 8 from other sources, and 5 from 1994-5 pilot survey. Against this modest number of new sites, it must be borne in mind that 98 sites have either been shown to have been natural features, destroyed or associated with another function. It is disappointing that just under a quarter of the sites listed for assessment remained un-visited, either for reasons of access or no evidence for a mound at the given location.

Comparisons of Cantrill's findings with that of the results from assessed mounds does bear out the general accuracy of his work, although the large numbers of his mounds which have been destroyed or were not found makes any further analysis of this impossible. The largest factor in the destruction of recorded mounds does appear to be arable farming and land improvement, not surprisingly focused in south-west Pembrokeshire.

As first identified by George Williams, a number of mounds have been assigned to a new group of burnt mounds: being composites of burnt and natural glacial drift material. Since firm recognition of these sites does rely somewhat on exposed sections, the numbers at present are still rather small.

4.2 General trends in Dyfed and wider afield

The wider scope of the 1997-8 survey with its larger sample has enabled regional trends, identified by Williams's and others, to be examined: As noted in all studies of burnt mounds, the vast majority of the Dyfed burnt mounds are on pasture/marginal land, usually below 244m OD, within 100m of water, most commonly streams but with a significant proportion group around natural springs. Relatively few sites were recorded in boggy/marshy areas, although the existence of significant numbers of mounds sealed and hidden from view by peat bog deposits can not be ruled out. At least 20 sites were recorded close to bog/peat deposits which may offer potentially important environmental evidence in the future.

The average shape and size does tend to show some variations within the region. As previously noted (Williams 1995) the mounds within the mixed igneous/sedimentary geology of the south-western region of Dyfed (south and west Pembrokeshire) do tend to be smaller, lower and oval/circular in plan, only 2 crescent sites were recorded in Pembrokeshire. General sizes are between 6-10m in diameter, less than 1m in height and with no examples of the particularly large sub-group of 'platform' mounds which form the biggest mounds seen. Further west into the predominately sedimentary geology of Carmarthen and eastern Ceredigion, the general size increases to 8-20m in diameter and up to 2m in height. A large variety of forms are present, with the majority of crescent/kidney/horse-shoe mounds concentrated in eastern Carmarthenshire and Ceredigion.
The largest sites are the previously mentioned 'platform mounds', the largest of which, mound 2267, was 26m in length and 13m in width (although rather squat, being only 0.90m in height) which are present in central and eastern Carmarthenshire and Ceredigion.

One small problem is that for many reported surveys the terms 'horse-shoe', 'crescent' and 'kidney' seem almost to be interchangeable, perhaps due to the 'morphing' nature of this general shape, which often means that recognition of the different non-oval shape-types can be rather subjective. However this shouldn't affect the general recognition between the two oval and crescent sub-groups.

The results from Dyfed are very much in contrast with the results of surveys from Ireland and Scotland, where between half and three-quarters of sites belong to crescent mounds or its sub-groups (Power *ibid.*; Halliday *ibid.*; Russell-White 1990), but intriguingly is similar to the pattern found in Sweden, where the majority of mounds or 'Skarvstenshogar' are oval with few examples of crescent or similarly shaped mounds (Larsson 1990).

Williams has described the problems in trying to explain the observed differences between the numbers of crescent type mounds in the Northern Haven area (few) of Pembrokeshire and other areas of Dyfed (far more) and mound sizes (Williams 1995). One of the factors he explored was geological (especially in explaining mound sizes) although he acknowledged that little data was available and that full excavation would be needed before the pattern of types of stone used (imported and local) could be fully evaluated.
It is interesting that both Swedish sites and those in Northern Haven are both predominately situated on regions of hard igneous rock (although belts of limestone and sandstone also occur close to the sites in the Dyfed example). It may well be that geological differences in the stone types used, affecting stone shatter/life span of pot-boilers *etc* have an effect on the overall size of the mounds and on the site formation processes which may govern their shape.
Others have also examined the make-up of burnt mounds in relation to the types of stone preferred (Condit 1990). In Wales both Carne (James 1986) and Graeanog, Gwynedd (Kelly 1992), were both on areas of mainly igneous bedrock and with significant erratic deposits of igneous rocks. While the composition of mounds in both areas reflected that of the locality, other work looking at Irish sites has claimed that while drift material was most commonly used, some degree of preference was shown for sedimentary rocks (Buckley 1990; Condit 1990). Obviously, further excavation work is needed on a variety of contrasting geological sites, in order to investigate relative compositions and preferences shown.

As for features, burnt mounds are fairly commonly associated with a limited number. Examples of stone or wood plank-lined troughs have been recorded during excavations and put forward as possible cooking pits or water containers (Gowen 1997; Barfield and Hodder 1987). These are often particularly well-preserved (in the case of wood) due to the boggy conditions surrounding many mounds. Other structures, often quite substantial, have been postulated as functioning as possible sweat lodges or processes involving domestic activities (Hedges 1974-5). The occurrence of finds, particularly stratified finds, is rarer. Isolated burnt mounds or *Fulachta fiadh* rarely produce finds, comparatively more are recovered from those associated with settlement sites (Cherry 1990).

Only a few examples of well-preserved stone or wood-lined troughs associated with burnt mounds have been excavated in Dyfed or indeed in Wales, (Kelly 1992). One of these was at mound 35843 at Stackpole Warren, although details have survived from a number of further mounds of traces of such features. A series of mounds partly excavated at Brongwy, mounds 2087, 2088 and 2089, did produce fragments of oak planks, which would seem likely candidates for trough/s. At Tan-y-Glogau, preserved wood and large unburnt flat stone slabs were produced from mound 9961, although in a heavily disturbed state. Another recorded site with a possible stone slab structure was at Meidrim, mound 2247, disturbed during the turn of this century by drainage. Sadly, the discovered stone slabs were quickly incorporated into the nearby courtyard and remain untraceable.

As for association with other monuments, while the pattern of burnt mound distribution in Dyfed reveals that the majority of mounds are in close association with other burnt mounds, relatively few associations can be illustrated with other monument classes and sites. Williams's 1994-5 survey report did identify close associations with standing stones in particular *(i.e.* mounds 3199, 9922 and 14220-3). Two further burnt mounds 3552 and 35843 have also now been added to the list as being closely within the proximity with (possible) standing stones. In each case the stone is either directly siting on the mound or surrounded by the mound. Even in a well-investigated context, the results may not be clear cut, such as at mound, 35843, which was excavated at settlement site of Stackpole Warren and found in association with a small stone trough. While the impression may have been for a potential function for ritual use, direct evidence of this would be hard to come by. This may well tie in with speculations involving the ritual use of burnt mounds, perhaps for ritual cleansing etc, but such associations still remain rare and difficult to prove.

Ideas on the likely functions of burnt mounds have rapidly expanded over the past 40 years; from that of being predominately cooking sites (O' Kelly *ibid.*), a possible role in bathing/ritual cleansing which may be associated with 'ritual monuments' (Barfield and Hodder 1987) to a wide variety for the use of hot water/stones ranging from beer making, boat building, food preservation, butter and salt production and textile working associated with settlement sites (Barfield 1991; Jeffery 1991).

The recent survey of the ritual and settlement complex in the Monavullagh Mountains, which included the identification of 15 burnt mounds, concluded that no close exclusive relationship existed with any particular monument class (Moore 1995). While this bears out the widely held view of burnt mounds as being multi-purpose, the survey did go further in characterising certain burnt mounds as 'ritual' or 'domestic' in nature, solely on the basis of associations with the nearest monuments/settlement traces, often over 100m away. In another example from Croagh Patrick, a distant mountain was the subject of speculation as a possible important religious focus, based on the 'fact' that the horns of a local horse-shoe-shaped burnt mound were pointing in its direction (Corlett 1997). This approach is fraught with danger. Putting aside problems with proving contemporary relationships between unexcavated monuments, it has already been seen that the true distribution and density of burnt mounds is likely to be far greater than is presently recognised, making the verification of valid associations between burnt mounds and other monument types even more difficult. It is probable that many other seemingly isolated burnt mounds are also closely related to other settlement sites, as yet untraced.

As noted in the introduction, the present state of knowledge about these monuments is still very primitive. Extensive and systematic survey throughout large areas is still needed before meaningful and confident statements can be passed. Further excavation and sampling is still needed in order to better understand the true variety of functions and associations of these monuments.

5. RECOMMENDATIONS FOR SCHEDULING

5.1 Introduction

The 1997-8 survey assessed a total of 251 sites, of which at least 89 could be demonstrated to be genuine burnt mounds. The remainder of 167 sites was made up of sites not available for assessment (127 sites): either destroyed; inaccessible; borderline sites or not found. The remainder of 35 sites were natural mounds or a separate monument class.
The criteria used in assessing the Dyfed burnt mounds for scheduling has already been discussed (*see* section 2.3). Although 48 sites scored 7 or more on the main criteria used, consideration of the secondary criteria was undertaken for those sites recorded as damaged or badly damaged. As detailed in the secondary criteria, only those damaged sites which were felt to have a high environmental potential were recommended for borderline consideration for scheduling. From the total of 27 mounds not recommended for borderline/scheduled status, despite their high score, 6 mounds have been recommended for further fieldwork (*see* section 6). Address of the relevant landowners has been listed in Appendix B, location maps in Appendix D.

Of the 89 genuine burnt mounds, 8 mounds from 7 locations have been recommended for scheduled status: **2267; 3458; 3574; 3629/3630;9526; 13376** and **30513**.

A total of 12 mounds from 10 locations were considered to be borderline recommendations for scheduling: **2450; 3596; 3724; 3758; 3778; 3788; 3886; 13053; 3610** and **3807/3808/33793**.

Two sites have been recommended for official notification to the land owners of the existence of mounds on their land; **3549 and 3652**.

Mound **3834** has been recommended for borderline scheduling due to the particularly high density of prehistoric sites close-by, only if located in the future.

These results are in addition to those of the 1994-5 survey which assessed 114 mounds, 59 of which were judged to be genuine. Of these 59 mounds, 27 mounds were put forward as candidates for scheduling and 6 as candidates for scheduling with some reservations.

Recommendations for scheduling
795; 803; 808; 838; 839; 885; 1975; 1982; 2920; 3014; 3166; 3197; 3199; 3343; 3348; 4011; 4012; 4053; 4066; 7524; 7525; 7805; 9740; 9922; 9961; 14221 and **14223.**

Recommendations for scheduling with some reservations
648; 797; 798; 3032; 4010 and **14235**

Thus with the final completion of the Dyfed burnt mounds survey, a total of 365 mounds have been assessed with at least 148 were judged to be genuine.
From these 148 mounds, 35 have been put forward as suitable for scheduling (24% of genuine mounds) and a further 18 put forward as borderline candidates (12% of genuine mounds).

5.2 Recommendations for scheduling

1. **Mound 2267 (Merthyr: SN 3523 2022)** Large well-preserved platform mound, 26m x 13m and 0.80m in height. Roughly trapezoidal in plan and within pasture, 3m from a stream. Appears to be intact, with little indication of any plough-damage. Close to undated cropmark feature 2268.
Score of 9, category F.
Recommended for scheduling

2. **Mound 3458 (Tedion: SN 0764 1089)** Well-preserved near-circular mound with flattened top, approx. 10m in diameter. and about 0.50m above a boggy area to NW. This mound was difficult to find, being fairly slight viewed from the south-east and produced only limited traces of burnt material on sampling. All of the surrounding area consists of scrub, trees and boggy ground which appears not to have been ploughed. Stream is about 20m away to the north-west and a hedge bank is located 15m to the north-east. Nearby sites include: a standing stone place-name PRN 7867 800m to the north-east and a standing stone PRN 3457 900m to the south-east. **Score of 9, category F.**
Recommended for scheduling

3. **Mound 3574 (Drim Wood: SN 0756 1922)** The well-preserved mound is crescent or horseshoe shape, *approx.* 11m across, 0.50m high on west side and 0.75m on east side. It appears well preserved but has some limited root disturbance. The mound is situated approximate 2m above the stream on its south side and about 20m above the junction with another stream joining the northern side. The slight 0.50m hollow of the interior of the mound shows burnt stone lying below pine needles. The site is within a cluster of other sites, including: Enclosures PRN 3572 and PRN 10639 600m to the north-east both possibly out of view: Hillfort PRN 8982 75m to the north; Unknown earthwork PRN 7620 250m to the south-east; Enclosures PRN 3570 and PRN 3575 325m and 400m to the south-east, both of these are probably just out of view. The site will be endangered by any further forestry work.
Score of 10, category F.
Recommended for scheduling

4. **Mounds 3629 and 3630 (Dinaston: SN 0764 1089, SN 0768 1089)** Sub-crescent shaped mound, approx. 10m x 7m x 0.60m high. Horns point up-stream (west). The site environs have never have been ploughed but has a forestry pine plantation close-by. A very small or damaged burnt mound PRN 3630 lies 45m to the south-east. It is possible that replanting of forestry could damage this site. Nearby sites include: an earthwork PRN 3634 200m to the south-east; Post Med? enclosure PRN 3632 and a cropmark PRN 4307 600m to the south-east. **Score of 12 (3629) and 9 (3630), category D.**
Recommended for scheduling

5. **Mound 9526 (Glan-Rhocca: SN 6312 5373)** Crescent shaped mound, 17m x 15m and c. 0.80m in height Situated in boggy pasture, with a spring-fed pond 40m to the west. Good well-preserved example of a rare crescent/ kidney mound. Mound is c. 100m north of marked site on 6" map, with no sign of mound at original point. Close to cropmarks PRNs 6350 and 6351 and 6532, all unidentified and undated features. **Score of 9, category F.**
Recommended for scheduling

6. **Mound 13376 (Eglwyscummin: SN 2195 0734).** Recently damaged site which is poorly defined and subject to continuing damage. The site is within a large group of predominately prehistoric sites, some of which are scheduled, although the site is most closely located to a probable medieval longhouse. This site should be considered for scheduled as forming part of an archaeological topographical group.
Score of 9, category E.
Recommended for scheduling

7. **Mound 30513 (Myndydd Mallaen: SN 7242 4308)** Crescent mound, 15m x 11m x 1.5m located on the steep south slope, adjacent to a spring. The mound is partly encroached by boggy deposits on its eastern side and sections have been exposed by sheep scraps. Considered by George Williams as an outstanding mound, closely situated in the vicinity of a wide range of prehistoric and medieval upland settlement features. **Score of 11, category F.**
Recommended for scheduling.

5.3 Recommendations for border-line scheduling and/or landowner notification

8. **Mound 2450 (Stember Wood: SM 9746 2000)** Apparently a well-preserved example which appears sub-circular, approximate 9m diameter and 0.60m high, with a straighter east side facing a minor stream from bog, possibly a former spring?. Site is under scrub and brambles which the landowner has no intention of clearing. The boggy area does not appear peaty.
Score of 9, category D/E.
Borderline recommendation for scheduling

9. **Mound 3596 (Nash Farm: SN 0472 1276)** Sub-circular mount, at least 14m across and up to 1m height, but uncertainty does exist to how much of the mound is made up of natural. Augering on the western edge of the site found natural 0.30m below the ground surface. There is a well-founded suspicion that the mound may continue under silt which may have accumulated around the mound. Surface traces indicated a possible trench feature associated with the mound, which although could be from recent activity does suggests scheduling potential, since few features of this type have been found associated with burnt mounds. The site appears not to have been cultivated and despite tree-planting and arable farming in the surrounding fields, the environs of the mound appear well-preserved. **Score of 9, category E.**
Borderline recommendation for scheduling

10. **Mound 3724 (Llanddewi-Velfrey: SN 1422 1681)** Large well-preserved oval mound, 16m x 12m and 0.45m, sheltered within the 'U' bend of an adjacent stream, within untended and heavily overgrown light woodland and scrub. The mound is close to the fence of a sewage sub-station, which may make it vulnerable to site alterations or maintenance in the future. The mound consists of densely packed charcoal and burnt stone, surrounded by reasonably well-preserved environs.
Score of 7, category E.
Borderline recommendation for scheduling

11. **Mound 3758 (Southfields: SN 1090 1287)** A very large heavily damaged sub-circular mound, 13m x 10m x 1.4m high, easily seen in small stream valley. Southern edge straightened and damaged by hedge bank cutting and possible later steam bed (now dry). Some leaf mould above very dark soil and fire cracked stone. Unknown earthwork PRN 3763 270m to the north; an enclosure (Iron Age?) PRN 3749 410m to the north-east; Hillfort? PRN 3785 800m to the north. Burnt mound PRN 3757 70m to the east. **Score of 10, category D.**
Borderline recommendation for scheduling

12. **Mound 3778 (Princess Gate: SN 1367 1304)** Oval/kidney shaped mound, 24m x 12m x 0.60m with shallow 'tailed' west edge, within rough pasture close to a stream. Trackway runs through the centre of the mound and across a shallow ford. High score, rare kidney type with good association with other burnt mounds, but only produced small amounts of burnt stone and charcoal on sampled area. Mound being eroded by trackway. **Score of 9, category E**
Borderline recommendation for scheduling

13. **Mound 3788 (Coad Ffynon: SN 1608 1475)** Sub-circular mound with flatish top, approx. 17m x 12m and 0.6m high. Very distinct western side. Mole-hills show vast amounts of fire affected stone, extending to ditch/stream. No history of ploughing since field is too stony and wet, but some additional cattle erosion due to trough placed on the site. Burnt Mounds PRN 3786 800m to SW; PRN 3789 700m to the west. Sympathetic land owner, with an interest in archaeology. However could be problem if land changed ownership. **Score of 9, category D.**
Borderline recommendation for scheduling

14. **Mound 3886 (Allt Pencoed: SN 2411 1325)** Large elongated platform mound, 18m x 12m and 0.60m in height. Within pasture, 10m north of a small dried up stream and 200m w of the main stream. Area contains a number of other raised mounds, all proving negative. Good well-preserved example of a platform mound, some limited degree of plough damage to northern side of the feature with mixing of topsoil and burnt material in extracted sample. **Score of 8, category E.**
Borderline recommendation for scheduling

15. **Mound 13053 (Troedrwiw Gwinau: SN 6195 8234)** Circular mound, 12m in diameter and up to 1.20m in height. Uncovered during a pipeline watching brief. The mound was partly excavated by the cutting of an evaluation trench through the centre of the feature exposing a visible section. No features were found to be directly associated with the mound, although another mound, PRN 12772, lay within 200m. The potential for environmental sampling was considered to be good. Beyond the effects of the archaeological trench, the environs of the mound were affected to a limited extent by the cutting of the pipe trench and associated topsoil dumping, but still remained reasonably preserved.
Score of 9, category D.
Borderline recommendation for scheduling

16. **Mound 3549 (Deborah's Inn: SN 0488 1751)** Circular mound, 16m in diameter and 0.50m high on west side of ditch which has been re-cut for hedge bank construction. Mound damaged with burnt material immediately below turf, and seen in shallow tractor ruts that cross over the site. Field would probably have been ploughed in past, and there is also evidence of re-seeding. Land owner aware of mound and sympathetic to archaeology. Reported similar material to North east of farm near a well 3576, but further away. This later site was not traced. Burnt mounds nearby include: PRN 3550 300m to the south-west; PRN 3560 800m to the north and a round barrow PRN 3548 700m to the east.
Score of 9, category C.
Recommended officially informing landowner of site and location

17. **Mound 3610 (Newton Farm: SN 0645 1360)** A well-preserved sub-circular mound, approx. 14m in diameter and 1.2m higher than stream at west end. The site is situated at the western end of a natural ridge within a flat bottomed woodland valley, *approx.* 40m across. There is almost no surface evidence for this mound, other than the soil is very dark below leaf cover. The eastern end is ill defined, although there is a very small slope in this direction. Any replanting would destroy the site.
Score of 9, category E/C.
Borderline recommendation for scheduling/ or at least informing owners of the site location

18. **Mound 3652 (Trewern: SN 1232 0868)** Very distinct linear mound, at least 15m long, 6-10m wide and standing up to 0.75m high, possibly over a natural feature. Black soil showed in rabbit scratching and stream edges. The stream is slightly eroding the edge of the mound, while the south-eastern end of the mound was partly hidden by scrub and hedgebank. Low priority site with sympathetic owner.
Score of 8, category C.
Recommended informing landowner of site and location

19. **Mounds 3807, 3808 and 33793 (White Lion Cottage: SN 1983 1300, SN 1983 1250, SN 1980 1296)** Three mounds located 60m south of trackway through plantation and immediately to the east of an old hedgebank. A stream on the west side of hedge bank cuts through it just to the south of mound 3807. The large Crescent mound 3807, approx. 12m across and, 1.30m to 0.15m high, with horns facing the stream. The mound has been damaged by some animal disturbance, possibly fox holes, with a vast amount of heavily burnt stone and black soil spilling from the feature. Mixing of deposits from the auger sample would seem to imply that the animal damage could turn out to be more substantial than surface traces would indicate. This may prove to be a continuing problem. The mound is partly covered by scrub, but with no pine trees on the mound itself, although they are close around it. Burnt mound 33793, a ill-defined circular mound 7m in diameter, lies 12m to the south-west and mound 3808, even more poorly defined, 60m to the south of mound 3807.
Score of 12 (3807), 12 (3808) and 10 (33793), category E/C.
Borderline recommendation for scheduling/Excavation and/or sampling

20. **Mound 3834 (Payett's Well: SN 2133 0736)** Site was not found, a good possibility exists that the site may simply have eroded away since it was recorded as close to sea edge. Large number of sites and find spots are recorded in the general area, but mostly over 100m away. These include: a burnt mound PRN 13376 700m to the east, but not in view; prehistoric flints PRN 7636, which were recorded around the mound; round barrows PRNs 3835, 3836 and 13375; cairn PRN 3836; chambered tombs PRN 3822-5; Long cairn PRN 11430; prehistoric finds PRN 13380;. long hut PRN 24644.
Score of 5, category A (at present).
Borderline recommendation for scheduling if found at a later date

5.4 Sites fulfilling scoring criteria but not meriting scheduled status

The vast majority of these sites, which scored 7 or greater in the main selection criteria all fall into the secondary selection criteria category 'C' i.e. *Very damaged, usually by ploughing which usually includes the environs of the mounds.*
Of these sites, 6 sites have been recommended as priorities for fieldwork (shown in **BOLD CAPITALS**). It may well be that given the extremely low number of sampled and excavated examples of burnt mounds examined in Dyfed that others from this list should be considered at a later date for fieldwork as previously recommended by George Williams.

Sites badly stream eroded

MOUND 2152 (LLANYBRI: SN 3218 1361) SCORE OF 9
MOUND 2176 (LLANDEILO ABERCOWIN FARM: SN 3147 1321) SCORE OF 7
Mound 2214 (Pen-Gelli-Isaf: SN 3581 1458) Score of 8
Mound 3894 (Blaen Waun Farm: SN 2056 1358) Score of 7
MOUND 4023 (MYNYDD-GARDDU: SN 6754 8681) SCORE OF 11
Mound 14229 (Penrhyn: SN 1422 4902) Score of 7

Plough damaged

Mound 3633 (Carn-uch farm) Score of 7
Mound 3723 (Llanddewi Velfrey: SN 1409 1678) Score of 8
Mound 3775 (Hill Farm: SN 1332 1181) Score of 8
Mound 3806 (Mountain Farm: SN 18851236) Score of 7
MOUND 3817 (MOUNTAIN FARM: SN 1893 1276) SCORE OF 9
MOUND 13293 (PENYPONT BREN: SN 736 743) SCORE OF 7
Mound 14218 (Gernos: SN 1283 4789) Score of 8
Mound 14219 (Gernos: SN 1286 4790) Score of 8
Mound 14224 (Esgryn Fach: SN 1409 4732) Score of 7
Mound 14226 (Esgryn Fach: SN 1403 4731) Score of 8
Mound 14230 (Ty-Hir: SN 1532 4618) Score of 7
Mound 14233 (Bryncws Fach: SN 1599 4559) Score of 7
Mound 14390 (Coed y Sgubor-y-coed: SN 6804 9506) Score of 7
Mound 33792 (Mountain Farm: SN 1890 1277) Score of 7
Mound 34443 (Hendre Felen: SN 7187 7023) Score of 9
Mound 34445(Celan y Mor: SN 1479 4870) Score of 7

Animal or drainage disturbance

Mound 3780 (Redford bridge: SN 1377 1276) Score of 7
Mound 14234 (Bryncws Fach: SN 1588 4557) Score of 8
Mound 14970 (Afon Marnog: SN 3025 3629) Score of 7
Mound 34446 (Ty'r Cwm: SN 7143 2094) Score of 7
Mound 34447 (Ty'r Cwm: SN 7141 2095) Score of 8

6. RECOMMENDATIONS FOR FURTHER WORK

6.1 Introduction

George Williams's report for the 1994-5 survey made a case for further action on a total of 14 sites, either in the form of excavation and C14 sampling (Mounds **808, 1691, 557, 2989, 3014, 3166, 3190 and 9824**) or simple recording of exposed sections and extraction of C14 samples (Mounds **798, 1205 and 4067**). He further recommended a programme of excavation/sampling at a later date, which could investigate sites with high scores drawn from the category C which had failed to make the scheduling lists.

The 1997/8 survey identified a further 16 mounds located in 14 sites which need further work, many of them urgent. Eight suffer from severe river erosion: **2152; 2176; 3552; 3757; 3797/3798; 4023 and 12874.** The rest are under threat or already damaged from a combination of cattle/sheep scrap, boundary/drainage disturbance or path erosion: **2177** (A very badly damaged mound, perhaps too late for meaningful action); **3459; 3597; 3817/33792; 13293** and **33791.**
The last mound **30513** suffers from limited sheep scrape, but was noted by George Williams as an outstanding site with high environmental potential and has been also put forward a candidate for scheduling.

6.2 Recommendations for further work

1. **Mound 2152 (Llanybri: SN 3218 1361)** Small oval mound situated within boggy pasture close to a spring and stream. Mound has been almost completely half-sectioned by the stream, with heavy deposits of burnt stone and charcoal visible in section and along the stream. Part of the mound's section is in imminent danger of collapse. High score, but very damaged to put forward for borderline scheduling.
Excavation and/or candidate for C^{14} sampling

2. **Mound 2176 (Llandeilo Abercowin: SN 3147 1321)** Platform mound half-sectioned by stream and cattle tracks, and showing large quantities of burnt stone and charcoal fragments above a reddish-burnt clay base. Mound has been badly eroded into three peaks. Poor environmental potential, but needs quick action.
Candidate for C^{14} sampling

3. **Mound 2177 (Llandeilo Abercowin: SN 3138 1292)** Raised platform mound with ill-defined limits. Charcoal and burnt stone fragments visible in section, but low environmental potential. Not all mound is 'real', only a small percentage of the mound contains burnt material, no trace of burning throughout the majority of the rest of the mound.
Candidate for C^{14} sampling

4. **Mound 3459 (Prettyland: SN 0191 0877)** Sub-oval mound disturbed by former cattle crossing and cut by hedge-row.
Evaluation excavation and/or Candidate for C^{14} sampling

5. **Mound 3552 (Coldblow: SN 0145 1510).** Minor surviving mound with little surface evidence, but shows in stream bank section. Possibly has one "set" large stone (0.20m across, 0.15m proud) within the mound, which may be significant.
Excavation and/or Candidate for C^{14} sampling

6. **Mound 3597 (Broomhill: SN 0413 1173)** Only survives as linear mound on the edge of a pasture field, ploughing for re-seedling appears to have cut into the north side of mound.
Borderline candidate for C^{14} sampling or excavation

7. **Mound 3757 (Southfields: SN 1090 1292).** Cut by stream which has been moved east by hedge bank. Burnt mound also in or under hedge bank, as burnt material and black soil seen in it.
Candidate for C^{14} sampling

8. **Mounds 3797 and 3798 (Pen-Ffordd: SN 1613 1271, SN 1612 1274)** Both mounds cut by a stream with burnt material cascading down eroded bank.. Burnt material runs along the stream bank for about a distance of about 12m.
Candidate for C^{14} sampling

9. **Mounds 3817 and 33792 (Mountain Farm: SN 1893 1276)** Oval mound in edge of pasture field. South end of mound probably damaged by removal of old fence.
No evidence of re-seeding but suspect field may have been cultivated in the past 33792 very small. Bog to west may contain peat deposits. Should formally inform owner of existence.
Evaluation excavation and/or Candidate for C^{14} sampling

10. **Mound 4023 (Penrhyn-Coch: SN 6754 8681)** Flattened oval/semi-circular mound, 10m x 5m x 0.70m, on south bank of stream. North face of mound has been eroded by water action exposing thick deposits of charcoal and burnt stone, which appears to sit on a low natural mound, of which quite a number exist along both banks of the stream. Under threat from stream erosion.
Excavation and/or C^{14} sample

11. **Mound 12874 (Mynydd-Gorddu: SN 6652 8591)** Semi-circular/ crescent mound, 12m x 7m x 0.40m, burnt stone and charcoal visible in section exposed by stream erosion.
Borderline candidate for C^{14} sampling.

12. **Mound 13293 (Pen y Pont Bren: SN 736 743)** Semi-circular mound, 8m x 7m, on the bank of a small tributary stream. Eastern edge of the mound has been eroded by a path. Section of mound shows mix of dark soil and burnt stone.
Borderline candidate for C^{14} sampling.

13. **Mound 30513 (Myndydd Mallaen; SN 7242 4308)** Crescent mound, 15m x 11m x 1.5m located on the steep south slope, adjacent to a spring. The mound is partly encroached by peat on its east side and sections have been exposed by sheep scraps. Considered by George Williams as an outstanding mound, closely situated in the vicinity of a wide range of prehistoric and medieval upland settlement features. Recommended for scheduling, but if this option is not taken up, then the mound would make an excellent candidate for a research excavation.

14. **Mound 33791 (Stember Wood: SM 9742 2015)** Very damaged mound, with exposed section.
Candidate for C^{14} sampling

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1997/8 survey: field-survey:	Andy Manning and Pete Crane
1994/5 survey and report:	George Williams
1997-8 text:	Andy Manning and Pete Crane
Illustrations:	Andy Manning and Hubert Wilson

APPENDIX A.
1997/8 Survey results

Tested sites

Positive (shape/water source/land type) Total of 89 sites

Shape= crescent, oval/circular, platform, kidney, uncertain
Water source= stream, spring, none, sea
Land type= pasture, rough pasture, marsh/bog, heath, woodland, forestry, scrub, , arable land

Note: **nd** = no details in that category

808 (o/st/p)	3623 (un/st/wo)	3894 (o/sp/wo)	14234 (nd/sp/nd)
2152 (o/st/p)	3624 (o/sp/p)	3903 (o/st/p)	14390 (o/st/p)
2176 (o/st/p)	3629 (c/sp/f, sc)	3957 (o/st/p)	14391 (pl?/st/p)
2177 (o/st/p)	3630 (nd/sp/sc)	4023 (o/st/p)	14392 (o/st/p)
2214 (o/st/p)	3633 (o/sp/rp)	7802 (un/sp/p)	14954 (o/st/nd)
2247 (o/sp/p)	3652 (pl?/sp/p)	8498 (o/sp/sc)	14970 (o/st/nd)
2267 (pl/st/p)	3723 (pl/st/p)	8499 (o/sp/sc)	30513 (c/sp/m)
2450 (o/st/sc)	3724 (o/st/wo)	9526 (k/sp/p)	33791 (o/st/ara)
3319 (o/st/p)	3744 (o/st/p)	11345 (nd)	33792 (o/sp/p)
3332 (o?/st/p	3757 (un/st/sc)	12874 (c/st/p)	33793 (o/st/f)
3333 (o?/sp/p)	3758 (o/sp/wo)	13049 (nd/st/p)	34441 (o/st/wo)
3458 (o/st/wo)	3775 (o/st/p)	13050 (nd/st/p)	34443 (o/nd/nd)
3459 (o?/st/sc)	3777 (o/st/p)	13053 (o/st/p)	34445 (o/nd)
3482 (o?/st/p)	3778 (k/st/p)	13293 (o?/st/p)	34446 (o/st/p)
3506 (o?/st/p)	3780 (pl/st/p)	13376 (nd/n/h)	34447 (o/st/p)
3545 (o?/st/p)	3788 (o, pl/st/p)	14218 (o/st/p)	35841 (o/st/p)
3549 (o/st/p)	3797 (nd/sp/p)	14219 (o/st/p)	35842 (o/st/p)
3552 (o/st/sc)	3798 (nd/sp/p)	14224 (o/nd/p)	35843 (o/st/p)
3574 (c/st/f)	3806 (pl/st/p)	14226 (nd/p)	35844 (o/st/p)
3588 (o/sp, st/wo)	3807 (c/st/f)	14229 (nd/st)	35845(o/st/p)
3596 (o/sp/wo)	3808 (o?/st/f)	14230 (nd)	
3597 (o?/st/p)	3817 (o?/sp/sc)	14232 (nd)	
3610 (o/st/wo)	3886 (o/st/p)	14233 (nd/sp/nd)	

Negative Total of 30 sites

585	3486	3743	3890
916	3537	3759	3961
1980	3651	3760	4138
2162	3700	3761	8204
2331	3714	3774	8526
3122	3722	3776	8983
3254	3726	3779	
3266	3738	3868	

Uncertain Total of 2 sites

3742 (pl/st/p)	3781 (o/st/p)

Other functions Total of 5 sites

11913/12788= Natural mound?/bonfire? 14231=bonfire 14225=bonfire? 14416=Palaeoenvironmental deposit 3609=Post-medieval furnace feature

Untested sites

No access A total of 30 sites

1281 (nd/sp/sc)
2088 (nd/sp/nd)
2124 (nd/sp/nd)
2138 (nd/nd/h)
2139 (nd)
2211 (nd/st/p)
2212 (nd)
2213 (nd)
2215 (nd/st/p)
2886 (nd/sp/nd)
2887 (nd)
2888 (nd)
2889 (nd)
3767 (nd)
3769 (nd)
3811 (nd)
3812 (nd)
3813 (nd)
3814 (nd)
3888 (c/sp/p)
3892 (nd)
3893 (nd)
3895 (c/st/nd)
3896 (nd/st/nd)
4022 (c/st/p)
4024 (o/st/p)
4140 (nd)
4828 (nd/sp/nd)
8994 (nd)
9786 (nd/sp/sc)

Destroyed Total of 63 sites

(**L**and Improvement), (**D**rainage), (**G**arden), (**C**onstruction), (**N**ot known), (**P**iping), (**A**rable ploughing/crops and other farming activities), (**Anim**al action), (**R**eservoir)(**C**liff **E**rosion) and (**F**orestry)

13239 (Ara/o/nd/rp)
3627 (LI?/nd/st/sc)
574? (Ara/nd/sp/p)
581? (Ara/nd/sp/p)
1404 (Ara/nd/st/ara)
1405 (Ara/nd/sp/ara)
2189 (P/nd/st/p)
2190 (P/nd)
2216 (Ara/nd)
2330 (Con/nd)
2434? (Dr?/nd/sp/sc)
2779 (LI/nd/st/rp)
2805 (LI/nd/sp/sc)
2963 (CEr/nd),
2963 (CEr/nd/nd/nd)
3074 (Ara/nd/st/p)
3108 (Ara/nd/st/sc)
3119 (Ara/nd/sp/p)
3121 (Ara?/nd/sp/p)
3126 (Ara/nd/st/p)
3129 (Ara?/nd/st/rp)
3222 (LI/nd/nd/nd)
3231 (Nkn/nd/sp/sc)
3232 (Ara/nd/st/p)
3233 (Ara/nd/st/p)
3234 (Ara/nd/st/p)
3249 (Ara?/nd/sp/p)
3251 (Ara/nd/sp/p)
3253 (Ara/nd/st/p)
3267 (Ara/nd/st/ara)
3305? (Ara?/nd/st/p)
3509? (Ara/nd/sp/p)
3512? (Ara/nd/st/p)
3540? (Ara/nd/sp/p)
3560 (Ara/nd/st/p)
3626 (Ara/nd/st/p)
3737 (LI/nd)
3786 (Ara/nd/st/p)
3809 (Ara/nd/st/p)
3810 (Ara/nd/st/p)
3834 (CEr/nd/sp/sc)
3861 (Nkn/nd/sp/p)
3865 (Dr/o/sp/p)
3889 (LI/nd)
4026 (LI/nd)
4032 (LI/nd)
4190?
(CEr?/nd/sp/sc)
4191?
(CEr?/nd/sp/sc)
4192?
(CEr?/nd/sp/sc)
4214?
(CEr?/nd/sea/sc)
5633
(Anim/nd/sp/nd)
6174 (Ara/nd/sp/nd)
7803 (Gard/nd/sp/nd)
8984 (Gard/nd/st/nd)
9785? (Ara?/nd/sp/p)
9787? (Ara?/nd/sp/p)
11120 (Res/o/st/p)
11876 (Res/o/st/p)
13120 (LI/nd/sp/ara)
14213 (Ara/o/st/ara)
14410 (LI/nd)
34444 (Con/o/nd/p)
35413 (Con/o/st/p)

Not found Total of 32 sites

1340 (nd/sp/p)
1938 (nd)
1939 (nd)
1981 (nd)
2178 (nd/sp/wo)
3120 (nd/sp/sc)
3123 (nd/st/sc)
3230 (nd/st/wo)
3239 (nd/st/sc)
3252 (nd/st/sc)
3460 (nd/st/sc)
3546 (nd/st/p)
3550 (nd/sp/p)
3553 (c/st/wo)
3608 (nd/st/f)
3609 (nd/sp/f)
3789 (nd/sp/p)
3801 (nd/st/p)
4025 (nd/st/p)
4030 (nd/st/nd)
4139 (nd/st/nd)
4155 (o/st/p)
6175 (nd/none/nd)
7807 (nd/sp/p)
8993 (nd)
9524 (nd)
9767 (nd/sp/p)
9784 (nd/st?/sc)
12001 (nd)
12772 (c/st/p)
33790 (nd/sp/p)
34447 (o/st/p)

APPENDIX B.

Contact names and address of landowners of recommended/borderline sites for scheduling

Mound 2267	Mr. R.B. Walters, Derllys Court Farm, Llysonnen Road, Bancyfelin, Carms. Tele. (01267) 211309
Mounds 2450 and 33791	Mr.V Jenkins. Stember Cross, Poyston Cross, Rudbaxton, Nr Haverfordwest. Tele. (01437) 763269
Mound 3459	Mr David Lort-Phillips. Knowels Farm, Lawrenny. Tele. (01834) 891221
Mound 3458	J H Roberts. Mountain Park Farm, Lawrenny. Tele. (01834) 891620
Mound 3549	K Graham. Ellenswell Farm, Llawhaden. Llawhaden Tele. (01437) 541221
Mound 3552	Mr. Gwyn Jones. Arnolds Hill Farm, Slebech Haverfordwest SA62 4BA. Tele. (01437) 751293
Mound 3574	Mr. Robert Jones. Broadway Farm, Llawhaden
Mound 3596	Mr. Jim Brown, Nash Farm, Minwear, Nr Narberth, Pembs. Tele. (01834) 891244
Mound 3597	Broomhill Farm, Minwear, Nr Narberth
Mounds 3629 and 3630	T J B Nicholas. Dynaston Farm, Crosshands, Nr Narberth. Tele. (01834) 891668
Mound 3652	Mr W J B Scale. Trewern Farm, Rylands Road, Kilgetty Tele. (01834) 812475
Mound 3724	Mr. Lewis, Hellan Farm, Llanddewi Velfrey, Carms.
Mound 3757	Mr and Mrs B Vaughan. South Field, Cold Blow, Narberth. Tele. (01834) 860891
Mound 3758	H W Watkins. Woodland Farm, Cold Blow, Narberth. Tele. (01834) 860885
Mound 3778	Mr. Keith Charles, 39 Gelli Deg, Capel, Princess gate, Carms. Tele. (01554) 773004
Mound 3788	Colonel R H Gilbertson. Coed-y-ffynon, Lampeter Velfrey. Tele. (01834) 831396
Mounds 3797 and 3798	D K M James. South Treffgarne, Narberth.
Mounds 3807;3808 and 33793	Uncertain of ownership as near boundary, but could be: G & D Jones Golden Grove, Tavernspite. Whitland Tele. (01994) 240413
Mounds 3817 and 33792	Mr C Bruce. Cendle, Tavernspite.
Mound 3834	Public Access on coast.
Mound 3886	Mr. G.H. Griffiths, Parciau farm, Allt Pencoed, Llanddowror, St. Clears, Carms. Tele. (01994) 240233
Mound 9526	Mr. David Thorp, Glan Rhocca Farm, Llanddewi Brefi, Carms. Tele. (01570) 493239
Mound 13376	Public Access, several SAMs nearby
Mound 30513	No details as of yet

APPENDIX C.
Archive index

The project archive has been indexed and catalogued according to National Monument Record (NMR) categories.

A. REPORT

A1. Copy of final report
A4. Report on disk

B. SITE WRITTEN DATA

B2. Survey Database
B5. Survey data-paper

C DRAWINGS

C1. Catalogue of drawings
C3. Survey drawings

D PHOTOGRAPHS

D1. Catalogue of photographs
D2. Colour slides
D3. Black and white contact prints

L PRE- AND POST-SURVEY DESIGN

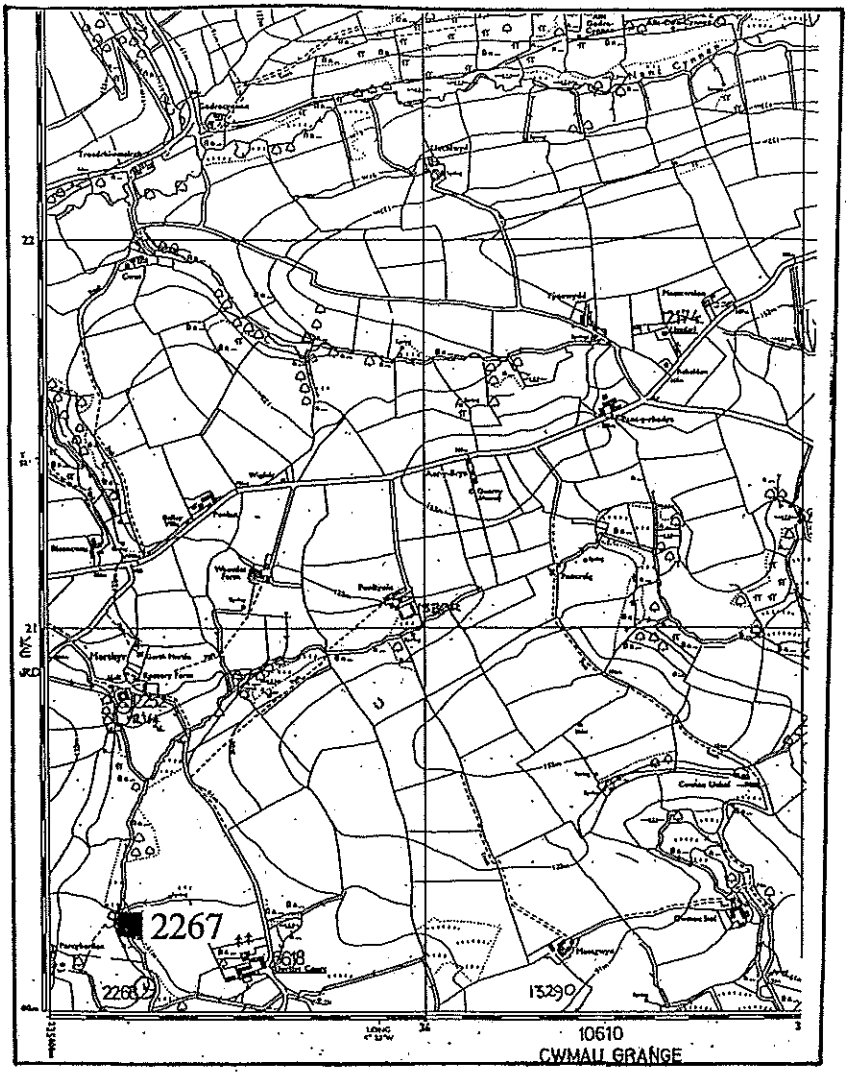
L1. Project research design

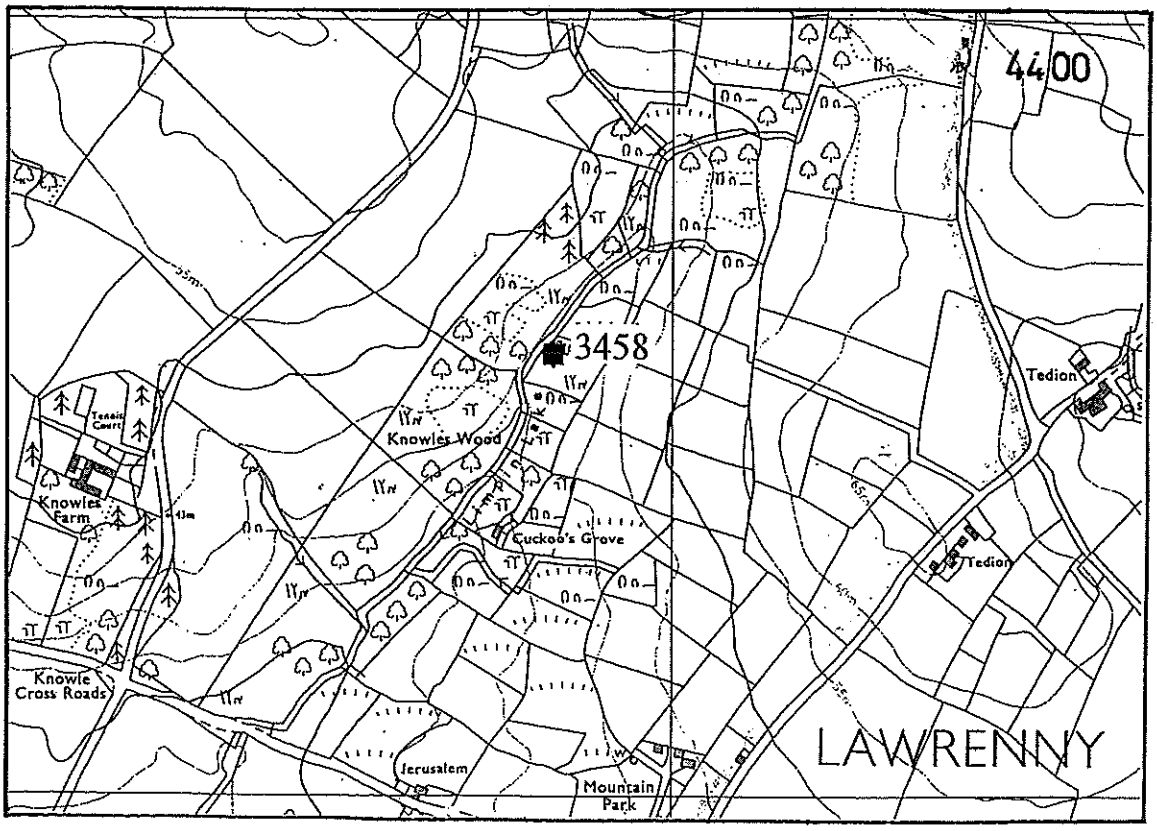
There is no material in classes E, F, G, H, I, J, K, M and N

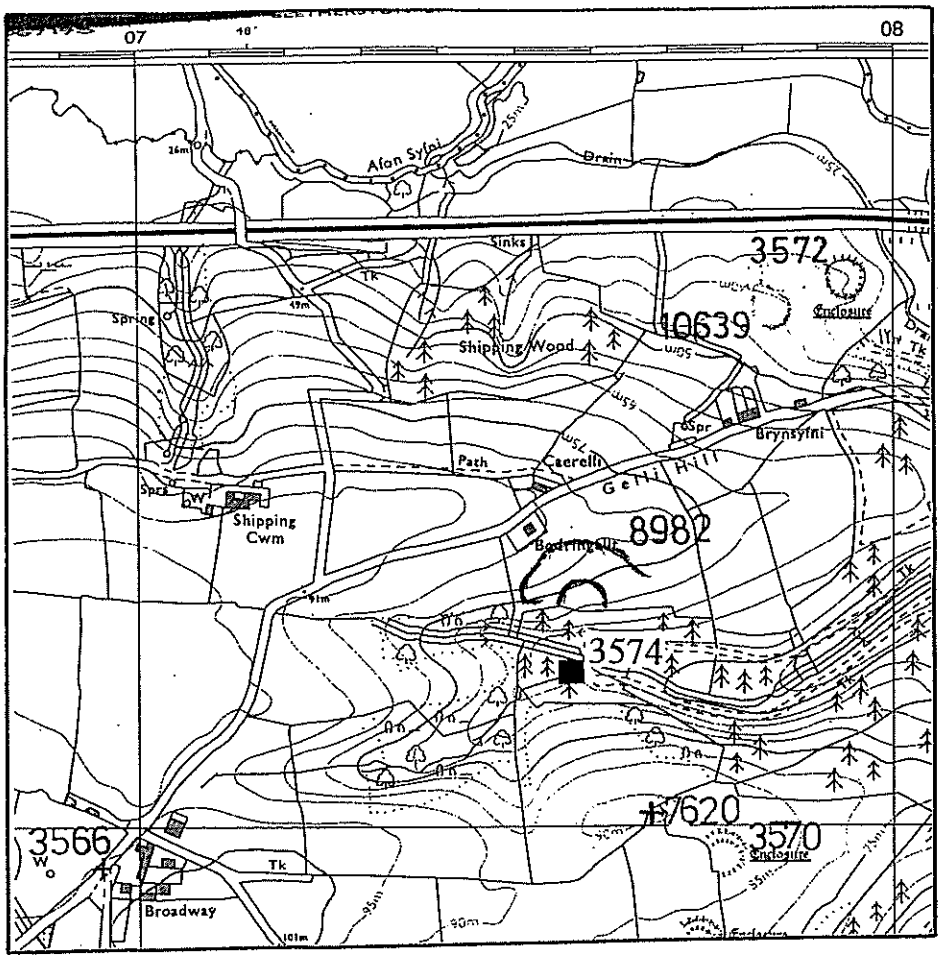
APPENDIX D.

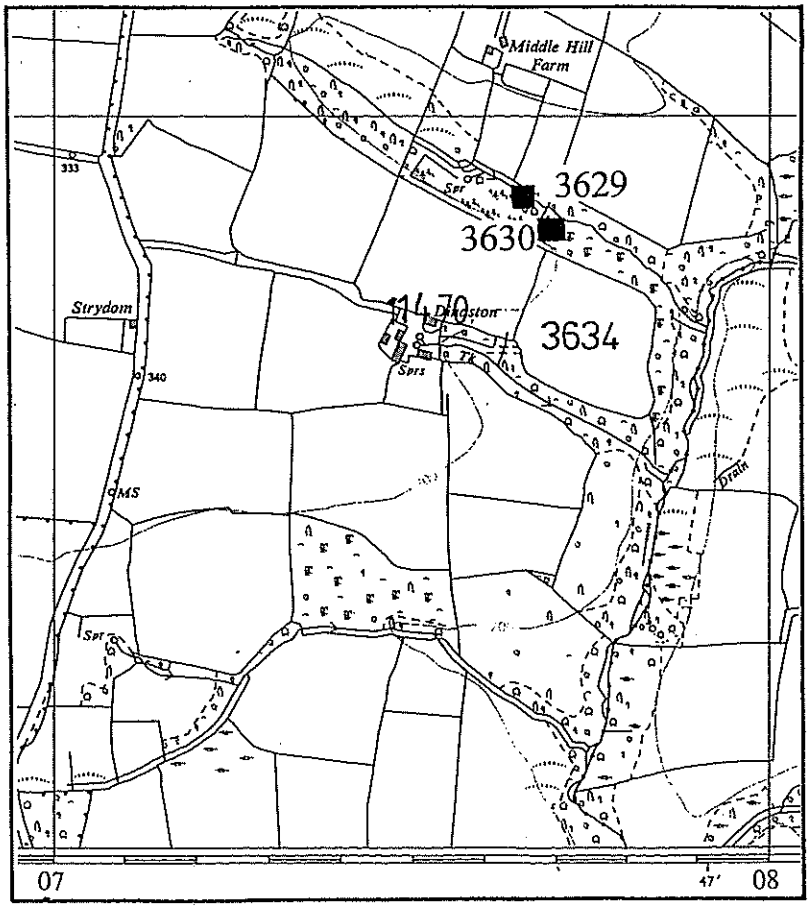
Location maps for sites recommended for scheduling, borderline scheduling or informing landowners

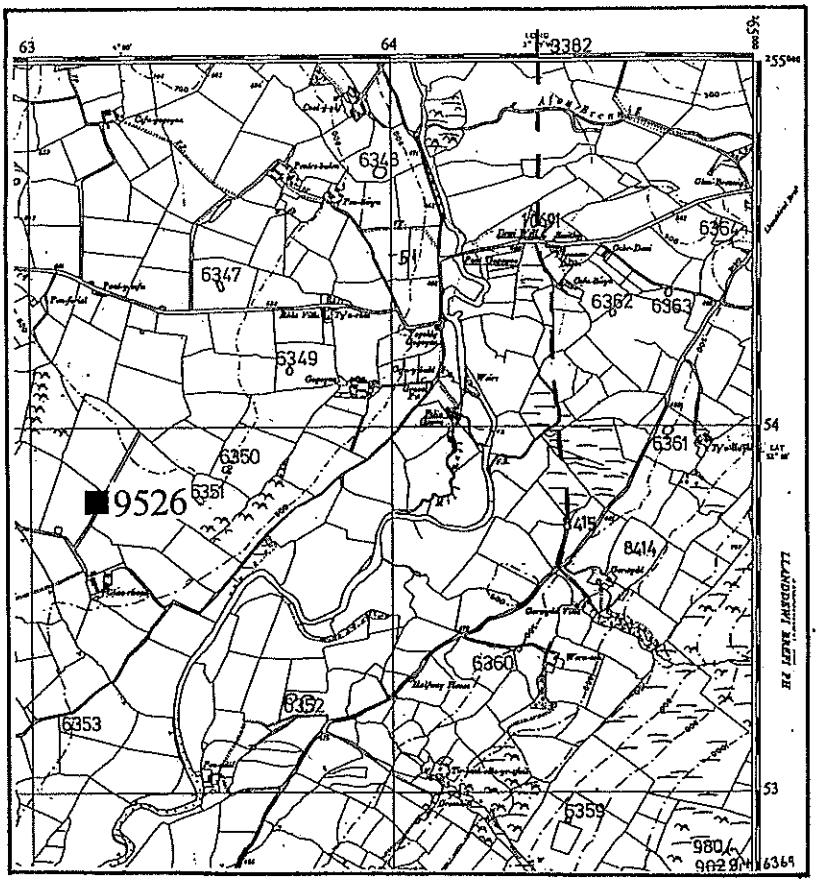
1.	Mound 2267 (Merthyr: SN 3523 2022)	Recommended for scheduling
2.	Mound 3458 (Tedion: SN 0764 1089)	Recommended for scheduling
3.	Mound 3574 (Drim Wood: SN 0756 1922)	Recommended for scheduling
4.	Mounds 3629 and 3630 (Dinaston: SN 0764 1089, SN 0768 1089)	Recommended for scheduling
5.	Mound 9526 (Glan-Rhocca: SN 6312 5373)	Recommended for scheduling
6.	Mounds 3834 (Payett's Well: SN 2133 0736) and 13376 (Eglwyscummin: SN 2195 0734)	Borderline recommendation for scheduling if found at a later date (3834) and Recommended for scheduling (13367)
7.	Mound 30513 (Myndydd Mallaen: SN 7242 4308)	Recommended for scheduling.
8.	Mound 2450 (Stember Wood: SM 9746 2000)	Borderline recommendation for scheduling
9.	Mound 3596 (Nash Farm: SN 0472 1276)	Borderline recommendation for scheduling
10.	Mound 3724 (Llanddewi-Velfrey: SN 1422 1681)	Borderline recommendation for scheduling
11.	Mound 3758 (Southfields: SN 1090 1287)	Borderline recommendation for scheduling
12.	Mound 3778 (Princess Gate: SN 1367 1304)	Borderline recommendation for scheduling
13.	Mound 3788 (Coad Ffynon: SN 1608 1475)	Borderline recommendation for scheduling
14.	Mound 3886 (Allt Pencoed: SN 2411 1325)	Borderline recommendation for scheduling
15.	Mound 13053 (Troedrwiw Gwinau: SN 6195 8234)	Borderline recommendation for scheduling
16.	Mound 3549 (Deborah's Inn: SN 0488 1751)	Recommended officially informing landowner of site and location
17.	Mound 3610 (Newton Farm: SN 0645 1360)	Borderline recommendation for scheduling/ or at least informing owners of the site location
18.	Mound 3652 (Trewern: SN 1232 0868)	Recommended informing landowner of site and location
19.	Mounds 3807, 3808 and 33793 (White Lion Cottage: SN 1983 1300, SN 1983 1250, SN 1980 1296)	Borderline recommendation for scheduling/Excavation and/or sampling

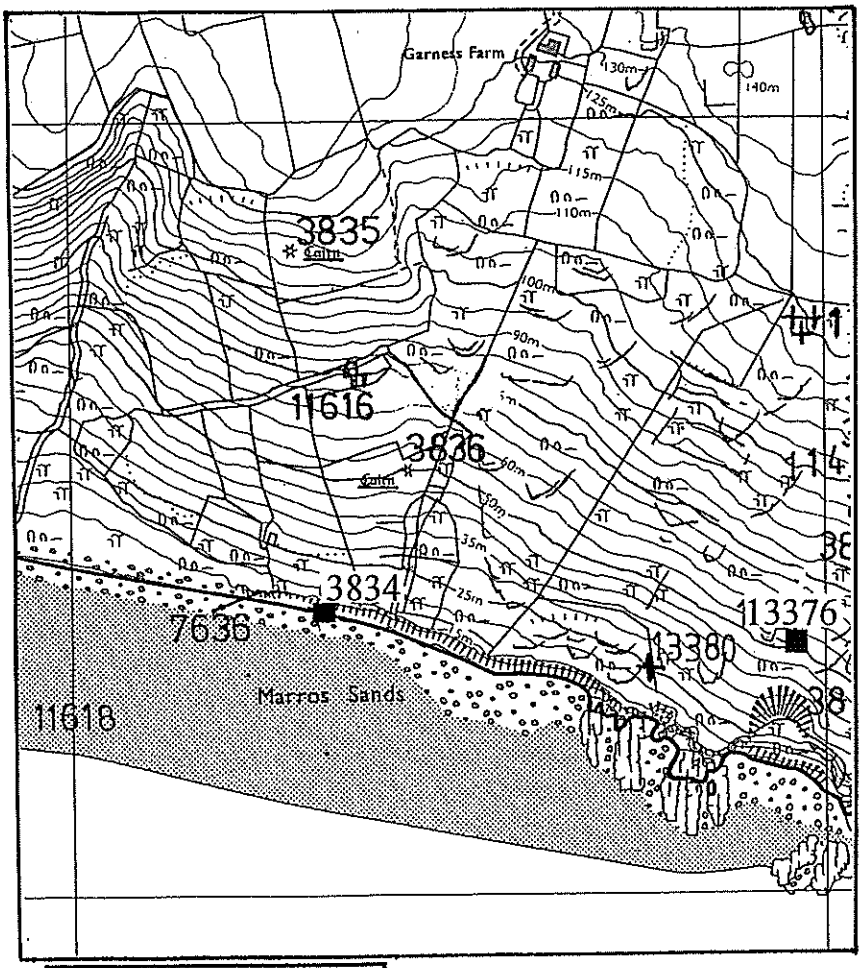


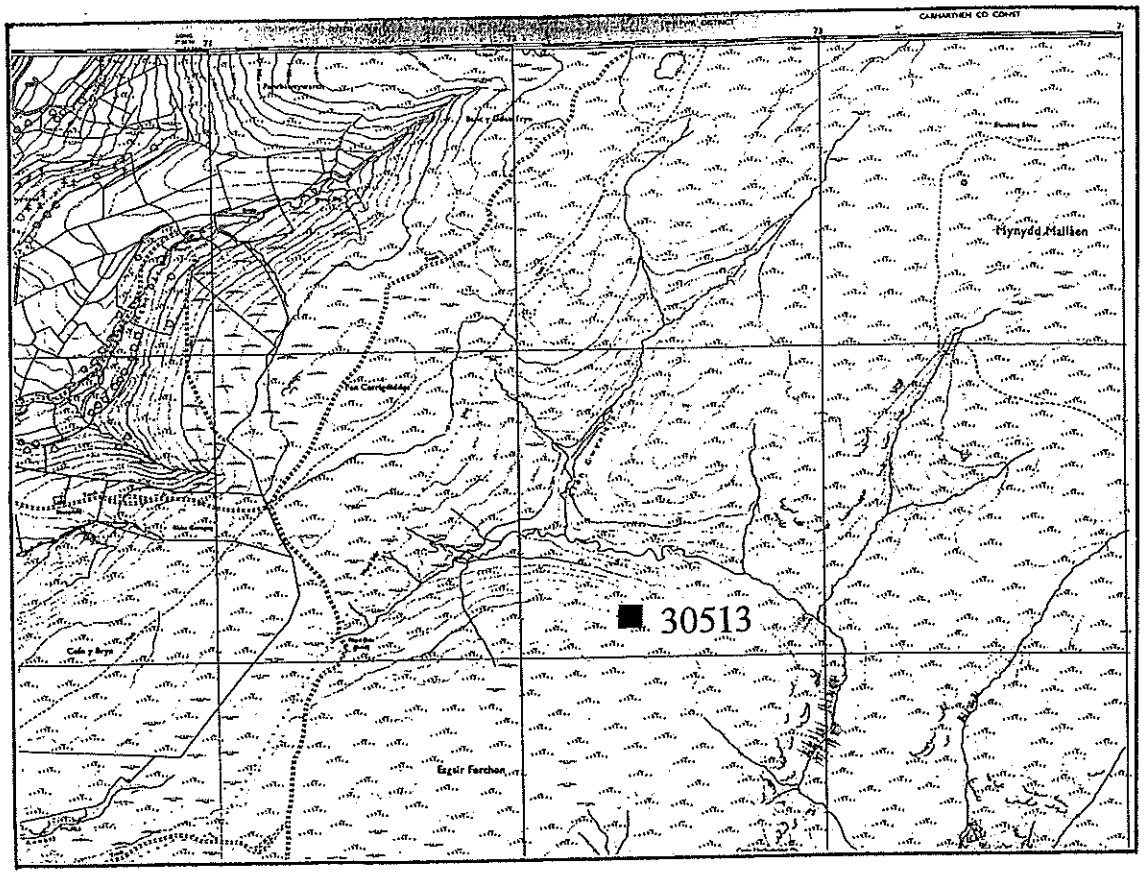


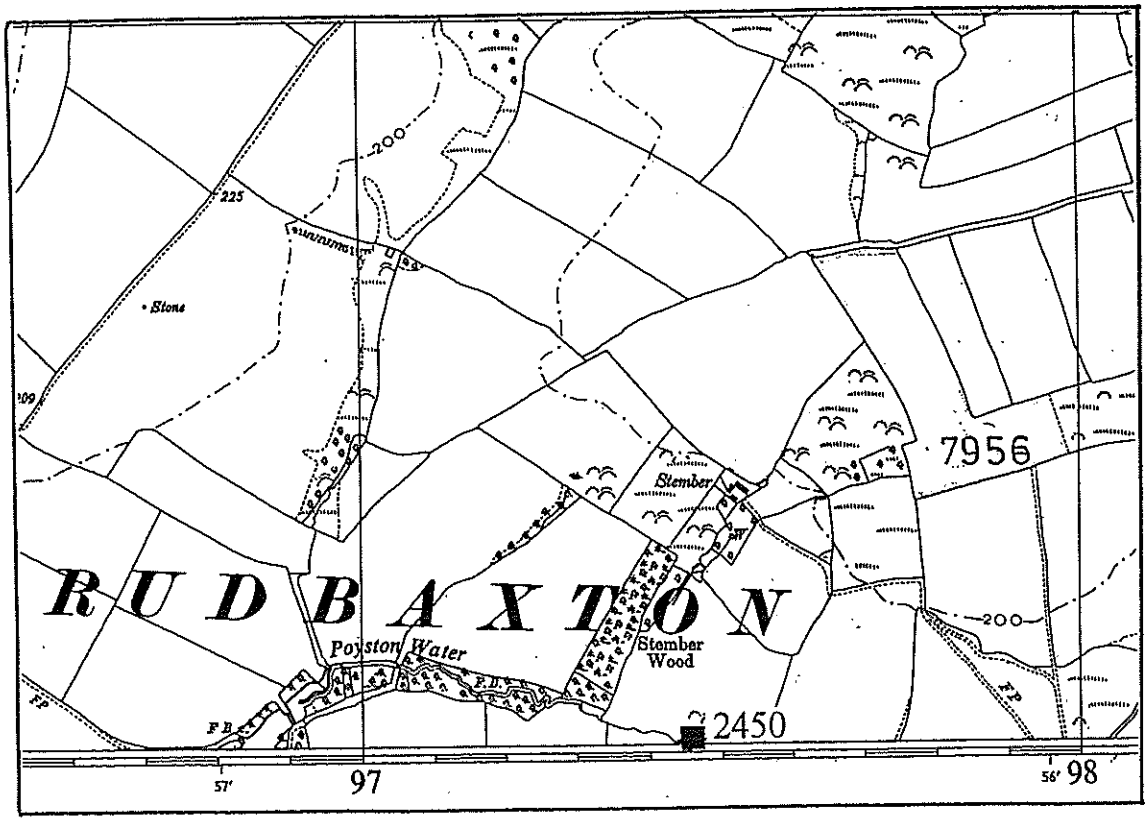


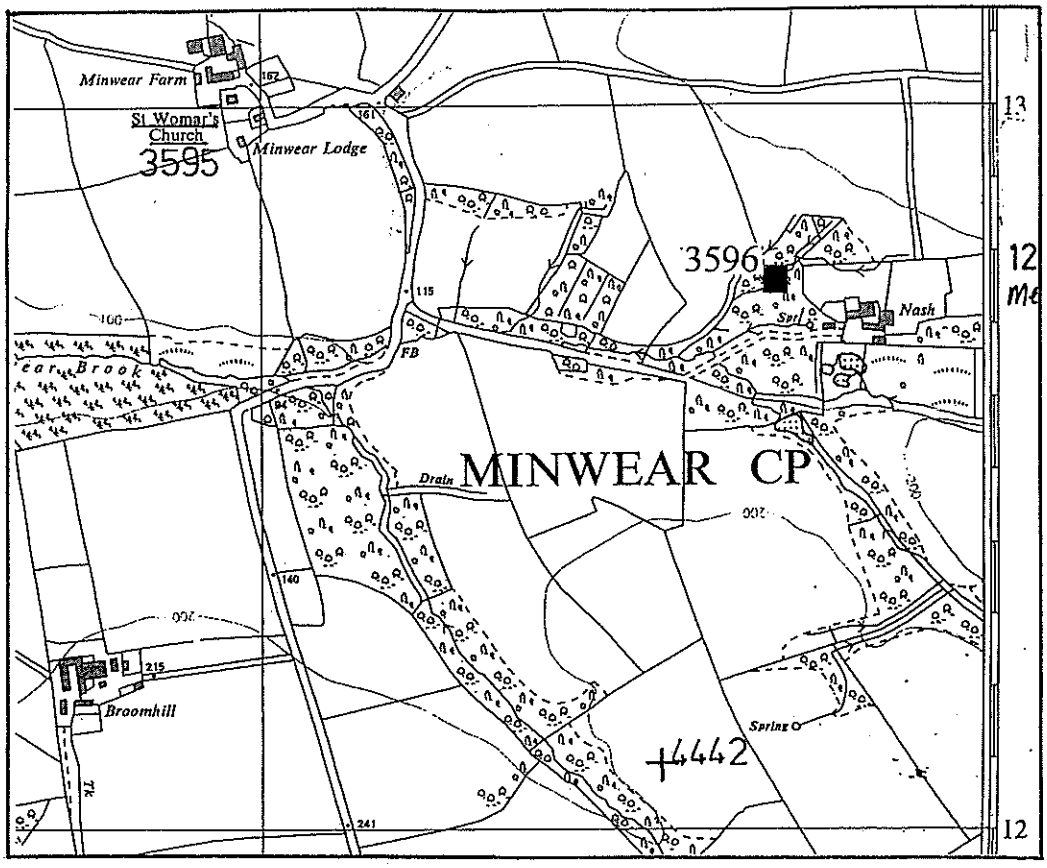


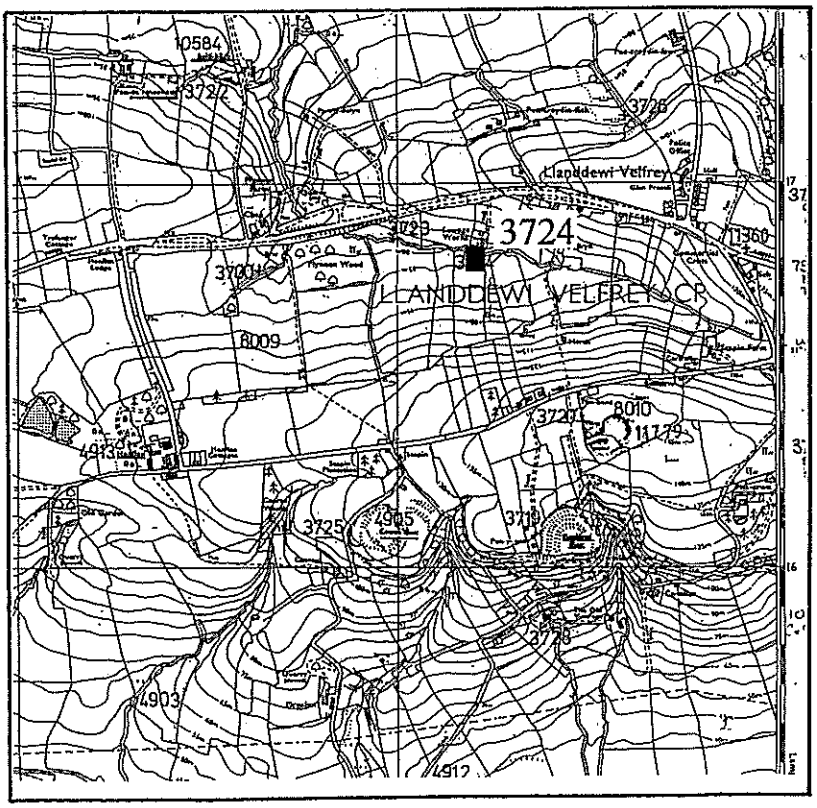


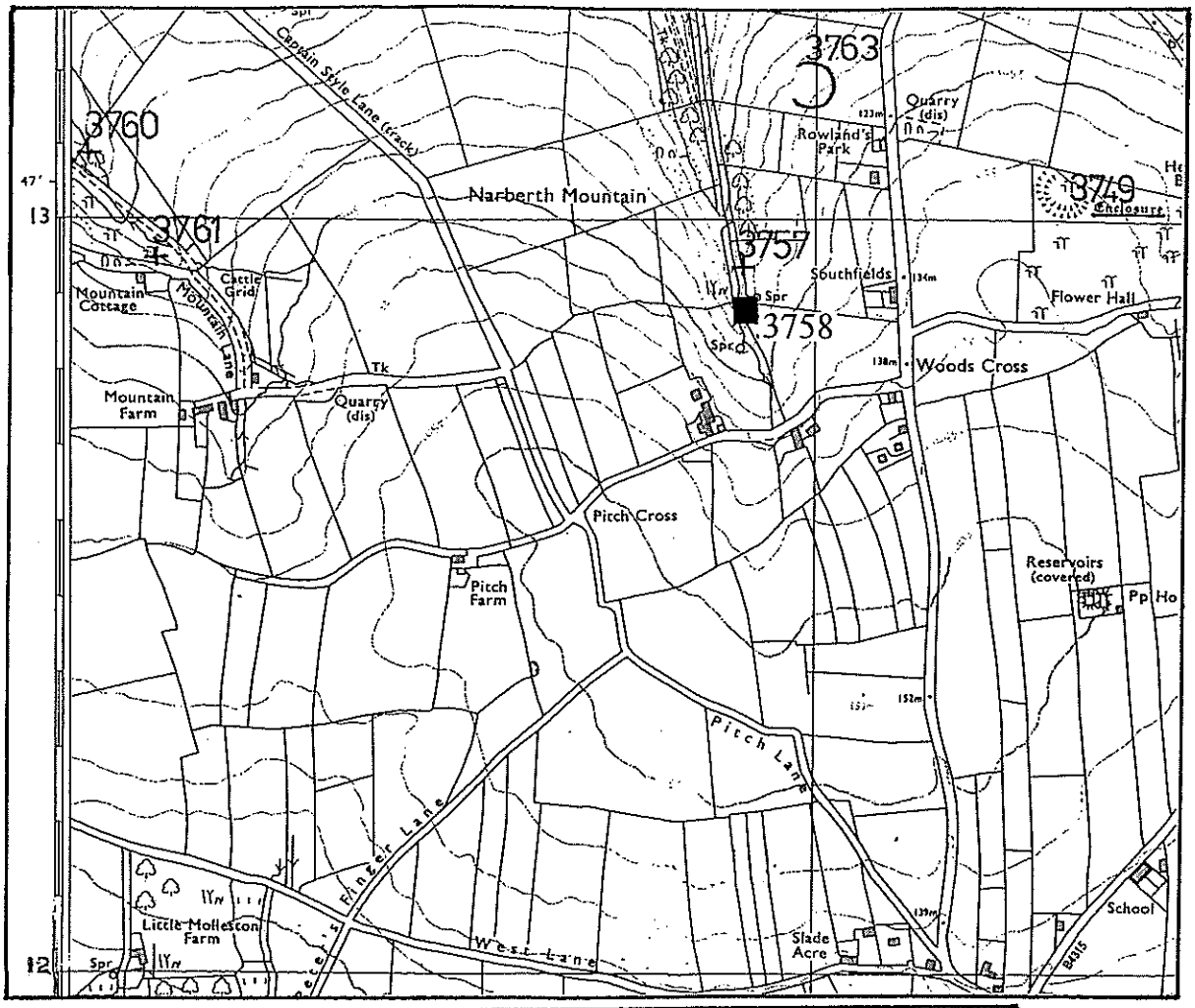


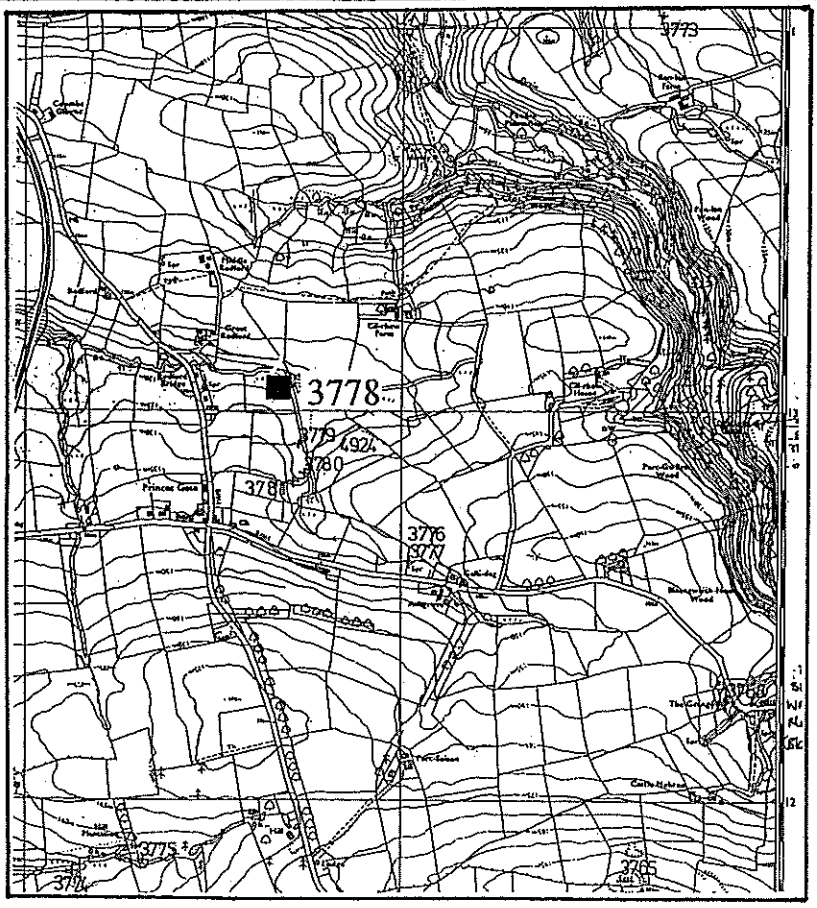


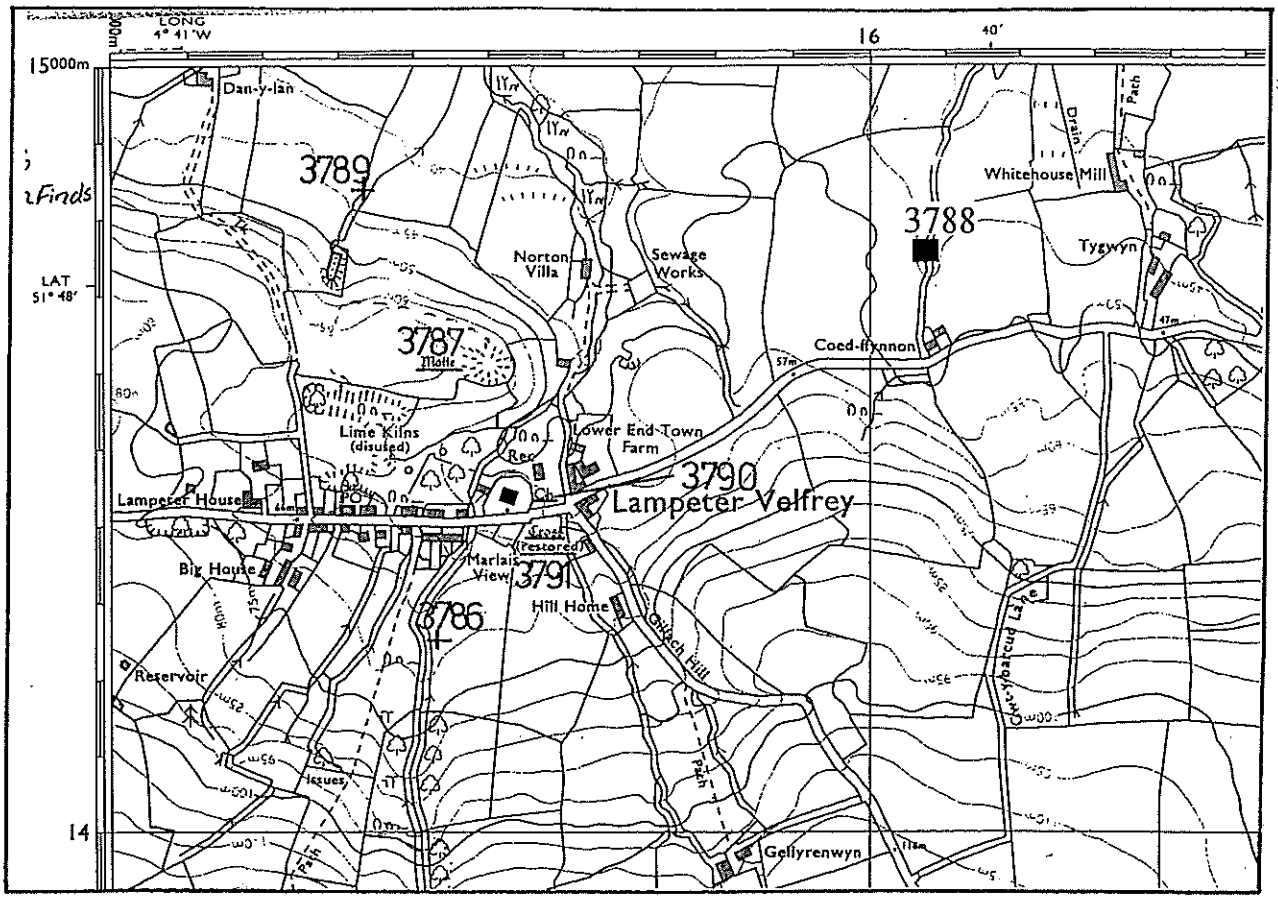


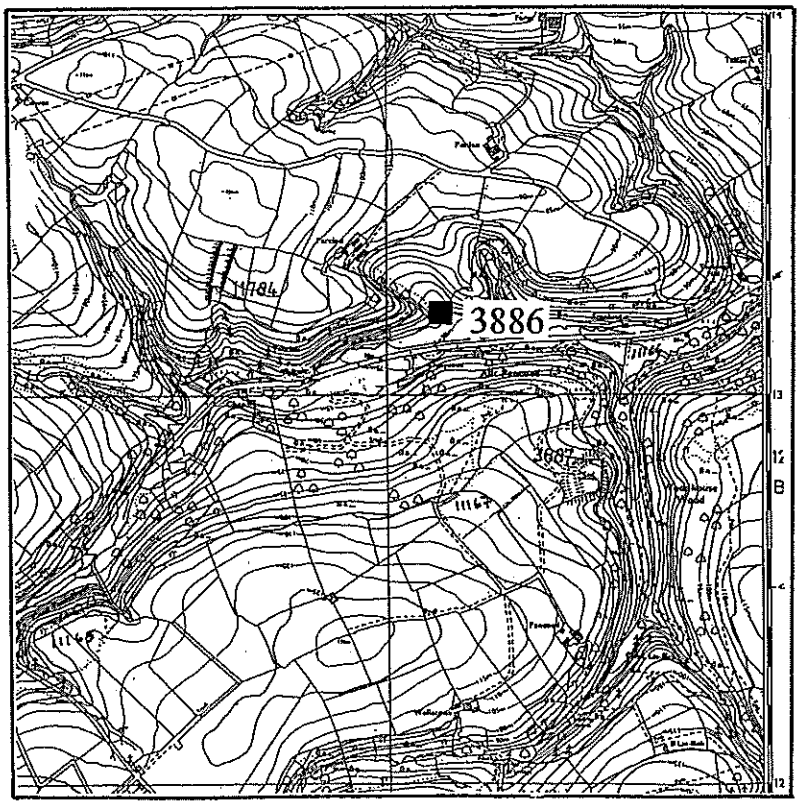


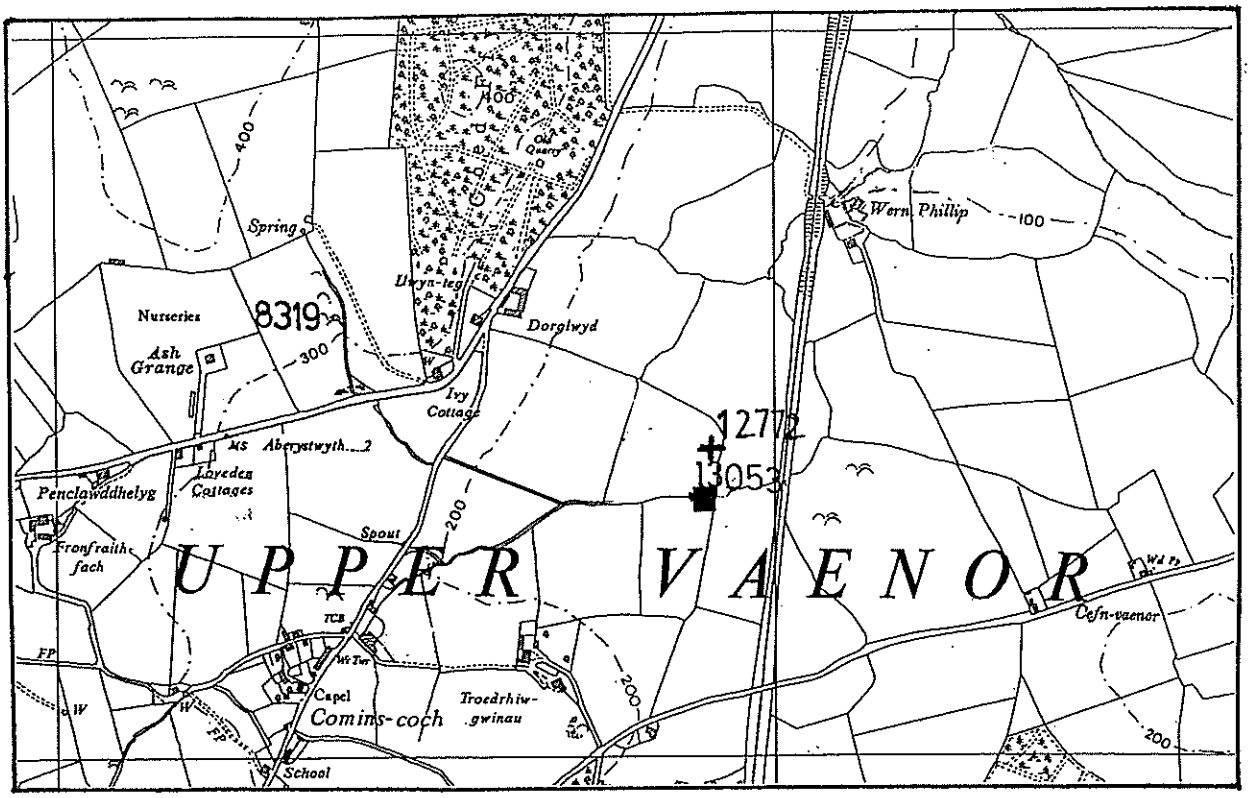


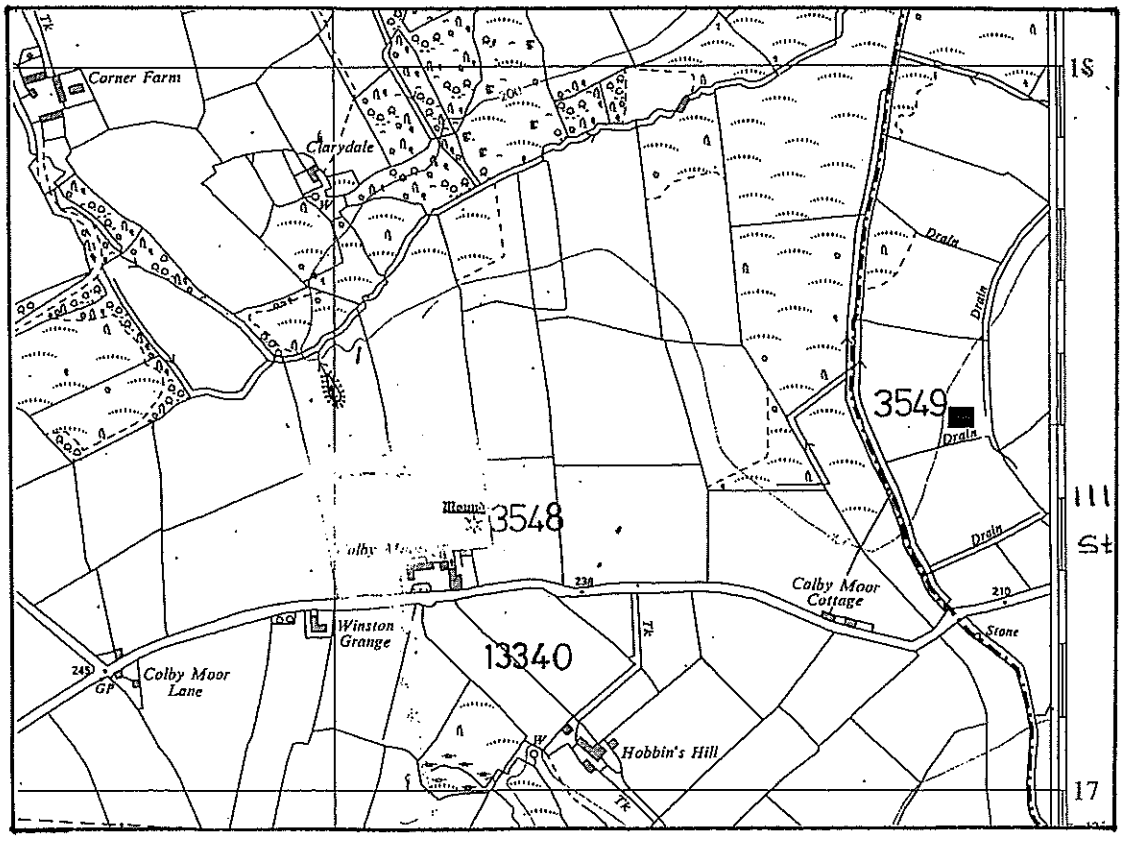


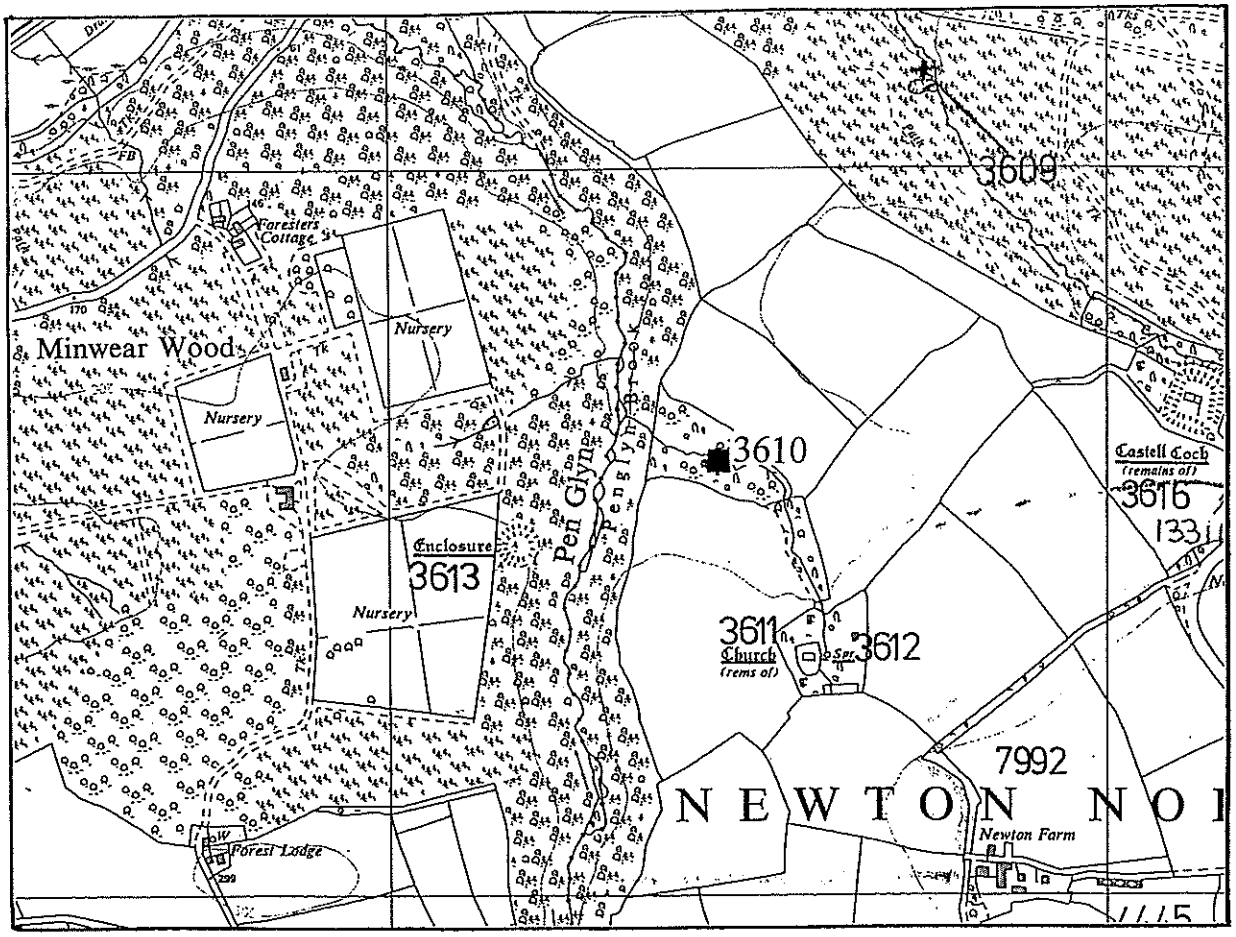


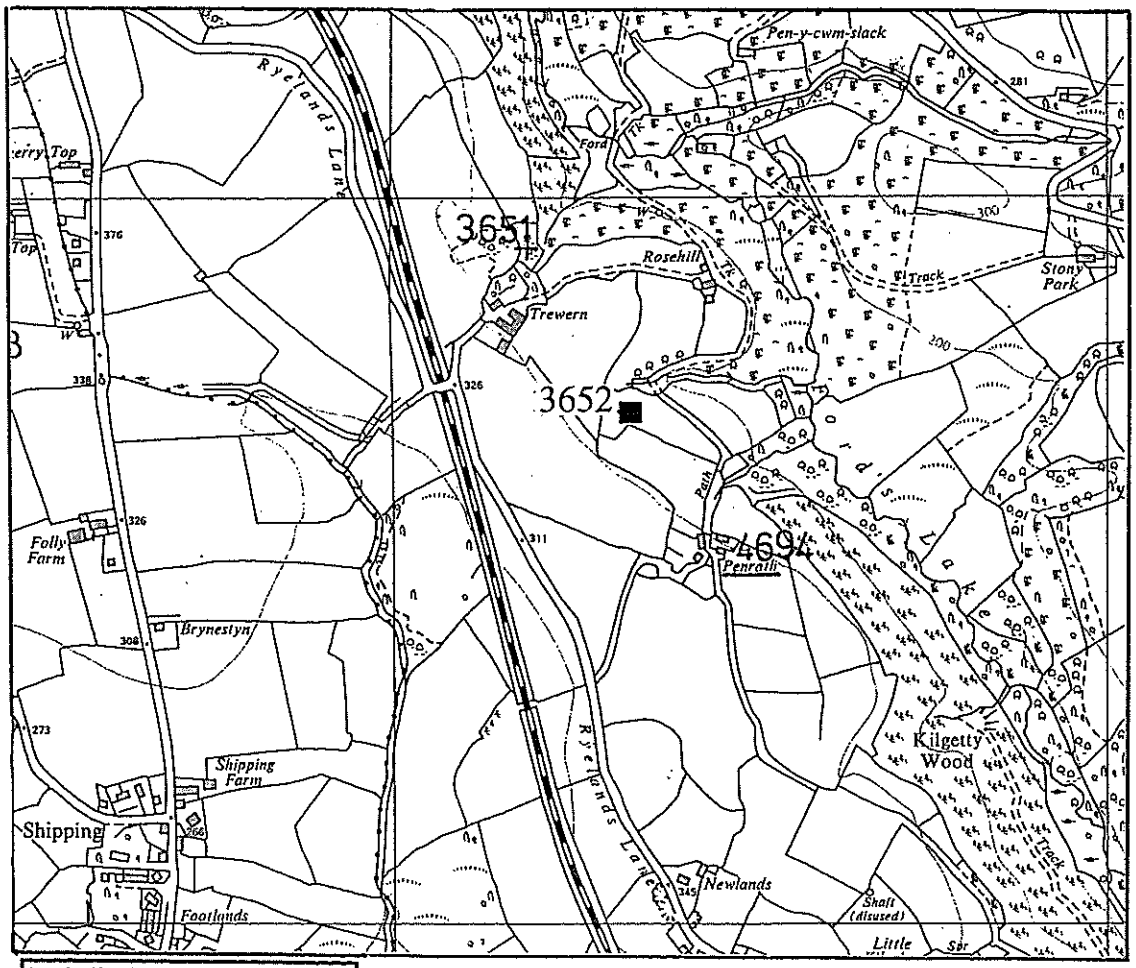


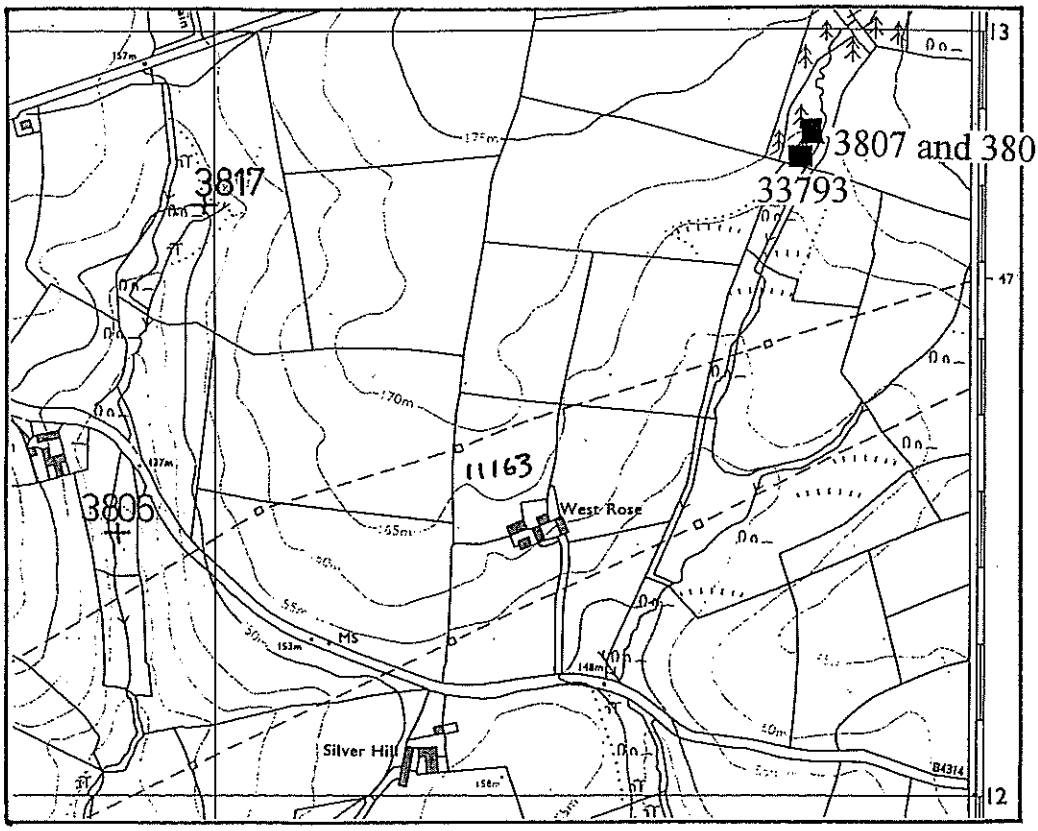






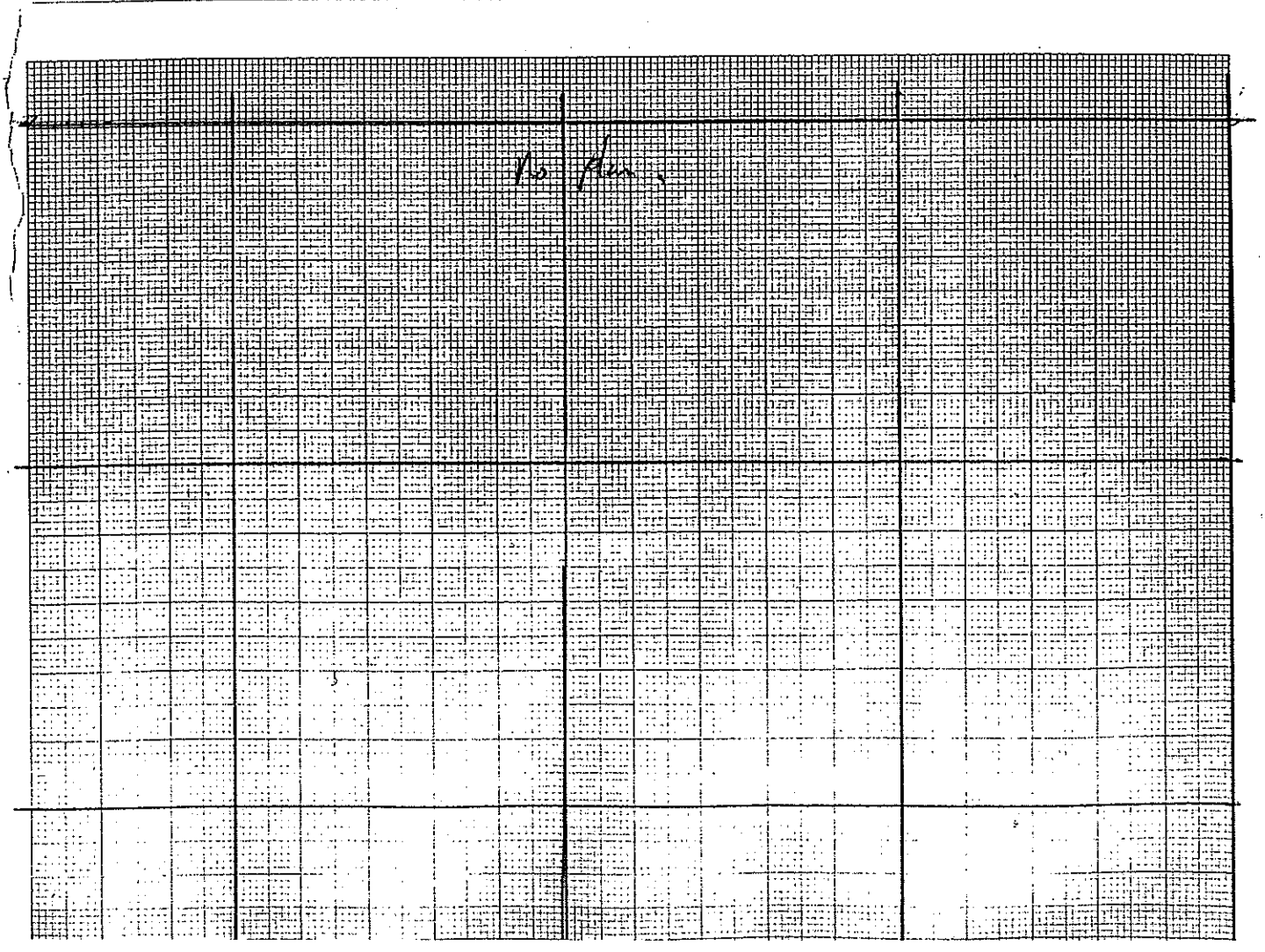






APPENDIX E
Example of field form

Pm
Mapsheet
Ngr
Name
Gentype
Form_cond
Period
Altitude
Land_use
Access
Source
Keywords
Site_val_p
Owners_p
Assoc_ot_p
Assoc_bm_p
Document_p
Visited
Description_p
Access_p
G_v_a_p
Surv_con_p
Doc_p
G_v_c_p
Pot_imm_p
Div_feat_p
Pot_env_p
Per_p
Div_form_p
Frag_vul_p
Recommendation



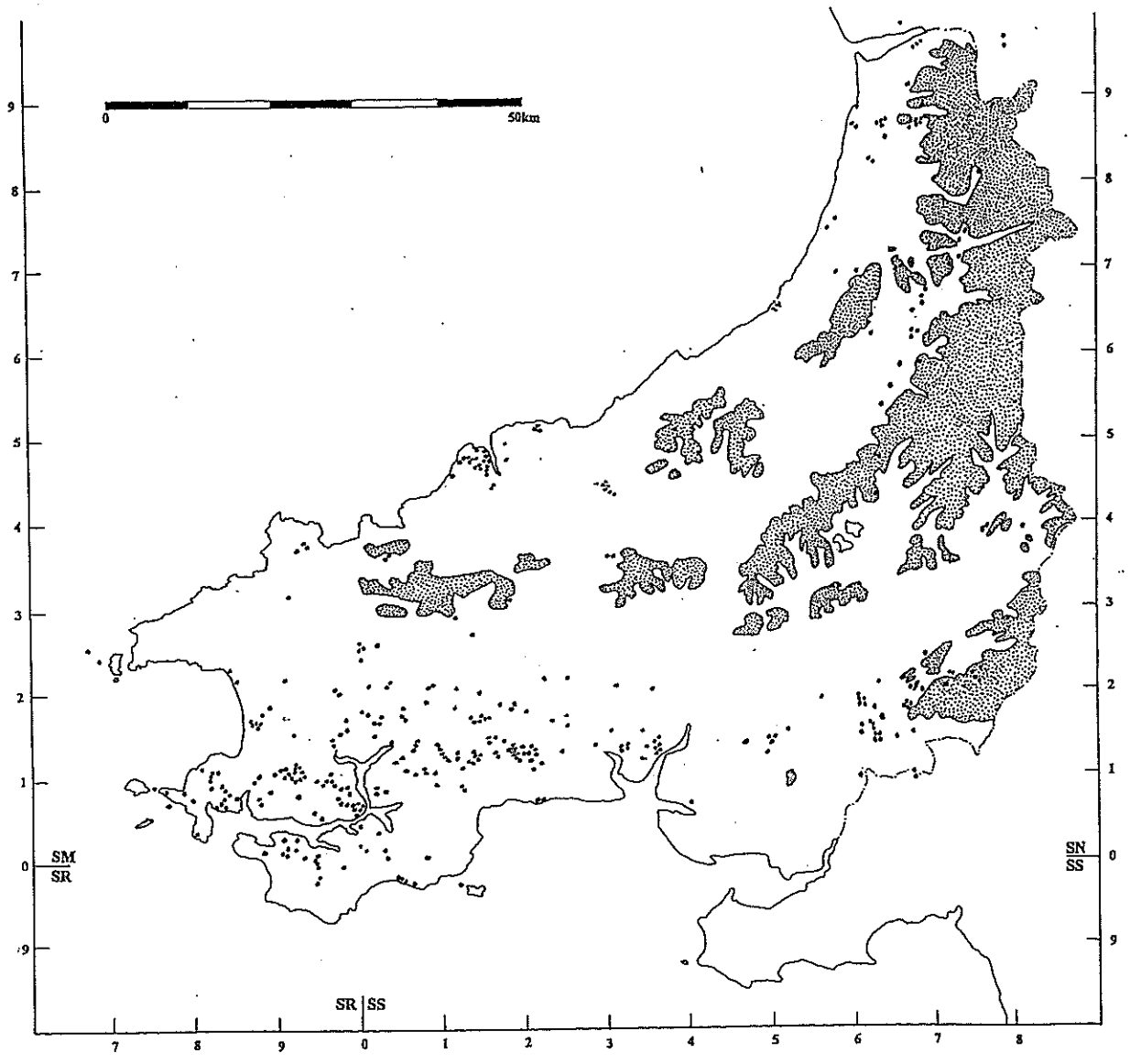


Fig 1. Location plan of burnt mounds on the Dyfed SMR

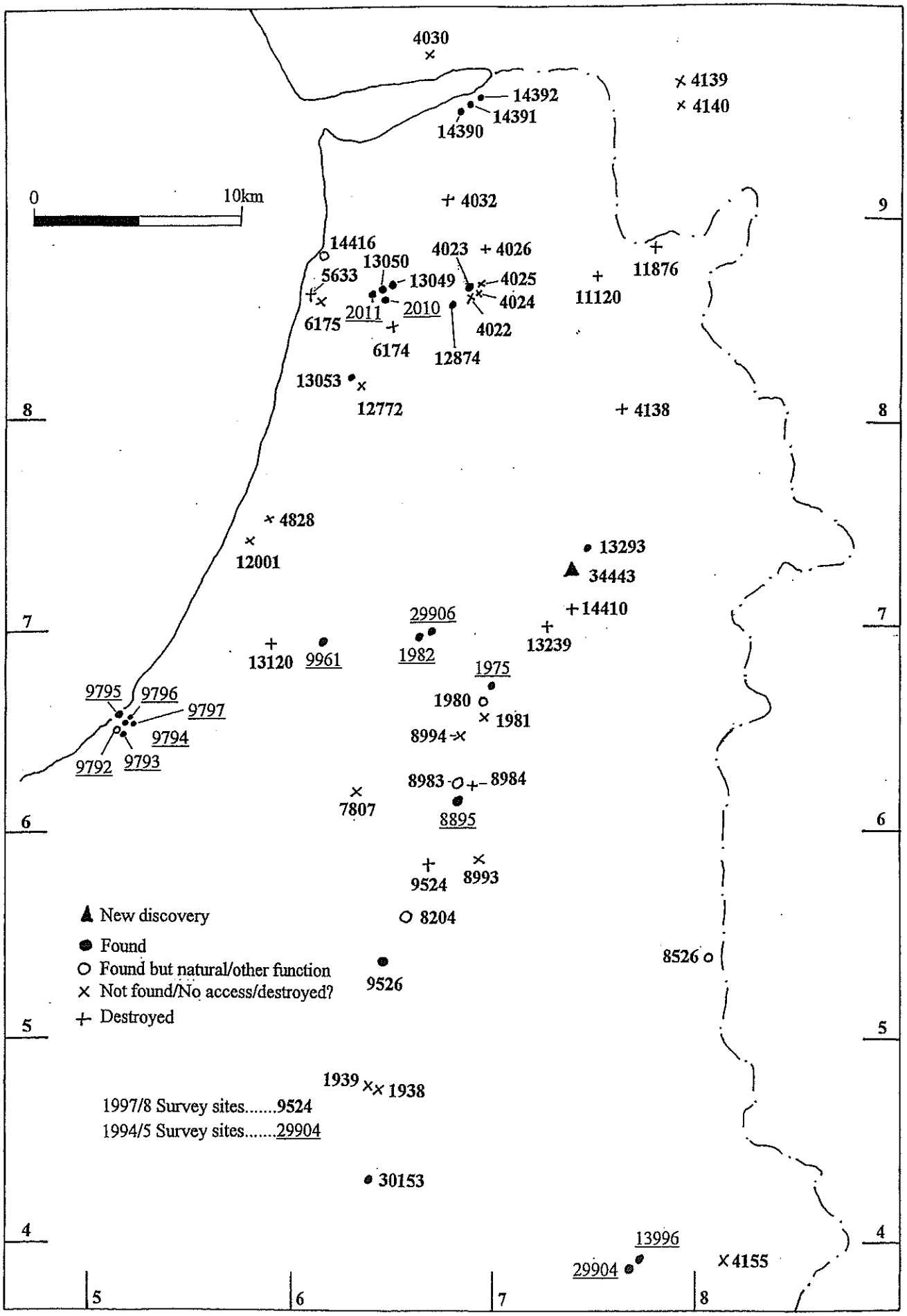


Fig 2. Survey area 1: Eastern Ceredigion

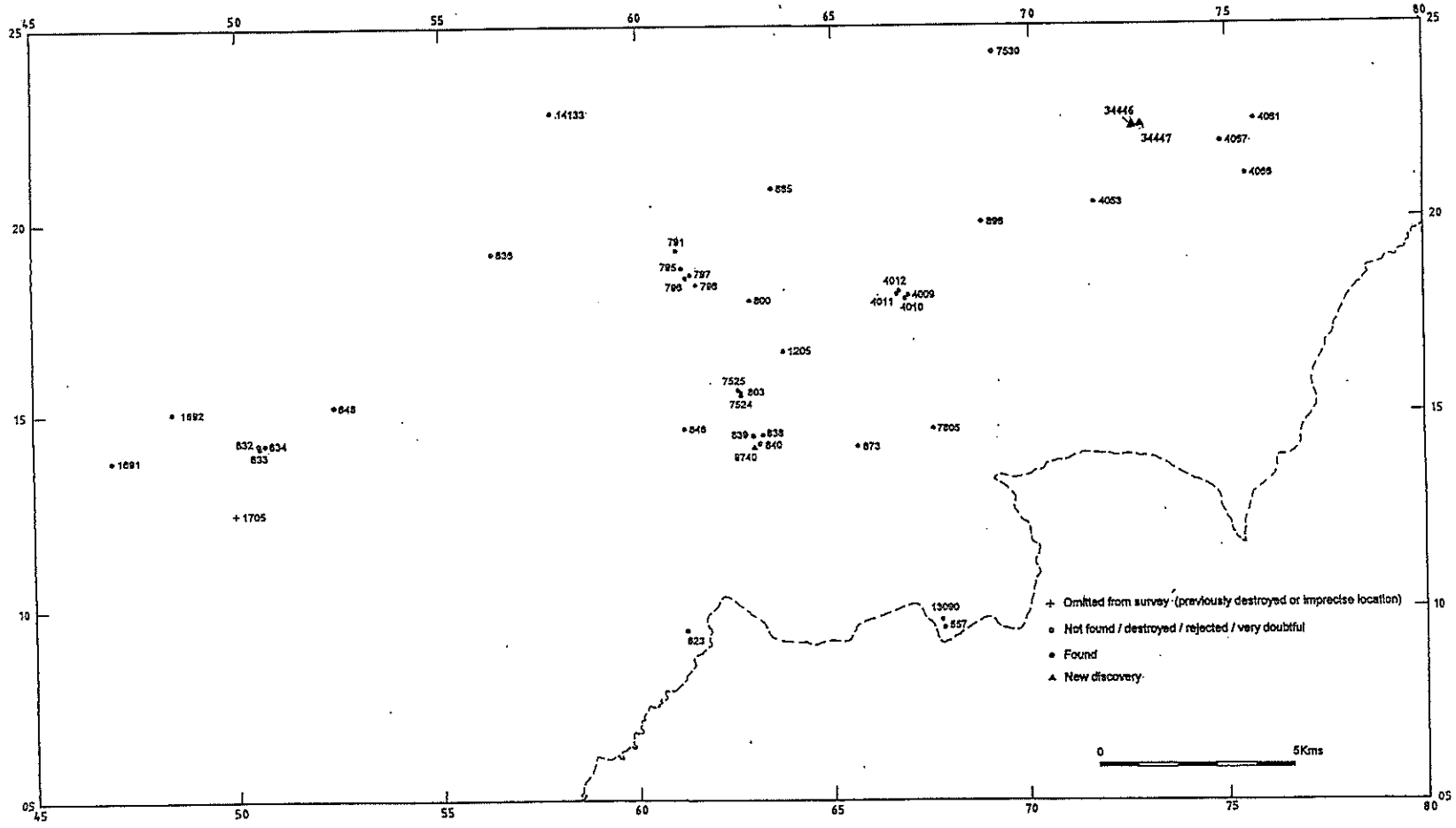


Fig 3. Survey area 2: South-eastern Carmarthenshire

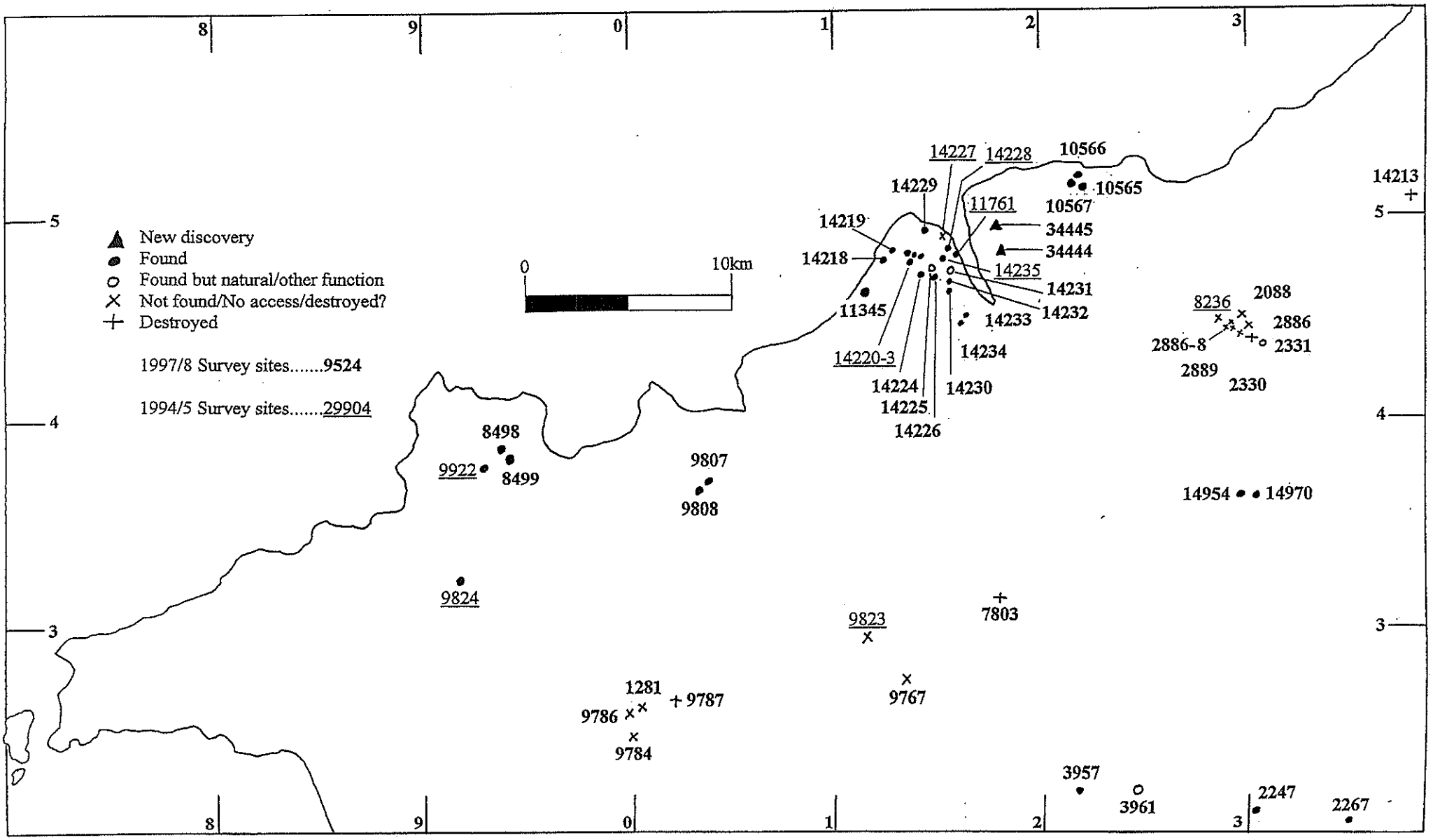


Fig 4. Survey area 3: Western Ceredigion/North Pembrokeshire

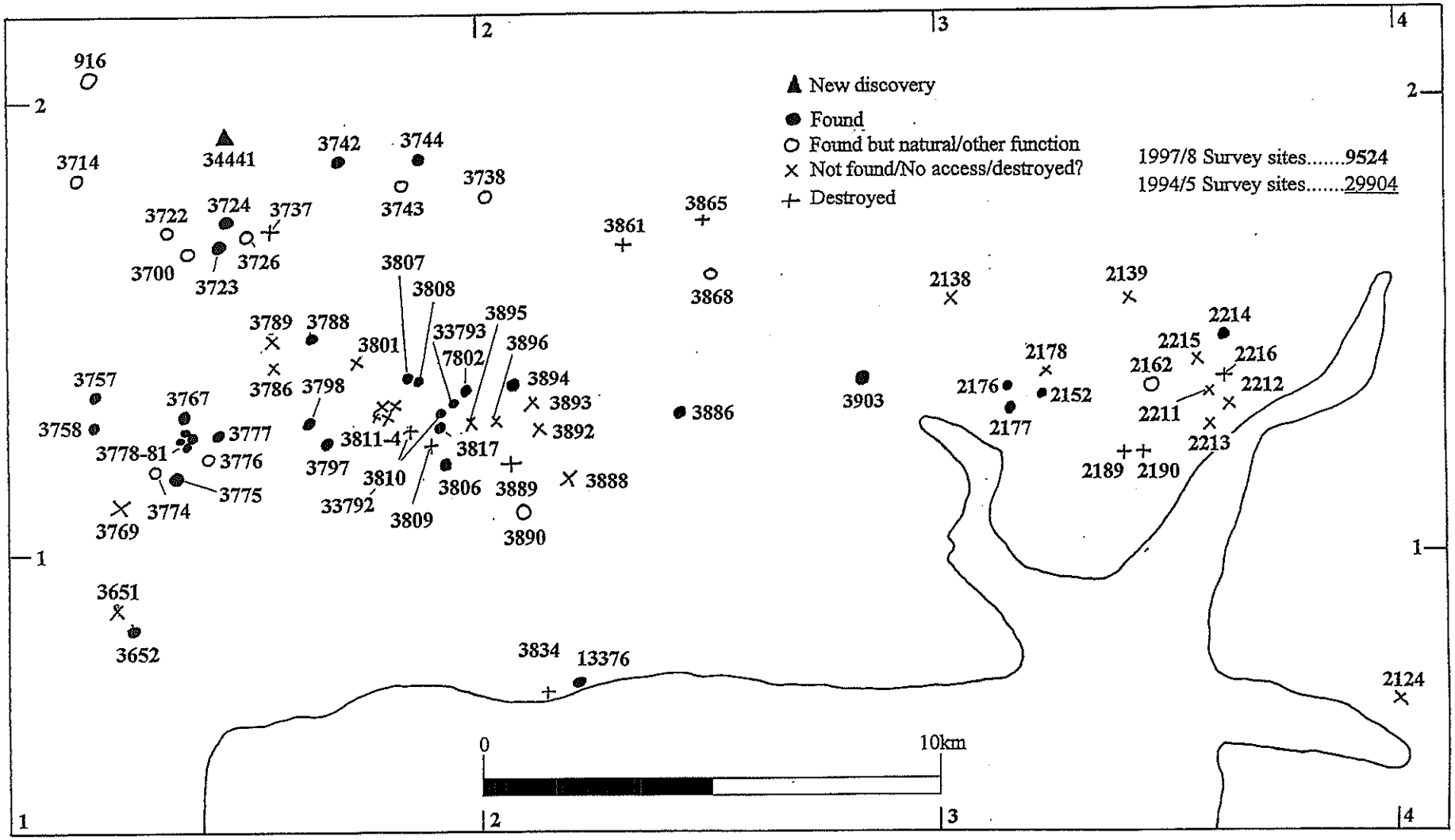


Fig 5. Survey area 4: Central Carmarthenshire

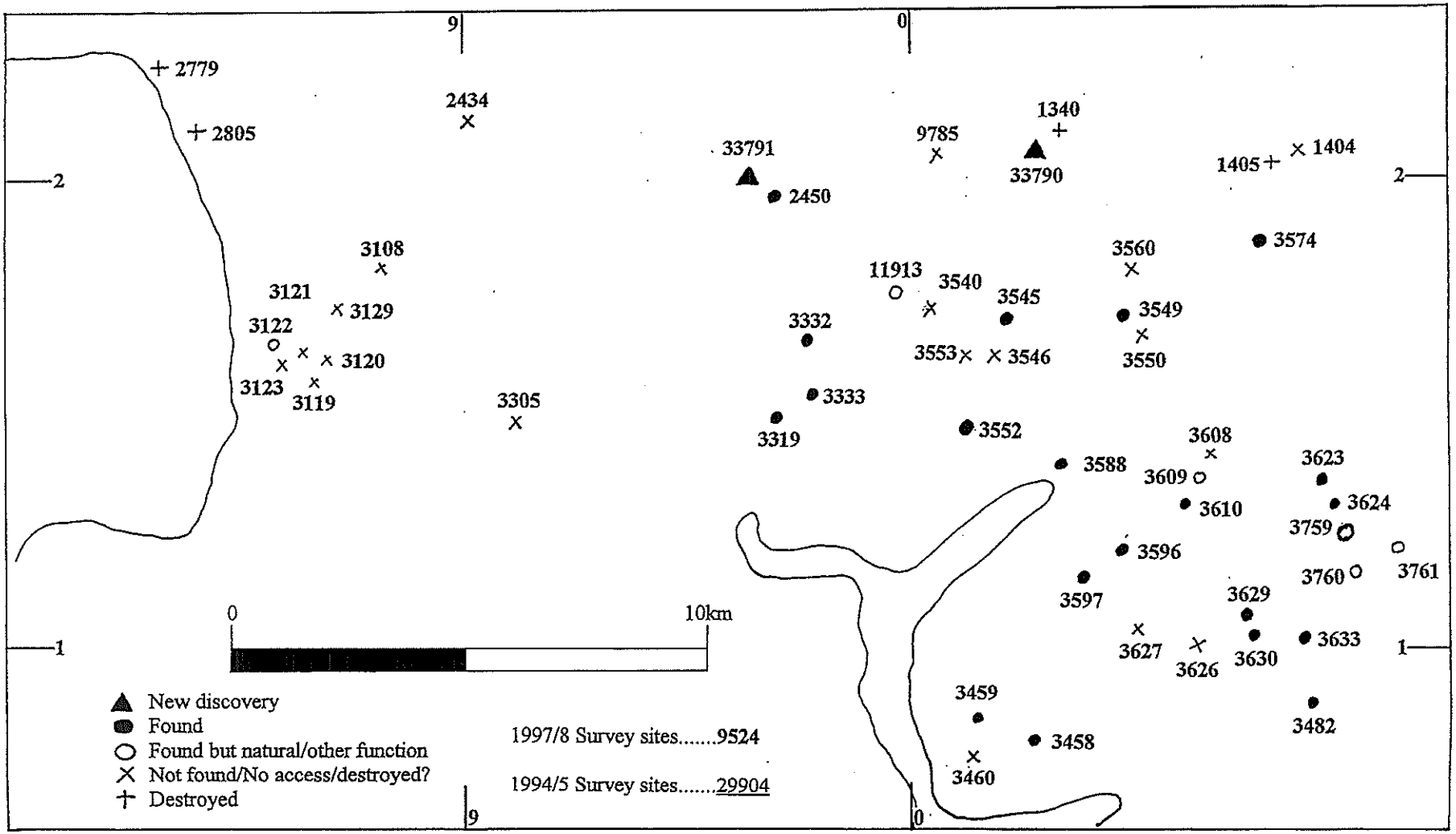


Fig 6. Survey area 5: Central Pembrokeshire

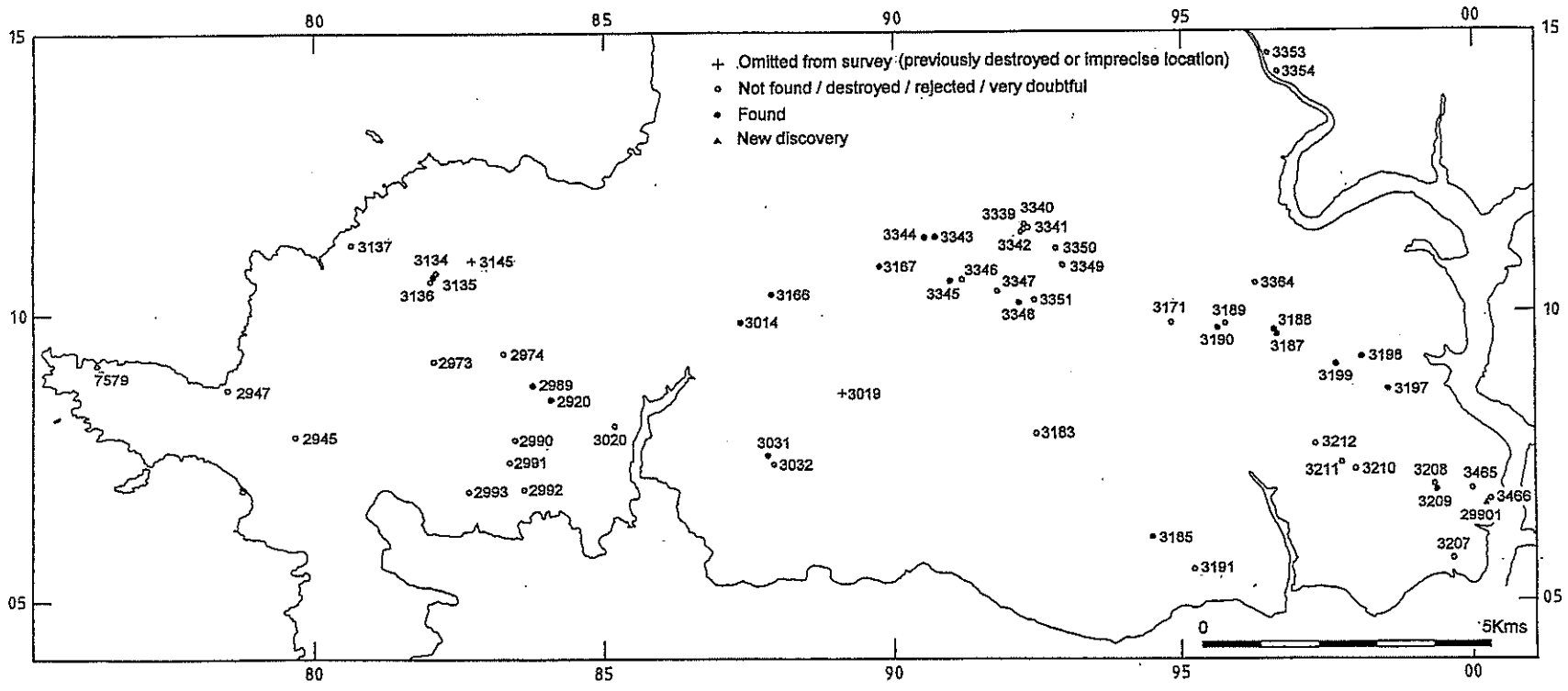


Fig 7. Survey area 6: Northern Haven

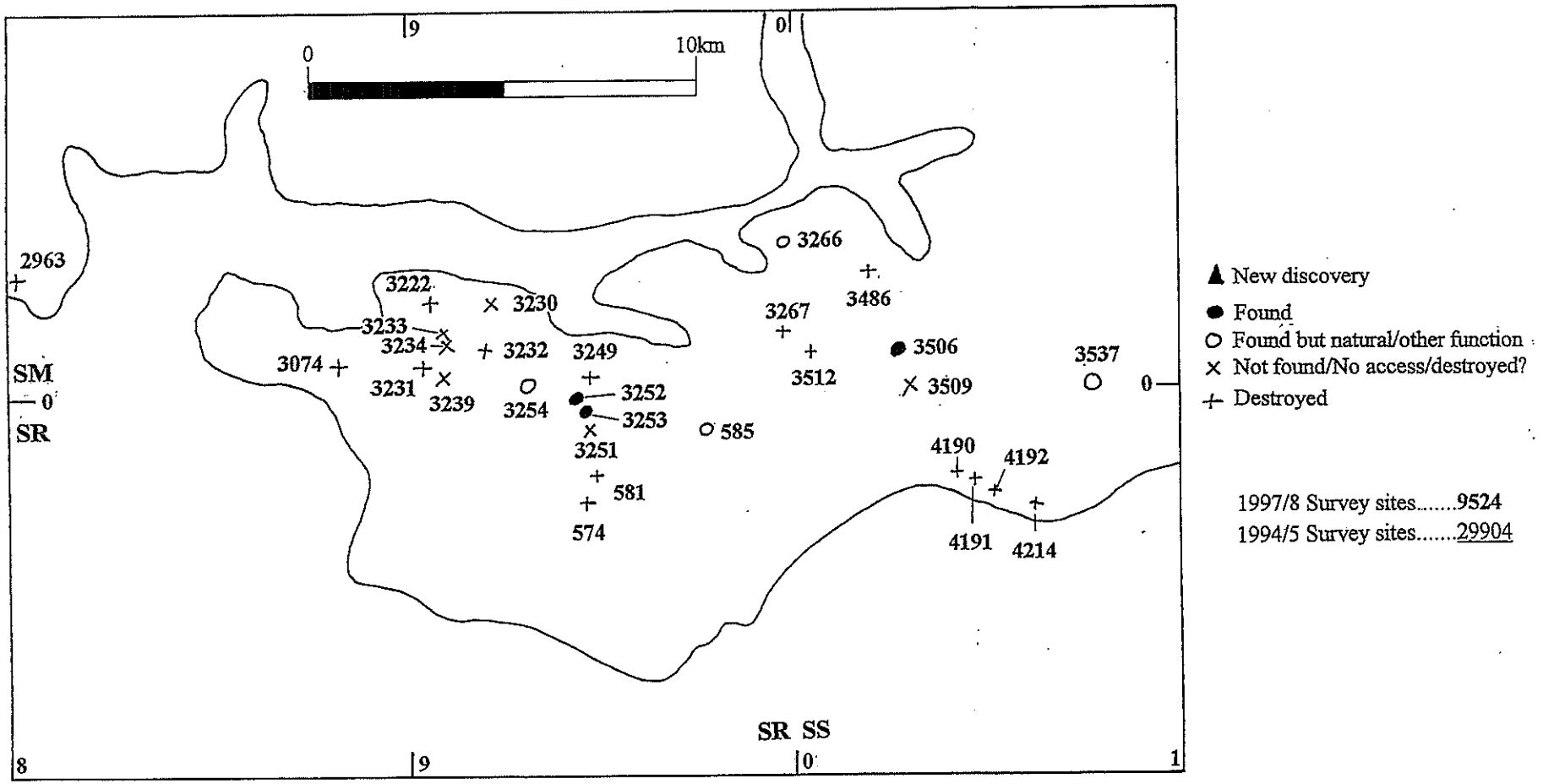


Fig 8. Survey area 7: South Pembrokeshire and Carmarthenshire

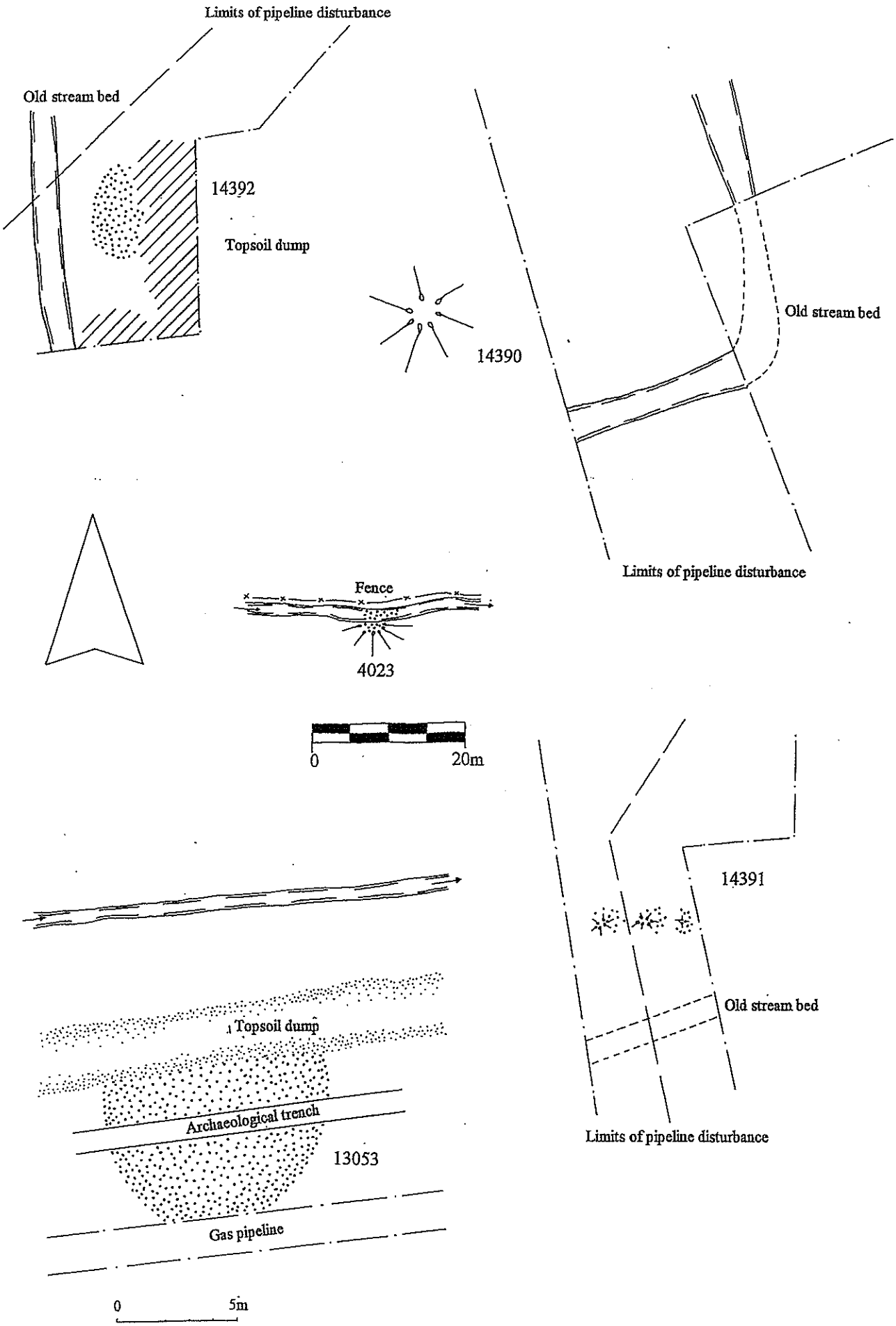


Fig 9. Plan of burnt mounds: Survey Area 1. North of Aberyswyth

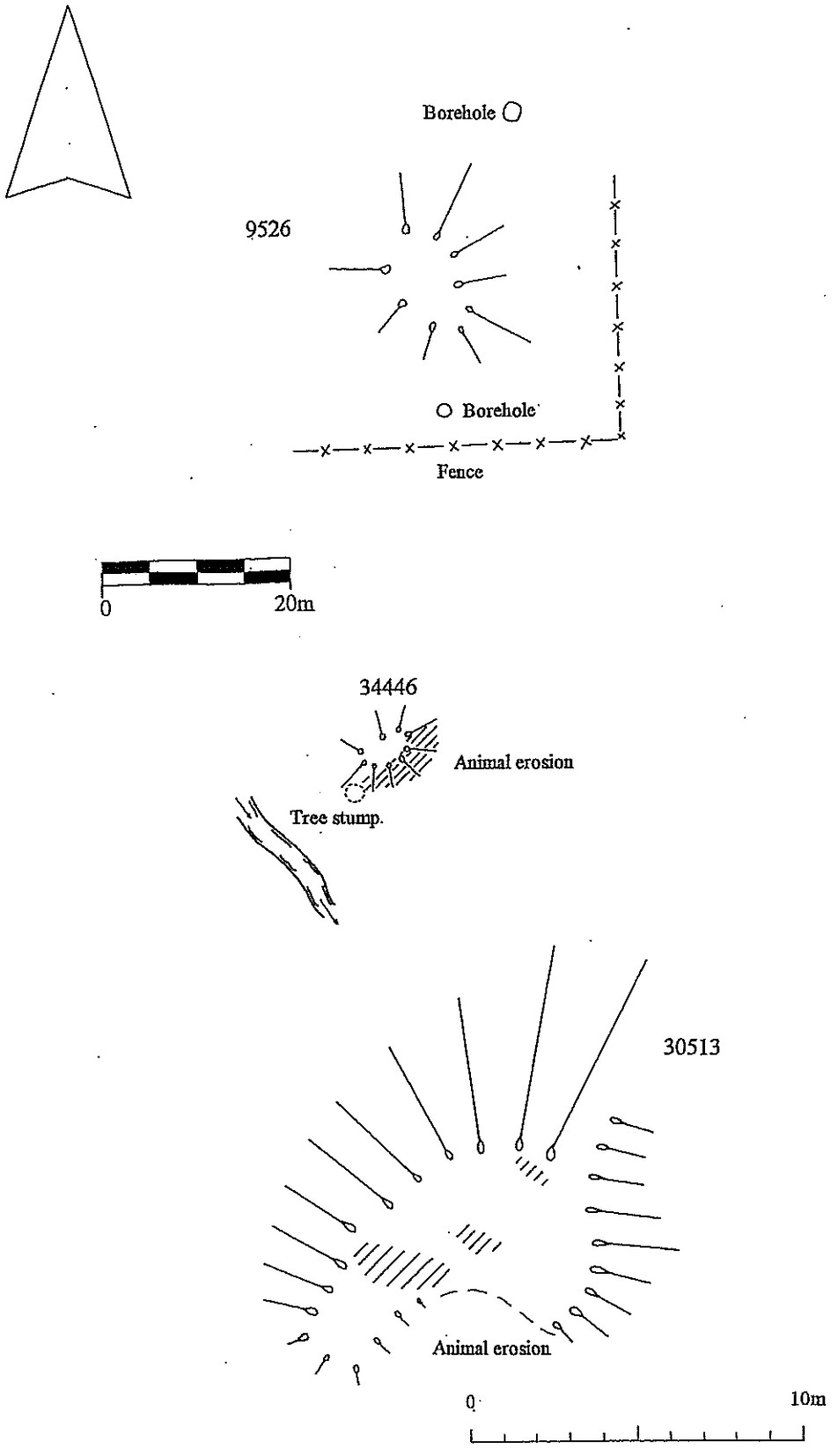


Fig 10. Plan of burnt mounds: Survey Area 1. Lampeter and its environs

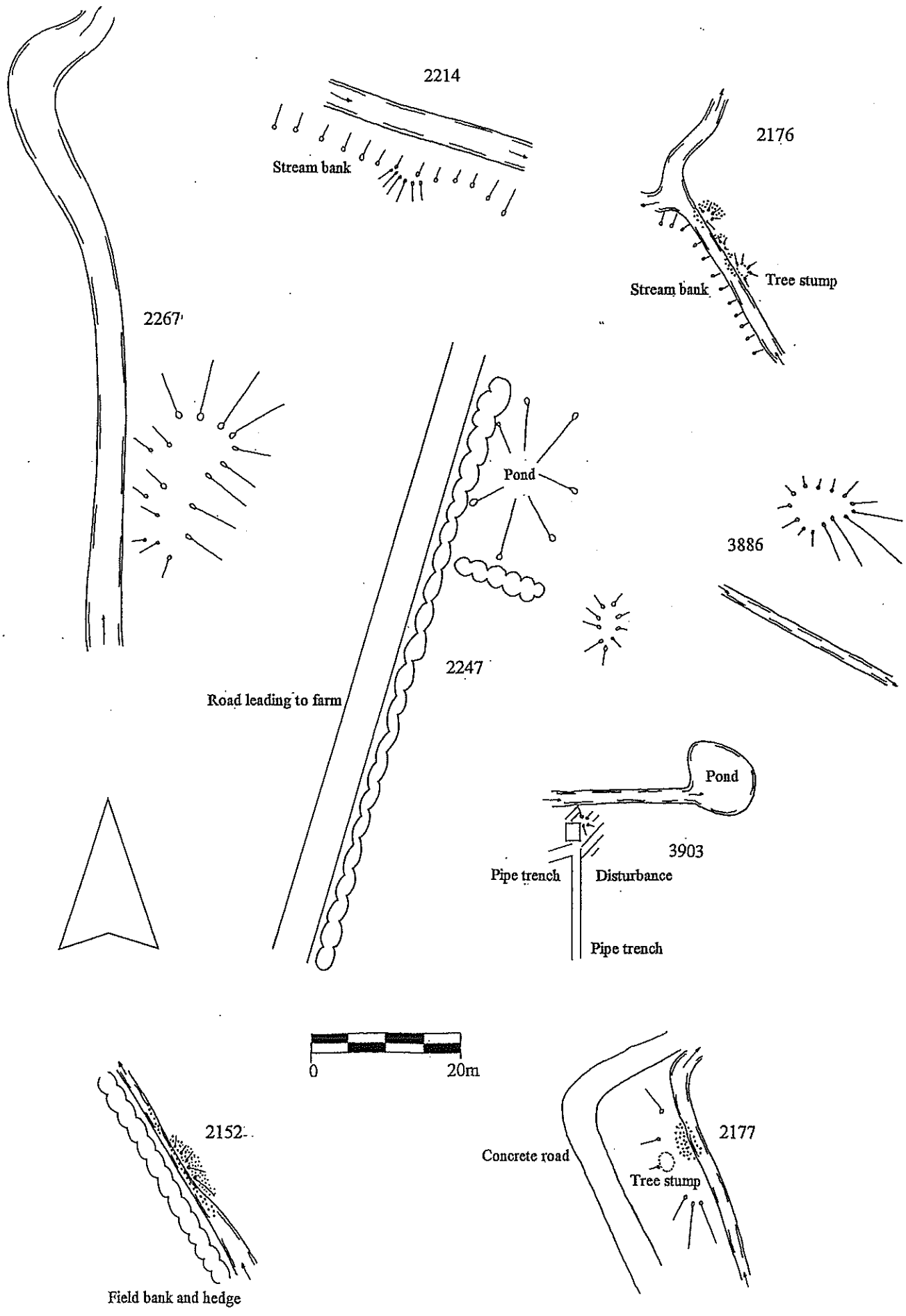


Fig 11. Plan of burnt mounds: Survey Areas 3 and 4 West of Carmarthen

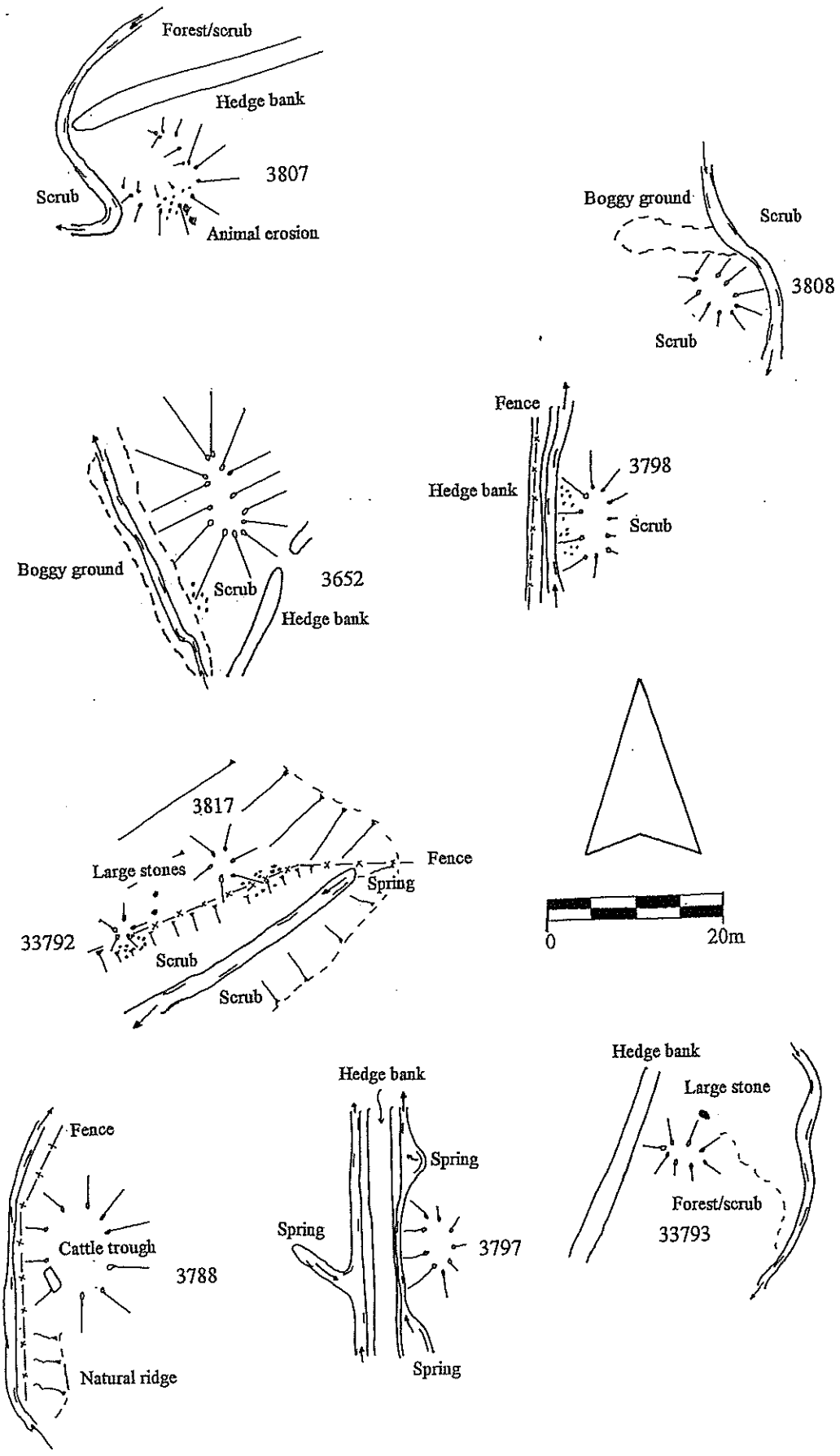


Fig 12. Plan of burnt mounds: Survey Area 4 South of Whitland

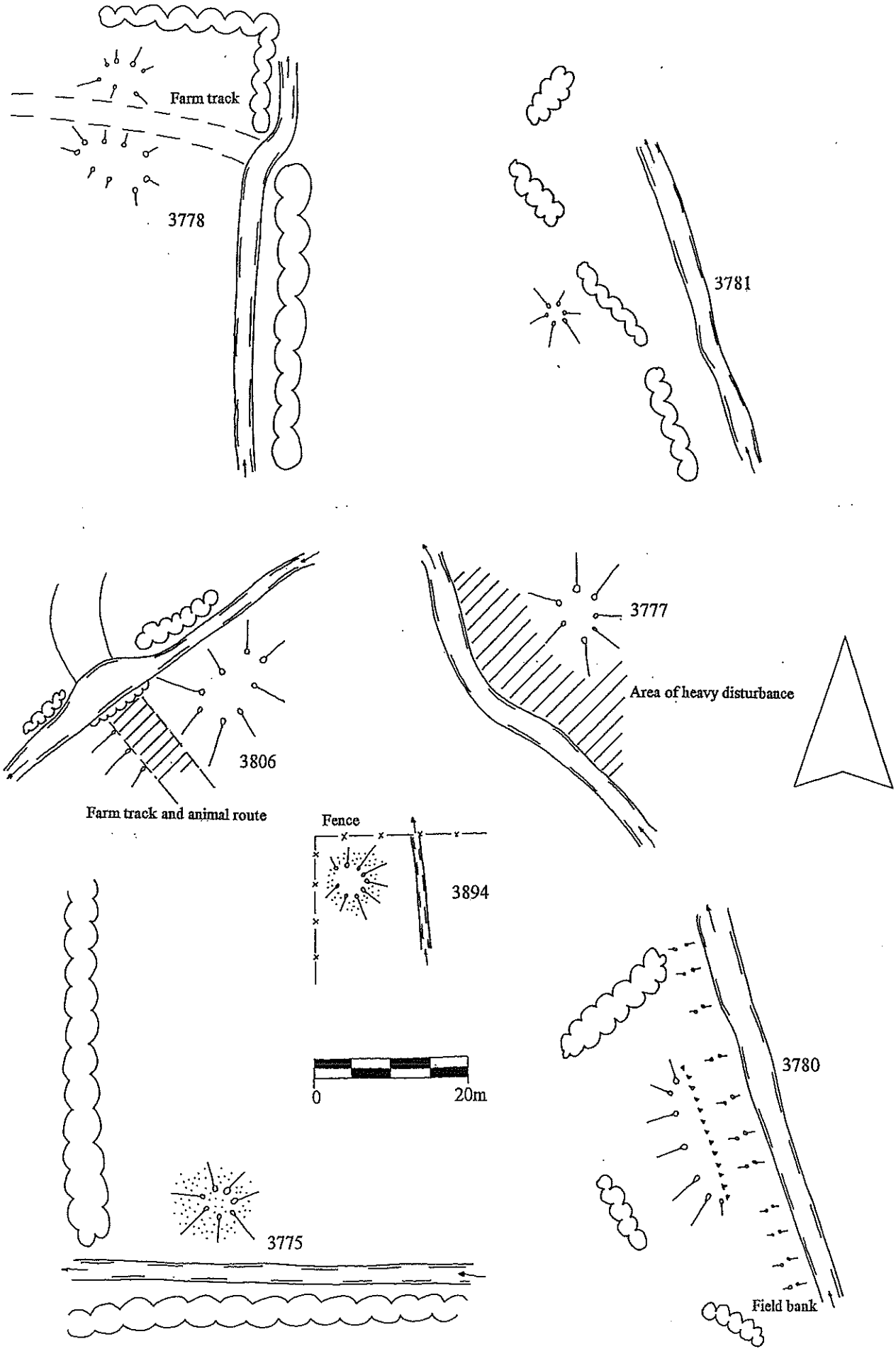


Fig 13. Plan of burnt mounds: Survey Area 4 South of Whitland

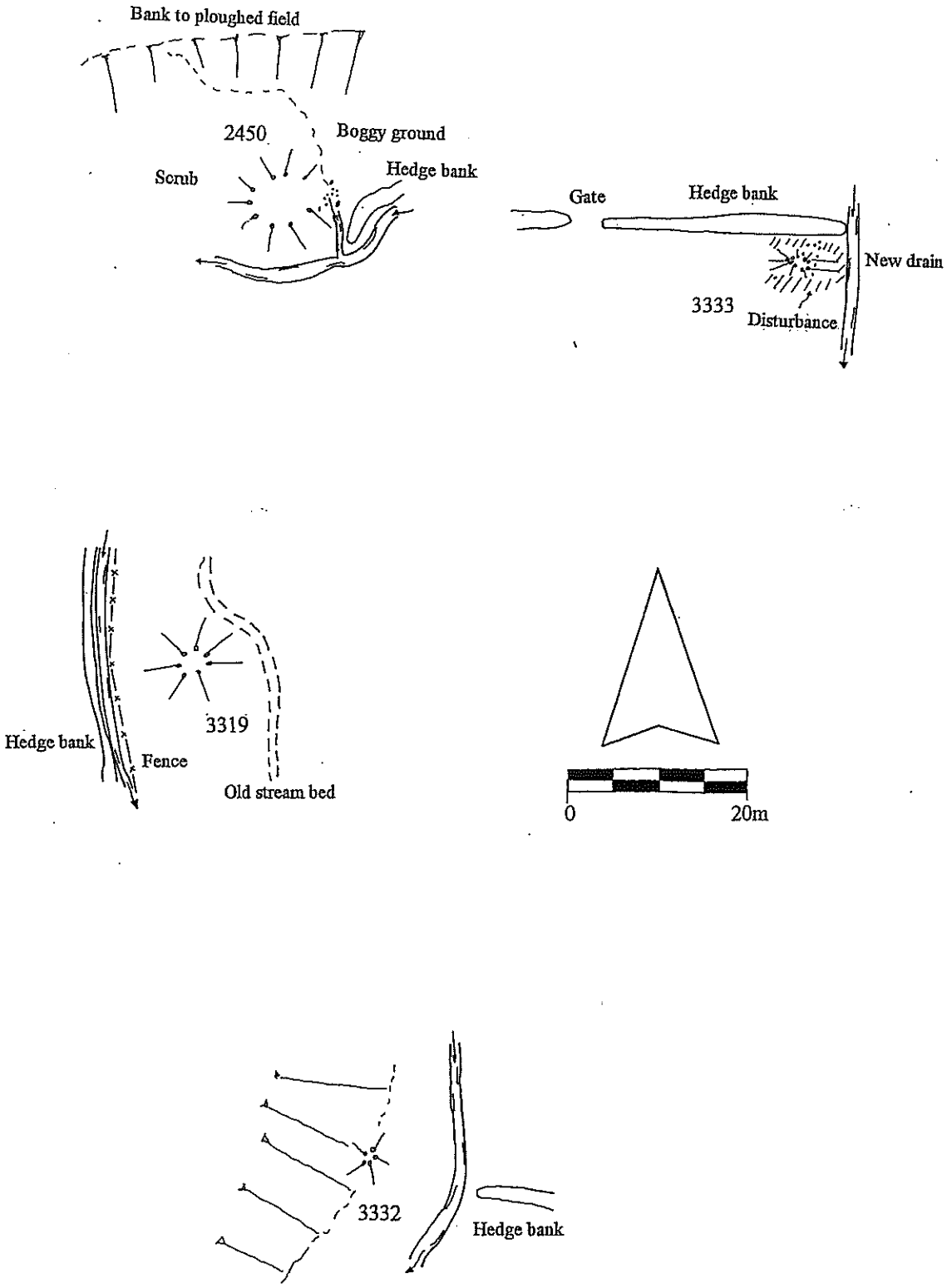


Fig 14. Plan of burnt mounds: Survey Area 5 Environs east of Haverfordwest

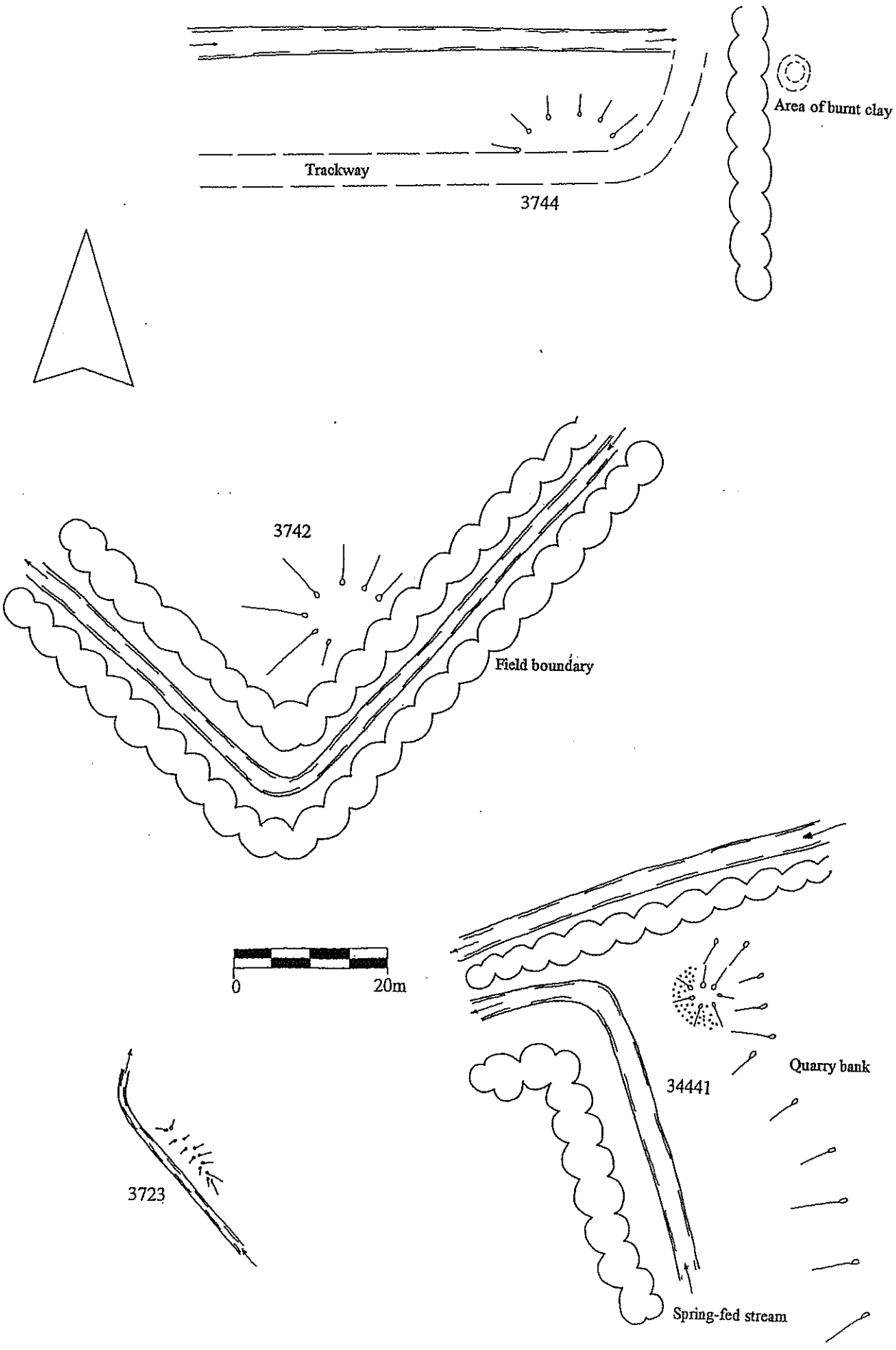


Fig 15. Plan of burnt mounds: Survey Area 5 West of Whitland

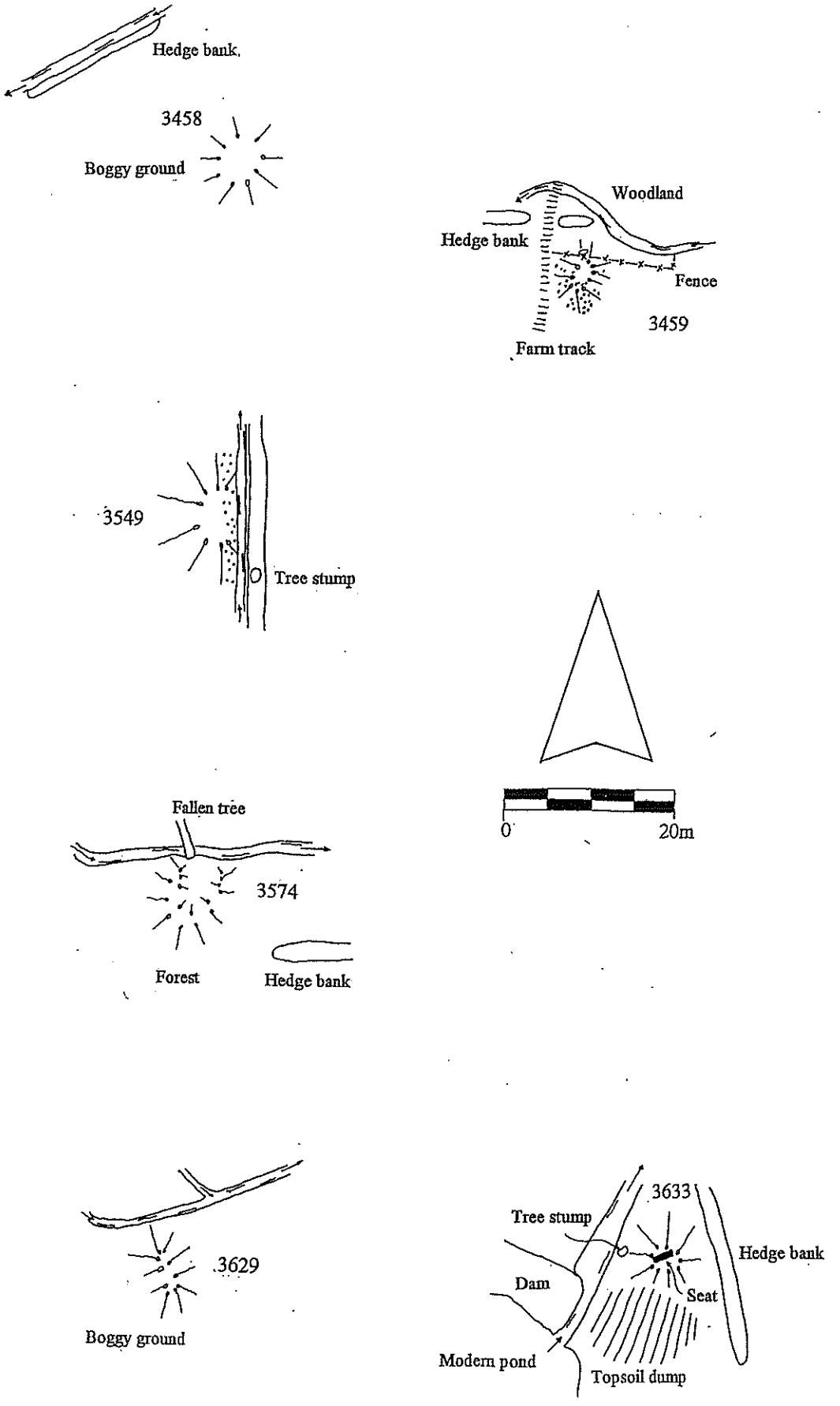


Fig 16. Plan of burnt mounds: Survey Area 5 Environs of Narbeth

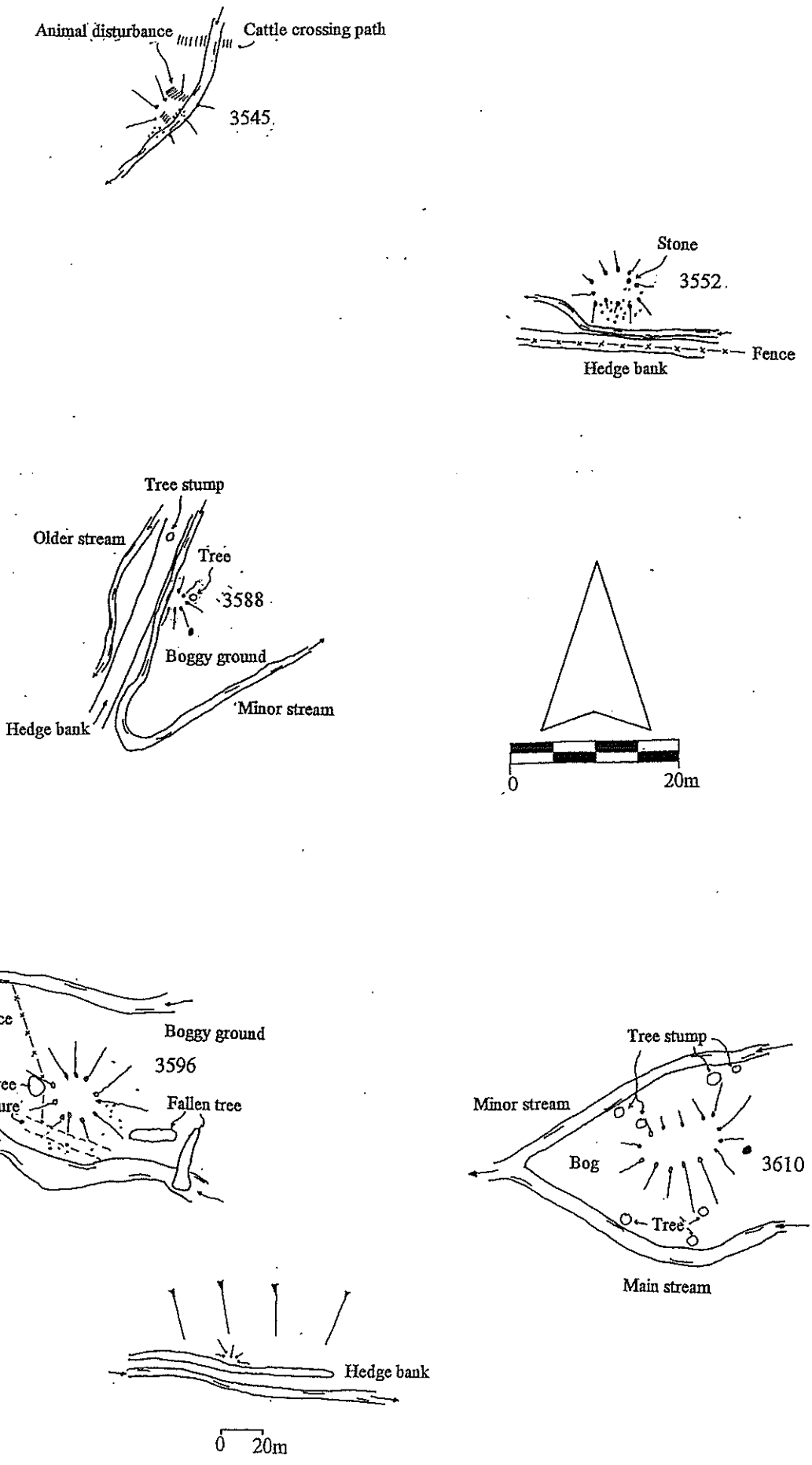


Fig 17. Plan of burnt mounds: Survey Area 5 East of Haverfordwes

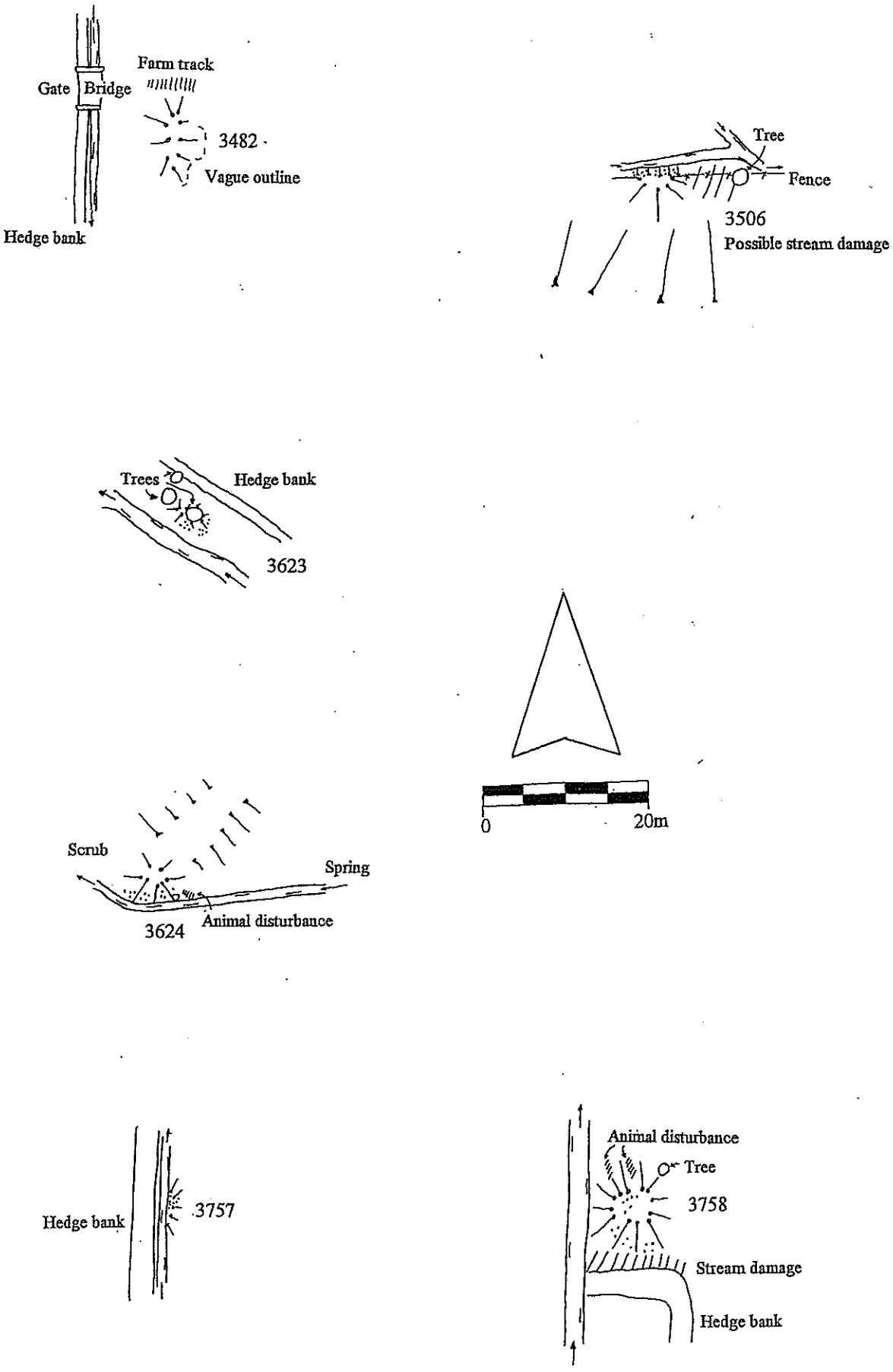


Fig 18. Plan of burnt mounds: Survey Area 5 and 7 South-west of Whitland