# Survey of Pen Anglas, Goodwick.



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#### Survey of Pen Anglas, Goodwick.

Gan / By

Polly Groom and Hubert Wilson

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# Survey at Pen Anglas, Goodwick

#### **RHIF YR ADRODDIAD / REPORT NUMBER**

#### March 2005

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Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

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#### 1. Summary

Pen Anglas, above Goodwick Harbour, was surveyed following a large heather fire which burnt off all the vegetation in the affected area. The fire revealed a wide variety of archaeological remains, with a date range from prehistoric to modern.

The survey area is divided into the north and south sections, and the two are divided by a small stream running east-west. The north section has a roughly flat top, with steep cliffs dropping away to the sea. The south section is mostly a more gentle coastal slope, which gradually becomes steeper as it falls towards the sea.

This division is also reflected in the types of archaeology which were recorded during the survey. The north is mostly a landscape concerned with agriculture. Field boundaries, clearance cairns and unidentified earth and stone mounds make up the vast majority of the recorded sites, along with a striking example of a set of pillow mounds. Some modern features were also noted, relating to the construction of the foghorn. However, interestingly, several features were noted which have been tentatively assigned a prehistoric date. The remains of what appears to be a cairn, with a central stone-built cist were located, near to traces of possible field walls and clearance cairns.

The southern portion of the survey revealed a landscape which was primarily industrial, dating to the turn of the 20<sup>th</sup> century. A large reservoir, a magazine for storing explosives and quarry-workers shelters were all recorded. The level of disturbance in this area was such that it is unlikely that many, if indeed any, earlier features will survive.

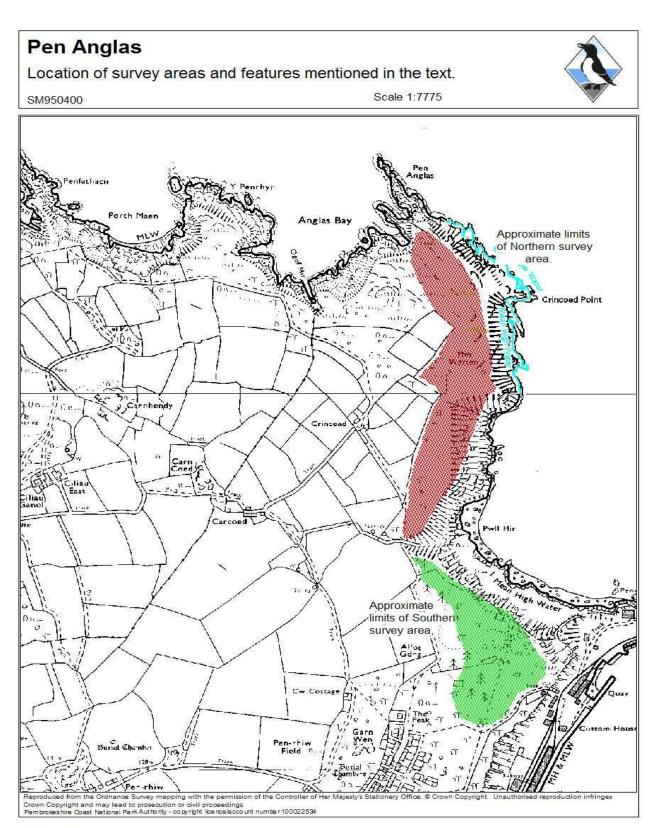
#### 2. Introduction

Following a fire on land above Goodwick Harbour (Grid reference: SM950400) a site visit was carried out to see whether any archaeological features had been revealed by the burn. A rapid walk-over assessment showed that a large number of features including field-boundaries, military buildings and a probable bronze age cairn were showing.

A full survey was recommended and this was carried out by Cambria Archaeology and Pembrokeshire Coast National Park Authority (PCNPA) in the summer of 2004. Unfortunately, it was not possible to carry out the survey immediately after the burn, and the delay meant that some areas had started to re-vegetate. However, in general, the visibility was still good.

For some years, Pen Anglas has been under dense scrub – mostly gorse and bracken. More recently it had become part of the coastal slope grazing scheme, which aimed to bring the scrub under control, and it is planned to re-instate a grazing regime once the vegetation has grown sufficiently to stabilise the underlying soil.

The survey area comprises a stretch of land along the east side of Pen Anglas. At its southern end, this land consists principally of a steep coastal slope running down to Goodwick Harbour. At the north end, the land is flat and open, with fields on the inland side bounded by substantial stone walls. The coastal slope is abrupt and steep, dropping onto inaccessible cliffs. The survey area is divided in two by a stream which runs down a small valley to a cove known as Pwll Hir. The majority of the northern section is owned by the National Trust.



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#### Figure 1: Map showing the general location of the survey areas. This Ordnance Survey map also marks several of the farms and features mentioned in the text.

#### 3. Methodology

Only the burnt areas of land were surveyed. The areas were walked, and features noted were included in an EDM survey of the area. Spot levels were also taken, to build up a contour survey. The very steep coastal slopes were not surveyed due to their inaccessibility. Time constraints meant that only the burnt areas were surveyed, and adjacent fields were not.

#### 4. Archaeological Background

Relatively little is recorded about the archaeology on this headland. The SMR contains reference to a possible 'cairnfield' (PRN 32095) and several possible cairn sites within it (32096 – 32099), but dense vegetation has obscured archaeological features for a number of years.

When this survey was undertaken, it proved difficult, if not impossible, to tie up the results of the survey with the previously recorded archaeology of the so-called 'cairnfield'. Consequently, most of the newly identified features have been allocated new PRNs, except where it was possible to definitely link a feature on the ground with a description in the SMR. The original records have been included in Appendix 1.

In the wider landscape, there is abundant evidence for prehistoric activity. A set of Neolithic chambered tombs survive behind the houses at Harbour Village (just south of the survey area), and at Llanwnda, to the northwest. A number of standing stones also survive in the area. Later prehistoric remains are represented by the substantial hillfort at Garn Fawr. A National Trust survey of Ciliau, one of their properties, also identified a possible hut circle, though it should be stressed that this was a tentative interpretation of the feature (National Trust ref. 81802, PRN 52509)

Later archaeology includes a set of pillow mounds (PRN 32100), nestling in a shallow valley which runs roughly east-west towards the sea. These have been noted before, and the place-name 'The Warren' (PRN 17551) persists into present day use. However, they have been all but invisible under vegetation and had not previously been surveyed in detail (but see James, 2002, 176). More recently, parts of the headland underwent extensive quarrying – presumably to provide stone for the breakwater and harbour at Goodwick, constructed around the turn of the 20<sup>th</sup> century. There is also evidence for military use of the headland, identified by Roger Thomas during his 1993 survey.

Pen Anglas was also, famously, the site of the last French invasion in 1797. After raiding local farmsteads and a few small skirmishes, the French revolutionary force apparently surrendered on Goodwick sands. The remains of Crincoed Farm (PRN 52524) survive outside the survey area – this is one of the farms which was supposedly plundered.

#### 5. Land-Use and History

#### Farmsteads

The only existing farms in the immediate area of the survey which appear to be of any substantial antiquity are Ciliau and Crincoed. Ciliau West, Ciliau East and Ciliau Farm are now all separate entities, but probably originated as a Medieval settlement named 'Kelle' (PRN 12308). By the time of the 1819 Ordnance Survey drawings, 'Cyle E' [presumably Cyle East] was a substantial settlement and the adjacent 'Cyle Common' appears to have been enclosed.

By contrast, Crincoed (PRN 52524) appears on the 1819 map as a rather isolated single dwelling. The later tithe map (1845) shows small fields grouped around Crincoed in a pattern which is typical of small-scale encroachment onto unenclosed land. This enclosure from the later 18<sup>th</sup> century, as the farm is noted in 1797, when it was apparently 'plundered' during the failed French invasion (Garfi, 2005, 7). The building is now ruined.

By the mid 19<sup>th</sup> century another dwelling had also been constructed – Carcoed (PRN 52528), just inland of Crincoed. The tithe apportionment lists much of the eastern side of Pen Anglas, along with the coastal slope, as being held by Carcoed. This includes much of the current survey area.

#### Fields

The tithe map serves to paint a good picture of land-use in this area in the mid 19<sup>th</sup> century. A cluster of fields west of Pen Cw (level with the Cow and Calf rocks) and immediately west of the southern survey area contains three fields named 'Park Newydd' which may indicate fairly recent enclosure. Around half the fields are listed as 'arable', with the other half used for pasture.

The tithe map, along with other historic maps, depicts the coastal slope remaining as an unfenced block but divided in two by the stream in the middle of the survey area. The upper portion is listed as pasture, part of the land belonging to Carcoed, whilst the lower portion is listed as 'Cnwc' – or hillock – and belongs to a different farm. This could easily have been in use as rough grazing, but is not specifically listed as such.

By 1887, when the Ordnance Survey map was published, two detached fields at the north end of Pen Anglas form a distinctive landscape feature. Also noted on the 1887 map is 'The Warren' (PRN 17551) – the set of pillow mounds on the eastern side of the headland. Although pillow mounds are often associated with medieval and early post-Medieval settlements, these mounds are not seen on the tithe map, which may imply that they were constructed between 1845 and 1867 (survey date of the 1887 Ordnance Survey map). When surveyed, it was apparent that the mounds retained a very 'sharp' profile, with little slumping or levelling, which supports a fairly recent date. The historic maps provide a useful insight into the changing field boundaries throughout the 19<sup>th</sup> and early 20<sup>th</sup> century, and paint a picture of steady encroachment onto open land. Earlier maps, including Morris' 1795 'Map of Fiscard Bay and Harbour' show no further details about the earlier history of this land. However, the survey revealed a number of field boundaries which are not seen on historic maps. This indicates that these boundaries must either pre-date the end of the 18<sup>th</sup> century, or post-date the 1908 map. The survey also noted several different types of boundary construction.

# 6. The Northern Survey Area

Full descriptions of the individual sites and features can be found in the gazetteer (section 10).

Period	Site Type	PRN	Brief Description
Prehistoric?	Clearance cairn	52512	Defined clearance cairn, consisting of
			stones piled up against a natural rock
			outcrop. No clear dating evidence.
Prehistoric?	Wall/ Field	52518	Possible stretch of stone walling, with
	Boundary		three clearance cairns piled up against it.
Prehistoric?	Wall /Field	52521	Short stretch of possible stone walling,
	boundary		with a terrace cut into the hillside to the
			west. Similar to PRN 52518.
Bronze Age	Cairn	52517	Stone remains of a probable cairn. A
			discrete, circular stone spread, now no
			trace of a mound. At the centre, a possible
			built structure/cist.
Post-Medieval	Pillow Mounds	32100	Rabbit warren, consisting of seven
			mounds. The 'sharp' profile and lack of
			slumping support a relatively recent date
			suggested by map evidence.
Modern	Trackway	52510	Probably related to the construction of the
			fog-horn at Pen Anglas.
Modern	Earthwork	52511	Earth and rubble spreads, containing
			modern material. Probably related to the
			construction of the fog-horn.
Modern	Field Boundary	52513	Stone field boundary, post-dating 1908
			Ordnance Survey map. Now derelict.
Modern	Trench	52516	Cable trench, visible at intervals
			throughout the survey area.
Unknown;	Earthworks	52522	Ground disturbance adjacent to a footpath,
Modern?			comprising mounds of earth and stone and
			short stretches of track or terrace.
Unknown	Clearance cairn?	52515	Stony mound, probably a clearance cairn,
			no obvious modern material in the make-
			up.
Unknown	Earthwork	52514	Earth mound, unknown date or function.
Unknown	Earthwork	52519	Disturbed area of ground, including stone
			spread and a shallow 'scooped' feature.
Unknown	Clearance cairns?	52520	Two discrete stone mounds.

#### Interpretation

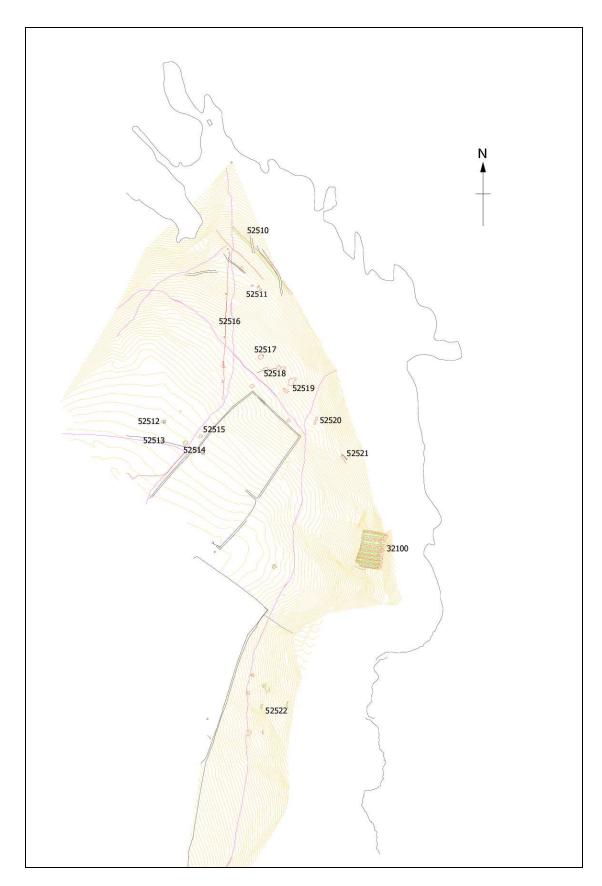
The features noted in this northern survey area can be roughly grouped into three types:

- i. Features relating to the construction of the fog horn at the end of the headland. This includes a cable trench which is visible at intervals across the whole area and several sections of trackway, probably of modern date (PRNs 52510 and 52516).
- Various earth and stone mounds of unknown date and function (PRNs 52511, 52514, 52515). These vary in size and appearance. A few contain modern material such as bricks and/or cement. Others are just roughly piled stone rubble. These are, again, spread across the whole survey area, but are particularly noticeable towards the southern end of this area, near to a footpath.
- iii. Features tentatively assigned a prehistoric date. The clearest of these is PRN 52517, which appears to be a cairn with a possible central cist. Close by, just to the southwest, is a short stretch of walling with probably clearance cairns piled up against it (PRN 52518). This is similar to features seen on St Davids Head and there attributed a prehistoric date. It is also tempting to include PRN 52512 in this group. This is a clearance cairn comprising small rockd and boulders clearly piled against a natural rock outcrop. It is far from being the only clearance cairn on this headland, however it is the only one which takes this form. It is also lying in one of the most undisturbed parts of the headland.

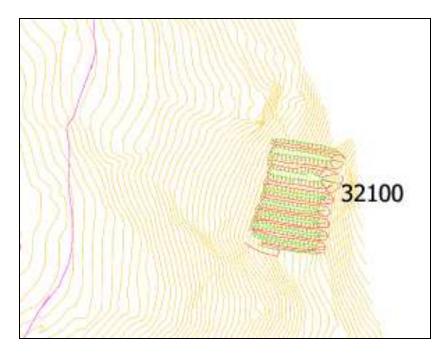
Historic maps and the data from this survey can be used to start to construct a narrative for this area. What is beginning to emerge is an understanding of the history of an area of marginal land which has been brought into, and fallen out of use over time. In recent years, the headland has been largely neglected but prior to the fire, controlled grazing was in use to try and reduce the scrub (mostly gorse and bracken) and produce a coastal slope vegetation which would be managed for bio-diversity. In the early years of the 20<sup>th</sup> century, the character of this landscape was radically altered through quarrying and the building of Goodwick Harbour and the fog horn on the end of the headland but prior to this, the landscape was shaped primarily by agriculture. The 19<sup>th</sup> and early 20th centuries saw this coastal land being gradually enclosed and brought into cultivation, in contrast to the open pasture and rough grazing seen on historic maps from the early 19<sup>th</sup> and late 18<sup>th</sup> centuries. The rabbit warrens were probably constructed somewhere between 1845 and 1867 – another indication of how this land was being brought into more active and controlled use.

In 1817 the 66 acres of Penanglas were mapped as open land belonging to the Bishop of St Davids (James, 2002, 176). It is likely that this ownership extended back through the medieval period (Ludlow, pers comm). Little is known about the land management during this long period.

The northern survey area has also revealed hints of a prehistoric landscape. The relatively low intensity of later land-use has allowed the survival of traces of a probable prehistoric field system, and the discovery of the remains of a cairn with central stone structure underlines the use of this landscape in the Bronze Age. The existence of prehistoric features in this area should, really, be no surprise since there is an abundance of prehistoric activity in the surrounding area. However, to until the fire, it had not been possible to confirm this suspicion.



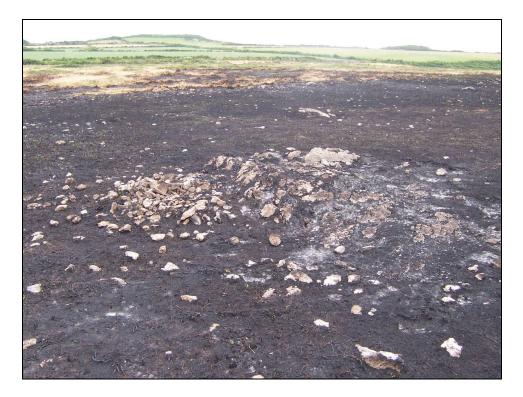
**Fig 2.** Survey data for the northern area. Features are identified by their PRNs. See section 9 for larger copies without annotations.



**Fig 3.** Pillow mounds, set into a natural valley which provides shelter on this otherwise exposed coastal slope.

Fig 4. The pillow mounds as they appeared after the vegetation had burnt off.





**Fig 5.** Clearance cairn (PRN 52512) formed of loose stones (left) piled up against a natural rock outcrop (right).

**Fig 6.** Probably Bronze Age barrow (PRN 52517) marked out by a discrete, circular spread of rubble. This appears to have a small 'cist' in the centre (see figure 7)





Fig 7. The possible built structure at the centre of the barrow, PRN 52517.

## 7. The Southern Survey Area

Full descriptions of the individual sites and features can be found in the gazetteer (section 10).

Period	Site Type	PRN	Brief Description
Post-Medieval	Wall	52525	Remains of a substantial field wall, seen on 1887 Ordnance Survey map. Rough shelters (PRN 32124) have been built against this wall.
Post-Medieval	Wall /Field Boundary	52526	Stone field boundary, modified at its north end, with rubble and loose stone heaped against it to create a wide bank.
Post-Medieval /Modern?	Shelter	32124	Small, roughly semi-circular shelters, crudely built against the field wall. Used by quarry-workers for protection when blasting took place.
Modern	Magazine	18142	Magazine for storing explosive. Consists of the remains of a building surrounded by an iron fence. A deep 'L-shaped' pit also survives, which would have muffled any accidental explosions.
Modern	Reservoir	32120	Concrete reservoir on the cliff-edge, dating to the turn of the 20 <sup>th</sup> century.
Modern	Settling Tank?	32121	A large, roughly rectangular earthwork immediately behind the reservoir (PRN 32120).
Modern	Military Building	32122	Ruined military building.
Modern	Military Building	32123	Ruined military building.
Modern	Settling tank?	52527	Set of parallel linear earthworks seen on aerial photographs. Not observed on the ground, as this part was not burnt and was covered in thick vegetation.

## Chronological summary of sites identified

#### Interpretation

Overall, this southern section of the survey area presents a very different character to the northern section. All of the identified features are post-Medieval or modern, and the majority date to the early  $20^{\text{th}}$  century. The survey revealed what is basically a relict industrial landscape, relating to the building of Goodwick Harbour.

The development of the harbour was of great local and regional importance. Until the late 1890s both Lower Fishguard and Goodwick Sands acted as ports. However, whilst Lower Fishguard comprised a tidal inlet with a quay for unloading cargoes, at Goodwick Sands,

boats had to unload straight onto the beach. In 1859, the 'Fishguard Harbour Act' entitled the Harbour Improvement Company to charge tolls on ships entering the harbour. This probably contributed to ships' captains continuing to discharge cargo onto Goodwick Sands, whenever the weather would permit! Throughout the 19<sup>th</sup> century, Goodwick remained as a small port and hamlet, but this situation changed in the late 1890s when the Great Western Railway decided to use Fishguard, rather than Neyland, for its Irish traffic. Accordingly the modern harbour at Goodwick was constructed, landing facilities were built, the harbour area was dredged and protected by breakwaters. Construction was authorised through the 1899 and 1908 'Fishguard and Rosslare Railways and Harbour Acts' and continued until the 1920s. However, by 1907 there was enough infrastructure to allow the Irish services to come into Goodwick, rather than Neyland (Lewis,R:1993, 69-71). This was the impetus for the urban development of Goodwick – a process which eventually resulted in the settlement at Goodwick merging with that at Upper Fishguard.

In understanding the development of Fishguard and Goodwick, it is necessary to look at the development of the harbour and the railway. The industrial remains recorded during this survey need, therefore, to be viewed within this local context.

There are several interesting points to be raised relating to this:

- i. The level of disturbance caused by industrial activities. There is widespread evidence for quarrying on this section of the headland, and both the aerial photographs and the survey show how many remains survive. A combination of good preservation and a relatively recent date has enabled the survival of features like rough shelters for quarry-workers (PRN32124), adding a human dimension to what would otherwise have been a very impersonal, industrial landscape. There is, therefore, always the possibility that earlier features may be obscured by later land-use.
- ii. Estimates of rates of coastal erosion. The large reservoir (PRN 32120) was depicted on the 1908 Ordnance Survey map as being some distance from the cliff edge. Today, one corner of the reservoir has been lost to the sea, giving an indication of the level of erosion over the past century. Future monitoring may enable us to ascertain whether this is a steady rate of erosion or whether isolated storm events are responsible for most of the cliff-fall.
- iii. The ease with which whole landscapes can be hidden. As a consequence of this land being largely unmanaged for a number of years, the scrub and vegetation had grown up to mask many of the archaeological features. Whilst we frequently think of prehistoric sites being completely hidden by vegetation, it is much rarer to think of modern landscapes being hidden in the same way. This survey has revealed just how much can be concealed, including a deep pit surrounding a magazine for storing explosives (PRN 18142) and a considerable earthwork which may be some form of settling tank! (PRN 32121)



Fig 8. Data from the southern survey area. Features labelled with PRNs.. For a larger image, without annotations, see section 9.



**Fig 9.** The headland above Goodwick Harbour. The concrete reservoir is visible on the cliff edge, and the earthwork behind shows as a scrub covered mound. **Fig 10.** One of the quarry-workers shelters, tucked up against the stone field wall.



#### 8. Management Issues

The survey of this headland has revealed the diversity of archaeology which may be concealed by scrub and undergrowth. It has also further highlighted the tremendous archaeological potential of the coastal slope and coastal zone. These observations are not new, but experience from surveying after the heather burn has raised several issues:

#### Archaeological survey on burn sites

The time delay between the fire occurring and the survey taking place was between five and six weeks. Although the visibility was still good, some of the vegetation had begun to grow back, meaning that some ephemeral features may have been missed. Should a similar situation arise again, it is strongly recommended that survey work commences immediately after the fire.

The type of archaeology that was revealed is also worth commenting on. The probable prehistoric remains were very slight and it is unlikely that they would have been noticed even under much shorter vegetation. It was only the complete absence of vegetation which allowed them to be seen and recorded. The potential for the survival of slight remains should therefore be borne in mind when working in other marginal, coastal areas, especially in areas considered to be high potential for prehistoric remains.

#### Stability and vulnerability of exposed remains

The stability and vulnerability of the exposed remains is a subject for consideration. Potentially, having delicate remains exposed could make them much more vulnerable to disturbance from people or animals, and to the effects of soil erosion by windblow. In this case, though, it appears unlikely that there is any increased threat to survival of the remains. The industrial remains are substantial, and unlikely to be disturbed by anything other than deliberate damage. The prehistoric remains are much more slight, however those too appear to be stable. Partly, this is because the features are so unspectacular and do not lie directly on the main footpaths – the majority of passers-by would not notice them, so there is little chance of any disturbance by visitors. Also, whilst the fire burnt off the vegetation, it was not severe enough to significantly affect the actual ground surface, so it has not de-stabilised the features.

Experience in the North York Moors National Park suggests that the severity of the fire is a significant factor affecting the future preservation and management of the archaeological features uncovered. In 2003, a fire on the moors uncovered a large area containing multi-period field systems and large number of prehistoric burial monuments, clearance cairns and hut circles. Here, the fire was so severe that the shallow peat layer was burnt off, meaning that many of these well-preserved features were revealed for the first time in the recent past. Not only did this expose the archaeology, but it also destabilized it – the removal of the peat layer removed the support for some of the stone features, as well as making them visible, and vulnerable to physical damage and future weathering (Lee,G: pers. comm.). At Goodwick, however, the fire was less severe and the archaeological features less well preserved. Accordingly, the features are less vulnerable in the aftermath of the burn.

#### Management of burn sites

Both short and long-term management of burn sites needs to be carefully thought through. At Goodwick, it was noticeable that the first vegetation to begin to re-grow was the bracken. This is problematic, since work on Dartmoor has recently begun to quantify the huge impact which bracken rhizomes can have in mixing and disturbing archaeological layers. As well as causing physical damage, they cause chemical changes in the soil – the effects of these on archaeological survival are, as yet, unknown. (Anon.: 2001). Controlling bracken is a real problem – a few grazing animals will take young bracken shoots, but almost none will take old fronds. The most effective way of controlling mature bracken fronds seems to be through repeated rolling or crushing during the growing season. This means that, to control re-infestation by bracken after a fire, there are two options – to put cattle or ponies on to graze when the young shoots are coming up, or to undertake repeated rolling in the years following the fire. The first option is the most cost-effective and far less labour intensive. However, it is dependant on the time of year and also on a very sensitive grazing regime. At Goodwick, it appeared that the bracken was substantially in advance of the development of any kind of sward, meaning that over-stocking may have led to severe erosion and/or poaching of the ground. The stock level will need to be carefully controlled and monitored until a good vegetation cover has been established. This process is currently underway at Goodwick.

In the long term, it is planned to continue grazing Pen Anglas, to encourage a varied coastal vegetation. Grazing for conservation purposes is becoming more common, and the Grazing Animals Partnership (GAP) has been set up to ensure that suitable animals and suitably experienced graziers can be matched with areas which would benefit from being grazed. The coastal slope grazing scheme, as the name suggests, focused conservation grazing on overgrown and neglected coastal areas, bringing them back into a favourable condition for bio-diversity. There is also potential for this, or similar schemes, to have a favourable impact on the condition of archaeological sites and landscapes on the coastal slope, removing some of the scrub and undergrowth which often covers them. This is already happening on an *ad hoc* basis, but if sites were deliberately chosen for their archaeological potential as well as their conservation value, the results of this scheme would bring an added benefit.

#### 9. Conclusion

A recent publication about the archaeology of the Welsh coastline commented that 'The coastal zone...often by virtue of its marginal nature, contains particularly fine examples of multi-period relict landscapes, and, where there has been lack of modern development, the diversity and wealth of sites clustered around good landing places can often surprise.' (Davidson, 2002, 3)

It is clear that Pen Anglas is no exception to this observation. There is abundant evidence for the use of this coastal slope over a long period of time. The traces of possible prehistoric activity on the north section of the survey area are particularly interesting and yet, really, should not be surprising as there are a good number of very significant prehistoric sites in the immediate vicinity. The quarry-workers shelters in the southern portion of the survey are interesting for other reasons - they are an immediate glimpse into people's working lives and although evidence for quarrying and construction works is widespread across Wales, the people behind these works are often forgotten.

What this work also highlighted is both the potential and the problems associated with working in burn sites. In this instance, we were relatively fortunate – the fire appears to have done little or no damage to the archaeology, and the nature of the remains means that they are unlikely to be significantly compromised by being exposed. However, we must be aware of the potential for severe burns to not only expose relict landscapes, but also to render them vulnerable. The management of burn sites also needs to be considered should this situation arise again in the future. In this instance, it was fortunate that the National Park Authority were strongly involved in the management of the area, making it straightforward to include archaeological considerations into the management plan.

#### 10. Gazetteer and Survey Data

**PRN** 12308

NGR SM94003970

Site Type Settlement

Period Medieval

## Description

'Kelle' is recorded by Rees in 1932 as a possible Medieval settlement. By the mid 19<sup>th</sup> century it had become known as 'Cyle' or 'Ciliau' and was separated into two or three different farms. Presently, Ciliau East, Ciliau West and Ciliau Farm all exist.

## Condition U

## **PRN** 17551

NGR SM95094006

Site Type Place Name

Period Post-Medieval

## Description

The place-name 'The Warren' is seen on the 1887 Ordnance Survey map and persists into the present day. It probably refers to a set of pillow mounds (PRN 32100) which are located in this area. The National Trust (2005) raise the possibility that the name also reflects earlier keeping of rabbits in this area, however, the name is not seen pre-1887.

Condition

## **PRN** 18142

NGR SM95003922

Site Type Magazine

Period Modern

## Description

The remains of a magazine, for storing explosives. The foundations of a building are set on a concrete footing surrounded by the remains of an iron fence. To the north and west of the concrete footing is a large, steep-sided 'L'-shaped pit. A ladder leads down into this pit from the concrete footing. This feature is generally in good condition but the sides show some signs of slumping. Local knowledge suggests that this was a magazine, used for storing explosives for the quarrying. The pit would serve to muffle any accidental explosions which may occur.

The main building is depicted on the 1908 Ordnance Survey map, and marked as 'Gravel Pit'.

**Condition** C

Site Type Pillow Mound

**Period** Post-Medieval

## Description

**PRN** 32100

A rabbit warren, consisting of a set of seven mounds running roughly east-west and set into a pronounced hollow. A previous description (James, 2002,176) states that the warren consists of only five banks. However, with the vegetation burnt off the details of construction were easier to make out. There is no apparent phasing in the construction.

Map evidence suggests a date between 1845 and 1867, and the sharp profile of the mounds supports a relatively recent date.

## **Condition** A

## **PRN** 32120

NGR SM95133940

Site Type Reservoir

Period Modern

## Description

A concrete built reservoir, with an internal dividing wall. This structure appears on the 1908 Ordnance Survey map but not on the 1887 edition, suggesting a construction date around the turn of the 20<sup>th</sup> century. Interestingly, the reservoir appears on the 1908 map some distance away from the cliff edge. However, today, the eastern part of the reservoir has been lost over the edge of the cliff, providing a measure of the speed of erosion at Goodwick.

It is presumed that this feature is associated with stone quarrying and the construction of Goodwick Harbour and breakwater.

**Condition** C

## **PRN** 32121

NGR SM95113935

Site Type Settling Tank?

Period Modern

## Description

A large, roughly rectangular earthwork set immediately behind (southwest of) the reservoir (PRN 32120). Only the northern part of this feature could be seen, as the rest was completely covered by dense scrub and bushes. The earthwork stands some 3m high, with steep banks and stone retaining walls. In the northern side (closest to the reservoir) is a 'passage' leading between the banks and climbing up to a depression in the top of the earthwork. The nature of this earthwork is not known, but it is thought to be associated with the quarry workings. It may have been some form of settling tank. This survey only records those parts of the earthwork which were accessible and visible under the vegetation. However, aerial photographs taken in August 2000 show a series of rectangular features related to this earthwork (PRN 52527) These are currently completely invisible under vegetation but may be water tanks or settling tanks. **Condition B** 

Site Type Military Building

Period Modern

## Description

**PRN** 32122

A ruined military building, surrounded by concrete fence-post bases. The building is similar in construction to PRN 32123, being brick built with a concrete skin. **Condition** C

## NGR SM95193934

PRN 32123 Site Type Military Building Period Modern Description

A ruined brick building, with the remains of a concrete 'skin'. It was identified as a military building during Roger Thomas' survey. The building is now roofless, but the concrete roof slab has fallen down inside the building and is still present, though broken in two. Records in the SMR suggest that the building was originally more than one storey high. **Condition** C

**PRN** 32124

NGR SM95043927

Site Type Shelter

Period Post-Medieval / Modern?

## Description

A collection of small, roughly semi-circular shelters which are, for the most part, 'tucked up' against the stone field wall PRN 52525. These are crudely built, of piled stone and often with no distinct entrances. One is isolated, in a field to the north of the wall, and contains a distinct depression in its centre. Pieces of corrugated metal remain in one or two of these shelters. It appears that these were shelters built by quarry workers, in order to protect them from flying debris when blasting was in process. **Condition B** 

## **PRN** 52510

NGR SM94994034

Site Type Trackway

Period Modern

## Description

This appears to be a modern track cutting through an artificial terrace. Several sections of trackway were noted on the ground. Small earth and rubble spreads were also noted, containing modern materials such as brick and concrete (PRN 52511). These features are probably linked to either the construction or the maintenance of the fog-horn at Pen Anglas Head, and therefore of a modern date.

#### **Condition** B

#### **PRN** 52511

NGR SM94994032

**Site Type** Earthwork

Period Modern

#### Description

Small earth and rubble spreads, containing modern materials such as brick and concrete. These features are cut through by a modern trackway (PRN 51510) and are probably linked to either the construction or the maintenance of the fog-horn at Pen Anglas Head, and therefore of a modern date.

#### **Condition** B

#### **PRN** 52512

NGR SM94874020

Site Type Clearance Cairn

Period Unknown; Prehistoric?

#### Description

A classic clearance cairn, comprising small and medium sized stones piled up against a natural rock outcrop. The presence of a defined clearance cairn like this implies that the area has been cultivated in the past. These features are notoriously difficult to date.

#### **Condition** B

**PRN** 52513

NGR SM94874017

Site Type Field Boundary

Period Modern

#### Description

A stone field boundary. This is not marked on the 1908 Ordnance Survey map, but it is on modern maps and clearly post-dates the two fields laid out on this headland. It is now derelict, indicating a relatively short period of use. However, the style provides a useful comparison in order to try and date other stretches of walling within the survey area.

#### **Condition** B

**PRN** 52514

NGR SM94904017

Site Type Earthwork

Period Unknown

Description

Earth mound of unknown date or function.

**Condition** B

Site Type Clearance cairn?

Period Unknown

## Description

**PRN** 52515

A stony mound, probably a clearance cairn. In contrast to PRN 52511, there appeared to be no obviously modern material in this mound.

## **Condition** B

**PRN** 52516

NGR SM94954029

Site Type Trench

Period Modern

## Description

A cable trench, running north towards the fog horn. This is visible at intervals throughout the length of the survey area. A ceramic block laid in the trench reads: 'B.R – C.R C.M. and E.E. Electric Cables'. **Condition** B

**PRN** 52517

NGR SM95004026

Site Type Cairn

Period Bronze Age

## Description

This appears to be the remains of a Bronze Age cairn. The feature is a roughly circular stone spread, with a defined edge. In the centre of the spread is a built structure, possible a squared stone cist, formed of upright stone slabs laid on their ends to form a 'box'. There is now no trace of a mound covering this feature. **Condition** C

## **PRN** 52518

NGR SM95004024

Site Type Wall/Field Boundary

**Period** Prehistoric?

## Description

A possible length of walling, immediately south of a probable Bronze Age cairn (PRN 52517). This 'walling' is quite slight, consisting of a line of stones which appear to have been deliberately placed. It is very similar in appearance to the walling in the field systems on St Davids Head, which are given a prehistoric date. Three distinct piles of stone are associated with this walling. These may be clearance cairns, piled up against the wall.

**Condition** C

#### Site Type Earthwork

Period Unknown

## Description

**PRN** 52519

A disturbed area, just to the south of a stretch of possible prehistoric field boundary (PRN 52518). This consists of at least one stone spread along with a shallow 'scooped' area. The date or purpose of this ground disturbance is unknown. **Condition** U

#### **PRN** 52520

NGR SM95054020

Site Type Clearance cairns?

Period Unknown

## Description

Two discrete stone mounds. These may result from field clearance, but the date is unknown. They do not immediately appear to be associated with any field walls or boundaries.

## **Condition** B

**PRN** 52521

NGR SM95084013

Site Type Wall/Field Boundary

**Period** Prehistoric?

## Description

A stretch of possible stone walling with a small terrace cut into the hillside to the west. The 'walling' is similar to that seen at PRN 52518, consisting of larger stones which appear to be deliberately placed.

## **Condition** C

**PRN** 52522

NGR SM94993987

**Site Type** Earthworks

Period Unknown

## Description

PRN 52522 is actually a suite of features adjacent to a footpath running north-south. These features comprise a number of earth and stone mounds along with short stretches of possible terracing. The nature of these features is unknown – some of the terracing, for example, could be sheep tracks. The mounds also vary – some are very 'fresh' looking whilst others are lower and more weathered. All of them give the impression of being 'unformed' – heaps of earth and rubble rather than any deliberately built structures. However, whatever its significance, the ground disturbance in this area makes it notable. **Condition** B

**Site Type** Earthworks

#### Period Modern

## Description

**PRN** 52523

PRN 52523 is an area of modern disturbance, cut through by a continuation of the cable trench for the foghorn (PRN 52516). The two mounds to the west of it are both stone and earth, but also contain some modern material. The southernmost of the two mounds is surrounded by a shallow depression or ditch. It is assumed that all these features are related to each other, but the origin of the two mounds is not known. **Condition** B

#### **PRN** 52524

#### NGR SM94813994

Site Type Building

Period Post-Medieval

#### Description

The remains of Crincoed Farm, which was apparently plundered during the last French invasion of 1797. The main part of the building consists of two rooms, with the remains of a fireplace in the south room.

## **Condition** C

**PRN** 52525

NGR SM95023926

Site Type Wall

Period Post-Medieval

## Description

The remains of a substantial stone wall, running roughly east-west. This boundary is seen on the 1887 and 1908 Ordnance Survey maps, but the small field at its east end appears to post-date the 1908 map. The wall is of roughly coursed stone with a rubble core. Parts of it are tumbled.

Small, semi-circular shelters (PRN 32124) have been roughly constructed against this wall.

**Condition** C

## **PRN** 52526

NGR SM95143934

Site Type Wall/Field Boundary

Period Post-Medieval

## Description

A stone field boundary, originally connected to PRN 52525 and similar in appearance. However, at this end the boundary has also been modified to create a larger stone bank. Loose stone and rubble has been heaped against the boundary to create a wide bank. It is not known when this took place, or why. However, it may relate to the use of the headland for quarrying or, possibly, to the later military use of this area.

#### **Condition** B

#### **PRN** 52527

NGR SM95083933

Site Type Settling Tank?

Period Modern

#### Description

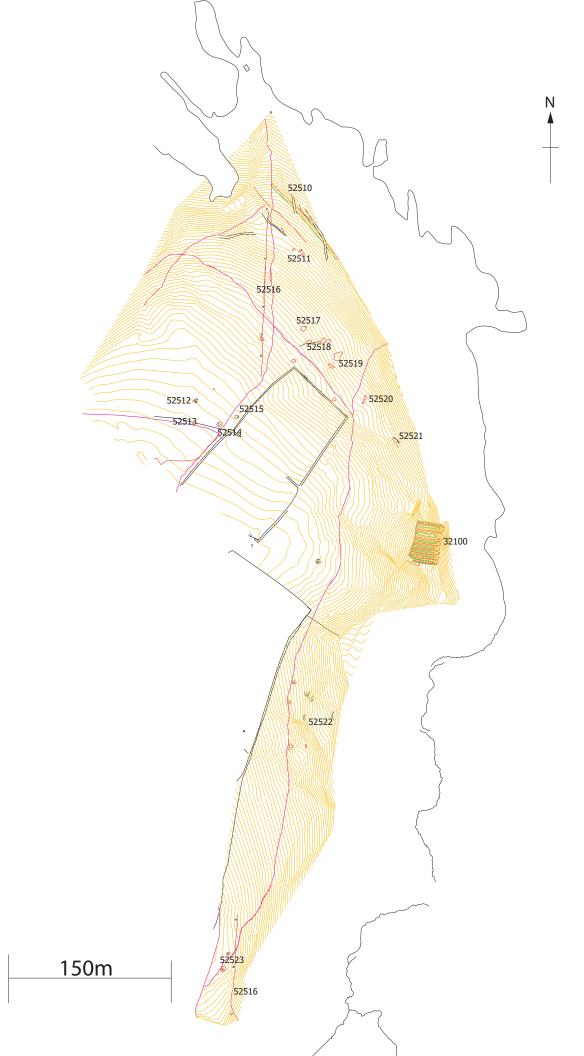
A set of parallel linear earthworks, seen on aerial photographs taken in 2000. These are immediately behind the large earthwork (PRN 32121) and may be some form of settling tank. When surveyed, the area was under such thick vegetation that access was not possible and the features were not observed on the ground.

#### **Condition** U

**PRN** 52528

NGR SM94543967

Site Type FarmsteadPeriod Post-MedievalDescriptionCarcoed Farm, seen on the 1841 tithe map but not before. Condition unknown.Condition U





#### 11. Bibliography

Maps

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Lewis, R:1993:*The Towns of Pembrokeshire, 1815 – 1974,* p.69 – 71. In Howell, D (Ed.), *Pembrokeshire County History, vol. IV.* 

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#### **APPENDIX 1**

# Gazetteer of sites recorded in Sites and Monuments Record but not identified during the survey.

Some of these sites may have been duplicated, with new PRNs assigned. Since the locations were originally only recorded approximately, it was not possible to confidently associate these records with identified features. No modifications were made to any of these records as a result of the survey.

PRN 14032NGR SM950398Site Type Common LandPeriod Medieval/Post-MedievalDescription

Condition n/a

**PRN** 32095

NGR SM950400

Site Type Cairnfield

**Period** Bronze Age

#### Description

In an area sloping to the east toward the coastal slope. The area has rocky outcrops and much loose stone. It is covered in bracken partly burnt off during the field visit. The area is known as 'The Warren' (PRN 17551), but there is no trace of artificial provision for rabbits although the area presumably functioned as such (see however PRN 32100). There is a cairnfield in the area. Of the features seen, PRNs 32096, 32098 & 32104 are cairns, presumably clearance although PRN 32098 could be ritual. PRN 32097 could be a foxhole or an example of the 'scoop graves' which occur in conjuction with cairnfields in upland areas. PRNs 32099, 32102 & 32103 are presumably modern, PRNs 32099 & 32103 may have been built by children or possibly the graves of pets. This is unlikely in the case of PRN 32103 which contains a piece of metal. More intensive field work would doubtless produce more cairns. A detailed survey of the whole area can be recommended. GW. 1996. **Condition** B

Site Type Clearance cairn

**Period** Bronze Age

## Description

**PRN** 32096

The site lies just about the edge of the coastal slope. The area supports grass and bracken. Presumably part of cairnfield PRN 32095. It is a circular mound, 3 across x 0.5m high, overgrown. It looks like a clearance cairn although there are natural outcrops in the area. GW 1996

## **Condition** B

## **PRN** 32097

NGR SM94964005

**Site Type** Scoop Grave? Weapon pit?

Period Bronze Age/ Modern?

## Description

On ground sloping to the east of the coastal slope. The area supports grass and bracken. The feature consists of a low oval mound  $4 \times 2m \times 0.5m$  high ? a shallow ditch to the north-west. It is possibly a foxhole but also similar to the scoop graves of more upland areas. The location may not be precise. GW. 1996. **Condition** B

**PRN** 32098

**NGR** SM94973988

Site Type Clearance cairn? Round barrow?

Period Bronze Age

## Description

On ground sloping to the east to the coastal slope. The area supports grass and bracken. Part of cairnfield PRN 32095. It quite regular in form. Although there are clearance cairns in the area, this is large enough and regular enough to be ritual. The location may not be precise. GW. 1996. Although the grass and bracken was beginning to die back the cairn was not located at the given grid reference. RSR 2004. **Condition** B

## **PRN** 32099

## Site Type Cairn

## Period Modern?

## Description

On ground sloping to the east towards the coastal slope. The area supports grass and bracken. The feature consists of a cairn, 2m across and 1m high. It is not overgrown. It is very steep sided and very possibly recent; possibly a pets

grave. There is a possible ? associated ? to the west (infilled). There is also dumping of stone in this area (PRN 32104) which may well be associated with cairnfield 32095. The location may not be precise. GW. 1996. This site was not located during PFRS fieldwork. RSR 2004.

## **Condition** A

## **PRN** 32101

NGR SM94903973

Site Type Defence Post

Period Modern

## Description

Indentified as a Weapons pit associated with air defence by Thomas. On ground sloping toward the coastal slope. The area supports grass and bracken. The feature is circular dry-stone walled enclosure 8m across, walls 0.6m high. GW. 1996. **Condition** B

## **PRN** 32102

NGR SM94893965

Site Type Mound

Period Modern

## Description

Near the edge of a seaward running valley. The area of cairn field 32095. A steep sided mound of stone and earth. Clearly modern as a piece of ? is incorporated in the base. Function unknown. The location may not be precise. GW. 1996.

Access was not gained to this site therefore no assessment was made. RSR 2004. Condition A

# **PRN** 32103

Site Type Mound

Period Modern?

## Description

On ground sloping to the east toward the coastal slope. The area supports grass and bracken. In area of cairn field PRN 32095. A mound of earth and stone measuring 0.6 x 1.5m x 1m high, steep sided and whole stones in make-up presumably collected, the feature is partly derived from an excavation upslope to the west (inland). Probably modern, possibly a pets grave. The location may not be precise. GW. 1996. The site could not be located during PFRS fieldwork in 2003. RSR 2004. **Condition** A

## **PRN** 32104

NGR SM94993987

Site Type Clearance Cairn

Period Bronze Age

## Description

See PRN 32099. GW.1996. A few small and medium size stones gathered together and deposited as a result of field clearance. RSR 2004. **Condition** B

## **PRN** 32126

NGR SM95023938

Site Type Standing Stone

Period Bronze Age

## Description

On ground sloping to the west toward Fishguard Harbour. The area supports grass, bracken and brambles. An irregular but roughly flat and slab like stone, set on its edge, measuring 1.2m long x 1m high. There is an erratic a few metres to the east and PRN 32126 may well be an erratic also. GW. 1996. A search at the given grid reference failed to locate this stone slab. RSR 2004.

**Condition** U