#### 7. MANAGING THE RESOURCE

#### 7.1 Introduction

This chapter deals with coastal heritage management issues, in the light of the results of the NERCZA project to date, and the special interest of the sites identified. The assessment of site significance and prioritisation is inevitably partly subjective and is based on the professional judgement of Archaeological research Services Ltd staff in consultation with other stakeholders, although it is based on the results of consistent and objective survey. The prioritisation of sites for archaeological intervention, as outlined below, and the discussion related to each of them, are intended to provide a starting point for discussion and consideration of how best to manage sites and target resources. Given that the coastline is such a dynamic environment the condition of sites will change, as will knowledge of certain types of sites, and as a consequence the list of prioritised sites should also be revised in the light of such changes. Consequently, the priority list, and this chapter generally, should be considered a 'live' document that will change subject to further discussion across the curatorial sector and in the light of physical changes on the coastline. It is, therefore, not intended as a definitive statement but rather an aid to discussion and subsequent decisionmaking and actions.

In some cases archaeological features have been assessed individually and, where appropriate, others have been assessed as a group. For example, the surviving Second World War military features at Alnmouth have been assessed as a group, but considered separately to the 19<sup>th</sup> century oyster beds recorded at the same location. Each set of records has been assessed on the basis of their condition and level of special interest (see below), and their value as a group of surviving archaeological features also considered. Where appropriate, single features have been assessed, for example an isolated feature of high archaeological significance that is under threat from erosion or removal. Examples of this can be seen with the Budle Bay and Scremerston Second World War batteries in Northumberland.

A list of sites ranked by level of threat, condition and special interest has been produced and is displayed in Table 7.1, and the top quartile of most significant sites under threat (a total of 13) are discussed in further detail in Section 7.2. There is duplication of the numbering of policy units in the North East and Northumberland SMP2 documents and so each has been colour coded in table 7.1 to distinguish between them.

The assessment of each of the ranked sites shown in Table 7.1 has been based on five criteria. These criteria are: threat from erosion, condition, significance, potential for further investigation and rarity. Each of these criteria has been scored out of ten using the principals set out in DCMS guidance for Scheduled Ancient Monuments

http://www.culture.gov.uk/images/publications/ScheduledMonuments.pdf (formerly Annexe 4 of PPG 16) and reflects the professional opinion of the ARS Ltd project team. The scoring is based upon data collected during the NERCZA project including that from the desk-based assessment, aerial photograph transcription, field survey and consideration of current and future sea level models.

The potential for some of these sites to be proposed for consideration for designation has also been reviewed. This is not scored but stated as Yes/No/Already designated within the table. The attribution given for these sites remains the opinion of the NERCZA project team and not the current position of English Heritage.

The scoring of the various criteria gives a total out of fifty. The table lists sites in their rank order with the site considered to be at most threat and greatest significance ranked number 1. All sites listed in the table are of special interest and face some risk from erosion, and a low ranking does not mean that the site is of low significance. It is only sites of special significance that have made it on to the list in the first place, as many hundreds of recorded features have been excluded as they are not considered to be at risk in the short or medium term. The criteria for assessing each site are discussed in more detail below.

Threat: This comprises the perceived level of threat to the site from coastal erosion or other ongoing erosion. It includes consideration of land use and the potential for the site to be removed artificially. A highly threatened site facing multiple types of erosion would score 9 or 10 while a site located in a stable location with little threat from erosion over the next 100 years would score 1. SMP2 predicted shorelines for 2025, 2055 and 2105 where also used in conjunction with the project GIS to assess the possible long term threat to each site. If the archaeological site was to be lost within 20 years using these predictions the threat would score higher, whereas if the shoreline projection indicated that it could survive for a further 100 years the score would be lower.

**Condition:** This score is based on the current condition of the site in question; a site which is an exceptional example of its type which survives mostly intact would score highly, while a site that survives in fragmentary form, or is mostly destroyed, will have a low score. The context of a site was also considered in this assessment. An archaeological site removed from its original context by later development would score lower than a site which has survived in its original context. This means that a well-preserved military site surviving *in situ* would score higher than a ploughed out Second World War crop mark site.

**Significance:** Assessment of significance has been based on the professional judgement of the project team with reference to the known information value, status, or historical significance of a site. This has been guided with reference to some of the criteria set out in the DCMS guidance for Scheduled Ancient Monuments

http://www.culture.gov.uk/images/publications/ScheduledMonuments.pdf (formerly Annexe 4 of PPG 16). A highly significant site will have rare archaeological features with considerable information potential and may contain components from multiple periods. A less significant site will typically comprise a single, more common archaeological feature.

**Potential:** This is the potential for the site to yield further knowledge or evidence which will make a significant contribution to our understanding. A site which survives intact, and is rare, may contribute more than a site that is already well known and has been extensively investigated. The score is an overall assessment

of how beneficial further archaeological work would be to furthering understanding and contributing to place-making and public enjoyment/well-being.

**Rarity:** This is the assessment of how common the site type is, while also considering its degree of preservation and integrity. Here a standard pillbox which survives intact will score slightly lower as there are numerous examples surviving along the North East coast, however a barrow or a prehistoric monument, such as the enclosures seen at Fenham and Overdale Wyke, will score more highly as there are many fewer examples.

Potential for Designation: Sites in highly threatened locations may be less likely to be considered, however significant they are. Very significant sites in stable locations are more likely to be put forward for consideration. Sites that are already designated are also highlighted. This assessment is not a direct proposal for designation but an indicator of what sites could usefully be considered for putting forward for designation, based on the opinion of the NERCZA project team. It is important to note that even sites in extremely threatened positions may still be considered for proposal for future designation and this has been taken into consideration when putting forward the opinion of the project team.

Table 7.1 sets out the key heritage assets of special interest within the study area displayed in ranked order of priority as evaluated by the project team. The sites have been divided into a hierarchy of colour-coded quartiles with red being those sites considered under 'imminent risk', orange being those considered to be under 'high risk', yellow being those considered at 'intermediate risk' and green being those sites at 'low risk'. Sites at 'imminent risk' are discussed individually in more detail within section 7.2 with specific reference to the threats faced. Sites considered to be at imminent risk are those scoring 40 or higher in the assessment. Those sites that scored between 30 and 40 are considered to be at high risk. Those scored between 20 and 30 are considered to be at intermediate risk and those lower than 20 are considered to be at low risk. Imminent risk is considered to be where there is an immediate or on-going threat to the surviving remains recorded on site and where there is also a clear need for further work. High risk is where the archaeological resource is threatened but the threat may not be as immediate, the site only being imminently threatened within the 20 year SMP2 coastline predictions. Intermediate risk sites are threatened in the long term and will only be directly threatened within the 20 - 50 year SMP2 coastline predictions. Low risk sites are those which will become threatened in the long term, the 50 - 100 year SMP2 coastline predictions, or possibly not at all using current data.

However by comparing the SMP2 predictions with the coastline as recorded by the NERCZA project the limitations of using the SMP can be seen. Using Low Hauxley as an example, the SMP2 predicted shorelines can be seen as woefully inadequate along this stretch of coast. The current line of the shore, in particular the location of the surviving peat layers known to contain archaeological material, can be seen to be further inland than the SMP2 predictions for the shoreline in 50 years time (Fig 7.2) (See also Chapters 5 and 6). This huge discrepancy demonstrates the limitations of using this data in assessing the threat to heritage assets, certainly in this part of the North east coastline, and an urgent review of

the SMP2 shoreline predictions for this area is required. It would seem that the current data can only be used as a rough guide as to what will happen in the future.

# 7.2 Prioritised list of threatened heritage assets on the North East coast of England based on the results of the NERCZA Project.

Position	Site Name	Site Type	NERCZA UID	Policy Unit	Policy	Threat	Condition	Significance	Potential	Rarity	Potential to Designate	Total
· comon	0.10 . 100	one type		. 55, 5			o o i i di di di	0.g00		. toty	Yes/No/Already Designated	/50
1	Low Hauxley	Mesolithic and Bronze Age Site	332	17.3	MR	10	10	10	10	10	No	50
2	Low Hauxley	Prehistoric footprints and other peats	700	17.3	MR	8	10	10	10	10	No	48
3	St Cuthbert's Isle	Hermitage	386	4.7	NAI	10	9	9	10	10	Yes	48
4	Fenham	Late prehistoric enclosure	472	4.3	NAI	10	8	9	9	9	Yes	45
5	Budle Bay	Gun Emplacement	500	4.5	HTL	8	10	9	8	9	Yes	44
6	Trow Point	Possible Bronze Age burial	132	3.1	NAI	10	7	8	9	9	No	43
7	Amble	6 Hulks of coal wherries	352-356	15.2	MR	10	7	9	9	8	Yes	43
8	Scremerston	Late prehistoric enclosure	4526	3.1	NAI	10	7	8	8	9	No	43
9	Scremerston	Gun Emplacement	463	3.1	NAI	6	10	9	8	9	Yes	42

10	Budle Bay	Fish traps	520	4.5	HTL	10	8	8	8	8	Yes	42
11	North Gare	WW1 Seaplane base	201	13.4	NAI	10	6	9	8	9	No	42
12	Hartley	Roberts Battery	451	24.1	HTL	10	9	7	7	8	Already designated	41
13	Holy Island	Lithic Scatter	518	5.1	NAI	8	8	9	7	8	No	40
14	Hartley	Fort House	443	24.1	HTL	7	7	9	8	8	No	39
15	Alnmouth	Oyster Ponds	223-228	13.4	HTL	10	6	7	7	8	No	39
16	Goldsbrough	Military camp	417	21.3	NAI	9	8	7	8	8	No	38
17	Hummersea	Alum works	52	17.3	NAI	10	8	7	7	7	Already designated	38
18	Alnmouth	19th Century Battery	214	13.1	MR	6	8	8	9	7	Already designated	38
19	Loftus	Alum works	195	17.3	NAI	10	8	7	7	7	Already designated	38
20	Sandsend	Alum works	415	21.3	NAI	10	8	7	7	7	Already designated	38

21	Overdale Wyke	Prehistoric enclosures	170	21.3	NAI	7	6	9	7	9	No	38
22	Kettleness	Alum works	426	21.3	NAI	10	7	7	7	7	Already designated	38
23	Trow Point	19th century disappearing gun and WW2 defences	119	3.1	NAI	9	7	8	6	7	Already designated	37
24	Whitburn	Fishing Trap	419	6.2	HTL	7	7	8	8	7	No	37
25	Alnmouth	Chapel	232	13.8	HTL	8	8	7	7	7	Yes	37
26	Greatham Creek	WW2 Decoy site	198	13.5	NAI	7	7	8	6	8	No	36
27	Newton Point	WW2 Radio station	666	9.1	NAI	7	10	7	6	6	No	36
28	Kettleness	Mineral railway	422	21.3	NAI	7	7	8	7	7	Already designated	36
29	Saltburn	Rutways	27	16.1	NAI	8	7	7	7	7	No	36
30	Saltburn	Rock cut features	29	16.1	NAI	8	7	7	6	7	No	35
31	Saltburn	Alum works	23	16.1	NAI	10	6	6	6	7	Already designated	35

32	North Gare	Medieval Salterns	184	13.3	NAI	5	8	8	7	7	Already designated	35
33	Druridge Bay (North)	WW2 Defences		17.4	MR	9	7	7	6	6	No	35
34	Druridge Bay (South)	WW2 Defences		17.3	MR	8	7	7	6	6	No	34
35	Bamburgh	Early Medieval burials	378 - 385	6.1	NAI	3	7	9	7	8	Yes	34
36	Dunstanburgh	WW2 military complex	640-660	10.1	NAI	7	7	8	6	6	No	34
37	Craster	WW2 Radar station	634	10.1	NAI	5	8	7	8	6	Already designated	34
38	Ross Links	WW2 Military remains	800	4.5	HTL	6	7	8	8	5	No	34
39	Sandsend	Railway	416	21.3	NAI	8	7	6	6	7	No	34
40	Druridge Bay	Gun Emplacement	264	17.4	MR	8	5	7	7	7	No	34
41	Goldsbrough	Roman signal station	429	21.3	NAI	2	7	8	7	9	Already designated	33
42	Sandsend	WW2 Defences	433	22.1	HTL	7	6	6	7	7	No	33
43	Budle Bay	Quarry complex	502	4.5	HTL	8	6	7	6	6	No	33

45	Greatham Creek	WW2 Defences	141-152	13.5	NAI	7	7	6	7	6	No	33
46	Holy Island	Fort	402	4.8	HTL	5	8	6	8	6	Already designated	33
47	Bamburgh	Military complex	363 - 374	6.1	NAI	7	7	6	7	6	No	33
48	North Gare	WW2 Defences	153 -190	13.2	NAI	7	7	6	6	7	No	33
49	Skinningrove	WW2 Defences	30	17.2	HTL	7	7	6	6	7	No	33
50	Boulmer	WW2 Airfield + Defences	612	11.2	NAI	6	7	7	6	6	Yes	33
51	Fenham	Grange	470	4.3	NAI	4	8	7	8	6	Already designated	33
52	Seahouses	WW2 Trench Network	670	7.1	NAI	9	7	6	5	6	No	33
53	Crimdon Dene	WW2 Defences	81-113	11.1	MR	8	6	7	6	6	No	33
54	Skinningrove	Ironstone mine	19	17.1	NAI	7	5	7	6	7	Already designated	32
55	Frenchmans Bay	WW2 Defences	140	3.2	NAI	6	6	6	8	6	No	32
56	Trow Point	WW2 Defences	120 - 139	3.1	NAI	8	7	6	6	5	No	32
57	Scremerston	WW2 Radar Station	467	3.1	NAI	4	7	7	6	7	Yes	31

58	Druridge Bay	Bombing range markers	259, 292 + 280	17.4	MR	8	4	7	4	8	No	31
59	Embleton Bay	WW2 military earthworks	640-660	9	NAI	7	5	6	6	7	No	31
60	Beadnell	WW2 Trench Network	662	8.2	HTL	7	6	6	6	6	No	31
61	Holy Island	Quarry	519	5.1	NAI	9	7	5	5	4	Already designated	30
62	Budle	Lime Kiln	497	4.5	HTL	9	7	5	6	4	No	30
63	Scremerston	Lime Kiln	458	3.1	NAI	9	6	5	6	4	No	30
64	Alnmouth	Post medieval barn	237	13.8	HTL	6	6	6	4	7	No	29
65	Alnmouth	Disguised pillbox	230	13.8	HTL	9	4	5	2	8	No	28
66	Crimdon Dene	Mesolithic flint scatter	99	11.1	MR	10	4	9	5	9	No	27
67	Scremerston	Defensive position	459	3.1	NAI	10	3	5	4	4	No	26
68	Scremerston	Pillbox	460	3.1	NAI	8	6	3	3	2	No	22
69	Alnmouth	Enclosure	218	13.1	MR	4	5	4	4	4	No	21

70	Whitburn	WW2 AA battery	550	6.1	HTL	2	5	5	1	7	No	20
71	Sandsend	Former Railway Station	406	22.1	HTL	2	10	2	1	4	No	19
72	Whitburn	Rifle range	561	6.1	HTL	2	10	2	1	3	No	18
73	Kettleness	Former Railway station	415	21.2	HTL	2	8	2	1	4	No	17
74	Kettleness	18 <sup>th</sup> century church	418	22.1	HTL	4	6	2	2	3	No	17
75	Cresswell	WW2 Military remains	236	17.5	MR	1	4	1	5	5	Yes	17
76	Alnmouth	Possible later medieval stock enclosure	219	13.8	HTL	2	4	1	3	4	Yes	14
77	Embleton (town)	WW2 military remains	612	9.1	NAI	2	3	2	2	3	No	12
78	Alnmouth	Beacon	216	13.8	HTL	1	2	1	2	2	No	8
79	Greatham Creek	Possible military buildings	139	13.5	NAI	2	1	2	1	1	No	7
80	Seahouses	WW2 military fragmentary remains	632	7.1	HTL	2	1	1	1	1	No	6

3.1	SMP2 Policy Unit for Northumberland
3.1	SMP2 Policy Unit for North East
Druridge Bay	Imminent Risk
Druridge Bay	High Risk
Druridge Bay	Intermediate Risk
Druridge Bay	Low Risk

Table 7.2 Key to colours used in table 7.1

## 7.3 Priority sites of special interest at 'imminent risk'

The following is a site by site discussion of the sites identified as being at 'imminent risk' in the ranked assessment shown in Table 7.1. The reasons for the scoring of each site are discussed and possible management options for the threatened archaeological remains are identified and discussed and placed in order of preference.

As three separate archaeological elements at Low Hauxley scored high enough to be included they have been grouped into two in this discussion according to their geographic position either side of the Bondicarr Burn.

## 7.3.1 Low Hauxley Mesolithic site and Beaker-Bronze Age burials

Low Hauxley; Mesolithic site and Beaker-Bronze Age cemetery (NU 28412 22705)

Druridge Bay, Northumberland **Policy Unit 17.3** 

Managed Retreat

The archaeological asset comprising the Mesolithic occupation site and Beaker-Bronze Age burial site at Low Hauxley is especially significant. The potential for further investigation and the potential for that to further our understanding of Mesolithic settlement and Beaker period – Early Bronze Age burial, together with questions of colonisation and immigration in prehistory, makes the significance and rarity of this site score maximum. The condition of the archaeological resource that survives, being sealed under calcareous sand dunes, is excellent even when considering the ongoing effects of erosion on the archaeology. On this evidence the site scores maximum on potential and condition criteria. However, it is not known how much more of the site survives given the quantity of material that has already fallen out. Therefore, there is a need to establish in more detail what still survives on the site. In addition to the archaeology there is a sequence of inter-tidal peats immediately adjacent to this site that have considerable palaeoenvironmental, geoarchaeological as well as archaeological potential. The series of radiocarbon dates for the peat layers retrieved as part of this project demonstrate that the earliest of these sediment units formed during the Late Mesolithic and they continue to at least the Late Bronze Age in the area to the north of the Bondicarr Burn. The peats represent an archaeological resource of high significance containing Mesolithic flints and are sealed by dune sand that has revealed evidence for many other archaeological features including a pristine Late Bronze Age rapier and a circular stone-built structure, probably a roundhouse, that has now been destroyed and washed away. These peat layers are under daily erosion, and given that they are known to be, in part, contemporary with the activity represented at the Mesolithic-Bronze Age site, present a resource of considerable potential. The combination of archaeological and palaeoenvironmental deposits together at the same location ensure the site is of high significance.

The threat to the archaeological resource is serious and ongoing (Fig 7.1), with destabilisation of the cliff (Fig 7.2) a daily occurrence. In addition, the site is also under threat by robbing from members of the public as evidenced by the

wedging of a side slab for one of the small cists back into position after human bone material had been scooped out and dropped below – it is thought that a pottery vessel is likely to have been removed by this action (see chapter 5.9). Here the threat level has also scored maximum. The threat to the site is so bad that there is considered little point in designating a site that only has a few years left before its inevitable removal, and designation will not assist in its survival.



Fig. 7.1 Location of a previous archaeological excavation trench backfill (above the black plastic sheet) eroding out of the cliff at Low Hauxley.

#### Management options

The management options for the site are listed in order of preference, with the first being the most preferable strategy.

- Archaeological evaluation to assess scale and cost of rescue works, followed by an appropriate level of excavation and recording in conjunction with a parallel programme of palaeoenvironmental investigation. This could be combined with recording and investigating Peat E, its footprints and worked timber. In addition, further monitoring and recording of the peats and eroding remains, with community involvement, as part of the wider "Coal and Coast" project.
- Ongoing regular monitoring of exposed archaeological sediments to assess if any more significant archaeological features are exposed and record what one can of them as they fall out.
- Do nothing and allow for loss.

The favoured option of the project team is the highest possible level of recording as this would provide the most information and preserve the resource through record before its removal due to natural processes. The significance of this site, combined with the complex multi-period archaeology, requires the attention of a structured archaeological evaluation in the first instance undertaken by

professional archaeologists with community support. This could involve community groups and schools and outreach allowing local people to engage with their coastal heritage and enhancing the experience of visitors, whilst also allowing possible access to wider sources of funding to allow this work to be undertaken.

#### 7.3.2 Low Hauxley Footprints

Low Hauxley Prehistoric footprints and worked wood (NU 28302 77257)
Druridge Bay, Northumberland
Policy Unit 17.3
Managed Retreat

The human and animal footprints identified at Low Hauxley, Northumberland, are visible in the inter-tidal zone, in a thin layer of intermittently exposed peat, Low Hauxley E (Fig 7.3). Their extent has been recorded and a sample of worked wood was retrieved (see section 5.9 and section 6) together with a peat sample that has produced Late Mesolithic calibrated date ranges of 5330-5210 cal BC and 5220-4990 cal BC for the on-set of peat formation (see also Chapter 6). Given the shallow depth of this peat it is clearly a relatively short-lived sediment and is likely to have only been accumulating for a short period and therefore the footprints, which would have had to be formed when the sediment was still very soft and wet, are likely to date to the final wet phase of the sediments before it dried out. Therefore, it is considered very likely that the footprints also being to the Late Mesolithic period although radiocarbon dates from the top of this sediment unit are still required to provide a more accurate date for the footprint formation.

The peat containing the footprints represents a newly identified sediment unit at a lower elevation, and of an earlier date, than the other previously known peats, and therefore is extremely important in its own right as it contains a wealth of environmental evidence concerning the immediate Late Mesolithic environment in this area. Considering the existence of abundant worked wood within the layer, which was seen when the footprints were recorded, the importance and potential of the site as a resource for gaining further knowledge about human activity and the environment during the latter stages of the Mesolithic is great. The presence of human and animal footprints impressed into this layer is also extremely important as there are only three other examples of preserved prehistoric footprints in Britain, at Formby on the Lancashire coast (Cowell 2001), the Severn estuary (Allen 2004) and Hartlepool Bay (Waughman 2005).

This site scored very highly in the table as it is of very high rarity and significance, being one of only four known sites where such footprints survive. The presence of abundant worked wood within the sediment layer, together with the potential of the peat for further plant micro and macro fossils only increases the significance of the site, and inspection of the peat showed that there was a huge quantity of timber surviving within it that could shed light not only on human activities, technology and woodland management, but also a rare and detailed insight into the type of vegetation and landscape setting in this area at the time the footprints were made. The dating of this layer to the Late Mesolithic indicates that it could be contemporary with the Late Mesolithic occupation site below the

Bronze Age cairn cemetery at Low Hauxley (see above) that was radiocarbon dated by Bonsall (1984) to a similar time bracket ("A single radiocarbon determination on a sample of shells from the midden suggests an age of about 5000 bc"), although the latter date has never been fully published. If the two sites are contemporary, as seems possible, then the group value of these remains is even higher and provides a very rare opportunity to understand a Mesolithic occupation site in relation to a submerged peat, with clear evidence for human activity within it, as well as human interaction with the environment in terms of woodland management and associations with animal activity. This site could provide a counterpart to Star Carr, except in this case it would provide an unparalleled level of detail on human activity in the Late Mesolithic prior to the introduction/adoption of farming and in a coastal setting.

The threat to the site from coastal erosion is significant as the peat layer is scoured clean of the overlying sand during storm events and the site scored moderately high as a result of this assessment, despite it being sometimes covered by beach sand - that protects the resource during the calmer summer months. When revealed again the peat in which the footprints and wood are preserved is very shallow and would be prone to erosion from the tide and beach walkers as it is situated within the inter-tidal zone. During a storm event this peat could be scoured away completely removing the evidence of the footprints, and probably the entire layer of peat and worked timbers altogether.

The potential to propose the site for consideration for designation is low as it is difficult to see how any kind of designation would help the site in terms of its survival, given that it is being affected by an inexorable natural process.

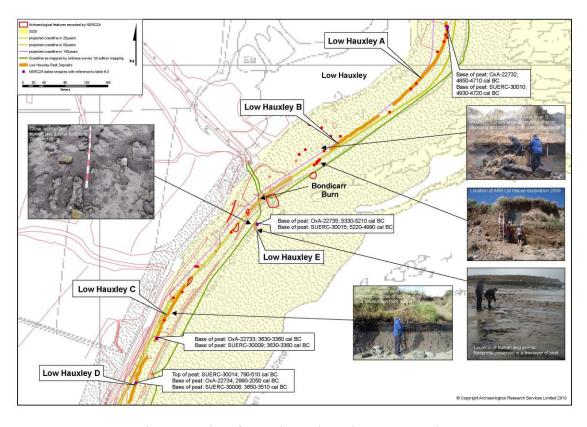


Fig. 7.2 Location of Footprints and samples at Low Hauxley.



Fig. 7.3 The briefly exposed footprints at Low Hauxley showing how much of the sediment has already been eroded away, and the position of the worked wood find, with the Bondicarr Burn outflow in the background, looking north (Scale = 2m).

#### Management options

Three possible recording strategies for the site are listed in order of preference, with the first being considered the most preferable strategy.

Full recording of the footprints next time they are revealed, utilising an accurate GPS plot of the full extent together with a full, hand drawn plan of the whole peat layer at a scale of 1:50 and detailed drawings, measurements and photographs for each footprint at 1:20. As well as this recording strategy, casts of some of the best-preserved footprints could be taken and a full photographic survey of their visible extent made. This would allow analysis on the direction of travel, the number of individuals, and possibly even ages, sex, as well as the species of animals and approximate number of individuals. Further samples of wood should be taken to allow more detailed analysis of woodland management and woodworking techniques (Taylor 2010) with the wood specialist involved on site in selecting samples for analysis. This would undoubtedly contribute to the understanding of prehistoric life in this part of Britain as there are very few examples of prehistoric worked timber known from the region, and from this period more generally. Further samples of the peat to be taken for environmental assessment and examination fro archaeological residues such as worked flints and suitable radiocarbon dating samples from the top of the peat layer and any other significant parts of the sediment unit or deposits within it.

- Ongoing monitoring of the visible extent of the footprints and basic recording to assess their condition and any increase/change in the nature of the threat faced in this location.
- Do nothing and allow the resource to be lost.

The favoured option of the project team is the highest possible level of recording as this would provide the most information and contribute significantly to our understanding of the Late Mesolithic period both at a regional scale, and nationally/internationally, whilst also preserving the resource through record before it is lost as a result of natural processes. If time and funding does not allow for full recording then the next best approach is to utilise and encourage motivated local amateur archaeologists, such as Jim Nesbit, to continually monitor the exposure and condition of the site. The least favourable option is to do nothing as the sediment unit will eventually be completely exposed and removed through natural process, losing a nationally valuable archaeological resource.

#### 7.3.3 St Cuthbert's Isle

St Cuthbert's Isle; Hermitage (NU 12289 772568) Holy Island, Northumberland Policy Unit 4.7 No Active Intervention

The site comprises the surviving structural remains of a hermitage, believed to have been the site initially occupied by St Cuthbert in the 7<sup>th</sup> Century AD. What is visible now represents a later medieval structure built on the site. The site is thought to have been initially occupied by the saint who eventually settled on Farne Island near Bamburgh. However, the site is still of historical significance as there is a possibility of well-preserved medieval archaeology relating to a small early medieval hermitage as well as the later chapel that still survives in ruinous state on the site. For this reason the site is potentially highly significant and, considering the threat faced by its location (Fig 7.5), can be seen to be placed at high risk. There are also well-preserved remains of at least two small buildings and associated earthworks, and the site therefore scored very highly on condition, potential and significance.

The possible link to St Cuthbert adds considerable significance and potential importance to the site, and justifies the high rarity value score. The threat to the site is also very high as archaeological deposits are being actively eroded at every high tide (Fig 7.4), with part of the western wall of the structure on the isle already having been lost. This is the reason for the site scoring a maximum in this category.



Fig. 7.4 Actively eroding archaeological remains on St Cuthbert's Isle, Northumberland, viewed at low tide looking east.

## Management options

Three possible recording strategies for the site are listed in order of preference, with the first being the most preferable strategy of the project team.

- Full Level 3 detailed survey of above ground remains on St Cuthbert's Isle at an appropriate scale, followed by rescue excavation of the western limits of the monument already being lost to erosion and ongoing monitoring of future erosion. There is also potential for geophysical survey, test-pitting and full excavation if the threat increases, possibly as a part of a wider community project.
- Level 3 survey of the whole of St Cuthbert's Isle at a scale of 1:500 and on-going regular monitoring of exposed archaeological sediments to assess if any significant archaeological features are exposed.
- Do nothing.

The favoured option of the project team is the highest possible level of recording as this would provide the most information and important knowledge gain whilst preserving the eroding resource through record, prior to its removal by natural processes. The site is exposed and archaeological remains are rapidly being eroded away, making at least Level 3 survey and recording of the exposed section a priority. If full survey or archaeological excavation cannot be undertaken in the near future some form of ongoing monitoring to evaluate the situation must be undertaken. This could be done by a local group, or island residents, as it would only require regular photography passed on to the local authority and English Heritage. However, without the scope to react to further erosion the monitoring would in itself be of little value. It would only serve to highlight a problem, raise expectations and local feeling, only for it to be dashed by no action being taken and the remains left for their inexorable removal.

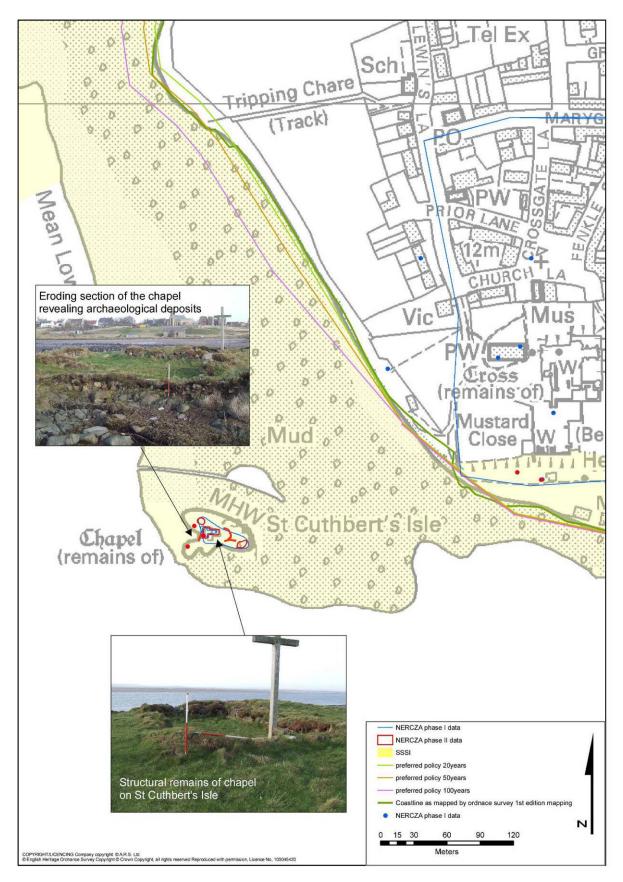


Fig. 7.5 Location of St Cuthbert's Isle, off the south coast of Holy Island.

## 7.3.4 Fenham Prehistoric Enclosure

Fenham, Northumberland (NU 42705 46881)

Policy Unit 4.3 Hold the Line

The degraded earthwork remains at Fenham of a prehistoric enclosure, probably a substantial 'palisade' site, warrant further investigation. Although the upstanding remains are slight the importance of the site and the imminent nature of the erosion mean that this is an archaeological resource of high potential and rarity value. The site could yield significant information about lowland enclosures, settlement and farming activities during later prehistory as well as help address the problem of the dating of palisaded sites in northern England, important objectives of the regional research framework. The site is, therefore, of high regional significance and although its surviving condition remains broadly unknown, though it evidently has substantial cut features surviving given the cropmark formation, the threat and significance increase the score of this monument. Furthermore, a significant portion of this large site has already been lost to the sea and the site is continuing to erode. There is potential for this site to be considered for putting forward for designation.



Fig. 7.6 The location of a slump below the Fenham enclosure. The ranging pole shows the location of the original centre of the enclosure bank which can be seen as a slight upstanding earthwork on the ground surface above (Scale = 2m).

#### Management options

Three possible recording strategies for the site are listed in order of preference, with the first being considered the most preferable strategy.

- Detailed level 3 field survey of surviving earthworks, followed by close-spaced fieldwalking and geophysical survey, targeted evaluation trenching and cutting back of the cliff section through the defences to gain a better idea of what survives, the condition of preservation and assess the date of the monument and its ability to answer key research questions.
   Production of report followed by on-going monitoring and further works if necessary.
- Continued monitoring of the cliff face and environs of the site to assess the effects of erosion.
- No further work.

The favoured option is the level 3 recording as this would provide the necessary information to gain some understanding of the date of these features, how the site was built and how it functioned, before further erosion degrades the integrity of this large complex. Here, a sensitive archaeological approach is required so as not to further destabilise the cliff edge. Fieldwalking and geophysical survey followed by targeted evaluation to gain further information on the preservation and extent of what remains is considered a priority. The site should at least be subject to ongoing monitoring to assess the extent and nature of any archaeological deposits that are exposed in due course. This site could provide a useful counterpart to the well-known sites in East Lothian, such as Broxmouth and Dryburn Bridge, and shed light on later prehistoric coastal settlement in North East England. The latter two sites were similar lowland enclosures under the plough and in near coastal locations, and these sites have added very significantly to the understanding of later prehistory in the region, as well as revealing evidence for being far more complex multi-period sites than the first impression of the cropmark remains suggested.

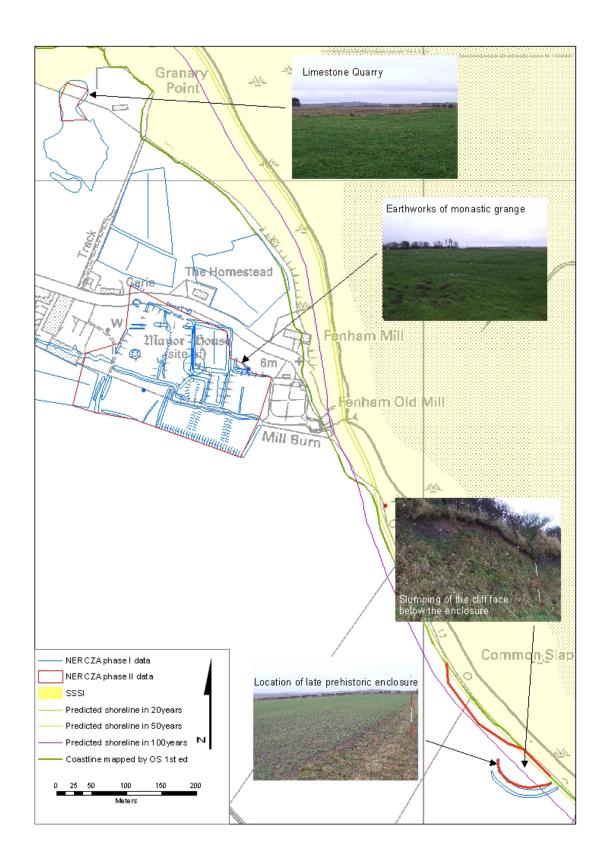


Fig. 7.7 Location of the late prehistoric enclosure at Fenham.

## 7.3.5 Budle Bay gun emplacement

Budle Bay, Northumberland, NU 16112 28151.

Policy Unit 4.5 Hold the Line

The site at Budle Bay comprises a small military battery formerly served by a small camp, now a caravan park (Fig 7.11). The surviving remains comprise a post-medieval industrial complex serving a quarry located on the golf course at Bamburgh, with a Second World War gun emplacement (Fig 7.10) constructed on top of it. It is this structure that is the subject of this assessment. The military building survives extremely well and has several unusual features that make this structure one of only a pair on the North East coast, the other being located at Scremerston, that are unparalleled elsewhere in the country. For this reason the condition, significance and rarity scores for this structure are high. These structures are far bigger and more complex than any other emplacements that can be seen to house the same calibre gun. For some reason greater emphasis and attention was paid when constructing these particular emplacements. There is also a possibility that these are based on German military designs, although this remains to be confirmed. The reason for the substantial nature of these positions is not currently clear from their location alone.



Fig. 7.8 The large gun emplacement at Budle Bay viewed from the south (1m scale visible).

## Management options

Three possible recording strategies for the site are listed in order of preference, with the first being the most preferable strategy.

• Architectural, photographic and Level 3 standing building survey with associated Level 3 earthwork survey of the environs of the site including the quarry and kilns. This to be followed by proposal of the site for

- consideration for future designation. Also, continued monitoring of the site over the long term with the assistance of volunteers.
- Photographic and basic Level 1 building recording survey, followed by continued monitoring of the site.
- No further work.

The favoured option is the Level 3 standing building survey and on-going monitoring as this would provide an adequate information base for a very rare monument in advance of future coastal erosion encroaching into this area. If this is not possible the remains should be at least subject to Level 1 recording to allow direct comparison with other examples of gun emplacements. Continued monitoring could be undertaken by groups, such as the Fortress Study Group, which comprises a motivated and knowledgeable group of enthusiasts.

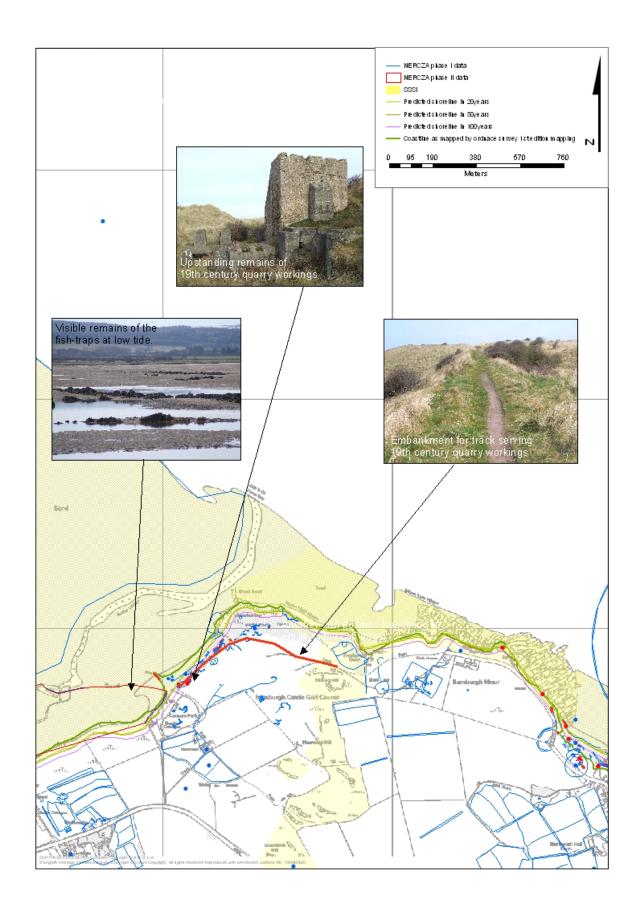


Fig. 7.9 The features surrounding the Budle Bay battery and fish traps.

## 7.3.6 Trow Point Barrow and Military Remains

Trow Point, South Shields (NZ 38361 72439)

Policy Unit 3.1

No Active Intervention

The whole of Trow Point is threatened by ongoing coastal erosion, and although the Second World War military remains face the same threat they are not as rare as the possible barrow. However, the nineteenth century 'disappearing gun' is a rare military monument, although only a small fragment of the original Victorian structure survives, it having been subject to later alteration. The gun that is currently visible at Trow Point is a much later twentieth century replacement that has been placed there to aid public interpretation. The presence of a surviving Bronze Age barrow has not been confirmed but the NERCZA survey has put forward a sub-circular earthwork, truncated by later features, as a possible candidate (Fig 7.6). It is positioned at the escarpment edge at the rear of the point and faces the threat of cliff collapse due to wave action destabilising the cliff edge to the north and south, which will lead to complete collapse over time (Fig 7.7). The potential significance of this monument is high, as it was thought to have been lost to quarrying, and is known to have produced a cist burial with a socketed Late Bronze Age axe head found nearby. The site, therefore, scored highly on threat, significance, potential and rarity. Having multi-period remains on the site, including those from WW1 and WW2, adds to the significance of the site which is being battered by wave action on a daily basis.



Fig. 7.10 Trow Point viewed from the west, the possible barrow is located on the high point to the right of the gun position.

The condition of the monument is currently unknown but is likely to be truncated due to antiquarian investigation and later impacts from the construction of military features. For this reason the condition scored lower.

Given that this is an actively eroding site it is not thought practical to propose this site for consideration for designation.

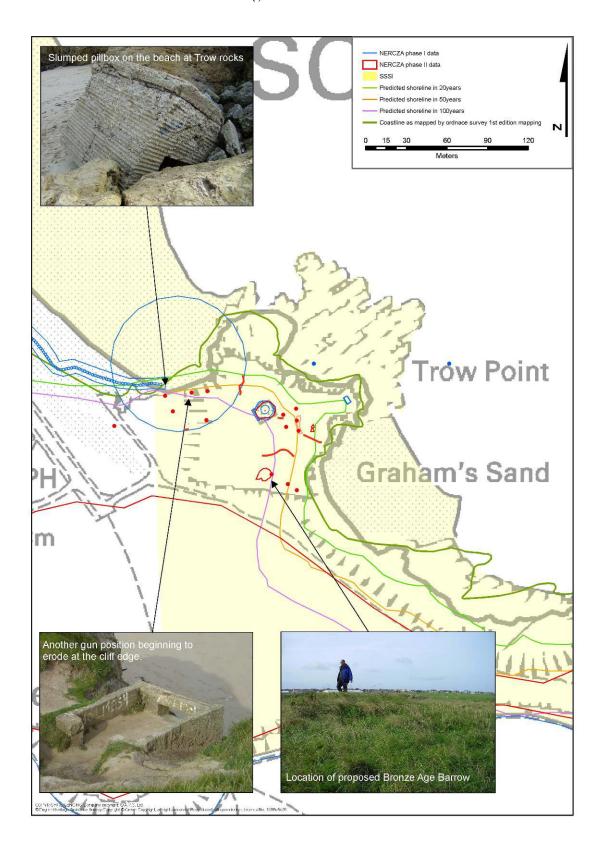


Fig. 7.11 Trow Point and its archaeology showing projected loss of archaeological features.

## Management options

Three possible recording strategies for the site are listed in order of preference, with the first being the most preferable strategy of the project team.

- Level 3 archaeological survey and investigation of all of the remains on Trow Point, followed by targeted test pits and/or small evaluation trenches to evaluate the potential survival of prehistoric and wartime remains. To be followed by continued assessment of impacts of ongoing erosion and monitoring of the remains with volunteers. It is not thought that geophysics would be a suitable technique at this site given that there is so much metal around the site due to wartime activity.
- Continued monitoring of the site to assess the effects of erosion based on the NERCZA field survey. Further investigation of the potential barrow utilising test pits and evaluation excavation.
- Ongoing monitoring of effects of erosion. No further archaeological work

The favoured option is the intrusive investigation approach as this would provide an appropriate evidence base upon which to devise future management options for the site and to establish the status of the possible barrow site. One way to achieve this is to construct a community-based research, monitoring and interpretation project based on community involvement, in co-operation with the National Trust, who currently manage the site. This could involve training in archaeological techniques and monitoring as well as the production of suitable interpretation and outreach opportunities for local schools which would assist in the local community taking some ownership of its historic assets and also helping to access funding streams.

# 7.3.7 Amble 19<sup>th</sup> century hulks

Amble, Northumberland, 19<sup>th</sup> century hulks (NU 26382 97995) **Policy Unit 15.2 Managed Retreat** 

The Amble hulks are located in the inter-tidal zone of the estuary of the River Coquet in Northumberland (Figs. 7.12 and 7.13). They have been the subject of a limited programme of research and are still poorly understood. The NERCZA field survey identified them as being threatened by every high tide and, although photographed and accurately located with basic measurements taken, a detailed survey of these inter-tidal hulks still has not been undertaken. There are many sites in Britain where inter-tidal hulks have been recognised, however there is no comparable assemblage of hulks from a similar period which survive to this extent along the North East coast. Others have been seen at Newburn on the River Tyne, but these do not survive as well and have already been surveyed (Taylor and Williams 2009). For this reason the Amble hulks scored highly against the significance, rarity and condition criteria.

The threat faced to these vessels by every high tide, and the build up of inter-tidal mud, has led to what remains being scored highly in terms of the threat criteria. They are also well within the Environment Agency flood zone (Environment

Agency 2007), and could eventually become permanently submerged with rising sea levels. For these reasons the threat level also scored highly.

In order to more fully understand the nature of these vessels detailed work needs to be undertaken, including detailed measured survey and analysis by experienced maritime archaeologists or historians. This would add to the public's knowledge of the historical maritime industry in the North East and help to tie down the exact function and date of the vessels. For this reason the hulks also scored highly against the 'potential' criterion. However, the potential to designate is currently considered low until the results of any further work are analysed. This consideration may change in the light of any future information.



Fig. 7.12 Three of the hulks in the inter-tidal muds in the Coquet estuary, Amble.

#### Management options

Three possible recording strategies for the site are listed in order of preference, with the first being the most preferable strategy.

- Detailed measured survey of each of the hulks at Amble, followed by detailed study and comparison of them with other similar vessels regionally and nationally. Production of a report and assessment on these findings followed by ongoing monitoring utilising volunteers if possible.
- Continued monitoring of the site to assess the effects of erosion.
- No further work

The favoured option is the detailed recording as this would provide the most information and preserve the resource prior to erosion or burial by inter-tidal mud. This is considered the most appropriate approach as the remains are still relatively poorly understood despite having been subject to rapid survey. Monitoring could be undertaken by suitably experienced individuals. Two experienced archaeologists, Alan Williams and Patrick Taylor, have already expressed an interest in recording these remains and have already surveyed similar remains at Newburn on the Tyne. They could be included in a project to

further record and investigate the remains and manage their long-term monitoring.

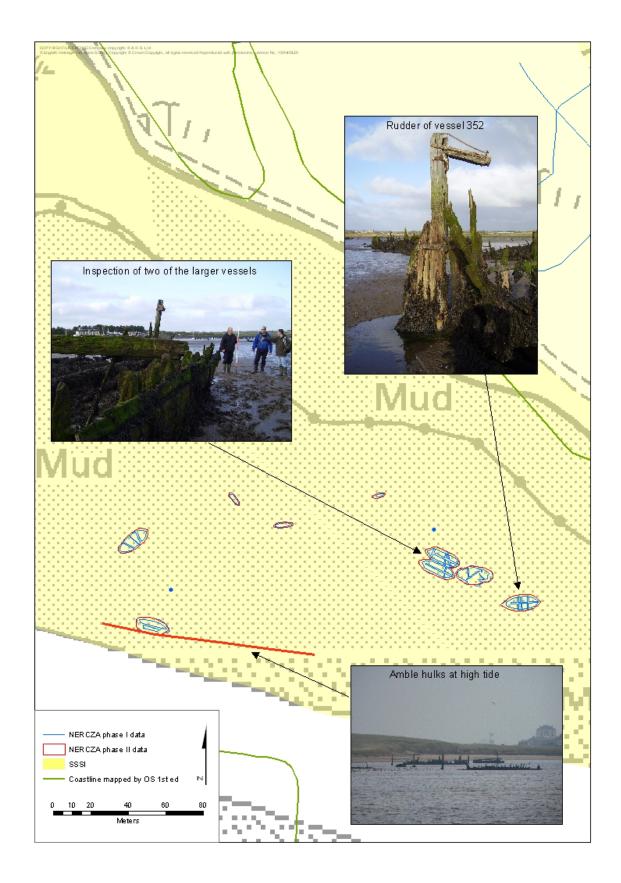


Fig. 7.13 The location of the Amble hulks in the mouth of the River Coquet.

## 7.3.8 Scremerston late prehistoric enclosure

Scremerston, Northumberland (NU 03177 72173)

Policy Unit 3.1

No Active Intervention

The late prehistoric enclosure identified at Scremerston as a cropmark was not visible on the surface as part of the field investigation. The current condition of this monument is therefore unknown and as a result the site warrants further investigation. If significant below ground remains do survive the site could provide valuable information concerning lowland enclosures, settlement and farming activities during later prehistory as well as help address the problem of the dating of such sites in northern England, important objectives of the regional research framework. The site is of high regional significance and although its surviving condition remains unknown, it evidently has substantial cut features surviving given the cropmark formation. The threat and potential significance increase the score of this monument. A significant portion of this site has already been lost to both the sea and the cutting for the East Coast mainline (Fig.14). The site is also continuing to erode as can be seen from the small section surviving to the north of the Railway (Fig.15). However the presence of the East Coast mainline will most likely lead to investment in sea defences along this stretch of coastline, ultimately protecting the enclosure although it has heavily truncated the monument.



Fig. 14 Location of the Scremerston late prehistoric enclosure, viewed looking South.

#### Management options

Three possible recording strategies for the site are listed in order of preference, with the first being considered the most preferable strategy.

 Close-spaced fieldwalking and geophysical survey, targeted evaluation trenching and cutting back of the cliff section through the defences to gain a better idea of what survives, the condition of preservation and assess the date of the monument and its ability to answer key research questions. Production of report followed by on-going monitoring and further works if necessary.

- Continued monitoring of the cliff face and environs of the site to assess the effects of erosion.
- No further work.

The favoured option is geophysical survey as this would provide the necessary information to gain some understanding of the survival of below ground features, how the site was built and how it functioned, before further erosion degrades the integrity of what survives. Here, a sensitive archaeological approach is required so as not to further destabilise the cliff edge and avoid any impact upon the railway cutting. Fieldwalking followed by targeted evaluation to gain further information on the preservation and extent of what remains is considered a priority. The site should at least be subject to ongoing monitoring to assess the extent and nature of any archaeological deposits that are exposed to the east of the railway cutting in due course.

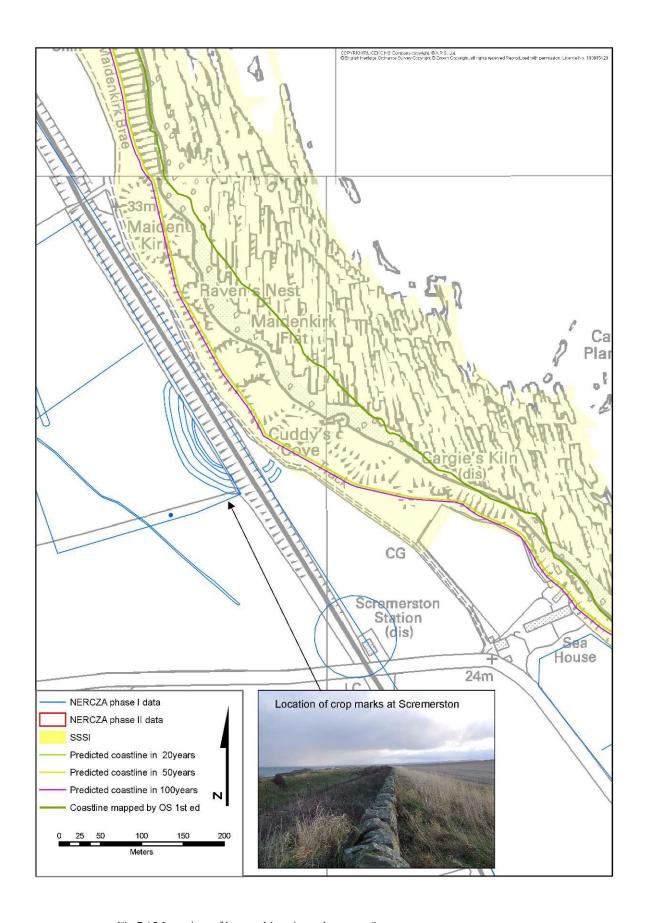


Fig 7.15 Location of late prehistoric enclosure at Scremerston

## 7.3.9 Scremerston gun emplacement

Scremerston, Northumberland (NU 03177 72173)

Policy Unit 3.1

#### No Active Intervention

The Gun emplacement at Scremerston is built to the same specification as that at Budle Bay (Fig 7.16), although the setting at Budle Bay led to a slightly different final shape being used. As discussed in Chapter 5, these structures are the only two emplacements of this type built to this high standard seen in the country. They are more akin to German designs of the 1940s seen in Hitler's "Atlantic Wall". This has scored the same in most of the criteria as the emplacement at Budle and for the same reasons. However, there is slightly less direct threat to this monument from the effects of erosion (Fig 7.17), and it is less likely to be demolished and removed. This has led to the threat being scored slightly lower than the battery at Budle. The lime works and kiln upon which the battery is situated are also under threat of erosion. However the significance and rarity of these remains means they have scored lower than the surviving military archaeology.



Fig 7.16 Gun emplacement at Scremerston, built on top of a trackway associated with a limestone quarry and associated kilns (Scale = 2m).

#### Management options

Three possible recording strategies for the site are listed in order of preference, with the first being the most preferable strategy.

- Architectural, photographic and Level 3 standing building survey with associated Level 3 earthwork survey of the environs of the site, including the quarry and kilns. To be followed by proposal to be considered for designation. Also, continued monitoring of the site in the long term with an appropriate volunteer group.
- Photographic and basic Level 1 building recording survey, followed by continued monitoring of the site.
- No further work

The favoured option is the Level 3 standing building survey and on-going monitoring as this would provide an adequate information base for a very rare

monument in advance of future coastal erosion encroaching into this area. The proposals are based on the same principals as those for the Budle Bay battery.

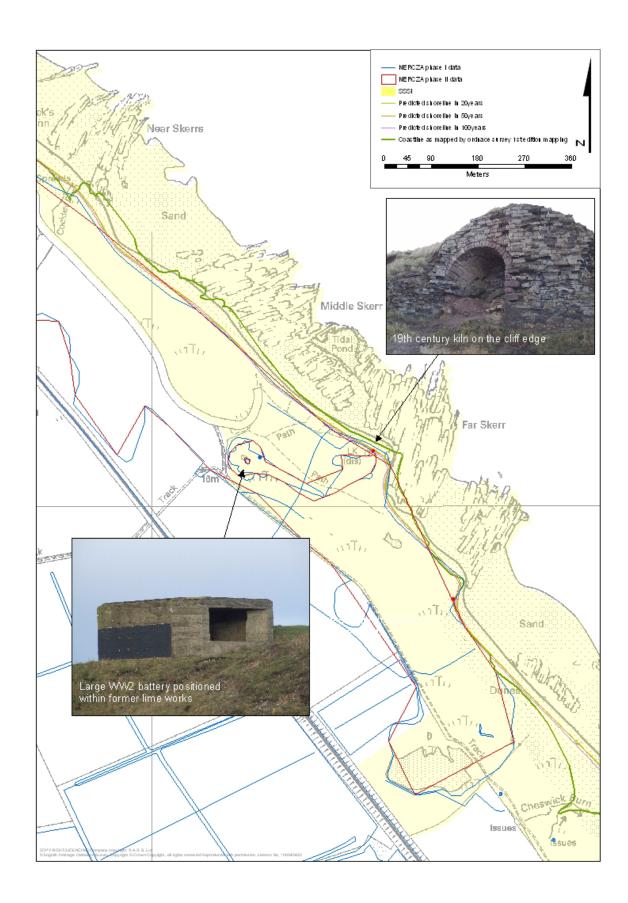


Fig. 7.17 The location of threatened features at Scremerston.

### 7.3.10 Budle Bay fish traps

Budle Bay, Northumberland (NU 16112 28151) **Policy Unit 4.5 Hold the Line** 

The fish traps at Budle bay (Figs 7.18 and 7.11) are potentially significant, as they could relate to a grange of Lindisfarne Priory, or to a nearby, but now deserted, medieval village. The remains appear to be wood and stone-built and are exposed to erosive wave action at every high tide. This places the remains high in terms of significance and threat. There are not many well-preserved examples of medieval fish traps nationally and no similar examples regionally. This means that this site scores high against rarity as well. There is potential to designate these remains as they lie within a very shallow protected embayment in an inter-tidal zone that has remained fairly stable for a considerable period of time.



Fig. 7.18 View of some of the surviving Budle Bay fishtraps at low tide.

There is certainly potential for further work including a baseline survey of each of the fish traps and possibly limited excavation and sampling to attempt to gain accurate dating information. In addition, the survival of the remains visible on the surface is also excellent. For this reason the site scored highly in the threat criteria.

# Management options

Three possible recording strategies for the site are listed in order of preference, with the first being considered the most preferable strategy.

• Detailed Level 3 field survey of surviving structural remains, followed by limited targeted excavation to gain accurate structural details and dating samples for the surviving structures, and to understand their construction

and how the traps are likely to have worked. Production of report and assessment of the survival of the site followed by on-going monitoring.

- Continued monitoring of the site to assess the effects of erosion.
- No further work

The favoured option of the project team is Level 3 recording and investigation as this would provide the necessary information to gain some understanding of the date of these features, how they were built and how they functioned before further erosion degrades the integrity of this large complex. As with other sites investigated, survey and targeted excavation of these features could be effectively facilitated as part of a community project in order to provide training opportunities as well as an outreach programme.

# 7.3.11 North Gare WWI seaplane base

North Gare, Seaton Carew, Teeside (NZ 53276 21480)

Policy Unit 13.4

No Active Intervention

The First World War seaplane base at Seaton Carew is a rare surviving example of one of these installations (Fig 7.19). Although much Second World War heritage survives, the First World War is not as well represented in the archaeological record. To find an undeveloped site with surviving earthwork and structural elements, including the slipway, is exceptional on the North East coast. For this reason the site scored highly against potential, significance, and rarity criteria.

The site has been demolished, but not flattened, as earthwork elements survive, along with two contemporary sheds close to the power station boundary. The condition, therefore, is only average but there is potential for further investigation below ground to locate buildings and perhaps produce a basic plan of the facility. For these reasons, however, there is limited potential to suggest the site for consideration for designation.



Fig. 7.19 The preserved slipway to the First World War seaplane base at Seaton Carew.

The threat to the site is clearly high with every high tide contributing to the gradual degradation of the slipway. The low-lying area of the remainder of the base is also at risk from rising sea levels and falls well within the Environment Agency flood zone (Environment Agency 2007). The threat to the site scores maximum as it is clearly under high and on-going threat.

### Management options

Three possible recording strategies for the site are listed in order of preference, with the first being the most preferable strategy.

- Detailed Level 3 field survey of surviving earthworks and structural remains, followed by close-spaced geophysical survey and subsequent test-pitting/evaluation trenching of geophysical anomalies. Production of report, plan and in-depth desk-based assessment of the site followed by on-going monitoring utilising volunteers.
- Continued monitoring of site to assess the effects of erosion.
- No further work

The favoured option is Level 3 detailed survey and investigation as this would provide essential baseline information on this rare site in advance of the inexorable effects of coastal erosion. A project here could involve local communities, history groups and schools and reveal more information about a potentially significant site, with the added value of community engagement. The site should at least be monitored regularly to assess the rate of degradation. This could again be undertaken by motivated local people guided by an experienced archaeologist.

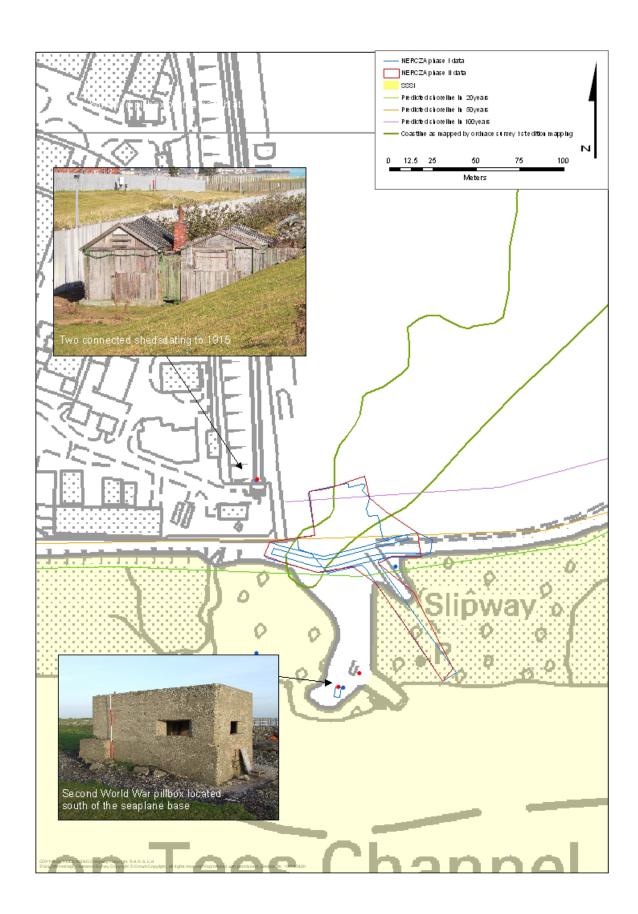


Fig. 7.20 Location of the WW1 seaplane base at North Gare.

# 7.3.12 Hartley; Roberts Battery

Seaton Sluice, Northumberland (NU 34266 76151)

Policy Unit 24.1 Hold the Line

The site at Roberts Battery contains the surviving remains of a military installation constructed between the First and Second World Wars. The visible structures and earthworks on the site have elements of both early defences, an encampment and a large-scale battery built in response to the German bombardments of the North East coast during the First World War (see section 5.5). The site comprises two main components, Fort House, and the remains of the battery itself. The most threatened area is the structural remains of the subterranean gun emplacements, which are very close to the cliff edge, and the only visible surface remains are fragmentary and heavily damaged. For this reason the site scored highly under threat despite the SMP2 policy being Hold the Line and scoring lower on condition.



Fig. 7.21 Location of Robert's Battery earthworks viewed looking North East from Fort House.

The site has scored highly for significance due to the rare elements that survive within Fort House, including a defended latrine block (see section 5.5). There is significant potential for developing the understanding of this type of site through further study of both Fort House and the battery complex. This is still the case when considering the relatively poor condition of the battery site on the surface as the condition of the below ground remains, currently inaccessible, is unknown at present. Establishing the condition of the subterranean element of the battery is key in developing a future management plan, and therefore further investigation of this part of the site would be preferable.

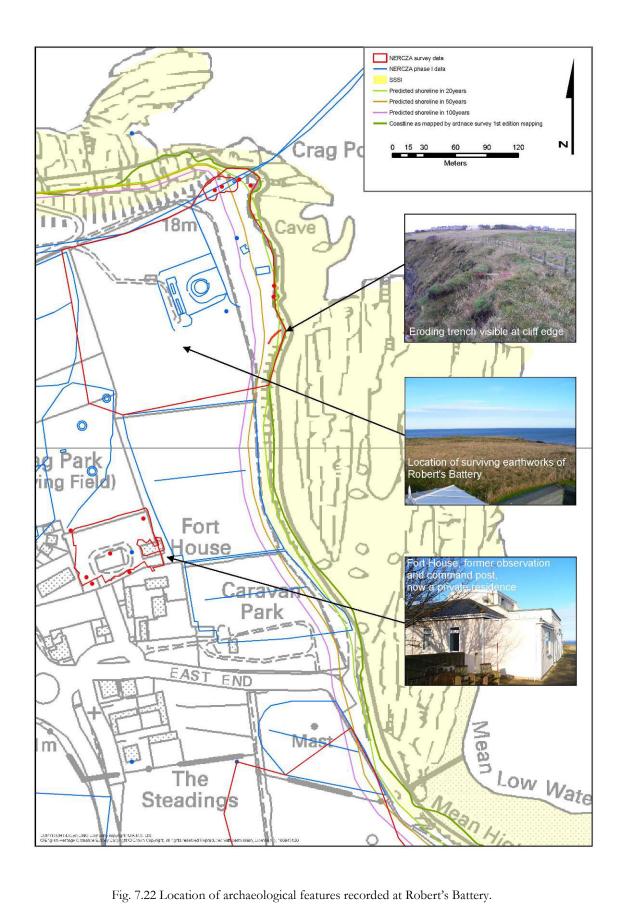


Fig. 7.22 Location of archaeological features recorded at Robert's Battery.

# Management options

Three possible recording strategies for the site are listed in order of preference, with the first being the most preferable strategy.

- Detailed Level 3 field survey of surviving earthworks and structural remains, followed by close-spaced geophysical survey to locate the extent of subterranean features of the battery. Production of report and assessment of full survival of the site followed by on-going monitoring utilising volunteers from the local history group.
- Continued monitoring of site to assess the effects of erosion and the retreating cliff face utilising local history group and volunteers.
- No further work

The favoured option is Level 3 detailed survey as this would provide essential baseline information on this site in advance of the inexorable effects of coastal erosion. A project here could involve local history groups or interested military study groups (for example the Fortress Study Group) and reveal more information about a potentially significant site, with the added value of community engagement. The site should at least be monitored regularly to assess the rate of degradation. This could again be undertaken by motivated local people guided by an experienced archaeologist.

#### 7.3.13 Nessend Lithic Scatter, Holy Island

Holy Island, Northumberland (NU 12877 43652) **Policy Unit 5.1 No Active Intervention** 

The Lithic scatter at Nessend is a potentially significant and threatened Mesolithic resource. The extent of the scatter has been previously recorded in detail (O'Sullivan and Young 1995) and has now been re-established as part of the rapid field survey (see section 5.14). The area faces two main threats; from erosion of the unstable edge of the former quarry and from run-off over the exposed clay surface into the quarry. The latter of these two processes is exposing the extent of the scatter which is subsequently being scoured by wind blown sand and eroded by run off after periods of rain. Consideration of these factors has meant that the site has scored highly on level of threat.



Fig. 7.23 The area of exposed clay at Nessend containing worked flints looking North.

The site is potentially significant due to the make up of the lithic assemblage (see section 5.14) and as such has scored highly against the significance and rarity criteria. There is potential for further close-spaced fieldwalking and re-mapping the precise extent of visible flints to provide comparative data which could be used in conjunction with the information on the extent of the scatter as described in O'Sullivan and Young (1995). This will allow any changes in the area exposed, and known to contain flintwork, to be accurately calculated. The NERCZA survey has established the approximate extent of the visible flint scatter, but onsite recording with a total station would be required to obtain more accurate locations for individual findspots as part of any further work.

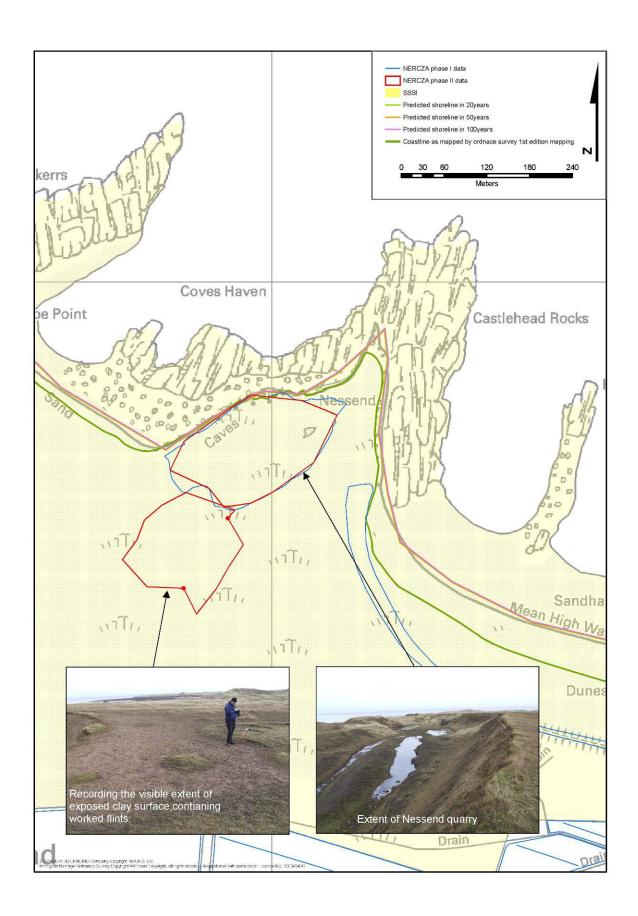


Fig. 7.24 Location and extent of Nessend lithic scatter.

### Management options

Three possible recording strategies for the site are listed in order of preference, with the first being the most preferable.

- Close-spaced fieldwalking or gridded surface collection of the area of exposed clay surface followed by close-spaced geophysical and magnetic susceptibility survey, with subsequent targeted evaluation trenching or test-pitting based on the results of this. Production of report and assessment of full survival of the site followed by on-going monitoring utilising volunteers from a local history group, or the Borders Archaeological Society.
- Continued monitoring of the site to assess the effects of erosion on the retreating quarry face utilising local history group and volunteers.
- No further work

The favoured option is the first as this would assist in characterising the site and assessing its significance, as well as there are further remains surviving in addition to the lithic scatter, in advance of coastal erosion and damage to the site from surface water run off. A project here could involve local amateur archaeology groups and reveal more information about a potentially significant site, with the added value of community engagement. The site should at least be monitored regularly to assess the rate of degradation. This could again be undertaken by local people guided by an experienced archaeologist.

#### 7.4 Conclusions

The NERCZA project has identified priority sites at risk from coastal erosion and has suggested various management options for those sites at 'imminent risk'. The assessment of interest and threat set out in Table 7.1 allows for the formation of management options for each of the sites on this priority register. This means that the raw data collected by the NERCZA project can be used as a management tool for forming positive archaeological strategies and actions. It can also be used for assessing condition, protection, recording, and where possible, preservation of archaeological sites.

This was one of the key overarching aims of the project and the value of the new data added to Historic Environment Records by both phases of the project has meant there is now a sound evidence base for future decision-making and actions. This exercise has produced a useful methodology to guide future monitoring of coastal assets that could be repeated at a local scale, at regular intervals, and at relatively low cost, particularly if volunteer groups were included under the supervision of a professional archaeologist. This could be achieved through a series of schemes designed to monitor and investigate the archaeology of the coast. This would allow local communities to further engage with their coastal heritage while contributing to the understanding, investigation and monitoring of heritage assets. Crucially, such projects would provide the necessary sustainability, particularly for monitoring work, into the future. Projects following this format would facilitate partnerships between professional archaeologists and volunteers through community inclusion, outreach and training. Such projects would not only help rescue remains from destruction without record, but they would also generate public interest, enjoyment and knowledge gain. Funding could be sought from a variety of organisations and could include the Heritage Lottery Fund, English Heritage, Defra, Natural England, Environment Agency, Leader Plus and perhaps maritime businesses such as North Sea oil companies.



Fig. 7.25 Rapid recording of an eroding pillbox at Warkworth in Northumberland.

The whole of the North East coastline could be broken down into chunks, perhaps based on the SMP policy unit areas, with an archaeological project set up to cover each area. Alternatively projects could be set up on a site by site basis according to need. Such projects would enable community engagement with coastal heritage, combined with ongoing monitoring of heritage assets. As an example, North Yorkshire and Teesside could effectively be covered by one overarching project, due to the overlap in the North Yorkshire Moors National Park and Teesside Historic Environment Records and the relatively small area concerned. This project could investigate the ongoing condition of the surviving alum works and expand on the work of the rutways survey project run by Tees Archaeology (Green 2009).

There is great potential for extensive community involvement in such projects, including local groups, schools, as well as visitors to the coast. Widespread involvement would aid in raising awareness amongst the public, capacity building within the heritage sector as well as locking in the volunteer sector. If such projects could be delivered then not only would the ongoing recording and monitoring of eroding assets continue into the future, but it would help maximise the benefit of such work to society whilst also reducing its cost.