



EASE ARCHAEOLOGY

Report on Coastal Zone Assessment Survey:

East Lothian & Scottish Borders

**Hazel Moore
Graeme Wilson**

Commissioned by The SCAPE Trust

Funded by Historic Scotland

SCAPE

Scottish Coastal Archaeology
and the Problem of Erosion

February - March 2006

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this document*

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Coastal Zone
Assessment Survey:
East Lothian
& Scottish Borders**

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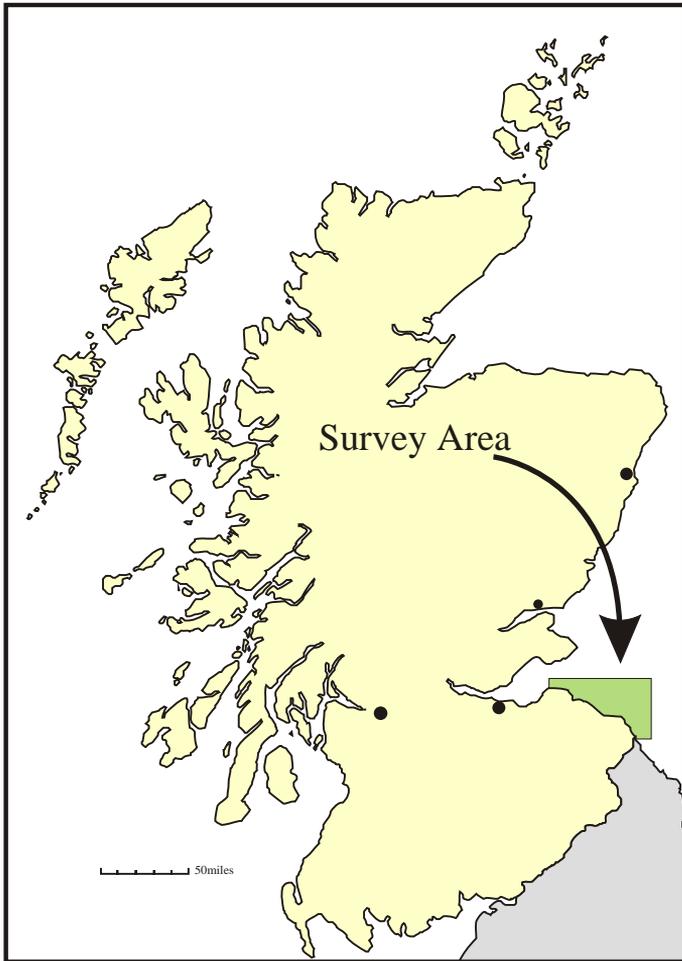
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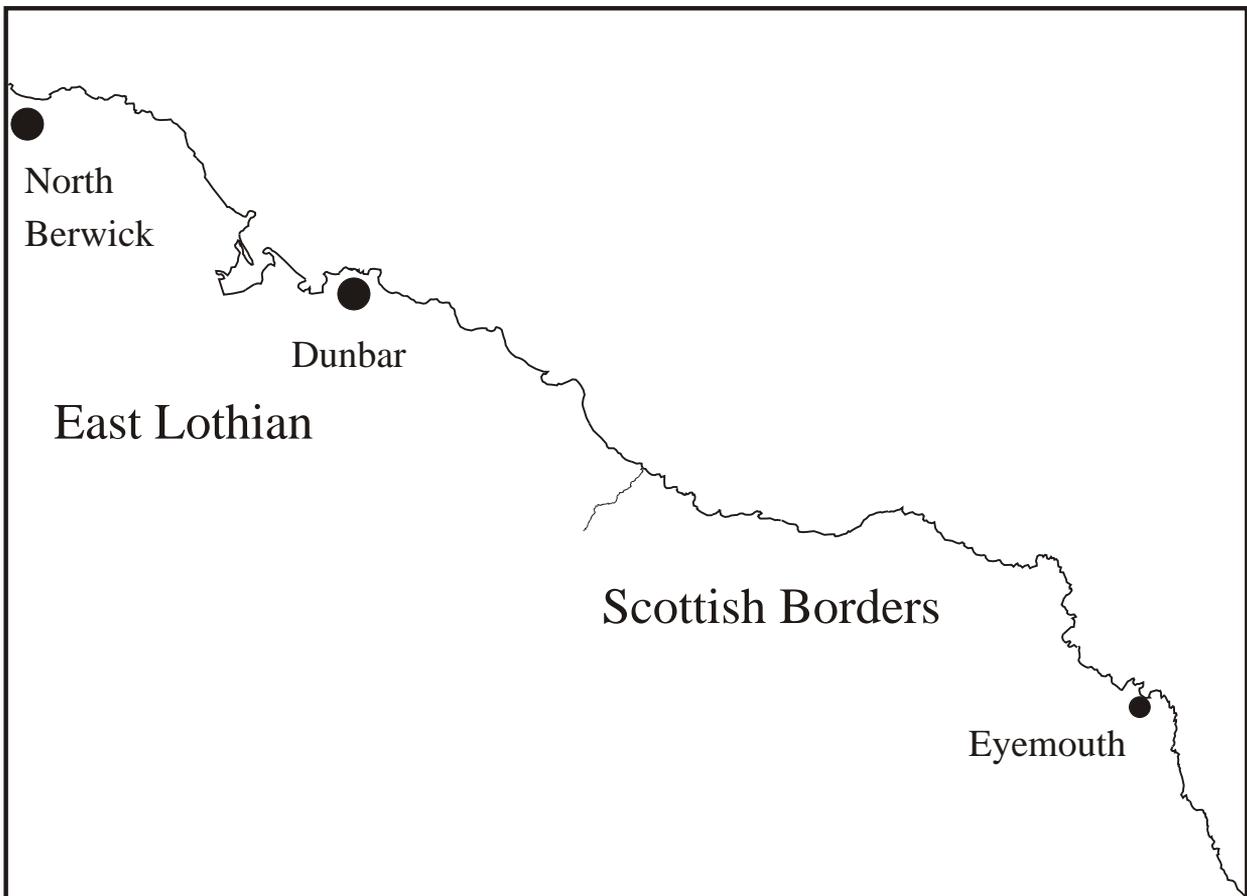
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Coastal Zone
Assessment Survey:
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Scottish Borders

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1.0 Introduction

1.1 This report documents the findings of a coastal zone assessment survey/re-survey of the coasts of East Lothian and Scottish Borders which was carried out in February-March 2006. The work was commissioned by The SCAPE Trust and funded by Historic Scotland. The work comprised of a desk-based assessment, followed by a walk-over survey.

1.2 The purpose of the coastal zone assessment survey was to gather data on the location, type and condition of all archaeological sites located within the coastal zone and to assess the nature and degree of risk faced by these sites in the future.

1.3 Part of the survey area, from North Berwick to Dunbar, had already been examined in the recent past (GUARD, 1996). The aim in re-surveying this section of coastline was to investigate what change had occurred in the intervening ten year period and, thereby, to build up a more dynamic picture of the coastal processes at work here. A further aim was to identify and record any previously unreported remains.

1.4 Similar data gathering surveys sponsored by Historic Scotland have been undertaken throughout Scotland over the past ten years for the purposes of informing coastal archaeology management strategy (Ashmore *in* Dawson (ed), 2003).

1.5 The area covered by this survey was set down within the project design formulated by The SCAPE Trust. The methodology employed by the survey and the format of this report correspond with specifications set out in Archaeology Procedure Paper 4: Coastal Zone Assessment Survey (Historic Scotland, 1996).

1.6 The desk-based assessment and fieldwork was carried out by Hazel Moore and Graeme Wilson. Amanda Brend carried out the aerial photography analysis and documentary research and Angus Mackintosh undertook the GIS work.

2.0 The Survey Area

2.1 The survey parameters were set within the project contract. They included most of the East Lothian coast and the entire coast of Scottish Borders; in other words, extending from North Berwick to the Scotland/England border. Measured at a scale of 1:25,000, it is calculated that the overall length of the survey area is some 100 km; at a scale of 1:10,000 is approximately 155 km.

2.2 Within these parameters, the survey investigated the entire length of the coast. In rural areas this included the coast edge, the intertidal zone and a 100m wide strip, where practicable. In urban areas it was restricted to works and buildings immediately abutting the coast and an examination of the intertidal zone. Offshore islands were not included in the survey area and marine survey was not undertaken, although known shipwrecks have been added to the database.

2.3 When, as happened on occasion, it was not possible to gain access to part of the area, for example where the presence of high cliffs cut off access to the shore, the omission was noted and is recorded within this report (see **Map Sections**).

3.0 Project Aims and Methodology

3.1 The objective of this work was to increase knowledge concerning the coastal archaeology of East Lothian and Scottish Borders and to identify those sites which are at risk, either presently or in the future.

3.2 Specifically, the aims of the survey were to rapidly assess (i) the nature and condition of the archaeological resource, (ii) the hinterland geology, (iii) coastal geomorphology and (iii) the erosion class of the coastal zone and, to present this information in report form capable of being used to inform future coastal archaeology management strategies.

3.3 In order to achieve these aims, our project design undertook to:

- Compile a profile of the archaeology of the survey area based upon existing records
- Conduct a walk-over survey of the entire coastline within the survey area
- Visit and reassess each archaeological site known within the coastal zone
- Identify and assess previously unreported archaeological sites within the coastal zone
- Undertake a complimentary study of the geology, geomorphology and erosional dynamics of the coastal landscape in which these remains are located.
- Produce a report on the findings of the work

4.0 Project Methodology

4.1 The project was conducted in three stages comprising of a desk-based study, followed by fieldwork and finally by the compilation of this report. The tasks undertaken during each stage of the work are outlined below.

4.2 Desk Based Study

A desk based study was carried out prior to fieldwork. This investigated existing documentary sources to build up a profile of the natural and archaeological background to the survey area. These sources included aerial photographs, the Sites and Monument Record, the National Monument Record of Scotland, cartographic sources and relevant published books and articles.

4.3 A total of 226 sites were found to have been previously recorded within the survey area. Where possible, these sites were revisited during this survey, although some could not be located again. Where they were found, sites were assessed to determine their present condition and to ascertain what change, if any, had taken place since they were last surveyed.

4.4 Fieldwork

The fieldwork programme, comprising of a walk-over survey was carried out in February 2006 by a team of two archaeologists.

4.5 The locations of archaeological sites and of geomorphological and erosion features were determined using hand held global positioning systems (GPS), providing a national grid reference with accuracy to between 3m and 10m (the degree of accuracy is provided within the individual entries in **Site Descriptions**). Locations were also marked on to 1:25,000 scale Ordnance Survey maps.

4.6 For the archaeological survey, each site was given a unique site code and was assessed under a variety of preselected headings. The terminology and criteria used to build up the site record are described under section **7.0** of this report. The written account was accompanied, in most cases, by a photograph and/or sketch drawing was made. Artefacts were not collected, although their presence and type was noted.

4.7 The findings of the hinterland geology, coastal geomorphology and erosion survey were annotated directly onto 1:25,000 scale Ordnance Survey maps, with more detailed commentaries recorded in a notebook. A series of photographs were taken to illustrate features of interest. The terminology and criteria used is described in more detail under section **7.0** of this report.

5.0 Fieldwork Conditions and Site Visibility

5.1 The weather conditions during the fieldwork were cold, frequently windy and occasionally very wet. In consequence, in particular of the windy conditions, working close to high sea cliffs and descending high slopes to get to beaches below was deemed hazardous and was generally not undertaken.

5.2 Vegetation growth was generally low, with a few exceptions. Where it is considered that visibility may have been impaired by vegetation, this is noted, both under individual site entries and within the **Map Introductions**.

5.3 Much of the survey area is served by coastal footpaths and thus pedestrian access is generally good. Access permission was sought from landowners in those areas not served by a coastal footpath.

5.4 For the most part the coast edge is set at a distance from the nearest road or vehicle track and there are few opportunities for circular walks. As a result of this, the walk-over survey covered at least 200 km of ground in order to investigate 100 km of coast edge.

6.0 Background To Survey Area

6.1 The Natural Background

6.1.1 The survey area comprises of the greater part of the east coast of Scotland to the south of the Forth. Beginning within the town of North Berwick, which lies some 40 km from Edinburgh, it extends for some 52 km across the blunt coastal headland backed by the East Lothian plain. From the low-lying sandy shores of the Tyne Estuary, past the town of Dunbar, the headlands of Barns Ness and Torness, this section finishes at Dunglass Burn, which marks the unitary authority division with Scottish Borders.

6.1.2 From this point for some 48 km southwards to the border with England, the Lammermuir Hills sweep down to the coast, forming an increasingly high and rugged edge to the land. Here, the coastline is more indented and less occupied; what coastal settlement as exists, such as the villages of St. Abbs and Burnmouth and the town of Eyemouth, are based on old fishing ports and havens which nestle between the cliffs.

6.1.3 There is a marked difference in landscape between East Lothian and Scottish Borders. The coast of East Lothian comprises of generally low-lying volcanic and sandstone cliffs. The landscape is further softened by a covering of glacial drift and river silts. The soils, which have been improved from 18th C onwards represent some of the richest in Scotland and, in combination with a high sunshine record, support a fertile and well-farmed landscape.

6.1.4 Geologically, the Scottish Borders form the eastern extension of the Southern Uplands and are characterised by rounded hills of rough pasture and glaciated U-shaped valleys. The long and diverse geological history can be read in the coastal cliffs, where compressed, tightly folded strata of Ordovician and Silurian greywacke are vertically bedded and interspersed with near horizontally-bedded Devonian red sandstones at Siccar Point, for

example, with Late Devonian andesitic lavas at St Abbs and Carboniferous mudstones and limestones around Cove. The Siccar Point formations were famously noted by the pioneer geologist, James Hutton in the 18th C, and used as a demonstration of the long timescales and multiple processes at work.

6.1.5 This difference in geology and topography is also reflected in land use. The well drained and lighter soils of East Lothian favour arable cultivation and market gardening and, historically brought great wealth from the production of grain and its allied industries, such as brewing. The more exposed, rugged hill land in Scottish Borders provides good sheep grazing, with lesser amounts of arable cultivation and historically has generated wealth through the supply of wool to the textile industry.

6.1.6 In terms of natural resources, the coastal fringe of East Lothian has limestone quarries which have been exploited from the 18th C and continue to be worked to produce cement, while at Cove, in Scottish Borders, a former coal mine tunnels beneath the sea. In past times, proximity to the North Sea provided for a thriving fishing industry and busy coastal trading. This was spurred on by the development of better harbour facilities and lighthouses in the 18th and 19th centuries.

6.1.7 Today, the fishing industry has all but collapsed in East Lothian and Scottish Borders, with only Eyemouth now retaining a fishing fleet of any size. With sea trade now centred on container ports equipped with modern facilities, transport links with the outside world focus on the road and, to a lesser extent, rail networks. The mainline east coast rail line and the A1 road run through the survey area, providing links to England and Edinburgh.

6.2 The Archaeological Background

6.2.1 A wide and impressive range of archaeological remains survive in East Lothian and Scottish Borders, bearing testimony to almost seven millennia of human endeavour. Evidence of the earliest inhabitants has traditionally been detected through chance artefact finds. More recently, however, the identification of Mesolithic settlement remains (at East Barns) indicates the potential for major new discoveries; in this case brought about during

pre-development assessment (Gooder, J & Hatherley, C, 2002). The light sandy soils of the coastal and river fringes must have been more attractive for farming than the heavier soils of the inland areas, but here again, scant evidence of human activity during this period has been identified within the survey area. Extensive spreads of pottery with stone and flint tools found in the late 19th/ early 20th C at Hedderwick Sands (EL106) suggest that there was a Neolithic- Bronze Age period settlement in this area. The coastline here is eroding but currently no archaeological remains are visible. Prehistoric funerary remains are more numerous in the area, with a probable cairn at St Baldred's Cradle (EL11) and numerous cist burials reported in the past (eg. EL74, EL134, SB45, SB46). Similarities in the types of Neolithic pottery with examples from Northern England suggests that the first farmers came from the south. That they were engaged in wider trading networks is indicated by the occurrence of exotic stone axes.

6.2.2 A small number of Iron Age sites have been recorded in East Lothian. These include records which detail probable settlement remains (EL86, EL88) and numerous long cists, probably of Late Iron Age date (eg. EL108, EL116, EL117, EL134). There are more abundant and visible remains of this date surviving in Scottish Borders. Here, several hill and promontory forts are located along the higher coast edge (eg. SB7, SB12, EL15, SB16, SB28). A probable settlement and long cist cemetery has also been recorded at Dunglass Dean (SB35), although nothing of this site now remains visible. There are no traces in the coastal zone of the Roman occupation which commenced from AD80, although there are numerous Roman military sites to the west of the region and Roman objects are frequently found on native sites of this period.

6.2.3 From about 650AD the influence of Northumbrian Christianity began to have an influence on South-East Scotland. Monasteries were established at Tynningham and St. Abbs in the 7th C; the latter by a step-daughter of king Aethelfrith of Northumbria. Destroyed by Viking raiders around 870AD, the remains of this monastery are variously said to lie on Kirk Hill (SB18) or, less convincingly, on a nearby rock promontory (SB66). Early churches are represented within the survey area, with fine examples at St. Andrew's, North Berwick (EL65) and at St. Helen's (SB6); the latter has Scandinavian-type hogback gravestones within its kirkyard.

6.2.4 The political unrest and shifting allegiances of the Medieval period is reflected in the heavily fortified strongholds of Tantallon Castle (EL41), Dunbar (EL164 and EL123) and Fast Castle (SB9). There were high status residences at Auldhame (EL44) and Seacliffe Tower (EL58) and villages, now deserted, in the vicinity of Auldhame and by St. Helen's Church at Old Cambus, in Scottish Borders. Fortifications of slightly later date are represented by King's Mount Fort (SB21) and the nearby Corn Fort (SB85) which were built under the Protectorate in 1540's. Later again, the 18th C Lamer Island Battery (EL127) which guards Dunbar harbour was built as defence against privateers during the American War of Independence.

6.2.5 The development of harbours and ports in the later 18th and 19th centuries promoted trade and the fishing industry. New harbour facilities were installed along the south east coast and are well represented within the survey area. Some of these, such as Dunbar (EL124 & EL125), St. Abb's (SB75), Eyemouth (SB89) and Burnmouth (SB99) remain in use today. Others, such as Skateraw (EL54), have been abandoned to the elements or are no longer in regular use (eg. Cove, SB3). In their heyday, these harbours facilitated coastal trade, opening up the hinterland and bringing great wealth to the area from the export of commodities such as corn and alcohol. From the later 19th C, coastal navigation was assisted by lighthouses, such as those at Barns Ness (EL145) and St. Abb's (SB19). The numerous ships known to have been wrecked off this coast, however, bear evidence to the frequently dangerous conditions along this North Sea coastline (eg. SB87 & SB88, EL151 & EL155).

6.2.6 During the 20th C, the threat of invasion by sea during WWII led to the heavy fortification of large sections of the coastline and the construction of numerous military installations and attendant camps. Defences such as anti-tank blocks and glider traps, were most numerous along the low-lying areas, such as around the Tyne Estuary (EL1, EL19), while look out positions and radar stations occupied more elevated positions, such as Gin Head (39) and Hawk's Heugh (SB41).

6.2.7 The sites of most recent date recorded by this survey, which include a sculpture (EL51) and a viewing seat (EL12) and swimming pool (EL119), provide a representative picture of how the coastline today has become a place of recreation for many. This has been greatly

encouraged by the development of coastal paths and country parks, which provide facilities and information for visitors to the area.

7.0 The Survey Report

The following notes explain the terminology and short hand descriptions used throughout the report.

7.1 Site Description Entries

The gazetteer entries provide a shorthand record for each site. The categories are as follows:

CATEGORY	EXAMPLE
Site code (NMRS code)	EL53 (NT77NW62)
Grid reference	NT 7077 7750
Placename	Skateraw
Characterisation	Limekiln
Date range	18th-21st C
Condition	Good
Recommendation	Nil
Status (HS Index) <i>(for sites designated as scheduled or listed)</i>	Listed B

7.2 Site Code

Each site has been given a reference code for the purposes of this survey. This comprises of a letter prefix which refers to the survey area and a unique number code. For example, the code SB7 refers to site number 7 in Scottish Borders, while EL10 refers to site number 10 in East Lothian.

7.3 Site Type

While the categories of site types has not been restricted to a predetermined list, some standardisation of descriptions has been made. For example ruinous buildings of 18-20th C date which could be positively identified have been divided into categories such as ‘dwelling house’, ‘mill’, ‘outbuilding’ etc. Where their use was not readily apparent, they have been described as ‘structures’.

Prehistoric sites, particularly mounds and eroding middens, are frequently difficult to date and characterise on the evidence of the visible remains alone. The identification of mounds as burial monuments or of clearance cairns, for example, was made on the basis of previously recorded information, or where this was not available, the most probable explanation of the visible remains.

7.4 Date Range

The date ranges set out for various site types within this report are based on comparison with similar sites in the area which have already been dated or characterised. These ranges represent a general consensus; it must be noted that there is much debate about the date ranges of specific site types. It is also likely that there are many local variations which provide exceptions to the rule. The date ranges used are as follows:

- Pre-4th millennium BC
- 4th-3rd millennium BC
- 3rd-1st millennium BC
- 1st millennium BC-1st millennium AD
- 10th century AD-14th century AD
- 14th century AD- 18th century AD
- 18th century AD- 21st century AD
- Indeterminate- not possible to estimate a date

7.5 Condition

The condition of each site entry was labelled using the following criteria:

- Good: this label was applied where a site exhibited either high potential or had sufficient visible elements surviving to properly characterise it. An archaeological site was considered to be in 'good' condition where it appeared to be relatively undisturbed. Further work at such sites could reasonable be expected to provide information regarding date, nature, extent and

complexity. Buildings (especially the large category of 18th/20th C structures) were considered 'good' where there were multiple site elements represented and survived in a reasonable enough condition to provide information regarding their construction, development and use.

- Fair: This label was applied to sites considered to have some potential or where limited elements remained and the site could be generally characterised. Archaeological sites of this type were generally somewhat disturbed but retained some potential; a sufficient part of the site remains that it could be more fully characterised via excavation. Standing buildings were considered 'fair' when, although ruinous or disturbed, sufficient of the site remained that it could be generally characterised.

- Poor: Sites described as 'poor' have visible elements which are very disturbed and offer little potential for further characterisation. This assumption was made on the basis of the evidence available at the time of this survey and it must be noted that, without recourse to full assessment, the true potential of many sites can only be estimated.

7.6 Recommendations

Three types of action have been recommended:

- Survey: This has been used as a general term covering all forms of further archaeological investigation or site protection. It includes topographical survey, standing building survey, site assessment and rescue excavation.

- Monitor: This is recommended either to keep a site of known potential under surveillance or to check for new exposures on sites currently considered to be of low or unknown potential. This will entail regular site inspections and include cross-checking of known information against new exposures.

- Nil: No action has been recommended where a site is not immediately vulnerable to change, or is of very limited potential.

7.7 Hinterland Geology and Coastal Geomorphology: Gazetteer Entries

The gazetteer entries comprise a set of characteristics for each coastal unit. The categories are as follows:

Category	Example
Label - Place name	1. Big Hurker
Grid Reference (to centre of area)	NT 7885 7155
Length of Unit	1.0 km
Foreshore Type	Rock Platform
Coast Edge Height	>5m
Hinterland	Drift
Description	Foreshore is characterised by rock platform..

7.8 Erosion Class: Gazetteer Entries

The gazetteer entries comprise a set of characteristics for each coastal unit. The categories are as follows

Category	Example
Label - Place name	4. Dunbar
Grid Reference	NT 6730 7930
Length of Unit	3.7 km
Characterise unit	Stable
Description	The coast edge here comprises...

7.9 Erosion Classes

The following definitions have been used:

- **Eroding:** Where more than 70% of the coastline is actively eroding.
- **Eroding to Stable:** Where there is both active erosion and stable areas, with 30-70% of either one.
- **Stable:** A section which is more than 70% stable. Usually any erosion is limited and local; any variation is specified in the accompanying text.
- **Accreting to Stable:** Where there are both accreting and stable areas, with 30-70% of either one
- **Accreting:** A section with accretion over more than 70% of its length.
- **Accreting/Eroding:** There are both accreting and eroding processes taking place and may vary from 20% to 80% of each process. The erosion and accretion may not be arranged in a linear fashion along the coastline; there may be erosion of the coastal edge and deposition of sands along the foreshore.

8.0 Analysis of the Results of the Coastal Survey

8.1 Site Density

	Total	East Lothian	Scottish Borders
Length of Coastline walked	100 km	52 km	48 km
Number of site entries recorded	285 sites	169 sites (+ 2 'cancelled' site entries)	116 sites
Site Density	2.85 sites per km	3.25 sites per km	2.4 sites per km

8.1.1 The total length of the coastline within the survey area is estimated to be in the region of 100 km long . A total of 285 sites were found, giving an average site density of 2.85 sites per kilometre. Broken down per area, East Lothian has a higher site density, with 3.25 sites per km, as compared to Scottish Borders with 2.4 per km.

8.1.2 These must be viewed as notional figures, however, since neither the length of the survey area nor the number of sites identified within can be calculated exactly. The site entries, for example, include some sites which, although previously recorded or identified from aerial photographs, could not be located on the ground. It also comprises of entries for site complexes, made up of more than one element (eg. SB18, St. Abb's Kirk etc.). If these had been entered separately, the site total would be considerably higher. Equally, the length of the area covered by this survey varies according to the scale at which it is measured: at a scale of 1:25,000 it is approximately 100 km, whereas at 1:10,000 it is approximately 155 km.

8.1.3 Nevertheless, the site density calculation provides a rough guide for comparison with other coastal surveys, as illustrated below. All of these surveys were conducted in the same manner, using the same methodologies and carried out by the same team of archaeologists.

Survey Area	Site Density
East Lothian and Scottish Borders: Overall area	2.85 sites per km
East Lothian	3.25 sites per km
Scottish Borders	2.4 sites per km
Western Isles (South): Overall area	1 site per km
Western Isles (South): Grimsay	1.5 sites per km
Western Isles (South): Benbecula	0.79 sites per km
Western Isles (South): South Uist	0.96 sites per km
Islay	1.36 sites per km
Coll	1.23 sites per km
Tiree	1.53 sites per km
Shetland: Overall Average	1.72 sites per km
Shetland: Northmavine	1.5 sites per km
Shetland: South Mainland	1.3 sites per km
Shetland: East Burra	2.6 sites per km
Shetland: Westside	1.46 sites per km
Orkney: Overall Average	2 sites per km
Orkney: Westray, Papa Westray etc	1.27 sites per km
Orkney: Sanday & North Ronaldsay	1.64 sites per km
Orkney: South Ronaldsay etc.	3.2 sites per km

8.1.4 In comparison with other areas, then, it would appear that site densities in both of the areas most recently surveyed are particularly high. In explanation, it might be suggested that both areas are well-populated and have been so since the prehistoric period and also that they are located close to major transport routes and to centres of population. Whereas, by contrast, the other surveyed areas are predominantly rural and many are remote or isolated. This alone is not a satisfactory explanation, however, since outside the towns (North Berwick, Dunbar, St. Abbs/ Coldingham, Eyemouth) most of the coastal land within the survey area is given over to agriculture. There is little coastal settlement in evidence, either from earlier times nor from the post-medieval period.

8.1.5 A significant factor may be that in this area, archaeological remains have been noticed, investigated and reported more frequently than elsewhere. It would appear that 19th C antiquarians were particularly active in East Lothian, and to a lesser extent in Scottish Borders. Their records, detailing sites such as St. Baldred's Cave (EL45), numerous cist cemeteries (eg.EL74, 116, 117, 137) and the remains of rig cultivation (SB59), preserve knowledge about sites which have either not survived or which have been badly damaged. There have also been largescale surveys by RCAHMS (Berwickshire, 1915, East Lothian, 1924). In recent times, in East Lothian, at least, a large amount of rescue and

pre-development archaeological work has been carried out, leading to many new and exciting discoveries (eg. EL164).

8.1.6 Another factor which has a bearing upon the high density of sites within this survey area, is the number of probable sites identified from aerial photographs. The area benefits from good AP coverage, and especially of WWII photographs. In East Lothian, in particular, significant amounts of the landscape are under arable cultivation and conducive to showing up archaeological remains in the form of cropmarks. While this is not the case in Scottish Borders, AP's have been successfully used to identify earthworks and defended sites, which are numerous in this area. This is in contrast to other survey areas, where AP coverage was found to be less extensive and not so useful in identifying new sites.

8.1.7 A further factor in explaining the high density of sites found within the coastal zones of East Lothian and Scottish Borders is the fact that large tracts of this coastline were heavily defended during WWII, in readiness against invasion by sea. As will be seen below, military remains abound along the coastline and constitute a large number of the sites recorded by this survey.

Previously recorded sites	226 sites
New sites identified by this survey	59 sites
Total	285 sites

8.1.8 The site entries represent a mixture of new and previously recorded features; with new sites representing some 21% of the total. A high number of the new sites represent remains of 18th-21st date which had been either excluded or not systematically recorded by previous recorders (but note: the 1996 GUARD survey was inclusive).

Area	Known sites & % of total	New sites & % of total	Total no. of Sites
East Lothian	137 sites / 81%	32 sites / 19%	169
Scottish Borders	89 sites / 76%	27 sites / 24%	116

8.1.9 While more new sites were found by this survey in East Lothian than were found in Scottish Borders, as a percentage of all known sites, the new sites in Scottish Borders

represent a greater increase in information. These figures indicate the potential for new discoveries even in areas which have already been surveyed.

8.1.10 It must be noted, however, that many of the 'new' sites, particularly in East Lothian, are likely to be of low archaeological potential: with the most visible sites already recorded, the net can be spread wider to include sites which might otherwise have been overlooked. This is particularly true for remains such as the very badly degraded and possibly ex-situ remains of wartime buildings (see EL6, EL13, EL21 etc.).

8.1.11 A small proportion of the new sites are potentially more interesting, however. These include eroding anthropogenic deposits (EL50) and possible artificial landing places (EL31, EL32, EL61, EL64). It is likely that these sites had not been noted previously because they were not visible during earlier surveys. For example, landing places are located in the intertidal zone and the tide may have been in when this area was last visited and the anthropogenic deposits appear to have begun to erode sometime after the 1996 survey.

8.2 Site Status

8.2.1 Some 33 sites within the survey area, representing some 11.5 % of the total number of sites, have a statutory designation. Fourteen sites are scheduled ancient monuments and a further 19 are listed buildings. These include 4 sites which are both scheduled and listed (3 in East Lothian, 1 in Scottish Borders). One site, Tantallon Castle, is a Property in Care, in addition to being both scheduled and listed.

Area	Scheduled	Listed	Total
East Lothian	8	9	17
Scottish Borders	6	10	16
Total	14	19	33

8.2.2 There are numerous other listed buildings located close to the coast edge within the urban areas but these have not been included here since they fall outwith the survey area.

8.3 Date Range

8.3.1 The assignment of date ranges to sites was generally made following the field assessment of archaeological remains. In some cases, the age of a site was known because work had already been carried out, in others, there were indicators such as the presence of diagnostic artefacts or architecture. In some instances, however, there were few clues available and date ranges had to be estimated. Where sites could not be located on the ground (eg. destroyed sites or possible sites seen on AP's), an estimate of date was made and when it proved impossible even to hazard a guess, sites were classified as being of 'indeterminate' date.

8.3.2 Visual inspection alone is not an ideal method of assessing the date of a site, especially when the remains in question may be poorly preserved or partially buried. Even where there are clear topographic features present, these may not be sufficiently diagnostic in terms of assigning a date or function to the remains. Therefore, caution is urged in using the following data, since dating has not been independently verified other than in a small number of cases.

Overall Survey Area: Site Date Range	East Lothian	Scottish Borders	Total
18th-21th C	101	52	153
14th-18th C	9	4	13
10th-14th C	0	1	1
10th-14th/ 14th-18th C	2	2	4
1st millennium BC- 1st millennium AD	6	6	12
3rd millennium BC- 1st millennium BC	5	2	7
4th-3rd millennium BC	0	0	0
Indeterminate	41	48	89
Various	3	1	4
N/A	2	0	4
Total	169	116	285

8.3.3 The majority of sites identified by the survey are classified as being of 18th-21st C date. This group constitutes some 54% of the total recorded sites (some 60 % in East Lothian and nearly 45% in Scottish Borders). Within this category are included a large number of WWII remains. These constitute almost 28% of the sites of 18th-21 C date in East Lothian and 19%

in Scottish Borders. The remainder of this category is made up from shipwrecks, agricultural remains, harbours, industrial remains and houses.

8.3.4 The second highest group represents sites of indeterminate date. These constitute some 31% of all sites recorded by this survey (41% in Scottish Borders, 24% in East Lothian). Within this group are included poorly preserved sites and better preserved but not typologically well defined sites. The latter category includes mounds, undeveloped landing places (slipways & harbours), fish traps, tracks, earthworks and walls, including possible defensive enclosures and promontory forts. The remainder of this group comprises of sites of unknown archaeological potential (eg. caves) and sites known from old or brief records which do not provide sufficient information to indicate a firm date.

8.4 Site Types

Site Type	East Lothian	Scottish Borders	Totals
Agricultural	9	9	18
Agricultural/Domestic	1	1	2
Agricultural/Maritime	1	1	2
Domestic	11	11	22
Domestic/Maritime	0	2	2
Domestic/Defensive	3	1	4
Defensive	29	20	49
Funerary	14	4	18
Church/ Funerary	1	2	3
Industrial	9	3	12
Domestic/ Funerary	2	0	2
Defensive/ Funerary	2	1	3
Church	2	1	3
Maritime (of which Shipwrecks)	48 (25)	28 (18)	76 (43)
Church/ Domestic	0	1	
Domestic/Defensive/ Funerary	0	1	1
Indeterminate	25	22	47
Other	12	8	20
N/A/Cancelled	2	0	2
Totals	171	116	287

8.4.1 The largest site type identified within the survey area are maritime sites. This reflects the fact that such sites are specific to the coast and therefore likely to be well represented within this survey and also indicates the importance of fishing and sea transport to this area.

Within this category are included two lighthouses, together with numerous harbours, slipways and shipwrecks. The shipwreck figures are provided separately in the table above because they constitute such a significant proportion of sites within this category (52% in East Lothian, 64% in Scottish Borders).

8.4.2 It should be noted, however, that these entries represent shipwreck locations which, in many cases, contain more than one shipwreck. In such cases, the names of individual ships are provided under the site entry within the site descriptions. A decision was taken not to separate out all of the shipwrecks as separate entries because (i) in most cases shipwreck locations are approximate (to within 100m) and therefore may not lie within survey area at all, and; (ii) if individually counted, the large number of shipwrecks would artificially inflate both the maritime category and the overall survey totals.

8.4.3 The second highest category, comprising 20% of all sites, is represented by sites of a defensive nature or with defensive elements. Within this group there are included promontory forts and earthwork enclosures of prehistoric date, medieval castles, 16th C forts and batteries, and numerous WWII remains, ranging from radar stations to tank traps and look-out positions. While a higher number of such sites were found in East Lothian, as a percentage of all sites found, both areas were equally matched (both c. 20%). The presence of so many defensive sites can be seen as a reflection of the fact that this part of South-East Scotland has been a contested borderland throughout much of the prehistoric and historic past, in combination with the threat of attack from the sea.

8.4.4 Sites of indeterminate type make up the third largest category (16%). Broken down by area, some 15% of sites in East Lothian were classified within this group, with almost 19% in Scottish Borders. In this category are included deposits seen in coastal exposures, together with mounds, poorly preserved structures and earthworks. In many cases, structures and earthworks were noted on AP's but were not found on the ground and could not be characterised with any certainty.

8.4.5 Sites associated with agriculture constitute 6.3% of the total and are evenly spread throughout the area (6.3 % in East Lothian, 7.75% in Scottish Borders). These sites include walls and boundary banks, tracks, farm buildings and clearance cairns.

8.4.6 Funerary sites, including sites with multiple elements which include funerary remains, formed 9.5% of the total. East Lothian (with 11.24%) contained almost twice as many such sites as Scottish Borders (with 6.9%), reflecting the greater number of cist cemeteries located within its sandy links areas. In many cases, knowledge of these sites derives from antiquarian records, although remains continue to be reported (eg. see Baker, L 2002).

8.4.7 Domestic sites, representing both occupied and unoccupied houses make up some 7.7 % of the total, although these figures are misleading, since houses located within urban areas were not generally recorded. Thus in East Lothian, which has more urban coastal settlement, the figures are not reflective of the true situation.

8.4.8 Industrial sites, including lime kilns, coal mines and bridges, represented 4.2% of all sites, with almost equal numbers in East Lothian (3%) as Scottish Borders (2.6%).

8.4.9 The 'Other' category, which makes up 7% of the total (7% in East Lothian, 6.95% in Scottish Borders), comprises of stray finds, public sculpture and amenity features, caves and locations where archaeological work has been carried out but nothing of interest has been found.

8.5 Site Condition

8.5.1 The sites were inspected to determine their physical condition and to assess both their archaeological potential and the nature and severity of any threat to their survival. This is a highly subjective interpretation which is based upon a number of judgements made rapidly in the field. These include (i) assessing the type of site represented by the visible remains, (ii) reconstructing how the site might have been constituted in its 'original' form, (iii) determining the degree to which the remains currently visible may be considered representative of the 'original' site and the remains are in relation to the conjectured original site and (iv) evaluating the potential of the remains to yield useful information and the means by which this information could best be recovered. These steps are stated here in such explicit terms in order to demonstrate the assumptions behind what might otherwise appear to be straightforward statements about the condition of the sites in the survey. The notes provided in **7.0** above set out the guidelines used in making such decisions.

Condition	East Lothian	Scottish Borders	Totals
Good	29	22	51
Fair	41	27	68
Poor	20	10	30
Fair/Poor	6	8	14
Unknown (?)	73	49	122
Totals	169	116	285

8.5.2 The majority of the sites (almost 43%) could not be judged with regard to their condition. In this regard, the two areas were equally matched, with some 43% of the East Lothian sites being of unknown condition and 42% in Scottish Borders. The reasons why sites could not be judged with regard to condition include the fact that a high number of the sites represent shipwrecks, which were not visited, or features seen on AP's and not visible on the ground. A number of the sites are also known only from old records and while it is possible that further remains survive but they are not visible as topographic features. In a small number of cases, terrestrial sites were not inspected: either, as in the case of a coal mine (SB38) because it was considered hazardous or because they comprise of privately owned residences to which access was not available.

8.5.3 Some 23% of all sites were found to be in fair condition (24% in East Lothian, 23% in Scottish Borders). This reflects the fact that most sites are currently stable and appear to preserve sufficient of their original form or quantity to be considered of some archaeological potential.

8.5.4 Some 18% of all sites were judged to be in good condition (c.19% in Scottish Borders and 17% in East Lothian). Within this category there are many sites of 18th-21st C date. A proportion of these sites remain in use and are regularly maintained, managed or have been consolidated in the recent past. Many of the sites representing WWII remains, however, are in a poor condition. Overall, only 10.5% of sites were found to be in poor condition. A slightly higher number of these sites were found in East Lothian (c.12%) than in Scottish Borders (8.6%).

8.5.5 While scheduled and listed sites are protected against development or damage by humans, many are at risk from natural threats, such as structural decay, coastal erosion and rabbit damage. Some 3.5% of all listed and scheduled sites were considered to be in fair

condition, with 4.5% being in good condition, 1% in poor condition, 0.7% in fair/poor condition and 0.7 in unknown condition.

8.5.6 The condition of a site should be considered in tandem with its erosion status. Sites currently considered to be in good condition may change rapidly if they have already begun to erode, whereas sites considered to be in fair or poor condition but which are not currently eroding may remain virtually unchanged for some considerable time.

	East Lothian	Scottish Borders	Totals
Sites Eroding	46	18	64
Sites not Eroding	77	66	143
Unknown (?)	46	31	77
N/A (or cancelled)	2	1	3
Totals	171	116	287

8.5.7 Within the survey area, the highest proportion of sites were found not to be eroding (50%). This category accounted for 45.5% in East Lothian and 57% in Scottish Borders.

8.5.8 Where erosion is found to be occurring, there may be a single or several agents at work. Throughout the survey area development pressure is largely confined to urban areas. Furthermore, damage caused by animals is minimal. Sheep stocking numbers are generally low and while rabbit burrowing is in evidence in some places, it does not constitute a major threat to coastal sites.

Type of Erosion	East Lothian	Scottish Borders	Totals
Wave action	50	21	71
Soil erosion	16	8	24
Wave & soil	16	5	21
Animal	1	1	2
Animal & soil	1	2	3
Development	7	3	10
Agriculture	0	3	3
Soil erosion & development	2	0	2
Structural decay	7	9	16
Structural decay & wave	5	4	9
Structural decay & animal	0	1	1
Soil erosion & structural decay	3	2	5
Other	1	0	1
N/A (inc 2 cancelled sites)	62	57	119

8.5.9 For some 42% of sites, no cause of erosion was identified (37% in East Lothian, 49% in Scottish Borders). This is because a large number of sites were not seen, for the same reasons as indicated under 'Site Condition', above, *viz* the sites were not visible on the ground or could not be inspected by this survey. Further, more targeted, assessment will be required in order to determine the physical nature of the remains at these sites and thereby to identify what threats there may be to their survival.

8.5.10 Erosion, in the form of wave action, was found to constitute the greatest identifiable threat to sites within the survey area. Some 25% of all sites were affected by the action of the sea. A further 10.5 sites are suffering from the combined effects of wave damage, soil erosion and structural decay. In East Lothian, 42% of sites are affected by wave action, while in Scottish Borders the figure is lower, at 25.8%. This difference reflects (i) the varying topography and geology, with higher cliffs and harder coastlines in Scottish Borders and; (ii) differences in site density, with more coastal settlement and activity of all periods present in East Lothian.

8.5.11 Soil erosion forms a threat to some 8.4% of the sites in the survey area (7% in Scottish Borders, 9.5% in East Lothian). Structural decay was identified as a risk to 5.6% of all sites and development to some 3.5% of sites. The identification of structural decay relies on clear and obvious signs of dilapidation: no in-depth structural analysis was conducted. The identification of development as a threat is theoretical and reflects the fact that sites located on or near to golf courses may be at risk from landscaping works which may not require planning permission. Elsewhere, sites at risk from development are likely to be protected under the planning process.

8.6 Recommendations

8.6.1 A recommendation for future action was attached to each site entry in the field. The factors taken into consideration when deciding the optimum course of action were (i) the present physical condition of the site (ii) the archaeological potential of the site, and (iii) the degree of risk to the site from forces other than development.

Recommendation	East Lothian	Scottish Borders	Totals
Survey	49	26	75
Monitor	66	60	126
Nil	55	30	85
N/A	1	0	1

8.6.2 Within this report, the word 'survey' is used in a broad sense to mean thorough assessment. This may be by means of topographical and geophysical survey, trial trenching, full excavation or rescue excavation, depending on the individual site context and circumstances.

8.6.3 It has been recommended that 75 sites, representing some 26% of all sites identified within the coastal zone, should be subjected to some form of survey. This figure includes all shipwrecks, since these were not assessed by this survey. When shipwrecks are excluded, the figure is reduced to 11% of sites (32 sites in all).

8.6.4 Monitoring is recommended at 44% of sites. This work should be non-invasive and designed to record any changes which occur in the future. In some cases, such as at sites in sandy areas or on soft coastlines, monitoring is likely to lead to the discovery of new sites, whilst elsewhere it will record the slow degradation of sites. This work would add a vital time-dimension to survey work such as this project, recording the rate of change and highlighting the key factors affecting sites. Ideally, this monitoring work should be carried out on a regular basis: an annual visit is likely to suffice at the more stable sites while more regular visits, especially in the wake of bad weather, may be required at the more vulnerable and sandy sites.

8.6.5 At some 30% of sites no further work is recommended at this time. These sites are considered to be either not at risk or of low archaeological potential and therefore no future course of action is recommended. This does not imply that their full archaeological potential is known, however, but merely that, on the basis of what is currently visible, no further work is recommended. It is likely, however, that a proportion of these sites have been misidentified or that the full potential has not been recognised and for this reason it is urged that these remains are not consigned to oblivion. It might be recommended, for example, that many of

the maritime, agricultural remains and domestic settlements of 18th-21st C date could be investigated as part of a project which also examined documentary sources to build up a better picture of 18th- 19th C life in this area. Such a project may throw up questions which can only be answered through further archaeological work

9.0 Summary of the Findings of the Hinterland Geology, Coastal Geomorphology and Erosion Survey

9.1 In terms of geomorphology, the coastline within the survey area may be divided into two sections which approximately coincide with the modern unitary authorities of East Lothian and Scottish Borders. The eastern part of the survey area, in Scottish Borders, is composed to a large extent of high cliffs. What modern settlement as exists in the coastal zone here tends to be centred in lower-lying areas with ready access to the sea, such as Burnmouth, Eyemouth and St. Abbs. The western section, covering East Lothian, is characterised by a generally low, sandy coastline interspersed with occasional stretches of high cliffs. These higher areas occur within the towns of North Berwick and Dunbar and between Gin Head, Tantallon Castle and Auldham.

9.2 The survey found that the hinterland geology over most of the area comprised of drift. In places it was possible to identify rock beneath the drift but such areas were nowhere extensive enough to justify the characterisation of the hinterland as comprising of ‘drift over visible rock’.

9.3 Storm beaches were found in most of the small coves and bays between high cliffs. They were also present on the upper foreshore of more low lying coast edges. Storm beaches were observed to be developing over a long stretch of coastline between Dunbar and Chapel Point.

9.4 Where the coast edge was composed of high cliffs, these were generally considered to be stable. Such erosion as was found here was usually localised and on a small scale. An exception to this is the west side of Eyemouth Bay (Map 13) in Scottish Borders, which is currently subject to severe erosion. The cause of erosion in areas of high cliffs was frequently caused by landslip rather than wave action. Land slippage was most common on steeply

sloping cliffs, where factors such as heavy rain and rabbit burrowing, has led to the loss of the soil covering. This was noted, for example, in the area of The Kings Mount Fort, in Eyemouth.

9.5 It can be assumed that there will be a loss of material to wave action at the base of the cliffs. Over much of the survey area it was not possible to observe these processes directly. In the Scottish Borders, where the rock is harder and the cliffs higher this process is considered to be slow enough to describe this type of coast edge as stable. In East Lothian, where there are softer, lower, sandstone cliffs, (see Maps 2 & 3) it was possible to gain access to the cliff faces at low tide. Here the signs of scouring of the rock face by wave action could be seen, together with the loss of overlying sediments.

9.6 Many areas of coast edge in both East Lothian and in the Scottish Borders are protected by coastal defences, such as sea walls. Such protection is, as might be expected, most extensive in areas of settlement and adjacent to infrastructure features, such as roads, harbours and power plants. There are coastal defences protecting almost the entire coastline within the towns of Dunbar, North Berwick and Eyemouth and the villages of St. Abbs and Burnmouth. Sea walls are not a guarantee against erosion, however, as demonstrated on the east side of Belhaven Bay and on the west side of Eyemouth Bay, where severe erosion is occurring adjacent to sea walls..

9.7 In several areas complex coastal processes were found to be at work. For example, the coastline between Scoughall and St. Baldred's Cradle, which comprises of a long sandy beach with dunes in the hinterland (Map 3), was found to have areas of both erosion and accretion at the coast edge. There were also signs of old blow-outs inland within the dune system. Further to the east, the Tyne estuary (Map 4) was found to have areas of salt marsh which are advancing in addition to areas of definite erosion.

9.8 Where storm beaches were found, none of these were found to be migrating landwards but, in general, were stable. This is probably due to a combination of small size and the presence of steeply sloping or armoured coast edges behind them.

9.9 A comparison of the results of this survey with a previous one carried out during 1996 between North Berwick and Dunbar (GUARD 1996) confirms, in general, those findings with three main exceptions. The first exception concerns the stretch of coastline between Scoughall and St. Baldred's Cradle. This was previously identified as definitely eroding, with the area at Pefferside found to be both accreting and eroding (see GUARD 1996: 95 and Map 3, this report). Observations made during this survey indicate that this whole section should now be considered to be both eroding and accreting. This was demonstrated by the fact that several WWII anti-tank blocks, and a road block (see site EL1) have been almost entirely buried by sand, while some erosion is apparent on the coast edge and along the banks of the Peffer Burn.

9.10 The second difference in the survey findings concerns the old sea walls on the east side of St. Baldred's Cradle (Map 3). These were previously recorded as lying below the HWM, and, on the basis of this, it was supposed that some 5 m - 7 m of land had been lost here in the last century (GUARD 1996: 95). This survey found that sections of 19th- 20th C sea wall survived at the present coast edge, thereby indicating that land losses are unlikely to have been so great as previously thought.

9.11 The third area of difference in the survey findings concerns the Tyne Estuary (Map 4). This survey identified large areas of salt marsh on the north side of the estuary, behind Sandy Hirst which had not previously noted. This salt marsh is accreting, possibly due to the trapping of silt behind a large stone barrier in the intertidal zone (Site EL36). On the south side of the estuary, erosion which was previously noted (GUARD 1996: 95, Unit 45) has continued, though it is now confined to a more limited stretch of coast. Where previously the erosion face was said to stand up to 3m high, it is now more than 5m in height and appears to be receding very rapidly. The remains of a wooden barrier, which was erected in an attempt to slow the erosion immediately prior to the 1996 survey, can now be seen in the intertidal zone, some 10m from the erosion face.

10.0 Discussion

10.1 In general, the findings of this survey indicate that while the coastal zone of both East Lothian and Scottish Borders contain an exceptionally high density of archaeological remains, relatively few sites have been identified as being currently at risk from erosion. There are several explanations for this. The high site density is the result of good record keeping in the past, in combination with factors such as the high number of WWII remains, sites seen on AP's and of shipwrecks. The low number of sites at risk reflects the fact that a high proportion of the sites cannot be located on the ground; either because they are buried or because they have already been destroyed.

10.2 New sites were identified by this survey in both areas, with a proportionally higher percentage being identified in Scottish Borders. This probably reflects the fact that the previous coastal zone assessment survey covered East Lothian in detail but sampled only limited areas of Scottish Borders. There is a slight qualitative difference in the nature of the new sites recorded in each area. The re-survey of East Lothian, in building on from an earlier work, commenced from a more informed position but found fewer sites of note. Many of the new sites found in this area represent WWII remains or features of recent origin which had been overlooked during the previous survey. While numerous of the 'new' sites identified in Scottish Borders are also probably of WWII origin, some potentially earlier sites, such as probable promontory forts were also found.

10.3 A review of the accumulated records indicates that sites in East Lothian have more often been found accidentally, either as the result of erosion or of development. In Scottish Borders, by contrast, the majority of previously recorded sites have, and continue to, endure as visible topographic features. This is reflective of both the differing nature of the site types present in each area and also the fact that the coastline in East Lothian is more prone to erosion. It probably also has always been more densely settled than the higher, more exposed coastline in Scottish Borders. These factors can usefully be used to inform future management strategy: coastal monitoring should be targeted at the low-lying and softer coastal areas where there is a higher risk that buried remains may be at risk from erosion. It may also be more useful to focus on sections of coastline than on specific site locations, since experience has shown that sites, such as cist cemeteries for example, are likely to be spread

over an extended area. Since many of the low-lying softer areas are both eroding and accreting, site visibility can be an issue. Remains may be eroding gradually, but nevertheless be covered over with loose sand and invisible to the surveyor. For this reason it is suggested that the optimum timing for monitoring work is likely to be in the wake of stormy weather or following any major change, such as flooding or parching, which may have the effect of temporarily uncovering new exposures.

10.4 While development was not found to constitute a major threat to the sites within the survey area, pre-development assessment is considered advisable, even in areas of unknown archaeological potential. The high density of sites known to exist or have existed within the coastal zone, in East Lothian, in particular, indicates that there is a significant chance that further remains may be present, even in areas where remains have not previously been reported. Special measures may be considered in relation to ‘development’ within the several golf courses which lie on the coast edge. In general, golf courses appear to have a positive effect upon the landscape and, by extension, the archaeological remains. They are stable, vegetated areas with little or no animal disturbance and in many cases, their coastal edges are protected by sea defences. In consideration, however, of the large numbers of sites reported to lie or have lain within these areas, any ground disturbance may have unintended and detrimental effects on the archaeology. In many such areas, archaeological areas are likely to be lightly buried and can easily be disturbed by landscaping and maintenance works which are not covered by the planning process.

10.5 The development of coastal paths and the encouragement of the coastal zone for recreational purposes in both East Lothian and Scottish Borders is to be applauded. By encouraging visitors to explore and appreciate the coastline as a valuable resource, this provides a ready audience for the rich archaeological and historical heritage which it contains. Where they exist, information boards provide welcome insights into the surroundings and there is ample room for more development in this area.

10.6 In summary, the coastal zones of East Lothian and Scottish Borders contain a wide range of archaeological remains, illustrating almost all periods of human history in the area. The earlier prehistoric remains, though known to be present, are least visible. Later prehistoric fortified sites are more numerous, especially in Scottish Borders. Early Christian

sites and especially funerary remains abound, although only churches and monasteries now survive as upstanding monuments. There are several fine Medieval castles and houses, with later fortifications ranging from 16th C forts to the abundant remains of WWII defences. There are harbours and lime kilns, coal mines, fine houses and lighthouses. There are, undoubtedly, also many new sites remaining to be found and this is most likely to come about either as the result of coastal erosion or of development.

10.7 In conclusion, the audit survey conducted during this programme provided for a rapid scan of the coastline. In the absence of opportunity for more than a single visit or for any form of follow-up work it should not be expected to have identified every archaeological feature or to act as a replacement for a full area study, such as that provided by the RCAHMS surveys. Its advantages are that it provides a current and more inclusive survey of the area and sets out a baseline from which future change to both sites and coastline can be measured. The opportunity provided by this programme to re-survey part of the East Lothian coast has the advantage of adding a time dimension to earlier survey findings and permits a more dynamic picture of the processes at work to be built up. By targeting the ‘problem’ areas more specifically, the findings can be used to direct future campaigns more effectively and efficiently.

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List of Aerial Photographs Consulted

Catalogue Number	Source	Surveyor Reference	Date
B17 5001-5209, 7001-7199	RAF	106G/SCOT/UK11	15.04.46
B58 5001-5184, 7001-7143-7239	RAF	106G/SCOT/UK14	15.04.46
B108 5154-5339, 7139	RAF	106G/SCOT/UK14	15.04.46
B174 3001-3133, 4001-4144	RAF	CPE/SCOT/UK257	12.08.47
B227 3001-3236, 4001-4236	RAF	541/A/427	11.05.49
B739 950-6, 958-016	Fairey Surveys	Film 1	30.07.73
B755 608-17, 626-33, 638-64, 671-82	Fairey Surveys	Film 17	25.05.74
B758 945-74, 976-8, 980-003	Fairey Surveys	Film 20	12.06.74
B760/761	Fairey Surveys	Film 22	14.09.74
OS/64/236	Ordnance Survey	-	06.10.64
OS/65/02	Ordnance Survey	-	28.03.65
OS/65/33	Ordnance Survey	-	01.05.62
OS/65/98	Ordnance Survey	-	04.06.65
OS/70/366	Ordnance Survey	-	19.09.70
Uncertain (photograph numbers 51988050-134/SAME AS GUARD C279 050 to C279 134??	JASAIR	Area 2/3	07.06.88

East Lothian: Sites Requiring Survey (Priority sites are highlighted)						
Site Map	NMRS	Placename	Characterisation	Eroding ?	Condition	Threat to Site
1	NT68SW44	Links Wood	WWII defences: anti-tank blocks & road block	Y	Fair	Soil erosion
2	NT68SW43	Bathan's Strand	WWII defences: anti-tank blocks and earthworks	N	Fair	N/A
3	see NT68SW42	Peffer Burn / Lochhouses Links	WWII defences: anti-tank blocks	N	Fair	N/A
4	NT68SW39	Peffer Burn / Scoughall Links	WWII defences: pill-box	Y	Fair/Poor	Soil erosion
8	NT68SW45	Whitberry Point	WWII trenches & possible structural remains	Y	Poor	Soil erosion
9	NT68SW45	Bathan's Strand/St. Baldred's Cradle	Structural remains: possible WWII	Y	Fair/Poor	Soil erosion
10	NT68SW45/22	Bathan's Strand/St. Baldred's Cradle	WWII defences: trenches	N	Fair	Nil
14	NT68SW46	Links Wood	WWII Structure: pill box	N	Good	N/A
15	NT68SW49	Links Wood	WWII defences: anti-tank blocks and road block	N	Good	Structural decay
17	NT67NW70	Hedderwick	WWII defences: anti-tank blocks	N	Good	N/A
19	NT67NW74	Hedderwick Sands	WWII defences: anti-glider traps	Y	Fair	Wave action
21	4	Tyne Sands	WWII Structure: indeterminate	Y	Poor	Wave action/soil erosion
26	5	Winterfield Golf Course	WWII Structure: indeterminate	Y	Poor	Wave action/structural decay
36	4	Tyne Estuary	Fish trap	Y	Fair	Wave action
37	3	Tyne Sands	Possible Fish Trap	Y	Fair	Wave action
39	2	Gin Head	WWII Structure: Radar Station	N	Good	N/A
42	2	Oxroad Bay	Track	Y	Fair	Wave action/soil erosion
44	2	Auldhamel/Seacliff	Laird's House and middens	Y	Poor	Soil erosion/structural decay
45	2	St. Baldred's Cave	Cave	N	Poor	Other: vandalism
50	7	Chapel Point	Coastal exposure: anthropogenic deposits	Y	Fair	Wave action/ soil erosion
54	7	Skateraw Harbour	Former Harbour	Y	Poor	Wave action
57	8	Bilsdean	Designed garden features	Y	Fair/poor	Structural decay
58	2	Seacliff Tower	Tower house	Y	Poor	Soil erosion/structural decay
102	3	Sandy Hirst	WWII defences: trenches	N	?	Soil erosion
82	2	Tantallon	Shipwreck	?	?	Wave action
90	2	Scoughall Rocks	Shipwreck	?	?	Wave action
91	2	NT68SW8019/8025	Shipwrecks	?	?	Wave action
92	2	NT68SW8003 etc	Shipwrecks	?	?	Wave action
94	3	NT68SW8020 etc	Shipwrecks	?	?	Wave action
104	4	NT68SW8011/8030	Shipwrecks	?	?	Wave action
105	4	NT67NW8001	Shipwreck	?	?	Wave action
107	4	NT67NW8002 etc	Shipwrecks	?	?	Wave action
111	4	NT68SW8007/8033	Shipwrecks	?	?	Wave action
112	4	NT67NE8048	Shipwreck	?	?	Wave action
115	5	NT67NE8037	Shipwreck	?	?	Wave action
128	5	NT67NE8047	Shipwreck	?	?	Wave action
138	6	NT77NW8012	Shipwreck	?	?	Wave action
139	6	NT77NW8003	Shipwreck	?	?	Wave action
144	6	NT77NW8018	Shipwreck	?	?	Wave action
146	7	NT77NW8007/8016	Shipwrecks	?	?	Wave action
148	7	NT77NW8004	Shipwreck	?	?	Wave action
150	7	NT77NW8006	Shipwreck	?	?	Wave action
151	7	NT77NW8015 etc.	Shipwrecks	?	?	Wave action
153	7	NT77NE8009	Shipwreck	?	?	Wave action
154	7	NT77NE8008	Shipwreck	?	?	Wave action
155	7	NT77NE8001 etc	Shipwrecks	?	?	Wave action
162	8	NT77SE8006	Shipwreck	?	?	Wave action
165	2	NT68SW8015 etc.	Shipwrecks	?	?	Wave action

East Lothian: Sites Requiring Monitoring							
Site	Map	NMRS	Placename	Characterisation	Eroding ?	Condition	Threat to Site
7	3	NT68SW62	Ravenshaugh Sands	WWII defences: anti-tank blocks & structure	Y	Poor	Wave action/ soil erosion
11	3	NT68SW/4.1	St. Baldred's Cradle	Cairn	N	Fair	N/A
16	4	MT67NW79	Buist's Embankment	Embankment and dyke	N	Good	Wave action/soil erosion
18	4		Hedderwick Sands	Structural remains: indeterminate	Y	Fair/poor	Wave action
22	5		Belhaven Bay	Footbridge	Y	Fair	Wave action/structural decay
25	5		Winterfield Golf Course	Structural remains: indeterminate	Y	Poor	Wave action/ soil erosion
29	5		Winterfield	Mound	N	Good	N/A
30	6	NT77NW36	Dunbar Golf Course: The Vaults	Structure	N	Good	N/A
31	6		Dunbar Golf Links	Harbour with tie-up post	N	Good	N/A
33	6	NT77NW33	Catraig	Lime kilns, quarry	Y	Fair	Structural decay
34	7	NT77NW62	Mild Links	Structural remains, houses	Y	Fair	Structural decay
40	1	NT58NE57	Canty Bay	Enclosure	Fair	Fair	Animal
41	2	NT58NE5.00	Tantallon	Castle & Dovecot	Y	Fair	Wave action/soil erosion
46	2		Great Car	Navigation Marker	N	Good	Wave Action
47	2		Car Rocks	Possible structural remains	Y	Fair	Wave action/soil erosion
56	8		Lawfield	Coastal exposure: possible anthropogenic deposits	Y	Fair	Wave action/ soil erosion
65	1	NT58NE3.00	St. Andrew's, North Berwick	Church and burial ground	N	Fair	Structural decay
67	1	NT58NE50	Anchor Green, North Berwick	Burials	N	N/A	Nil
68	1	NT58NE55	The Lecks	Walled enclosure	?	?	Wave action
69	1	NT58NE70	St. Andrew's Kirkyard	Trial excavations: grave yard deposits	N	N/A	Nil
71	1	NT58NE1	Castle Hill, East Links	Possible castle/Fort	Y	Good	Soil erosion/animals
72	1	NT58NE56	Glen Golf Course, North Berwick	WWII slit trenches	?	?	N/A
73	1	NT58NE6	Glen Golf Course	Midden/anthropogenic deposits	N	Fair	N/A
74	1	NT58NE7	The Leithies	Burial	Y	?	Wave action/soil erosion
75	1	NT58NE23	Leckmoram Ness	Cave	?	?	Wave action
76	1	NT58NE8	The Yellow Man	Cave, midden deposits	Y	?	Wave action/ soil erosion
77	1	NT58NE20	Leckmoram Ness	Findspot: bronze brooch	Y	?	Wave action
80	2	NT58NE131	Castleton	Landing place	?	?	Wave action
81	2	NT58NE48	Castleton	Harbour	Y	Poor	Wave action
83	2	NT58SE70	Oxroad Bay	Rock cut ditch	?	?	Wave action
84	2	NT58SE71	Oxroad Bay	Cave	Y	Fair	Wave action
85	2	NT68SW65	Seacliff	Ditch	?	?	Soil erosion
86	2	NT68SW3	The Gegan	Structural remains and midden	?	Fair-poor	Wave action/soil erosion
87	2	NT68SW30	Auldham	Possible promontory fort	?	?	Soil erosion
88	2	NT68SW8	Seacliff	Midden and cist burials	Y	?	Soil erosion/Wave action
89	2	NT68SW12	Scoughall	Possible site of chapel	?	?	Soil erosion
101	3	NT68SW60	Tyne Sands	Sea defence	?	?	N/A
106	4	NT67NW10	Hedderwick	Cist and artefacts	Y	Poor	Soil erosion
108	4	NT67NW11	The Targets, Dunbar	Burial	?	?	Soil erosion
109	4	NT67NW75	Hedderwick Hill Plantation	WWII defences: anti-tank blocks & structures	?	?	N/A
110	4	NT67NW143	John Muir Country Park	Human remains	N	?	Soil erosion
114	5	NT67NE16	Lochend	Houses, gate piers, cottages, garden, steading	N	?	N/A
116	5	NT67NE1	Belhaven Bay	Long cist burials	?	?	Soil erosion
117	5	NT67NE94	Winterfield Golf Course	Long cist burials	N	?	Soil erosion/development
118	5	NT67NE163	Winterfield Golf Course	WWII defences: trenches & structure	N	?	Soil erosion/development
120	5	NT67NE272	Dunbar	Findspot: gold pin	?	?	Wave action

122	5	NT67NE503	Dunbar Harbour	Vaults, possible ice house	N	Good	N/A
123	5	NT67NE8	Dunbar Castle	Castle	Y	Poor	Soil erosion/ wave action
127	5	NT67NE53	Lamer Island	Battery	Y	Fair	Soil erosion
129	5	NT67NE18	Dunbar, Old Harbour	Harbour	N	Good	Wave action/structural decay
134	5	NT67NE2	Kirkhill Braes	Long cist cemetery	?	?	N/A
135	5	NT67NE186	Dunbar Golf Course	Trial Excavation: cist, Roman pottery and cut features	N	Good	Development
137	6	NT77NW28	The Vaults	Cists	N	?	Development
141	6	NT77NW4	Dunbar Golf Course	Cists	N	?	Development
143	6	NT77NW90	White Sands	Evaluation & watching brief	N	N/A	Development
145	7	NT77NW37	Barns Ness	Lighthouse	N	Good	N/A
147	7	NT77NW64	Barns Ness	Enclosure	N	?	N/A
149	7	NT77NW11	Chapel Point	Site of St. Denis's Chapel	Y	?	Wave action
157	7	NT77SE35	Thorntonloch	Enclosure	N	?	N/A
160	8	NT77SE77	Lawfield	Cropmarks: pit alignment	N	?	N/A
163	8	NT77SE3	Castle Dykes	Fort, cists, findspot	N	Fair	Soil erosion
164	5	NT67NE141.00 etc.	Castle Park, Dunbar	Timber hall, fort, burials	N	Fair	N/A
167	5		Winterfield Golf Course	Mound	N	?	Development
168	7		Skateraw	Mound	N	?	N/A
169	7		Castle Dykes	Structural remains	N	?	N/A

Scottish Borders: Sites Requiring Survey								
Site	Map	NMRS	Placename	Characterisation	Eroding ?	Condition	Threat to Site	SMR
2	8		Dunglass Burn	Possible anthropogenic deposits	Y	Poor	Wave action/soil erosion	
5	9	NT77SE71.00-.02	Hawk's Heugh	WWII remains: Radar Station	N	Fair/poor	Structural decay	1050162
6	9	NT87SW1.0	St. Helen's Church	Church, graveyard	Y	Fair/Poor	Structural decay	
8	9	see NT87SW17	Sicar Point	WWII Structures	N	Fair	N/A	?1050185
14	11		Step Heugh	Possible WWII structure	N	Fair	N/A	
15	11		Heathery Carr	Possible promontory fort	N	Fair	Soil erosion	
24	13		Linkin Shore	Possible WWII firing range	N	Fair	Structural decay	
32	14		Hurker's Haven	Structure: possible WWII look-out	Y	Fair	Structural decay/vandalism	
41	9	NT77SE71.0-.02	Hawk's Heugh	WWII Radar Station	Y	Poor	Structural decay	
42	9	NT77SE8005	Pease Bay	Shipwreck	? ?	? ?	Wave action	
52	11	NT87SE8003/8006	Fast Castle Head	Shipwrecks	? ?	? ?	Wave action	
56	11	NT87SE8001	Fast Castle Head	Shipwreck	? ?	? ?	Wave action	
57	11	NT87SE8005	Souter Point	Shipwreck	? ?	? ?	Wave action	
61	12	NT96NW8010	St. Abb's Head	Shipwreck	? ?	? ?	Wave action	
62	12	NT96NW8002	Pettico Wick	Shipwreck	? ?	? ?	Wave action	
68	12	NT96NW8048	St. Abb's Head	Shipwreck	? ?	? ?	Wave action	
72	12	NT96NW8070	St. Abb's Head	Shipwreck	? ?	? ?	Wave action	
78	12	NT96NW8006	St. Abb's	Shipwreck	? ?	? ?	Wave action	
79	12	NT96NW8009	St. Abbs	Shipwreck	? ?	? ?	Wave action	
84	13	NT96NW8060	Coldingham	Shipwreck	? ?	? ?	Wave action	
87	13	NT96SW8012/17/21	Eyemouth Harbour	Shipwrecks	? ?	? ?	Wave action	
88	13	NT96SW8006 etc.	Eyemouth Harbour	Shipwrecks	? ?	? ?	Wave action	
93	13	NT96SE8003	Whaltness	Shipwreck	? ?	? ?	Wave action	
92	13	NT96SE8008	Polly, Eyemouth	Shipwreck	? ?	? ?	Wave action	
95	14	NT96SE8007	Gull Rock, Burrough Harbour	Shipwreck	? ?	? ?	Wave action	
103	12	NT96NW8071	Pettico Wick	Shipwreck	? ?	? ?	Wave action	

Scottish Borders: Sites Requiring Monitoring		Placename	Characterisation	Eroding ?	Condition	Threat to Site	SMR
Site Map	NMRS						
3	9	NT77SE9.01-.07	Cove Harbour		Fair	Wave action/structural decay	1050160
7	9	NT87SW9	Siccar Point	N	Fair	Soil erosion/animals	1050124
9	11	NT87SE1	Fast Castle	Y	Fair/Poor	Wave action/structural decay	1060019
10	11		Mound	N	Good	N/A	
12	11	NT87SE2	Brander Heugh	N	Fair	N/A	1060020
13	11	NT87SE10	Lumsdaine Shore	N	Good	Soil erosion	1069223
16	12	NT86NE8	Earn's Heugh/ Tun Law	N	Good	Animal	1060034
18	12	NT96NW5/17/141	St. Abb's Head	N	Fair	Soil erosion/animal	1060044
19	12	NT96NW39.01-.06	St Abb's	N	Defensive	Soil erosion/ structural decay	1060213/14
20	12	NT96NW47	Pettico Wick	Y	Fair	Wave action	1060222
21	13	NT96SW1	Eyemouth, Kings Mount	Y	Good/Fair	Wave action/ soil erosion	1120004
22	13		Eyemouth, Kings Mount	N	Fair	Structural decay	
26	13		Eyemouth	N	Fair/Poor	Development	
27	13		Agate Point	N	Fair	Development	?1020002
28	13		Agate Point	N	Fair	Soil erosion	
29	13		Horse Head	N	Fair	N/A	
30	13		Hawk's Ness	N	Fair	N/A	
31	13		Hurker's Haven	N	Fair	N/A	
34	15	NT95NE5	Lamberton Shiel	N	Fair	N/A	1220011
35	8	NT77SE13	Dunglass Dean	N	Poor	Development	1050097
37	8	NT77SE78	Cove	N	Good	N/A	1050058
38	8	NT77SE34	Cove	?	?	Wave action	1050140
43	9	NT87SW7	Old Cambus Dean	N	?	N/A	
44	9	NT87SW12/14	Old Cambus	?	?	N/A	
45	9	NT87SW5	Old Cambus Dean	?	?	Soil erosion	1050131
46	9	NT87SW8	Old Cambus Dean	?	?	Soil erosion	
47	10	NT87SW16	Redheugh	N	Poor	N/A	
48	10	NT87SW14	Old Cambus	N	?	N/A	
49	10	NT87SW18	Menzie Cleugh	?	?	Wave action	1050060
51	10	NT86NW10	Soldier's Dyke	N	Poor	N/A	
58	11	NT86NE3	Lumsdaine	N	Fair/Poor	Nil	
59	11	NT86NE36	Oatlee Hill	Y	Fair/Poor	Agriculture	1060224
60	12	NT86NE37	Snuffhole Heugh	N	?	N/A	
63	12	NT96NW2	Pettico Wick	N	Fair/Poor	Soil erosion	1060041
65	12	NT96NW43	Hope's Heugh	Y	Poor	Soil erosion	1060226
66	12	NT96NW6	St. Abb's Head	Y	Fair	Soil erosion/structural decay	1060073
73	12	NT96NW58.01-.03	St. Abb's	N	Good	N/A	
75	12	NT96NW54 etc.	St. Abb's	N	Good	Wave action	1060120
81	12	NT96NW36	Homeli Knoll	N	Fair	N/A	1060213
83	13	NT96NW18	Bennison's Brae	N	?	N/A	1060140
85	13	NT96NW14	Eyemouth	Y	Fair	Soil erosion	1120006
89	13	NT96SW76 etc.	Eyemouth Harbour	N	Good	Wave action/structural decay	
90	13	NT96SW66	Gungreen	?	?	?	
91	13	NT96SW59	Gungreen	N	Good	N/A	1023014
94	14	NT96SE2	Blaikie Heugh	N	Fair	Agriculture	1020048

99	14	NT96SE8	Burmmouth Harbour	Harbour	Y	Fair	Wave action/structural decay	1023011
100	14	NT96SE19 etc	Burmmouth	Housing	N	Good	N/A	
101	14	NT96SE24	Ross Point	Soil marks: possibly natural	?	?	Agriculture	
104	14	NT96SE10	Fancove Head	Fort	Y	?	Soil erosion/ wave action	1020070
105	10	NT87SW15	Red Heugh	Structure	?	?	?	1050063
106	12		White Heugh	Quarry	?	?	?	1060306
107	10		Menzie Cleugh	Possible mounds	N	?	?	
108	10		Dowlaw	Possible cultivation remains	N	?	?	
109	11		Dowlaw	Possible earthwork	N	?	N/A	
110	11		Dowlaw	Possible earthwork	N	?	N/A	
111	11		Coldingham	Field boundary	N	?	N/A	
112	12		West In Thirle Heugh	Possible earthwork	N	?	N/A	
113	13		Pocklaw Slap	Cropmarks	N	?	N/A	
114	13		Barefoots	Cropmark	N	?	N/A	
115	13		Tod's Loup	Possible earthwork	N	?	N/A	

