

NORTHUMBERLAND

Historic Landscape Characterisation

The Northumberland Historic Landscape Characterisation Project was carried out between 2005 and 2008 by Liz Williams for Northumberland County Council and Northumberland National Park with the support of English Heritage.

All the mapping contained in this report is based upon the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationary Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Northumberland County Council OS Licence No. LA100049048.

All aerial photographs are extracts from the Millennium Map™, which is copyright Getmapping plc.

Physiographic maps are derived from 1:50,000 scale BGS Digital Data under Licence 2006/139 British Geological Survey. ©NERC

© Northumberland County Council,
Northumberland National Park and English
Heritage

February 2008

Copies of this report and further information can be obtained from:

Conservation Team
Development Services, Local Services
Northumberland County Council
County Hall
Morpeth
NE61 2EF

Tel: 01670 620305

Email: archaeology@northumberland.gov.uk

Website: www.northumberland.gov.uk

or National Park Archaeologist
Northumberland National Park
Eastburn
South Park
Hexham
NE46 1BS

Tel: 01434 611531

Contents

1.	Introduction	1
1.1	Background	1
1.2	The National Context	1
1.3	The Northumberland HLC project	2
2.	The Northumberland Landscape	4
2.1	Introduction	4
2.2	Landscape Character	4
2.3	Geology	5
2.4	Soils	5
2.5	Topography	6
2.6	Physiography	6
2.7	Perceptions of Cultural Landscape	7
2.8	Archaeology and historic development	8
3.	Methodology	14
3.1	Familiarisation	14
3.2	Sources	14
3.3	Software	14
3.4	Mapping Methodology	15
3.5	Database Structure	15
3.6	Analysis	19
4.	Coast	20
4.1	Cliff	22
4.2	Dunes	23
4.3	Intertidal zone	25
4.4	Rocky foreshore	26
4.5	Saltmarsh	27
5.	Communication	28
5.1	Airfield	31
5.2	Harbour	32
5.3	Railway	33
5.4	Road	35
6.	Fieldscapes	36
6.1	Modern Fields	40
6.2	Pre-1860 Fields	46
7.	Industry	63
7.1	Extractive site (active)	66
7.2	Extractive site (disused)	67
7.3	Other industry (active)	68
7.4	Other industry (disused)	69
7.5	Utilities	70
8.	Military	71
8.1	Military airfield (active)	74
8.2	Military airfield (disused)	75
8.3	Military site (active)	76
8.4	Military site (disused)	77
9.	Ornamental, Parkland and Recreation	78
9.1	Designed landscape	81
9.2	Other parkland and recreation	83
9.3	Golf course	85

9.4	Sports ground	86
10.	Rough Land	87
10.1	Open moorland (upland)	92
10.2	Enclosed moorland (upland)	93
10.3	Open moorland (lowland)	94
10.4	Enclosed moorland (open)	95
10.5	Reverted moorland	96
11.	Settlement	97
11.1	20 th century settlement	102
11.2	Late 19 th century settlement	104
11.3	Pre-1860s settlement	105
12.	Water	106
12.1	Artificial lake/pond	108
12.2	Reservoir	109
12.3	Natural open water	110
12.4	Marsh	111
12.5	River	112
13.	Woodland	113
13.1	20 th century woodland	116
13.2	Late 19 th century woodland	117
13.3	Pre-1860 woodland	118
13.4	Ancient replanted woodland	119
13.5	Ancient semi-natural woodland	120
13.6	Scrub	122
14.	HLC Areas	123
14.1	North Pennines and Hadrian's Wall	124
14.2	North Northumberland	125
14.3	South East Northumberland	126
14.4	Kielder Forest	127
14.5	Central Southern Northumberland	128
14.6	Sandstone Hills	129
14.7	Cheviot Hills	130
14.8	Methodology	131
15.	Time Depth and Change	134
15.1	Time Depth	134
15.2	Direction of Change	138
15.3	Rarity	139
15.4	Susceptibility	139
15.5	Mid-19 th Century Time Slice	140
16.	Research Agenda	142
16.1	Coast	142
16.2	Communications	142
16.3	Fieldsapes	143
16.4	Industry	144
16.5	Ornamental, Parkland and Recreation	144
16.6	Settlement	144
16.7	Woodland	146
17.	Bibliography	147
	Appendix 1: Project design	149
	Appendix 2: Database	172
	Appendix 3: Database Queries for Historic Landscape Character Types	173

Appendix 4: Occurrence and change	180
Appendix 5: Physiographic Model Methodology	205

Figures

- Figure 1: Northumberland historic landscape types
- Figure 2: Joint Character Areas in Northumberland
- Figure 3: Physiographic map of Northumberland
- Figure 4: Screenshot of the HLC database
- Figure 5: Variations in boundary shape
- Figure 6: Examples of different map sources used by the HLC
- Figure 7: Broad entry level Historic Landscape Types
- Figure 8: Coastal HLC types.
- Figure 9: Proportions of Communication HLC types
- Figure 10: Communication HLC types
- Figure 11: Distribution and proportion of modern and pre-1860s fields
- Figure 12: Fieldscape HLC types
- Figure 13: Distribution of modern fieldscape types
- Figure 14: Distribution of regular pre-1860 enclosure
- Figure 15: Distribution of irregular pre-1860 fields
- Figure 16: All pre-1860 fieldscape types
- Figure 17: Lowland small surveyed fields
- Figure 18: Upland small surveyed fields
- Figure 19: Irregular pre-1860 fieldscape types
- Figure 20: Distribution of other irregular fields by size
- Figure 21: Breakdown of industry by HLC types and period
- Figure 22: Industry HLC types
- Figure 23: Military HLC types
- Figure 24: Proportions of Military HLC types
- Figure 25: Ornamental, parkland and recreational HLC types
- Figure 26: Proportions of Ornamental, parkland and recreational HLC types
- Figure 27: Maximum extent of rough land in the mid-19th century overlaid with later land use types
- Figure 28: Extent of rough land in the mid-19th century with the addition of place name evidence and extent of rough land in the 21st century
- Figure 29: Proportions of rough ground HLC types
- Figure 30: Distribution of moorland at the beginning of the 21st century
- Figure 31: Proportions of Settlement HLC types
- Figure 32: Settlement HLC types
- Figure 33: Settlement HLC types plotted against physiographic zones
- Figure 34: Settlement form plotted against ancient parishes
- Figure 35: Proportion of Water HLC types
- Figure 36: Water HLC types
- Figure 37: Proportions of Woodland HLC types
- Figure 38: Woodland HLC types
- Figure 39: Ancient woodland at Rivergreen, near Molesden
- Figure 40: Map of ancient parish boundaries showing distribution of ancient woodland, replanted ancient woodland and wood-related place names
- Figure 41: Historic landscape character areas from merged polygons
- Figure 42: North Pennines and Hadrian's Wall historic landscape character area
- Figure 43: North Northumberland historic landscape character area
- Figure 44: South East Northumberland historic landscape character area
- Figure 45: Kielder Forest historic landscape character area
- Figure 46: Central Southern Northumberland historic landscape character area
- Figure 47: Sandstone Hills historic landscape character area
- Figure 48: Cheviot Hills historic landscape character area
- Figure 49: Generalisation: cell size
- Figure 50: Generalisation: majority filter and expand
- Figure 51: Generalisation: second majority filter and boundary clean

Figure 52: Shapefile created from conversion of raster data; keyed to raster colour scheme; and broad historic landscape character areas sketched out

Figure 53: Time depth in the Northumberland landscape and pie chart showing proportion of HLC types by date of origin

Figure 54: 20th and 21st century historic landscape character types

Figure 55: Surviving late 19th century historic landscape character types

Figure 56: Surviving pre-1860 historic landscape character types

Figure 57: HLC types mapped according to their direction of change with pie chart showing the proportions of HLC types by change categories

Figure 58: Rarity of HLC types

Figure 59: Susceptibility of HLC types and pie chart showing proportion of high, medium and low ratings

Figure 60: Mid-19th century time slice of Northumberland

Tables

Table 1: Key criteria used to determine physiographic terrain types

Table 2: Broad periods and date ranges used to classify Northumberland HLC

Table 3: Suggested chronology of fieldscape types

Table 4: Summary of vegetation development in the Northumberland landscape

Plates

Plate 1: Embleton Bay

Plate 2: Milepost

Plate 3: High Callerton fields

Plate 4: Barrasford Quarry

Plate 5: Brunton Airfield

Plate 6: Matfen Hall

Plate 7: Scald Hill

Plate 8: Wooler

Plate 9: Kielder Water

Plate 10: Woodland

Abbreviations

AONB	Area of Outstanding National Beauty
GIS	geographic information system
HCA	historic character area
HER	Historic Environment Record
HLC	historic landscape characterisation
JCA	Joint Character Area
LG	lower ground (physiographic region)
NATO	North Atlantic Treaty Organisation
NCC	Northumberland County Council
NNPA	Northumberland National Park
OS	Ordnance Survey
OTA	Otterburn Training Area
PPG	Planning Policy Guidance
PPS	Planning Policy Supplement
RAF	Royal Air Force
RCAHMS	Royal Commission for the Ancient and Historic Monuments of Scotland
UG	upper ground (physiographic region)

Acknowledgements

The author would like to acknowledge the advice and assistance provided by Chris Burgess, Rob Edwards, Graham Fairclough, Sara Rushton, Sam Turner, Andy Wigley and Rob Young.