

APPENDIX 3: Database Queries for Historic Landscape Character Types

Before the queries that would define HLC types were designed five new fields were created in the main HLC table (tblHLC), these included: Type1 (for the new HLC type), PreviousHLC1860 (for character type in the 1860s), Basic Character Types (the entry-level HLC group, eg Fieldscape), Basic Previous Character Types (entry-level HLC group as before), and Character Type Date Range (a broad date range based on Source and Date fields, eg pre-1860, late 19th century, 20th century). The following tables set out the criteria that were used to define each of the entry-level HLC groups and each of the character types described in chapters 4 to 14 above. They are all designed to be transparent and relatively easily adjusted should new information become available or new research suggest alternative interpretations of character type.

A3.1 Entry Level Types

DESCRIPTION	CRITERIA	DEFINITION
Coast	Level1 = COASTAL (2)	Land between high and low watermarks, including cliffs, sand dunes and rocky foreshore.
Communications	Level1 = COMMUNICATIONS (3)	Major communication routes over 20m wide, airports, and harbours. Includes road, rail, air and water transport.
Fieldsapes	Level1 = AGRICULTURE (1) Level4 = ARABLE or MIXED or PASTURE (56 or 57 or 55) OR Level1 = AGRICULTURE (1) Level2 = FISH FARM or HORTICULTURE (44) or POULTRY (50)	Enclosed fields.
Industry	Level1 = INDUSTRY (4)	Land used for industrial purposes, including extraction, fabrication and utilities.
Military	Level1 = MILITARY (5)	Land used for military purposes, including land (barracks, etc) and air (RAF bases, etc).
Ornamental/ Parkland/ Recreation	Level1 = ORNAMENTAL (6) Level2 = DESIGNED LANDSCAPE (16) or RECREATIONAL (17)	Designed landscapes, including parkland, cemeteries.
Rough Land	Level1 = AGRICULTURE (1) Level4 = ROUGH GRASSLAND or MOORLAND or MOSS (54 or 48 or 74)	An area of open, uncultivated land with poor soil that is covered with a moorland vegetation (predominantly heather, grass and sedges).
Settlement	Level1 = SETTLEMENT or INSTITUTIONAL (7 or 10)	Excludes parks, sports grounds, cemeteries, etc
Water	Level1 = WATER (8)	Bodies of water, including natural (rivers, etc) and artificial (reservoirs, lakes, etc).
Woodland	Level1 = WOODLAND (9) Level3 = ANCIENT AND SEMI- NATURAL (158)	Areas of woodland.

A3.2 Current Historic Landscape Character Types

A3.2.1 Coastal

DESCRIPTION	CRITERIA	DEFINITION
Intertidal Zone	Level1 = COASTAL (2) Level2 = INTERTIDAL ZONE (1)	Area between high and low water marks. Includes, sand, shingle, mud and boulder shores.
Dunes	Level1 = COASTAL (2) Level2 = DUNES (4)	Sand dunes above high water mark.
Rocky Foreshore	Level1 = COASTAL (2) Level2 = ROCKY FORESHORE (5)	Rock outcrops between high and low water marks.
Saltmarsh	Level1 = COASTAL (2) Level2 = SALTMARSH (2)	Occurs on the upper part of mud shores, which the sea reaches only at high tide.
Cliff	Level1 = COASTAL (2) Level2 = CLIFF (42)	Steep or sheer slopes marking the landward edge of the shore.

A3.2.2 Communications

DESCRIPTION	CRITERIA	DEFINITION
Roads	Level1 = COMMUNICATIONS (3) Level2 = ROAD (26) Active = YES	Modern roads (over 20m wide) including embankments and service areas as depicted on current mapping.
Railways	Level1 = COMMUNICATIONS (3) Level2 = RAIL (6) Active = YES	Modern passenger and mineral railway lines (over 20m wide), including sidings and junctions, as depicted on current mapping.
Disused railways	Level1 = COMMUNICATIONS (3) Level2 = RAIL (6) Active = NO	Former railways (over 20m wide) including embankments and former sidings. Most were dismantled in the 1950s and 1960s.
Airfields	Level1 = COMMUNICATIONS (3) Level2 = AIR (7) Active = YES	Airfields still in use, based on current OS mapping.
Harbour	Level1 = COMMUNICATIONS (3) Level2 = WATER (27) Level3 = HARBOUR (76)	Harbours as defined on current OS mapping.

A3.2.3 Fieldscapes

DESCRIPTION	CRITERIA	DEFINITION
20 th Century Restored Fields	BasicCharacterTypes = FIELDSCAPES Date = 20 th CENTURY (6) Interpretation = RESTORED FIELDS (24)	Fields that are unrecognisable or significantly altered in character and form when compared to the first edition Ordnance Survey map (1860s).
Other 20 th Century Fields	BasicCharacterTypes = FIELDSCAPES Level2 = ENCLOSED FIELDS (40) Date = 20 th CENTURY (6) Interpretation = not RESTORED FIELDS (24)	Fields that have significantly altered in character and form when compared to the first edition (1860s) and second edition (1890s) Ordnance Survey maps, through boundary loss/replacement, or through improvement from rough land.
Late 19 th Century Fields	BasicCharacterTypes = FIELDSCAPES Date = POST MEDIEVAL (5) Interpretation = not RESTORED FIELDS (24) 2 nd Edition Ordnance Survey = YES	Fields that have significantly altered in character and form when compared to the first edition (1860s) Ordnance Survey maps, through boundary loss/replacement, or through improvement from rough land.
Surveyed Enclosure (straight edged)	BasicCharacterTypes = FIELDSCAPES Date = POST MEDIEVAL (5) Field Size = MEDIUM or LARGE Pattern = REGULAR ExtBMorphologyPrimary = STRAIGHT (1) IntBMorphologyPrimary = STRAIGHT (1) or NONE (4) or Is Null (0) OS 1 st Edition = YES InternalBCharacter = NOT DOG LEG (2) or S CURVE (3) or Is Null or 0	Fields characterised by straight internal and external boundaries and regular pattern, giving a geometric, planned appearance.
Surveyed Enclosure (wavy edged)	BasicCharacterTypes = FIELDSCAPES Date = POST MEDIEVAL (5) Field Size = MEDIUM or LARGE Pattern = REGULAR ExtBMorphologyPrimary = SINUOUS (2) or CURVING (6) IntBMorphologyPrimary = STRAIGHT (1)	Fields characterised by straight internal boundaries and regular pattern, giving a geometric, planned appearance. The external boundaries are wavy, curving or sinuous.

DESCRIPTION	CRITERIA	DEFINITION
	or NONE (4) or Is Null (0) OS 1 st Edition = YES InternalBCharacter = NOT DOG LEG (2) or S CURVE (3) or Is Null	
Surveyed Enclosure (erratic edged)	BasicCharacterTypes = FIELDSCAPES Date = POST MEDIEVAL (5) Field Size = MEDIUM or LARGE Pattern = REGULAR ExtBMorphologyPrimary = ERRATIC (3) IntBMorphologyPrimary = STRAIGHT (1) or NONE (4) or Is Null (0) OS 1 st Edition = YES InternalBCharacter = NOT DOG LEG (2) or S CURVE (3) or Is Null	Fields characterised by straight internal boundaries and regular pattern, giving a geometric, planned appearance. The external boundaries are erratic.
Other small surveyed fields	BasicCharacterTypes = FIELDSCAPES Date = POST MEDIEVAL (5) Field Size = MEDIUM or LARGE Pattern = REGULAR IntBMorphologyPrimary = STRAIGHT (1) or NONE (4) or Is Null (0) OS 1 st Edition = YES InternalBCharacter = NOT DOG LEG (2) or S CURVE (3) or Is Null	Small regular fields with straight internal boundaries, giving a geometric, planned appearance.
Piecemeal Enclosure	BasicCharacterTypes = FIELDSCAPES Date = POST-MEDIEVAL (5) Internal Boundary Characteristic = S-CURVE/DOG LEG (3 or 2) FieldSize = SMALL or MEDIUM or LARGE	Fields created out of the medieval open fields in the 17 th and early 18 th centuries. Some fields follow the old strips or furlongs and have distinctive aratral (reverse-S) boundaries, dog-legs, and sometimes ridge and furrow, but more rectangular fields also appeared which disregarded the old system; however, the latter fields still tend to have a rather irregular pattern overall and are quite unlike the later 18 th and 19 th century enclosures with their rigid geometric appearance (Taylor 1987, 122)
Reorganised piecemeal enclosure	BasicCharacterTypes = FIELDSCAPES Pattern = REGULAR Field size = SMALL, MEDIUM or LARGE Date = POST MEDIEVAL (5) Internal Boundary Characteristic = S-CURVE/DOG LEG (3 or 2)	Reorganised piecemeal enclosure includes fields which, although enclosed in the 17th or 18th centuries by agreement, have had their boundaries redrawn in the later 18th or 19th centuries in line with the Parliamentary enclosure movement. Despite a regular overall regular pattern and straight boundaries one or two boundaries will bear traces of the earlier phase of enclosure by means of a reverse-S curve or dog-leg, signalling the strips and furlongs of medieval open fields.
Other small irregular fields by settlement (paddocks and closes)	BasicCharacterTypes = FIELDSCAPES Pattern = IRREGULAR Field size = SMALL Date = POST MEDIEVAL (5) Os 1 st Ed = YES InternalBCharacteristic = NOT DOG LEG (2) or S CURVE (3) or Is Null ExternalBCharacteristics = SETTLEMENT EDGE (1)	Small irregular fields located on the edge of settlements. Probably represent small meadows, paddocks and closes of varying dates.
Irregular upland fields (intake and inbye)	BasicCharacterTypes = FIELDSCAPES Level3 = UPLAND Pattern = IRREGULAR FieldSize = SMALL or MEDIUM or LARGE Date = POST MEDIEVAL (5) OS 1 st Ed = YES InternalBCharacteristics = NOT DOG LEG (2) or S CURVE (3) or Is Null ExternalBCharacteristics = NOT SETTLEMENT (1)	Irregular fields in upland areas (over 250m) not adjacent to settlement, although small farmsteads can occur
Miscellaneous floodplain fields	BasicCharacterTypes = FIELDSCAPES Pattern = IRREGULAR Date = POST MEDIEVAL (5) OS 1 st edition = YES Level3 = LOWLAND ExternalBCharacteristics = WATERCOURSE (7)	Irregular-shaped fields situated on river floodplains, or adjacent to watercourses, which do not fall into any other category.

DESCRIPTION	CRITERIA	DEFINITION
	InternalBCharacteristics = WATERCOURSE (1) and NOT DOG LEG (2) or S CURVE (3) or Is Null	
Other large irregular fields (lowland)	BasicCharacterTypes = FIELDSCAPES Level3 = LOWLAND (148) Pattern = IRREGULAR Field size = LARGE Date = POST MEDIEVAL (5) Os 1 st Ed = YES InternalBCharacteristic = NOT DOG LEG (2) or S CURVE (3) or WATERCOURSE (1) or Is Null ExternalBCharacteristics = NOT WATERCOURSE (7)	Large irregular fields not classified under any other type.
Other medium irregular fields (lowland)	BasicCharacterTypes = FIELDSCAPES Level3 = LOWLAND (148) Pattern = IRREGULAR Field size = MEDIUM Date = POST MEDIEVAL (5) OS 1 st Ed = YES InternalBCharacteristic = NOT DOG LEG (2) or S CURVE (3) or WATERCOURSE (1) or Is Null ExternalBCharacteristics = NOT WATERCOURSE (7)	Medium irregular fields not classified under any other type.
Other small lowland irregular fields	BasicCharacterTypes = FIELDSCAPES Level3 = LOWLAND (148) Pattern = IRREGULAR Field size = SMALL Date = POST MEDIEVAL (5) Os 1 st Ed = YES InternalBCharacteristic = NOT DOG LEG (2) or S CURVE (3) or WATERCOURSE (1) or Is Null ExternalBCharacteristics Not SETTLEMENT EDGE (1) and NOT WATERCOURSE (7)	Small irregular fields not classified under any other type. It includes small fields that do not occur next to settlement edges, although small farmsteads can occur. Most fields of this type occur in the North Pennines and are probably related miner/farmer smallholdings created in the 17 th and 19 th centuries.
Ancient enclosure	In GIS join tbiHLC and tbiPreviousHLC to HLC_Northumberland shapefile. Select all 'other small irregular lowland fields' Remove from selection where tbiPreviousHLC.Level2 = STRIP FIELDS (41) Create new layer from selection and select by location where features are intersected by features in WoodlandPlacenames.shp, select by location again and add to this selection features that are intersected by features in moor_placename.shp	Based on 'other small lowland irregular fields' (above). Ancient enclosure is fields that were created in the medieval period by clearing woodland or waste. They pre-date the enclosure of the open fields which took place from the 16th/17th centuries onward and are generally not typical of open field landscapes. Typically small and irregular fields.
Horticulture	Level1 = AGRICULTURE (1) Level2 = HORTICULTURE (44)	Areas of market gardening, glasshouses and orchards.
Other Farming	Level1 = AGRICULTURE (1) Level2 = FISH FARM (43) or POULTRY (50)	Other types of farming that do not fall into any other categories. Include fish farms, poultry farms.

A3.2.4 Industry

DESCRIPTION	CRITERIA	DEFINITION
Active extractive sites	Level1 = INDUSTRY (4) Level2 = EXTRACTIVE (11) Active = YES	Active extraction sites. May be gravel/sand, coal or stone.
Abandoned extractive sites	Level1 = INDUSTRY (4) Level2 = EXTRACTIVE (11) Active = NO	Former extraction sites which have not been restored to another character type.
Other Active Industry	Level1 = INDUSTRY (4) Level2 = HEAVY (9) or LIGHT (10) Active = YES	Areas of heavy industry, including refining and processing, power stations, fabrication, storage/warehousing/ depots, and docks; and

DESCRIPTION	CRITERIA	DEFINITION
		areas of light industry, including auction marts, and industrial estates.
Utilities	Level1 = INDUSTRY (4) Level2 = UTILITIES (12) Active = YES	Active utility sites, including sewage farms, water treatment works, landfill, waste sites, gas and electricity generation and storage.
Abandoned Industry	Level1 = INDUSTRY (4) Level2 = not EXTRACTIVE (11) Active = NO	All areas of former industry, excluding extractive sites, that are no longer active and that have not been altered to another character type.

A3.2.5 Military

DESCRIPTION	CRITERIA	DEFINITION
Disused military airfield	Level1 = MILITARY (5) Level2 = AIR (7) Active = NO	Former military airfield.
Active military airfield	Level1 = MILITARY (5) Level2 = AIR (7) Active = YES	Airfield currently in use as depicted on current mapping.
Active military site	Level1 = MILITARY (5) Level2 = LAND (14) Active = YES	Military site (camp, barracks, etc) currently in active use.
Disused military site	Level1 = MILITARY (5) Level2 = LAND (14) Active = NO	A former military site (camp, barracks, battery, range, etc) no longer in active use. Most date to the mid 20 th century and World War II.

A3.2.6 Ornamental, Parkland and Recreation

DESCRIPTION	CRITERIA	DEFINITION
Designed Landscape	Level1 = ORNAMENTAL (6) Level2 = DESIGNED LANDSCAPE (16) Level3 = ORNAMENTAL PARKLAND (42) OR DEER PARK (43)	Designed landscapes that can still be identified in the current landscape. Many are the result of emparkment in the post-medieval period or 19 th century, but may include elements of medieval parks (eg. deer parks).
Golf Course	Level1 = ORNAMENTAL (6) Level2 = RECREATIONAL (17) Level3 = GOLF COURSE (61)	Modern golf courses as depicted on current maps.
Sports Grounds	Level1 = ORNAMENTAL (6) Level2 = RECREATIONAL (17) Level3 = SPORTS GROUND (44) or RACECOURSE (108)	Modern sports grounds and racecourses as depicted on current maps.
Other Parkland and Recreational	Level1 = ORNAMENTAL (6) Level3 = CIVIC PARK (46) or CEMETERY (106) or CARAVAN/CAMPING SITE (41) or ALLOTMENTS (45) or WATERSPORTS (157) or RETAIL (147) or HERITAGE SITE (161) or MARINA (78)	Other forms of parkland, recreational or ornamental landscapes that do not fall into any of the above categories. Includes cemeteries, caravan parks, allotments, watersports, marinas, and heritage sites.

A3.2.7 Rough Land

DESCRIPTION	CRITERIA	DEFINITION
Open Upland Moorland	Level1 = AGRICULTURE (1) Level2 = OPEN GROUND (38) Level3 = UPLAND (149) Level4 = MOORLAND (48) or ROUGH GRASSLAND (54) or MOSS (74) FieldsInterpretation = NOT REVERTED ROUGH GROUND or Is Null	An area of open, uncultivated land above 250m with poor soil that is covered with a moorland vegetation (mainly heather, grass and sedges).
Enclosed Upland Moorland	Level1 = AGRICULTURE (1) Level2 = ENCLOSED FIELDS (40) Level3 = UPLAND (149) Level4 = MOORLAND (48) or ROUGH GRASSLAND (54) or MOSS (74) FieldsInterpretation = NOT REVERTED ROUGH GROUND or Is Null	An area of enclosed, uncultivated land above 250m that is covered with a moorland vegetation (mainly heather, grass and sedges).

DESCRIPTION	CRITERIA	DEFINITION
Open Lowland Moorland	Level1 = AGRICULTURE (1) Level2 = OPEN GROUND (38) Level3 = LOWLAND (148) Level4 = MOORLAND (48) or ROUGH GRASSLAND (54) or MOSS (74) FieldsInterpretation = NOT REVERTED ROUGH GROUND or Is Null	An area of open, uncultivated land below 250m with poor soil that is covered with a moorland vegetation (mainly heather, grass and sedges).
Enclosed Lowland Moorland	Level1 = AGRICULTURE (1) Level2 = ENCLOSED FIELDS (40) Level3 = LOWLAND (148) Level4 = MOORLAND (48) or ROUGH GRASSLAND (54) or MOSS (74) FieldsInterpretation = NOT REVERTED ROUGH GROUND or Is Null	An area of enclosed, uncultivated land below 250m with poor soil that is covered with a moorland vegetation (mainly heather, grass and sedges).
Reverted Moorland	Level1 = AGRICULTURE Interpretation = REVERTED ROUGH GROUND (27)	Uncultivated land with poor soil, which has reverted back to moorland vegetation (mainly heather, grass and sedges).

A3.2.8 Settlement

DESCRIPTION	CRITERIA	DEFINITION
Pre-1860s settlement	Level1 = SETTLEMENT(7) Date = POST MEDIEVAL (5) 1 st ed OS = YES	The extent of a settlement as marked on the 1 st edition 6-inch Ordnance Survey map (1860s).
Late 19 th century settlement	Level1 = SETTLEMENT(7) Date = POST MEDIEVAL (5) 1 st ed OS = NO 2 nd ed OS = YES	Late 19 th century growth where the extent of settlement shown on the 2 nd edition 6-inch Ordnance Survey map (1890s) has changed or grown significantly since the first edition.
20 th century settlement	Level1 = SETTLEMENT (7) Date = 20 th CENTURY (6)	The limit of settlement shown on OS MasterMap, showing growth in the 20 th century. This type can also be subdivided to separate institutions and schools (see below).
Institution	Level1 = INSTITUTIONAL (10) Level2 = PRISON (49) or MEDICAL (13) or CIVIC (55)	Public institutions, including prisons, hospitals and civic buildings.
School	Level1 = INSTITUTIONAL (10) Level2 = SCHOOL (53)	Modern schools, including their playing fields, as depicted on current mapping.

A3.2.9 Water

DESCRIPTION	CRITERIA	DEFINITION
Reservoir	Level1 = WATER (8) Level2 = OPEN WATER (21) Level3 = ARTIFICIAL (146) Level4 = RESERVOIR (71)	Artificial fresh water bodies created for water supply.
Natural Open Water	Level1 = WATER (8) Level2 = OPEN WATER (21) Level3 = NATURAL (109)	Natural bodies of open fresh water.
Artificial lake/pond	Level1 = WATER (8) Level2 = OPEN WATER (21) Level3 = ARTIFICIAL (146) Level4 <> RESERVOIR (71)	Manmade bodies of open fresh water (other than reservoirs) that include lakes, ponds, fisheries, flooded quarries.
River	Level1 = WATER (8) Level2 = RIVER (22)	Natural stream of water flowing in a channel. Only channels wider than 20m have been recorded.
Marsh	Level1 = WATER (8) Level2 = MARSH (32)	An area of ground that is waterlogged throughout the year, it may include bulrushes or reeds as opposed to moss and peat.

A3.2.10 Woodland

DESCRIPTION	CRITERIA	DEFINITION
20 th Century Woodland	Level1 = WOODLAND (9) Level2 = CONIFEROUS (23) or DECIDUOUS (24) or MIXED (25) Level3 <> ANCIENT REPLANTED (159) Date = 20 TH CENTURY (6)	Coniferous, deciduous and mixed woodland that appear only on the 3 rd edition Ordnance Survey map or later.
Later 19 th Century Woodland	Level1 = WOODLAND (9) Level2 = CONIFEROUS (23) or	Coniferous, deciduous, mixed and scrub woodland that appear only on the 2 nd edition

DESCRIPTION	CRITERIA	DEFINITION
	DECIDUOUS (24) or MIXED (25) Level3 <> ANCIENT AND SEMI-NATURAL (158) and <> ANCIENT REPLANTED (159) Date = POST-MEDIEVAL (5) OS 2 nd Edition = YES OS 1 st Edition = NO	Ordnance Survey map or later.
Pre-1860 Woodland	Level1 = WOODLAND (9) Level2 = CONIFEROUS (23) or DECIDUOUS (24) or MIXED (25) Level3 <> ANCIENT AND SEMI-NATURAL (158) and <> ANCIENT REPLANTED (159) or Is NULL Date = POST-MEDIEVAL (5) OS 1 st Edition = YES	Woods that appear on the 1 st edition Ordnance Survey map, which are not classified as Ancient and Semi-Natural Woodland by Natural England.
Ancient Semi-Natural Woodland	Level1 = WOODLAND (9) Level3 = ANCIENT AND SEMI-NATURAL (158)	Primary woodland that has had continuous woodland cover since at least AD1600. Defined by Natural England as 'Ancient Semi-Natural Woodland', that has retained the native tree and shrub cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally.
Ancient replanted woodland	Level1 = WOODLAND (9) Level3 = ANCIENT REPLANTED (159)	Woods where the original native tree cover has been felled and replaced by planting, usually with conifers and usually in the 20th century.
Scrub	Level1 = WOODLAND (9) Level2 = SCRUB (30)	Young woodland, although there are few large areas of scrub in Northumberland because there is little unmanaged land and because of widespread sheep grazing, preventing regeneration.