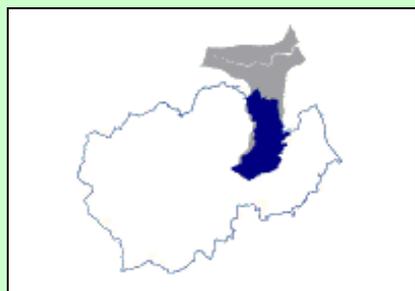


## The Wear Lowlands



- The Wear Lowlands
- The Tyne & Wear Lowlands Countryside Character Area
- County Boundary



### Key characteristics

- A broad lowland valley incised by the meandering River Wear and its tributaries.
- Carboniferous coal measures of sandstones, shales and coal are overlain by thick layers of glacial boulder clays, sands and gravels.
- Gently rolling terraces of open arable and mixed farmland with low hedges and few trees or woodlands occupy much of the valley floor.
- The River Wear and its tributaries lie in steep sided wooded gorges and denes, which open up in places into broad floodplains overlooked by steep bluffs.
- Ancient oak woods are found in denes and gorges and steep floodplain bluffs.
- Parklands and wooded estates surrounding landmark castles and country houses lie along the river corridor.
- A settled landscape with the historic city of Durham at its centre and scattered 'green' villages with buildings of local sandstone with roofs of red clay pan tile or slate.
- Numerous mining or industrial towns and villages of Victorian terraced housing of brick and slate and later estate housing. Large industrial estates fringe the main settlements.
- A long-standing communications corridor carrying major roads, railways and power lines.
- Large areas of land have been opencast for coal or reclaimed from former colliery workings and their landscapes lack maturity.
- A generally broad scale landscape with panoramic views from higher ground in which Durham Cathedral is a notable landmark. In the incised valley of the River Wear the landscape is more enclosed and the scale more intimate.
- A landscape heavily influenced by urban and industrial development with a semi-rural or urban fringe character in places. Elsewhere the landscape has a strongly rural character, often of high scenic value.

## Description

The lowlands of the Wear occupy a broad valley between the limestone escarpment and the spurs of Pennine fringe ridges. The River Wear carves an incised meandering course between steep bluffs and river terraces on the valley floor.

Thinly bedded sandstones, mudstones and coals of the Coal Measures are masked by thick layers of glacial drift which gives rise to a gently rolling terrain. Areas of more undulating topography mark pockets of fluvio-glacial sands and gravels. Post-glacial rivers and streams have cut down into the valley floor, creating narrow steep side gorges and denes. The floodplain of the River Wear is below the general level of the valley floor and bounded in places by steep bluffs. Soils are mostly heavy gleys with areas of lighter brown earths, sands and alluvial soils.

Agricultural land use is mixed but predominantly arable. Hedges tend to be cut low and the pattern of the landscape changes much with the seasons. Hedgerow trees are largely oak and ash and are abundant in places and sparse in others. Most field systems have their origins in town field enclosures of the C16th and C17th and have suffered in varying degrees from field enlargement in the C20th. There is a small surviving area of lowland heath and valley mire at Waldrige Fell.

The incised corridor of the River wear is well wooded. Ancient semi-natural oak woods are found in denes and gorges and on steep floodplain bluffs. Plantations of broadleaves or conifers like pine and larch are found in similar situations, often associated with parkland or estate landscapes. On the valley terraces woodlands are sparse. There are numerous parklands and areas of wooded estate farmland surrounding country houses and castles along the corridor of the Wear. Some are of medieval origins; others were developed in the 18th and 19th centuries.

The cathedral city of Durham occupies a strategic site in the centre of the valley. The settlement pattern is dominated by mining and industrial settlements that have built on, and in most cases entirely replaced, older agricultural villages. Old villages which retain their scale and identity are few - buildings here are typically of local sandstone with clay pan tile or slate roofs. Mining settlements are generally a mixture of 19th century terraced housing of brick and slate and post-war housing estates. Settlement edges are often abrupt or fringed by allotment gardens and pony paddocks. Large industrial estates lie on the edges of the main settlements.

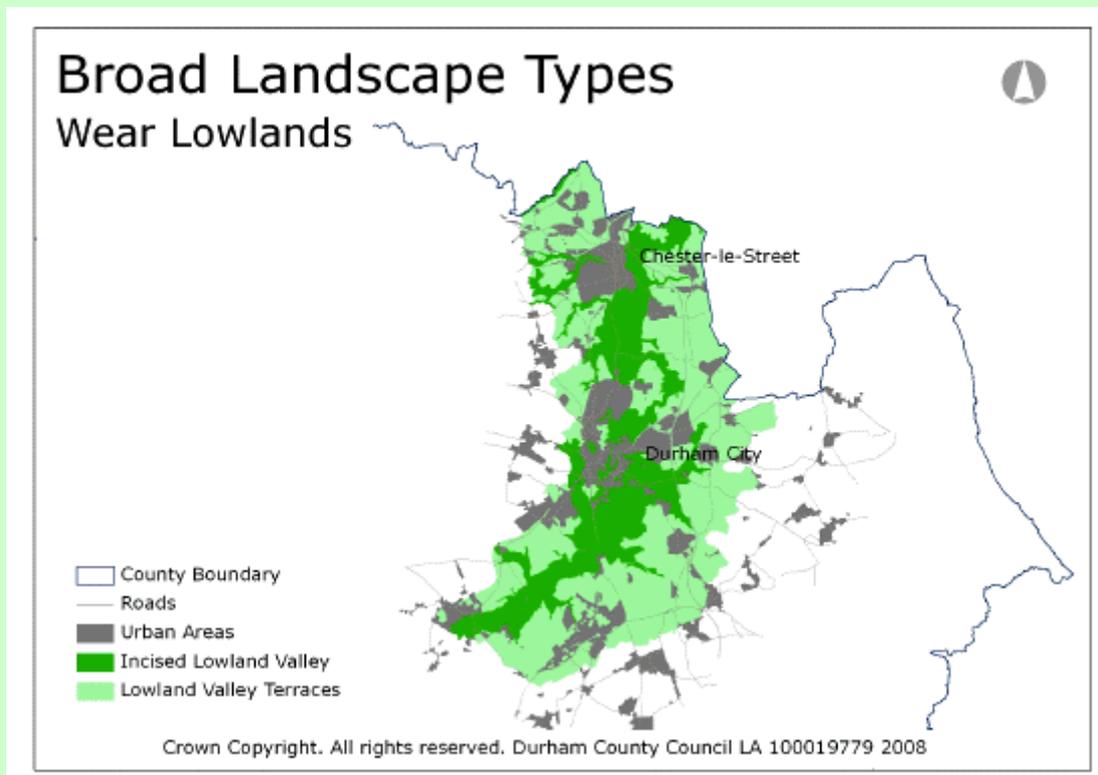
The Wear Lowlands have long been an important communications corridor and carry major infrastructures such as the A1 (M), the east coast main railway line and major transmission lines, together with historic features such as disused railway lines and viaducts. The landscape has been heavily influenced by coal mining. Some elements of the older industrial landscape remain - railway lines, tramways, small waste heaps - but most have been removed by land reclamation in recent years. Opencast mining has had a substantial impact on parts of the landscape. Reclaimed or restored land is often relatively featureless and lacks maturity.

The landscape of the valley is generally broad in scale with panoramic views from higher ground in which Durham Cathedral is a notable landmark. In the heavily wooded incised valley of the River Wear the landscape is more enclosed and the scale more intimate.

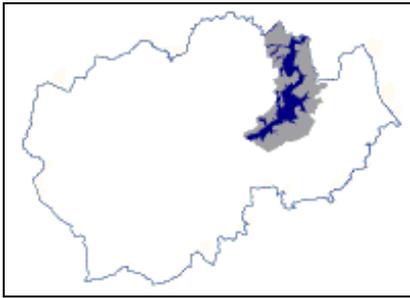
The landscape has been heavily influenced by urban and industrial development and this, together with its well-developed and busy road network, gives it a semi-rural or urban fringe character in places. Elsewhere the landscape has a more rural character, often of high scenic value with numerous ornamental parklands, picturesque views and landmark buildings.

## Broad landscape types

The Wear Lowlands can be broadly divided into those landscapes which are part of the heavily wooded incised valley corridor of the River Wear (**Incised Lowland Valley**) and those which are part of the open rolling farmland terraces to the east and west (**Lowland Valley Terraces**).



## Incised Lowland Valley



- Incised Lowland Valley
- Wear Lowlands
- County Boundary



### Key characteristics

- Incised valley landscape of gorges, denes, river floodplains and steep bluffs.
- Carboniferous rocks are masked by thick deposits of glacial drift.
- Sandstones, shales and thin coal seams outcrop very occasionally in gorges.
- Meandering rivers with alternating riffles and pools.
- Varied soils - alluvial soils, brown sands, and heavy clays.
- Mixed farmland - pasture on steeper ground and arable cropping on floodplains.
- Semi-regular patterns of old enclosures bounded by hawthorn hedges.
- Abundant hedgerow oak, ash, sycamore and beech.
- Heavily wooded – ancient oak woods in river gorges, denes and bluffs.
- Numerous ornamental parklands and areas of wooded estate farmland.
- Occasional older 'green villages' of stone and clay pantile.
- Landmark buildings including Durham Cathedral and Castle.
- Numerous bridges and viaducts from the ancient to the modern.
- An enclosed landscape, intimate in scale, with occasional dramatic vistas.
- A settled but tranquil rural landscape of great scenic quality and a rich cultural heritage.

### Description

The River Wear and its tributaries lie in narrow gorges and denes that open up onto broad floodplains overlooked by steep bluffs. Carboniferous rocks of the coal measures are buried beneath thick layers of glacial drift, laid down over several periods of glaciation. Sandstones, shales and thin coal seams outcrop occasionally in the deeper gorges. Most valleys cut down through boulder clays and sand and gravel beds. Rivers meander across flat alluvial floodplains with alternating riffles and pools, or course over rocky beds in gorges and denes. Soils are heavy clays and lighter brown sands, with alluvial soils on the floodplain haughs.

Agricultural land use tends to reflect the topography, with pasture on steeper ground and arable cropping – mostly of cereals and oil-seed rape - on floodplains and gentler slopes. Field boundaries are hawthorn hedgerows. Field systems are semi-regular in pattern, and most date from the enclosure of the common arable fields, pastures and meadows of older villages in the 1600s and early 1700s.

The landscape is rich in trees with abundant hedgerow ash, oak, sycamore and beech. It is also heavily wooded with ancient oak woodlands in gorges and denes and on the steeper floodplain bluffs. Narrow riparian woodlands of alder and willow follow rivers and streams. The valleys contain numerous ornamental parklands and areas of wooded estate farmland surrounding country houses and castles. Some are of medieval origins; many were developed extended or redesigned in the 18th and 19th centuries.

The valleys were historically worked from villages on the surrounding terraces, but a small number fall within the incised valleys – buildings of stone or brick with roofs of clay pan tile cluster around a central village green. The city of Durham occupies a strategic site on an incised meander, its castle and cathedral important landmarks over much of the valley. The valleys have a long association with the church and contain other ecclesiastical buildings including the ruins of Finchale Priory.

As part of a major north-south communications route the valleys contain many river and valley crossings – bridges from many different periods cross the rivers and railway viaducts span the denes and gorges.

The landscape is intimate and enclosed being both heavily wooded and contained by its topography. There are occasional dramatic vistas across the valleys to landmarks like Durham Cathedral. Although part of a densely settled lowland valley, the incised valleys tend to be relatively tranquil and rural in character, with great scenic qualities and a rich cultural heritage.

## **Broad Character Areas**

The Incised Lowland Valley landscape type is represented by five Broad Character Areas.

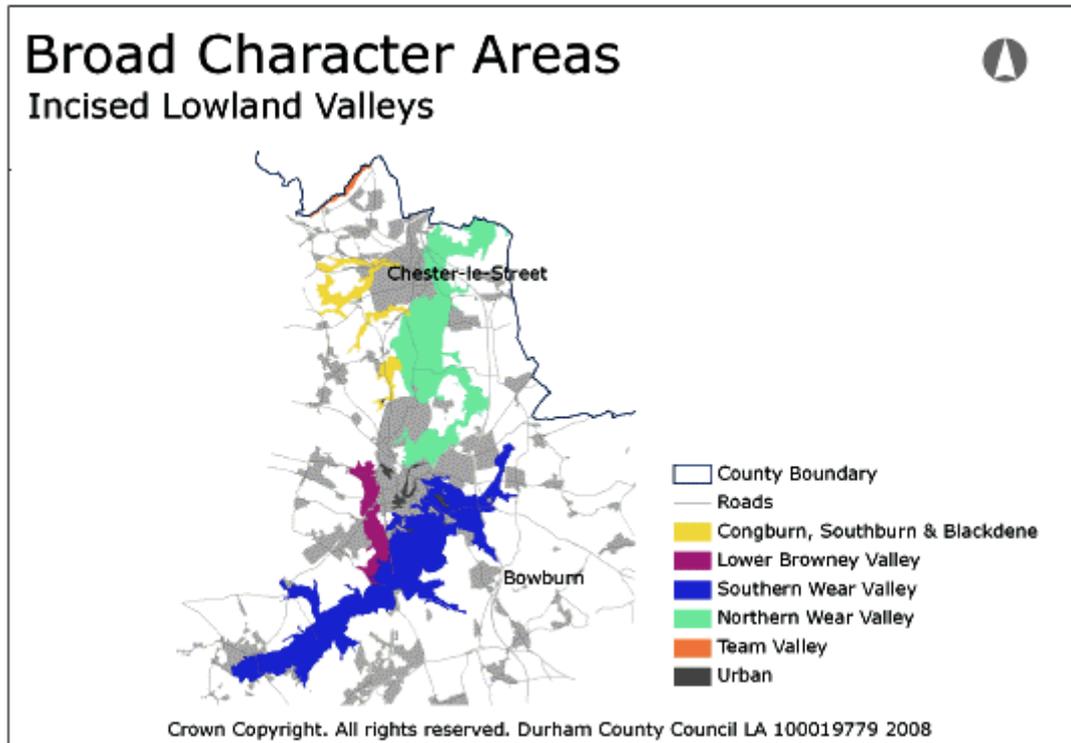
**Congburn, Southburn & Blackdene.** A series of incised wooded denes flowing from the coalfield valleys in the west to the River Wear between open arable farmland of the surrounding river terraces with which they are closely associated. The denes contain ancient oak woodlands, in places replanted with conifers, and some areas of open birch woodland and heath. Parts of the Twizell burn have been affected by mineral workings and contain areas of reclaimed land.

**Lower Browney Valley.** The River Browney carves an incised course in a narrow valley between Durham City and the village of Langley Moor. Steeper valley sides and low bluffs are covered in broadleaved woodlands or pasture with scattered trees and scrub. Tree lines follow the river. Gentler valley slopes and small areas of floodplain are largely arable farmland with low clipped hedges and few hedgerow trees.

**Southern Wear Valley.** The River Wear meanders across a broad floodplain bordered in places by steep wooded bluffs divided by tributary denes. The riverbanks are open, or lined with trees, and occasionally backed by low levees. The open arable farmland of the floodplain is made up of large fields bounded by low clipped hedges with few trees. Wooded parklands at Brancepeth, Whitworth, Croxdale and Burn Hall lie along the edges of the floodplain. Open arable farmland and the parkland of Sherburn Hospital lie in the tributary valleys of the Sherburnhouse and Whitwell becks in the east.

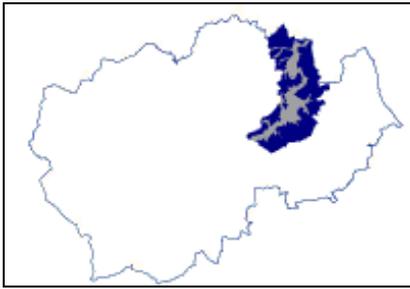
**Northern Wear Valley.** The River Wear lies in deep steep-sided wooded gorges, opening out in places into a broader valley with small areas of floodplain. The valley slopes are largely wooded arable farmland with frequent coniferous and broadleaved plantations, low clipped hedges and scattered hedgerow oak and ash. There are parklands and areas of heavily wooded estate farmland at Lambton Castle and Lumley Castles. The ruins of Finchale Abbey lie in the wooded gorge. Durham City lies to the south of the character area, its castle and

cathedral towering above the wooded gorge which runs through the city. The large town of Chester-le Street lies to the north of the character area, its parks and playing fields spreading onto the floodplain, from where Lumley Castle is a notable landmark.



**Team Valley.** The River Team meanders across a narrow floodplain fringed by low wooded bluffs. The woodlands of the bluffs are ancient oak woods, some of which have been re-planted with conifers. The floodplain is pastoral, with large fields of improved pasture and occasional ponds. In its upper reaches the river lies in the steep sided wooded gorge of Ousbrough woods, its narrow valley floor containing the remains of early water-powered forges.

## Lowland Valley Terraces



- Lowland Valley Terraces
- Wear Lowlands
- County Boundary



### Key characteristics

- Broad lowland valley floor.
- Carboniferous Coal Measures are masked by thick layers of glacial drift.
- Gently rolling topography of boulder clay with areas of more undulating terrain of glacial sands and gravels.
- Heavy, seasonally waterlogged clay soils and lighter brown earths and brown sands.
- Mixed farmland of improved pastures and arable cropping.
- Semi-regular patterns of medium and large-scale fields bounded by low hawthorn hedges.
- Few trees – thinly scattered hedgerow ash, oak and sycamore.
- Isolated fragments of lowland heath and mire.
- Sparsely wooded but with some heavily wooded areas of old parkland and estate farmland. Scattered mining towns and villages connected by busy modern roads. Occasional older 'green' villages
- Opencast coal sites, clay workings and waste disposal sites locally prominent.
- Tracts of immature and relatively featureless reclaimed land. An important communications corridor with motorways, trunk roads, railway lines and overhead transmission lines.
- An open landscape, broad in scale, defined by the Limestone Escarpment to the east and the spurs of the West Durham Coalfield to the west.
- A settled landscape with a semi-rural or urban fringe quality in places.

### Description

Broad lowland valley floor sitting around 40m above the level of the incised River Wear. Rocks of the Carboniferous Coal Measures are buried beneath deep layers of drift laid down over several periods of glaciation. The topography is gently rolling in areas of boulder clay with a generally more undulating terrain associated with areas of fluvio-glacial sands and gravels, and glacial moraines or kames. Watercourses are small and inconspicuous and often straightened to follow field boundaries. Soils are mostly heavy, seasonally waterlogged clays, with areas of lighter brown earths and brown sands in areas of sandier drift.

Agricultural land use is mixed but predominantly arable with a strong emphasis on cereals & oilseed rape. Field boundaries are hawthorn hedgerows – generally cut low but occasionally overgrown and neglected. Field patterns are semi-regular, most dating from the enclosure of the common fields of older villages in the 1600s. There are some areas of more regular 'surveyor enclosed' field systems dating from the enclosure of manorial wastes in the 1700s – often marked by the pace name 'moor'. Field systems are often fragmented by the enlargement of arable fields. There is a single surviving area of lowland heath and mire.

Tree cover is low, with thinly scattered hedgerow ash, oak and sycamore. The landscape is generally sparsely wooded although there are some heavily wooded areas of old parkland and estate farmland with frequent conifer or mixed plantations of pine, larch and beech. Ancient and secondary semi-natural oak birch woods are found in narrow denes or along old railway lines and on former colliery land.

Mining towns and villages are scattered across the valley connected by a well-developed network of busy roads. Most of these have a core of 19<sup>th</sup> century terraced housing of brick or stone and welsh slate surrounded by estates of post-war public housing. Settlement edges are often abrupt or fringed by allotment gardens, pony paddocks and industrial land. This settlement pattern overlies and largely obscures an older network of small agricultural villages that survives in places. These older villages often have a core of buildings of local stone with roofs of clay pan tile set around a central village green.

The landscape has been heavily influenced by deep and opencast coal mining, and the extraction of clays and brickshales. Much of the legacy of the coal industry has been removed by land reclamation in recent years, but persists in the settlement pattern, in the areas of reclaimed colliery land to be found around villages, and in the well-developed network of roads, footpaths, old railway lines and waggonways. Active opencast coal sites, clay workings and waste disposal sites are locally prominent features. There are extensive areas of relatively featureless reclaimed or restored opencast land. The valley terraces have long been an important communications corridor and carry major roads, railway lines and overhead transmission lines.

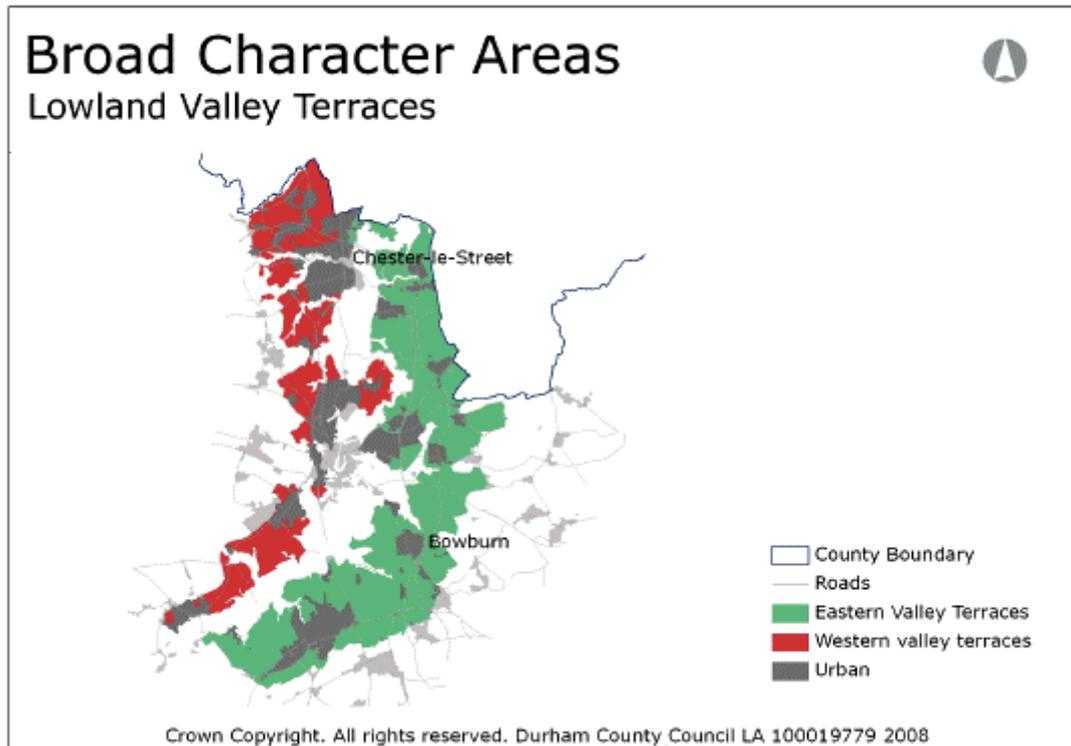
The landscape is typically open in character and broad in scale. The limestone escarpment forms a middle distance horizon to the east, as do the spurs of the West Durham Coalfield to the west. Urban areas are often prominent and Durham Cathedral in its wooded setting is an important component in many views. The landscape has been heavily influenced by urban and industrial development - its scattered mining towns and villages and busy roads give it a semi-rural or urban fringe character in places.

## **Broad Character Areas**

The Lowland Valley Terraces landscape type is represented by two Broad Character Areas.

**The Eastern Valley Terraces.** Gently rolling farmland between the incised valley of the River Wear and the Limestone Escarpment. An open landscape of largely arable farmland with sub-regular patterns of old hedges, fragmented in places, with scattered hedgerow trees and few woodlands. The landscape becomes more wooded towards the Wear where parklands and wooded estates spread onto the terraces at Lambton, Croxdale and Whitworth. The terrace landscape runs up to the escarpment and into the escarpment vales where it becomes more wooded in places, and notable in the former parkland and estate landscapes of Elemore east of Pittingdon. There are large areas of reclaimed colliery land and restored opencast land which contain young hedges, plantations and shelterbelts. Frequent mining towns and villages and the western outskirts of Durham City are connected by a network of busy modern highways and older, narrow, winding lanes. The area is crossed by the A1(M), the east coast main line and the Leamside line, and by major power lines. The escarpment forms a strong horizon to the east.

**The Western Valley Terraces.** Gently rolling or undulating farmland between the incised valley of the Wear and the valleys of the West Durham Coalfield. The terraces are incised by steep-sided wooded denes running to the Wear. Glacial sands and gravels are associated with undulating terrain which has been worked for sand in places and supports lowland heath at Waldrige Fell. An open landscape of largely arable farmland with sub-regular patterns of old hedges, fragmented in places, with scattered hedgerow trees and few woodlands. There are parklands at Brancepeth and smaller relic parklands at Sniperley, Plawsworth and The Hermitage. The landscape is heavily settled with scattered mining villages and the fringes of the larger settlements of Durham and Chester-le-Street spreading westwards onto the valley terraces. Busy roads and the east coast main line cross the area





## Local Landscape Types

Dene pastures

Disturbed land

Floodplain farmland: arable

Floodplain farmland: pasture

Heaths and fells

Infrastructure

Lowland woods

Lowland woods: denes & bluffs

Lowland woods: floodplain & riverside

Mineral working

Nurseries & market gardens

Parkland

Parks and recreation grounds

River: middle reaches

River: lower reaches

Terrace farmland: arable

Terrace farmland: open arable

Terrace farmland: open pasture

Terrace farmland: pasture

Terrace farmland: wooded arable

Terrace farmland: wooded estate arable

Terrace farmland: wooded estate pasture

Terrace farmland: wooded pasture

Urban

Valley farmland: open arable

Valley farmland: open pasture

Valley farmland: open pasture

Valley farmland: wooded arable

Valley farmland: wooded estate arable

Valley farmland: wooded estate pasture

Valley farmland: wooded pasture

## Dene pastures

Incised denes and steeply sloping bluffs of improved or semi-improved pasture or rough grazing. Steeply sloping pastures are often difficult to manage or improve agriculturally and tend to be more diverse than the surrounding farmland. Tree cover is very variable. Hedgerow oak and ash are locally common. Steeper slopes may support areas of bracken, or scrub of hawthorn or gorse.

### Subtypes

#### **Old enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns may be irregular or sub-regular and tend to reflect the underlying topography. Boundaries are typically hedgerows.

#### **Open heath.**

Areas of open, heathy pasture, with bracken and gorse.

#### **Reclaimed land.**

Areas of C20th enclosure following the restoration of mineral workings or the reclamation of derelict land. Field patterns tend to be regular. Boundaries may be hedges or fences and are lacking in mature hedgerow trees.

#### **Surveyor enclosed.**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field patterns are regular grids of hedges or walls which often ignore the underlying topography.

## Disturbed land

A variable type made up largely of abandoned mineral workings and railway lines.

### Subtypes

#### **Old clay pits & gravel workings**

Abandoned clay pits and gravel workings. A variable type but generally comprising ponds or lakes formed from flooded extraction areas surrounded by areas of disturbed ground, rough grassland or secondary woodland. Water bodies tend to be relatively deep and steep-sided with only narrow fringes of marginal vegetation (often reedbed). Secondary woodland and scrub colonising areas of disturbed ground is dominated by pioneer species like birch, alder and goat or grey willow.

#### **Old colliery workings**

Abandoned colliery workings. A variable type but often including areas of bare colliery wastes, rough grassland and scrub or secondary woodland. Structures like coal tipplers, coke ovens, waggonways and derelict buildings survive in places. Acidic colliery spoils often support diverse acid grasslands or heath and secondary woodland or scrub of birch, alder, aspen, hawthorn, gorse and goat willow.

#### **Old railway**

Abandoned railway lines survive as narrow linear features running through other landscapes. Most are made up of alternating cuttings and embankments. Many structures survive along their routes including bridges and viaducts, culverts, tipplers and station platforms. Some associated buildings like station houses and railway cottages have been converted to other uses. Most abandoned lines have been colonised by natural regeneration and support a diverse grassland and woodland flora which reflects the range of naturally occurring or imported

materials found in cuttings and embankments. Pioneer or ruderal species are particularly characteristic. Many old railway lines have been adopted as recreational multi-user routes.

#### **Old sandstone quarry.**

Abandoned sandstone quarry. Typical elements include extraction faces, spoil mounds and haul roads, softened by varying degrees of natural regeneration. Some quarries contain small ponds or larger areas of standing water. Quarry faces are horizontally bedded Carboniferous Sandstone varying in colour from buff to grey. Base-poor sandstone wastes and overburdens often support an acid-loving flora and are typically colonised by pioneer tree and shrub species like birch, alder, goat willow, hawthorn, gorse, broom and dog rose.

### **Floodplain farmland: arable**

Low lying arable farmland on the fertile alluvial soils of the flat 'haughs' of the river floodplains. Fields tend to be large and bounded by hedges or fences, and may be subject to seasonal flooding or protected by artificial levees.

#### **Subtype**

##### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are generally sub-regular and bounded by hedges with occasional hedgerow trees. Smaller fields have often been amalgamated to create large irregular parcels.

##### **Surveyor Enclosed.**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure, usually piecemeal rather than part of larger parliamentary enclosure systems. The relatively small scale of the floodplains, and the loss of boundaries in areas of field amalgamation, means that the regular patterns typical of this period of enclosure rarely occur. Field boundaries are straight but otherwise the subtype differs little from the Old enclosure subtype.

### **Floodplain farmland: pasture**

Low lying pastoral farmland on the flat 'haughs' of the river floodplains including both productive improved pasture and poorly drained or seasonally flooded, wet rushy pasture. Pastures may border directly onto the river or be separated from it by narrow riparian woodlands or fenced, often tree lined, river banks. In places floodplain pastures contain meandering minor watercourses and oxbow lakes, or relics of watermills and associated features. Pastures are generally divided by hedgerows, but in areas subject to regular flooding and more dynamic, shifting watercourses the floodplain may remain open.

#### **Subtype**

##### **Modern field system.**

C20th field system – usually a rationalisation of earlier enclosures. Field patterns tend to be regular. Boundaries may be hedges or fences and are usually lacking in mature hedgerow trees.

##### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are generally sub-regular and bounded by hedges with occasional hedgerow trees.

##### **Parkland.**

Areas of ornamental parkland on the floodplains haughs characterised by the presence of parkland features such as copses and parkland trees. In some areas only a small number of relic features survive.

##### **Reclaimed Land.**

Areas of C20th enclosure following the restoration of mineral workings. Field patterns tend to be regular. Boundaries may be hedges or fences and are lacking in mature hedgerow trees. The landform may have an engineered character.

#### **Surveyor Enclosed.**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. The relatively small scale of the floodplains means that the regular patterns typical of this period of enclosure rarely occur. Field boundaries are straight but otherwise the subtype differs little from the Old enclosure subtype.

### **Heaths and fells**

Areas of lowland and mid-altitude heath and open fell. This very variable type includes both small commons and stunted pastures, areas of parliamentary enclosure in the upland fringes which have reverted to heath, and fragments of heathland vegetation that have survived elsewhere or regenerated naturally on disturbed land.

### **Subtype**

#### **Heath.**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland

#### **Reclaimed fell.**

Heath restored following mineral extraction. Largely dominated by species poor acid grassland.

### **Infrastructure**

A variable local type covering a range of different forms of infrastructure.

### **Subtypes**

#### **Highway**

Only major roads are mapped and only where the scale of development is significant. The Highway subtype therefore covers larger scale cuttings, embankments and interchanges.

#### **Landfill**

Active landfill or other waste management facilities. Most feature voids – usually left from prior mineral extraction – currently being infilled. Tipping activities and litter trap fencing may be prominent.

#### **Military**

A variable type consisting of military installations such as active, dormant or abandoned ordnance dumps and firing ranges.

#### **Railway**

Only major railways are mapped and only where the scale of development is significant. The Railway subtype therefore covers larger scale cuttings, embankments and sidings.

#### **Substation**

Electricity substation. Usually associated with large numbers of overhead transmission lines. Only larger complexes are mapped.

#### **Water treatment works**

Sewerage or water treatment works. Only features in rural or urban fringe situations are mapped; others are

subsumed within the Urban type. Treatment works are typically made up of large concrete reservoirs, water tanks, filtration beds, lagoons, and ancillary buildings. Most are surrounded by security fences.

## Lakes and ponds

A variable type covering a range of natural and man made water bodies.

### Subtypes

#### **Flooded clay pits & gravel workings**

The water bodies of abandoned or restored clay pits, sand and gravel working. Abandoned features tend to have an irregular form with steep bank sides and fairly deep water, surrounded by areas of semi-natural vegetation, rank grassland, secondary woodland and scrub made up of species such as willows, alder and downy birch. Restored water bodies have a more designed form with shallower margins.

#### **Ornamental lake**

Ornamental lakes of parklands and recreation grounds. Only larger features are mapped. Many similar features may be found within the Parkland and Parks and Recreation grounds local types. They typically have a designed but 'naturalistic' shape and may be planted with ornamental or native species depending on their context.

## Lowland woods

A variable type covering the diverse woodlands of lowland valleys, plains and plateaux.

### Subtypes

#### **Ancient woods.**

Ancient semi-natural woodlands. On the base-poor glacial drift that covers much of the lowlands the predominant woodland type is a lowland mixed broadleaved woodland with Common or Sessile Oak the major canopy species (NVC W10). Some Oak-birch woodlands (NVC W16) occur on less fertile sandy soils, and stands of Alder (NVCW5) woodland are found on flushed slopes or wet ground. Some woodlands show signs of having been managed as coppice in the past.

#### **Secondary woods and wood pasture**

Secondary semi-natural woodlands dominated by pioneer species (Birch, Ash, Sycamore, Hawthorn, Sallows, Gorse) that have colonised areas of disturbed land such as railway embankments and colliery tips, or unmanaged pasture or heath.

#### **Plantation.**

Planted woodlands of very variable character, including hardwood plantations of species such as Beech, Oak and Sycamore often planted as part of parkland or estate landscapes, and plantations dominated by softwoods.

## Lowland woods: denes, bluffs & river terraces

Woodlands of incised denes and steeply sloping valley-side or escarpment bluffs. Woodland plant communities are diverse and reflect the range of underlying parent rocks and drift materials that occur – often within a single wood.

### Subtypes

#### **Ancient woods.**

Ancient semi-natural woodlands. On the base-poor glacial drift into which many lowland denes are incised the predominant woodland type is a lowland mixed broadleaved woodland, with Common or Sessile Oak the major

canopy species (NVC W10). Similar woodlands occur on river terrace gravels and rocky gorges on carboniferous sandstones and shales. On poorer soils, and particularly in the west, these woodlands may be transitional in character with upland Oak woods (NVC W11). On the more acidic strata of the coal measures they often occur along-side Oak-birch (NVC 16) communities. On the limestone escarpment, and in the coastal dunes where limestones are exposed, lowland Ash woodland communities (NVC W8) are found, with occasional stands of pure Yew (W13) on the thinnest soils. Ash communities transitional in character with upland Ash woods (NVC W9) are found where carboniferous limestones are exposed in the west. Stands of Alder-Ash woodland (NVC W7) and Alder carr (NVC W5) occur on flushed slopes or waterlogged ground. Some woodlands show signs of having been managed as coppice in the past. Woods on the coal measures often contain relics of drift mining – pit-falls, waggonways and small spoil mounds. Some dune woods also contain relics of small scale quarrying activities.

#### **Modified ancient woods.**

This subtype includes re-planted ancient woodland sites and ancient woods that have been heavily modified by the introduction of commercial or exotic species, or species not native to the locality.

#### **Secondary woods and wood pastures.**

Secondary semi-natural woodlands dominated by pioneer species (Birch, Ash, Sycamore, Hawthorn, Sallows, Gorse) that have colonised areas of disturbed land such as railway embankments and colliery tips, or unmanaged pasture or heath.

#### **Old wood pastures.**

Ancient woodlands that have long been managed as wood pasture. A mosaic of open woodland, scrub and neutral grassland containing ancient and veteran trees.

#### **Plantation.**

Planted woodlands of very variable character, including hardwood plantations of species such as Beech, Oak and Sycamore often planted as part of parkland or estate landscapes, and plantations dominated by softwoods – some planted historically for pit-wood, others under taxation incentives in the late C20th or as part of the reclamation of derelict land and opencast coal workings

### **Lowland woods: floodplain & riverside**

Narrow corridors of woodland on riverbanks and river terraces, usually semi-natural in character and made up of native species, particularly Oak, Ash, Alder, Aspen, Birch and Willows. Many are ancient woods; others are secondary semi-natural woods that have followed the shifting course of the river.

### **Subtypes**

#### **Ancient woods.**

Ancient semi-natural woodlands. The predominant woodland type on drier ground is a lowland mixed broadleaved woodland with Common or Sessile Oak the major canopy species (NVC W10), with Alder-Ash (NVC W7) and Alder (NVC W6, W5) woodlands on wetter ground and washlands.

#### **Modified ancient woods.**

This subtype includes re-planted ancient woodland sites and ancient woods that have been heavily modified by the introduction of commercial or exotic species, or species not native to the locality.

#### **Secondary woods & wood pastures**

Secondary semi-natural woodlands, often containing similar species to ancient woods, but which have naturally colonised the shifting riverbank environment and are therefore dominated more by pioneers like Alder, Aspen, Birches and Willows.

#### **Plantation.**

A variable subtype of planted woodlands including old broadleaved plantations, softwood plantations, poplar plantations and more recent new native woodlands on river floodplains and carrs.

### **Mineral working**

A diverse type made up of active or dormant mineral workings ranging from hard-rock quarries to opencast coal sites, gravel pits and clay workings. Typical common elements include extraction voids and faces, soil mounds, overburden and waste heaps, haul roads, buildings and processing plant.

#### **Subtypes**

##### **Clay pit**

Clay pits worked for brick-shales and fireclays, and usually associated with adjoining brickworks. Extraction areas tend to be deep voids with steeply sloping sides of grey clays, mudstones and sandstones. There are usually large un-vegetated materials stockpiles either within the void or on adjacent land. The neutral or base poor clays, overburdens and wastes may support areas of diverse acid or neutral grassland and secondary woodland or scrub of birch, alder, aspen, hawthorn, gorse and goat willow where they have been undisturbed.

### **Nurseries and Market gardens**

Commercial nurseries, garden centres and market gardens, typically including extensive areas of greenhouses, car parking and storage areas. Some include areas of intensive horticulture, growing trees, herbaceous plants or fruit bushes.

### **Parkland**

The designed landscapes of ornamental parks typically include formal gardens together with larger areas of open pastoral parkland. Veteran native and exotic trees are scattered across the park or arranged in formal avenues. Clumps of trees, copses and larger woodlands are deployed for their aesthetic effect. Other ornamental features – lakes, ponds, cascades and follies may be present. Buildings – gatehouses, lodges and farms – are typically designed in a formal style to compliment the main house. The park may be visually open, often with boundary ha-ha's to maintain an open character, or enclosed by boundary fences or hedges and particularly in areas away from the parkland core. The park as a whole is often bounded by a high mortared stone wall.

#### **Subtypes**

##### **Enclosed parkland arable.**

Enclosed ornamental farmland currently in arable use. Parkland trees may survive as isolated features within the crop. The parkland character often survives largely in the woodland pattern.

##### **Enclosed parkland pasture.**

Enclosed ornamental farmland currently under pasture. Field systems may date from earlier enclosures or may be contemporary with the layout of the park. The parkland character often survives largely in the woodland pattern although field or avenue trees may also be present.

##### **Golf course.**

Older parkland developed as a golf course. Parkland features survive along side familiar elements of the modern golf course – bunkers, greens, fairways, roughs and ponds – as well as new tree planting usually of a ‘parkland’ character.

**Open parkland arable.**

Open parkland currently in arable use. Few parkland features other than the larger woodland pattern and occasional isolated trees usually survive

**Open parkland pasture.**

Open pastoral parkland. grasslands may be improved or semi-improved and often contain relics of the medieval landscape including rig and furrow and building platforms. Veteran parkland trees – both native and exotic - are scattered across the parkland, sometimes in great numbers. Other parkland relics – avenues, ornamental water bodies, small copses, ha-has etc may be present.

**Ornamental gardens.**

Ornamental gardens are very diverse but often include walled vegetable gardens, bordered walks and formal parterres.

## Parks & Recreation Grounds

A varied type incorporating a large range of recreational landscapes.

### Subtypes

**Allotment gardens.**

Allotment gardens vary in character but are typically laid out in regular plots which may be open or surrounded by individual fences. Some allotments contain many buildings & structures – sheds, greenhouses, poultry houses, frames etc – often made out of reclaimed materials.

**Caravan sites.**

Permanent caravan sites, sometimes with touring pitches. Often located within areas of woodland. Most contain a permanent infrastructure of roadways and service buildings.

**Churchyards, cemeteries & crematoria.**

The designed amenity landscapes of churchyards, cemeteries and crematoria.

**Golf courses.**

Extensive areas of amenity grassland with bunkers, greens, fairways, roughs and ponds with individual trees, tree groups and copses in varying degrees of maturity. Some contain elements surviving from the previous landscape – veteran trees, hedgerows and woodlands, or fragments of heath.

**Monuments.**

Ancient monuments and their grounds - usually including areas of amenity grassland, car parks and other facilities.

**Playing fields & urban green space.**

Open spaces of amenity grassland including sports pitches and areas of informal public open space.

## River: middle reaches

The middle reaches of major rivers meandering across narrow floodplains or running through incised denes or larger gorges. Where they cross floodplains the river banks are fenced from the adjacent farmland which is occasionally protected by low artificial levees. The river banks are often lined with narrow Riverside woods.

## Subtypes

### **Oxbow lake.**

Oxbow lakes cut off from the main watercourse and usually heavily vegetated with emergent aquatic plants like Reedmace.

### **River.**

Rapidly flowing watercourses with alternating pools and riffles, shingle banks and occasional islands.

### **River bank.**

River banks fenced from adjacent pasture, or left unfenced from adjacent arable, support rough unmanaged grassland with native riverside species like Butterbur and, in places, introduced species like Himalayan Balsam, Giant Hogweed and Japanese Knotweed. Bank side trees - Crack Willow, White Willow, Purple Willow, Alder – are common. River banks may be engineered in places, occasionally with low flood-protection levees.

## River: lower reaches

The lower reaches of major rivers meandering across narrow floodplains, protected in places by low artificial levees. The river banks are often lined with trees or narrow Riverside woods.

## Subtypes

### **River.**

Generally sluggish and meandering watercourses. Below the tidal limit the river is flanked by mud banks exposed at low tide.

### **River bank.**

River banks fenced from adjacent pasture, or left unfenced from adjacent arable, support rough unmanaged grassland with native riverside species like Butterbur and, in places, introduced species like Himalayan Balsam, Giant Hogweed and Japanese Knotweed. Bank side trees - Crack Willow, White Willow, Purple Willow, Alder – are common. River banks may be engineered in places, occasionally with low flood-protection levees.

## Terrace farmland: open arable

Open, rolling or undulating arable farmland. Fields are often large and bounded by low clipped thorn hedges. Hedgerow trees are absent or infrequent.

## Subtypes

### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are sub-regular but often disrupted by field amalgamations.

### **Reclaimed Land.**

Areas of C20th enclosure following the restoration of mineral workings. Field patterns are regular and geometric.

### **Surveyor Enclosed.**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field boundaries are straight and field patterns are regular grids, often disrupted by field amalgamations.

### Terrace farmland: open pasture

Open, rolling or undulating farmland of improved pasture. Fields are often large and bounded by low clipped thorn hedges or wire fences. Hedgerow trees are absent or infrequent.

#### Subtypes

##### **Modern field system.**

C20th field system – usually a rationalisation of earlier enclosures. Field patterns tend to be regular. Boundaries may be hedges or fences and are usually lacking in mature hedgerow trees.

##### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are sub-regular but often disrupted by boundary loss.

##### **Reclaimed Land.**

Areas of C20th enclosure following the restoration of mineral workings. Field patterns are regular and geometric.

##### **Surveyor Enclosed.**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field boundaries are straight and field patterns are regular grids, often disrupted by boundary loss.

### Terrace farmland: pasture

Rolling or gently undulating farmland of improved pasture with some pockets of less improved pasture, often associated with areas of relic rig and furrow. Field systems are generally sub-regular enclosures of early post-medieval origins. Field boundaries are clipped or overgrown hedges, usually dominated by hawthorn, in which hedgerow Ash, Oak and Sycamore trees are common.

#### Subtypes

##### **Old Enclosure.**

The type.

##### **Surveyor Enclosed.**

Areas of 20th century enclosure. Field boundaries are straight and field patterns are regular grids of hedges with no trees. Relics of medieval rig & furrow are found locally.

### Terrace farmland: wooded arable

Rolling wooded arable farmland. Fields are bounded by low clipped hawthorn hedges. The pattern of woodland is variable though generally this type gets its wooded feel from the woods of denes and riverside bluffs it borders onto.

#### Subtypes

##### **Modern field system.**

C20th field system – usually a rationalisation of earlier enclosures. Field patterns tend to be regular. Boundaries may be hedges or fences and are usually lacking in mature hedgerow trees.

##### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are sub-regular, locally disrupted by field amalgamations. There may be scattered hedgerow ash, oak or sycamore.

**Reclaimed Land.**

Areas of C20th enclosure following the restoration of mineral workings. Field patterns are regular and geometric. There may be small linear coniferous shelterbelts and field corner copses. There are no mature hedgerow trees.

**Surveyor Enclosed.**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field boundaries are straight and field patterns are regular grids, locally disrupted by field amalgamations. There are few hedgerow trees

### Terrace farmland: wooded estate arable

Rolling wooded arable estate farmland of the lowland valley terraces. Fields are bounded by trimmed hedges or estate fencing, or border onto woodlands. Small copses, spinneys and shelterbelts are common along with other elements of the estate landscape: designed farmsteads, lodges, gatehouses, mortared stone walls and entrance gates.

#### Subtypes

**Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are sub-regular with scattered hedgerow ash, oak or sycamore.

**Reclaimed Land.**

Areas of C20th enclosure following the restoration of mineral workings. Field patterns are regular and geometric. There may be small linear coniferous shelterbelts and field corner copses. There are no mature hedgerow trees.

### Terrace farmland: wooded estate pasture

Rolling wooded pastoral estate farmland of the lowland valley terraces. Fields are bounded by trimmed hedges or estate fencing, or border onto woodlands. Small copses, spinneys and shelterbelts are common along with other elements of the estate landscape: designed farmsteads, lodges, gatehouses, mortared stone walls and entrance gates. Areas of older rig and furrow may survive in less improved pastures.

#### Subtypes

**Modern field system.**

C20th field system – usually a rationalisation of earlier enclosures. Field patterns tend to be regular. Boundaries may be hedges or fences and are usually lacking in mature hedgerow trees.

**Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are generally sub-regular. Field boundaries are hedgerows, usually dominated by hawthorn. Mature hedgerow or parkland trees occur locally

**Surveyor Enclosed.**

Areas of late, 18th or 19th century enclosure. Field boundaries are straight and field patterns are regular. Mature hedgerow or parkland trees occur locally.

**Reclaimed Land.**

Areas restored following C20th opencast coal mining. Field patterns are regular and geometric. Fields are

bounded by young hedges or wire fences. There may be small linear coniferous shelterbelts and field corner copses. There are no mature hedgerow trees.

### Terrace farmland: wooded pasture

Rolling wooded farmland of improved pasture with occasional older semi-improved pasture, often associated with areas of relic rig and furrow. Fields are bounded by hawthorn hedges – generally trimmed but locally tall and overgrown. The pattern of woodland is variable though generally this type gets its wooded feel from the woods of denes and riverside bluffs it borders onto.

### Subtypes

#### Old Enclosure.

Areas of early, often piecemeal, enclosure. Field patterns are sub-regular, locally disrupted by boundary loss. There may be scattered hedgerow ash, oak or sycamore and areas of relic rig and furrow.

#### Reclaimed Land.

Areas of C20th enclosure following the restoration of mineral workings. Field patterns are regular and geometric. There may be small linear coniferous shelterbelts and field corner copses. There are no mature hedgerow trees.

#### Surveyor Enclosed.

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field boundaries are straight and field patterns are regular grids, locally disrupted by boundary loss. Hedgerow trees are scarce.

### Urban

A variable type which covers a broad range of urban development - housing, industry, retail and commerce, community facilities and public open space. The landscape character assessment does not identify variations in character within the urban landscape at any level of detail but does identify a small number of basic subtypes.

### Subtypes

#### Industrial and retail estates

Industrial and retail estates typically have a planned layout, often with significant areas of structure planting and amenity planting. Buildings are generally large in scale and industrial in character. There may be significant areas of open operation land or vacant land awaiting development. Smaller areas of land in industrial or commercial use are generally subsumed within the Urban subtype.

#### Gypsy and traveller site

Small developments, often in rural or urban-fringe locations, with a planned layout of roads, hard-standings and utility blocks.

#### Institutions

A variable subtype including schools, hospitals, colleges and other institutions in rural situations. Large individual buildings or building complexes set in areas of open green space and amenity planting.

#### Urban

The type. Urban land including built development, gardens and public open spaces together with areas of recreational land (unless separately identified as **Parks & recreation grounds local landscape type**) and industrial/ commercial land (unless separately identified as **Industrial and retail estates** subtype).

### Valley farmland: open arable

Open arable farmland on the heavy clay soils of the valley landscapes of the exposed coal measures. Fields are often large and bounded by low clipped thorn hedges, or, more rarely, dry stone walls. Hedgerow trees are absent or infrequent.

#### Subtypes

##### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are generally sub-regular but disrupted in places by field amalgamations.

##### **Reclaimed Land.**

Areas of C20th enclosure following the restoration of mineral workings. Field patterns are regular and geometric.

##### **Surveyor Enclosed.**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field boundaries are straight and field patterns are regular grids, disrupted in places by field amalgamations.

### Valley farmland: open pasture

Open pastoral farmland of the coalfield valleys. Large fields of improved pasture with some pockets of semi-improved pasture or rough grazing, occasionally with patchy gorse or hawthorn scrub. Field boundaries are typically species poor hawthorn hedges, or a mixture of hedges and fences. Hedges are often sparse and overgrown or grazed through and supplemented by wire fences. Hedgerow trees are absent or infrequent. Patches of rigg & furrow survive from medieval agriculture and later periods of improvement. Small field ponds, some being 'subsidence flashes' caused by underground workings, are fairly common.

#### Subtypes

##### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field systems are generally sub-regular although the pattern has often been disrupted by the removal or decline of hedgerows.

##### **Surveyor Enclosed.**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field boundaries are straight and field systems regular although the pattern has often been disrupted by the removal or decline of hedgerows.

### Valley farmland: wooded arable

Wooded arable farmland of the valley landscapes of the exposed coal measures. Fields are bounded by low hawthorn hedges or border onto woodlands. The pattern of woodland is very variable, being typically a combination of small ancient broadleaved woodlands in narrow denes and along watercourses, and larger blocky plantation of mixed or coniferous species.

#### Subtypes

##### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are generally sub-regular but disrupted in places by field amalgamations. Field boundaries are trimmed hedgerows, usually dominated by hawthorn but sometimes more diverse, with scattered hedgerow ash and oak.

### **Reclaimed Land.**

Areas restored following opencast coal mining. Field patterns are regular and geometric. Fields are bounded by young hedges or wire fences with few hedgerow trees.

### **Surveyor Enclosed.**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field boundaries are straight and field patterns are regular grids of trimmed hawthorn hedges, occasionally walls, disrupted in places by field amalgamations. Hedgerow trees are scarce.

### **Valley farmland: wooded estate arable**

Wooded arable estate farmland of the valley landscapes of the exposed coal measures. Fields are bounded by trimmed hedges or estate fencing, or border onto woodlands. Small copses, spinneys and shelterbelts are common along with other elements of the estate landscape: designed farmsteads, lodges, gatehouses, mortared stone walls and entrance gates.

### **Subtypes**

#### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are generally sub-regular but disrupted in places by field amalgamations. Field boundaries are trimmed hedgerows, usually dominated by hawthorn but sometimes more diverse, with scattered hedgerow ash and oak.

### **Valley farmland: wooded estate pasture**

Wooded pastoral estate farmland of the valley landscapes of the exposed coal measures. Fields are bounded by trimmed hedges or estate fencing, or border onto woodlands. Small copses, spinneys and shelterbelts are common along with other elements of the estate landscape: designed farmsteads, lodges, gatehouses, mortared stone walls and entrance gates. Areas of older rig and furrow may survive in less improved pastures.

### **Subtypes**

#### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are generally sub-regular. Field boundaries are hedgerows, usually dominated by hawthorn. Mature hedgerow or parkland trees occur locally

### **Reclaimed Land.**

Areas restored following opencast coal mining. Field patterns are regular and geometric. Fields are bounded by young hedges or wire fences with few hedgerow trees.

### **Valley farmland: wooded pasture**

Wooded pastoral farmland of the valley landscapes of the exposed coal measures. Fields are bounded by hedges, often tall and overgrown, or dry stone walls. The pattern of woodland is very variable, being typically a combination of small ancient broadleaved woodlands in narrow denes and along watercourses, and larger blocky plantation of mixed or coniferous species.

### **Subtypes**

#### **Modern field system.**

C20th field system – usually a rationalisation of earlier enclosures. Field patterns tend to be regular. Boundaries may be hedges or fences and are usually lacking in mature hedgerow trees.

**Old Enclosure.**

Areas of early, often piecemeal, enclosure. Field patterns are generally sub-regular. Field boundaries are hedgerows, usually dominated by hawthorn, or dry stone walls with scattered (locally abundant) hedgerow oak and ash. Areas of rig and furrow may survive in less improved pastures.

**Surveyor Enclosed.**

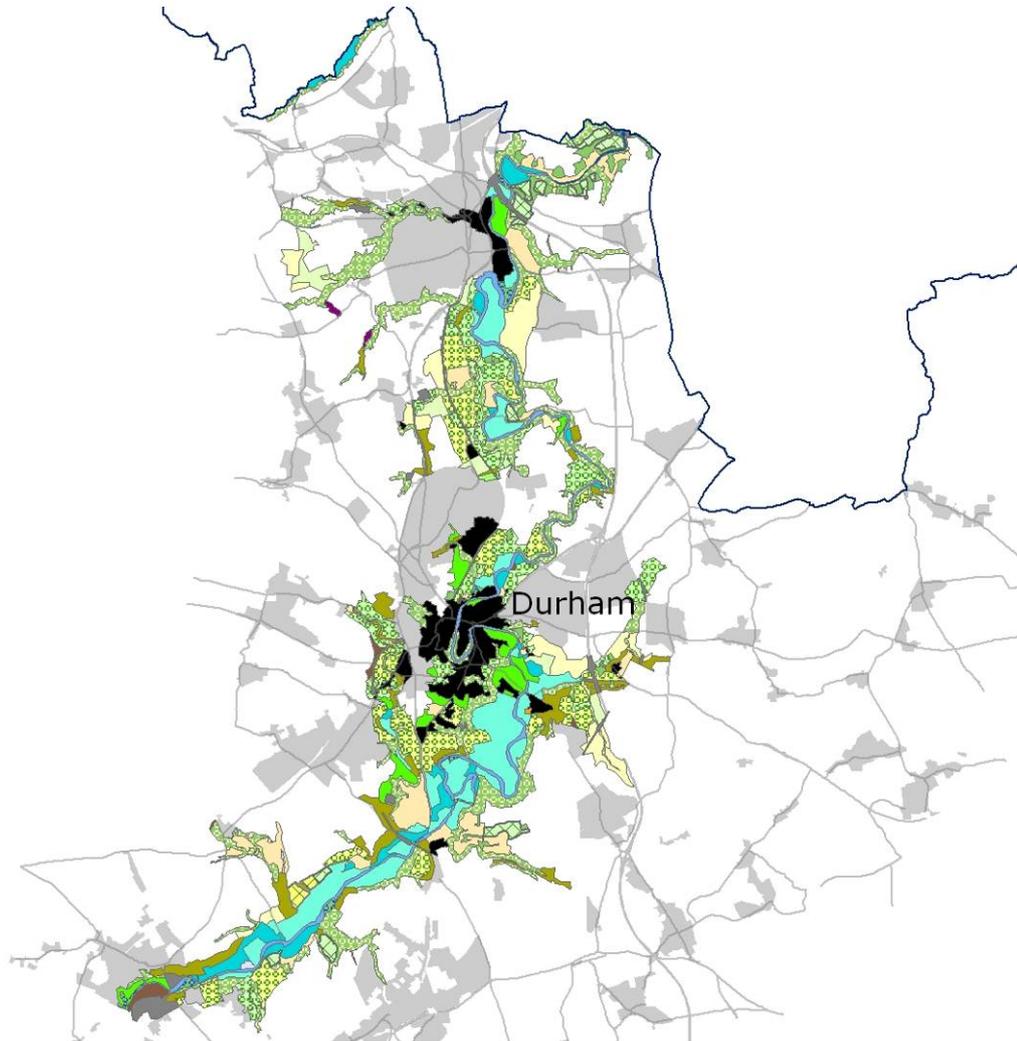
Areas of late, 18th or 19th century enclosure. Field boundaries are straight and field patterns are regular grids of hedgerows or walls with occasional hedgerow trees.

**Reclaimed Land.**

Areas restored following opencast coal mining. Field patterns are regular and geometric. Fields are bounded by young hedges, wire fences or new dry stone walls with few hedgerow trees. Small shelterbelts and copses, often of softwoods, are common.

# Local Landscape Types

## Incised Lowlands

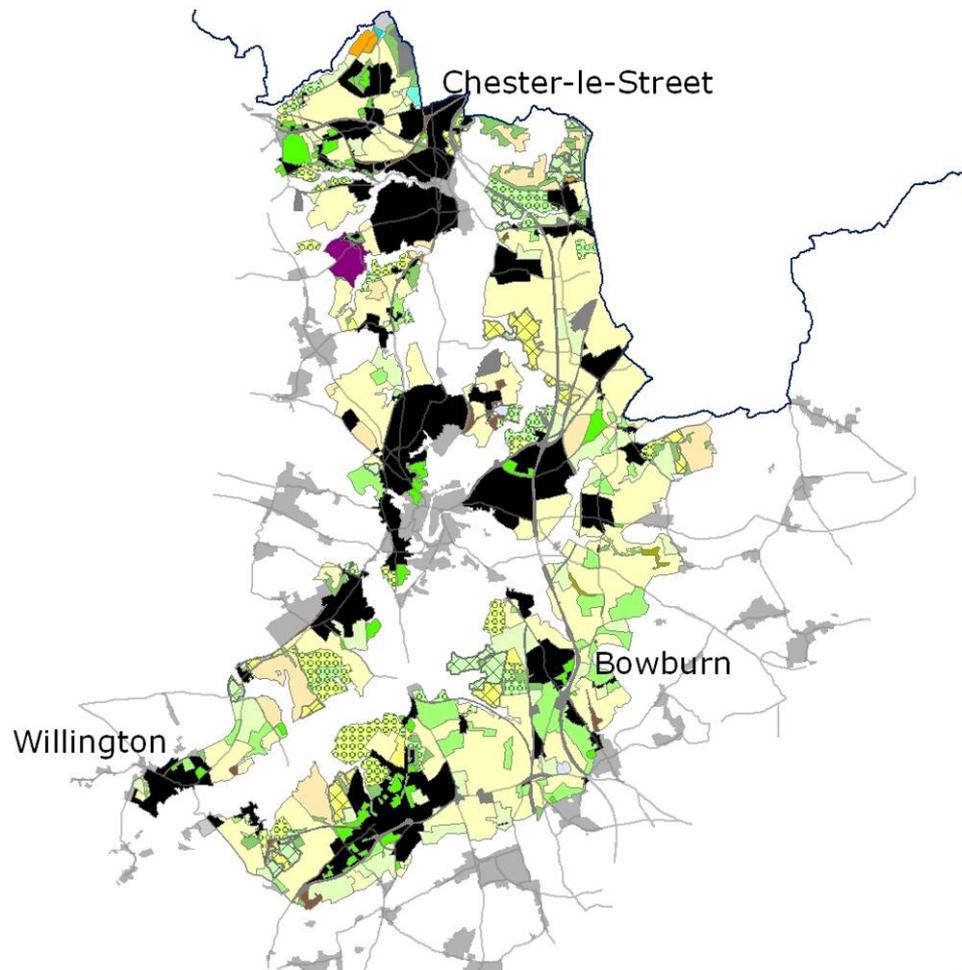


- |                               |  |
|-------------------------------|--|
| County Boundary               | Lowland woods: floodplain & riverside  |
| Settlements                   | Nurseries & market gardens             |
| Roads                         | Parkland                               |
| Urban                         | Parks & recreation grounds             |
| Infrastructure                | River: lower reaches                   |
| Mineral working               | River: middle reaches                  |
| Disturbed land                | Valley farmland: open arable           |
| Dene pastures                 | Valley farmland: open pasture          |
| Floodplain farmland: arable   | Valley farmland: pasture               |
| Floodplain farmland: pasture  | Valley farmland: wooded arable         |
| Heaths & fells                | Valley farmland: wooded estate arable  |
| Lakes & ponds                 | Valley farmland: wooded estate pasture |
| Lowland woods                 | Valley farmland: wooded pasture        |
| Lowland woods: denes & bluffs |  |

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# Local Landscape Types

## Lowland Valley Terraces



- |                               |   |
|-------------------------------|---|
| County Boundary               | Nurseries & market gardens              |
| Roads                         | Parkland                                |
| Settlements                   | Parks & recreation grounds              |
| Urban                         | Terrace farmland: arable                |
| Floodplain farmland: pasture  | Terrace farmland: open arable           |
| Floodplain farmland: arable   | Terrace farmland: open pasture          |
| Infrastructure                | Terrace farmland: pasture               |
| Disturbed land                | Terrace farmland: walled pasture        |
| Mineral working               | Terrace farmland: wooded pasture        |
| Dene pastures                 | Terrace farmland: wooded arable         |
| Heaths & fells                | Terrace farmland: wooded estate arable  |
| Lakes & ponds                 | Terrace farmland: wooded estate pasture |
| Lowland woods                 | Terrace farmland: wooded pasture        |
| Lowland woods: denes & bluffs |   |

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