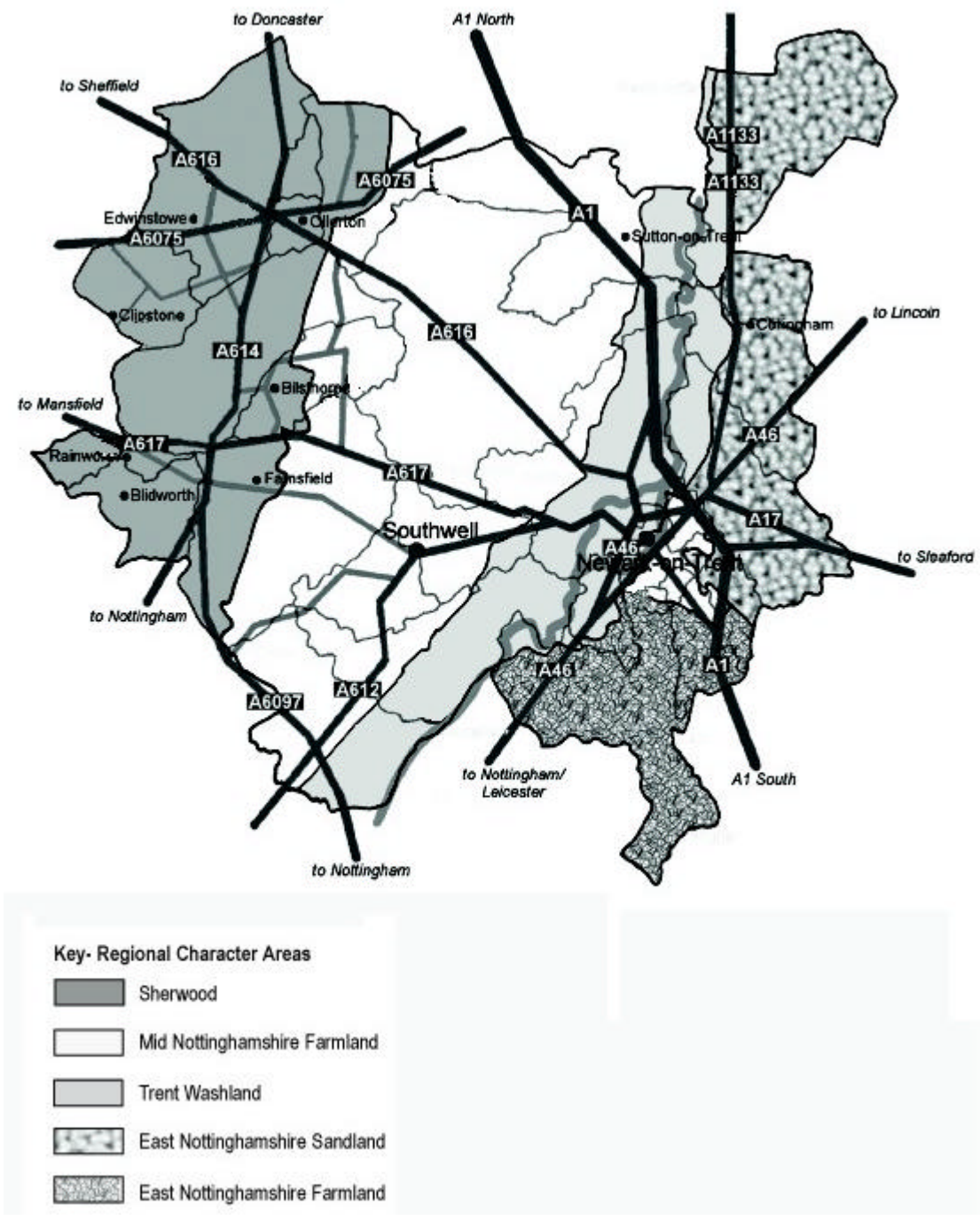
The Regional Character Areas of Newark and Sherwood District

The District contains 5 Regional Character Areas: The Mid Nottinghamshire Farmlands; The Trent Washlands; The East Nottinghamshire Sandlands; The South Nottinghamshire Farmlands; Sherwood



The Mid Nottinghamshire Farmlands Regional Character Area

The Mid Nottinghamshire Farmlands form a broad band running north-south up the centre of the District, between the Sherwood RCA (to the west) and the Trent Washlands RCA (to the east).

River Greet, nr Southwell, Credit : Nottinghamshire Wildlife Trust

The underlying rocks of this RCA comprise Waterstones and Mercia Mudstone (formerly Keuper Marl). The latter sometimes having bands of skerry (hard sandstone) associated with it. A well marked scarp slope overlooks the Sherwood NA, whilst the low, rolling topography of the rest of the RCA dips gently to the east. This geology gives rise to mainly dark brown stoney clay loam or clay soils. Tongues of river alluvium are found in the beck valleys and stoney soils are found where the skerries come close to the surface.

The Countryside Appraisal describes this RCA as an area of undulating landscape with a distinctively rural agricultural character. Arable farming is the predominant land use on the clay soils with the exception of the area south of Southwell where mixed farming prevails. Where the farming practice is intensively arable, cereal field margins and hedgerows are the most significant biodiversity features, providing habitat for farmland birds such as grey partridge, yellow hammer, bullfinch and linnet; for invertebrates, especially butterflies and for mammal species such as bats and harvest mouse.

Generally, the RCA has a well wooded character generated by the numerous small–medium sized mixed and deciduous woodlands, a relatively intact hedgerow pattern, scattered pockets of parkland (e.g. Norwood in Southwell), hedgerow trees and the tree–lined becks and dumble streams, which drain the area from west to east.

Many of the woodlands, including the narrow, linear woodlands associated with the dumble streams (e.g. Halloughton Dumble e.g. Westhorpe Dumble) are ancient in origin. There is also a relatively high proportion of ancient hedgerows, particularly along country roads and green lanes. Bluebell, yellow archangel, ramsons, dog's mercury and sweet woodruff are typical ancient woodland indicator species found in these woodlands and hedgerows. More rare ancient woodland groundflora of the RCA includes herb paris, greater butterfly orchid and wood vetch. These woodlands are an important habitat for a range of fauna, especially invertebrates, birds and mammals.

Duke's Wood, Credit : Nottinghamshire Wildlife Trust

The wooded character of this RCA is reflected in its Site of Special Scientific Interest coverage (Figure 5). Kirton Wood SSSI, Wellow Park Wood SSSI, Redgate Woods and Mansey Common SSSI, Mather Wood SSSI and Roe Wood SSSI all support ancient woodland of national importance.

Eakring Meadows SSSI,, Credit : Nottinghamshire Wildlife Trust

The other two SSSIs of the RCA (in the District) are both nationally important grasslands: Laxton Sykes SSSI and Eakring and Maplebeck Meadows SSSI. Redgate Woods and Mansey Common SSSI also supports valuable grassland. This reflects another main feature of importance within this RCA, which is unimproved neutral grassland. This feature was once widespread before arable agriculture became so dominant in the second half of the 20th Century. What remains is often associated with water course corridors, where problems with drainage and or topography have prevented agricultural improvement. Characteristic species include: cowslip, hayrattle, oxeye daisy and sweet vernal grass. Specialities include: adder's tongue fern, common spotted orchid and, in wetter areas, southern marsh orchid. These grasslands are also often very valuable invertebrate and bird habitat.

Three of the seven SSSIs are owned/ managed by the Nottinghamshire Wildlife Trust. The rest are in other private ownership.

A fairly wide range of common species and some of the species on the LBAP list of species of conservation concern are known to occur across the RCA. All 12 of the selected key biodiversity species (refer to Box 3) are likely to have been recorded in the RCA at some point. The species selected in the table below are those which occur more frequently and which can be used as indicators of the health of the key habitat features.

Key Biodiversity Features of the Mid-Nottinghamshire Farmlands RCA

(a) Habitats

Habitat	***Status***
Mixed Ash Woodland	LBAP
Unimproved neutral grassland	UKBAP & LBAP
Rivers and Streams	LBAP
Ancient species-rich hedgerows	UKBAP
Cereal field margins	UKBAP

(b) Species

Species	***Status***
Water vole	UKBAP and LBAP
Bats (some species)	UKBAP and LBAP
Brown hare	UKBAP
Barn owl	LBAP
Bullfinch	UKBAP

The Trent Washlands Regional Character Area

The Trent Washlands RCA is essentially the River Trent and its valley, running northwards through the eastern half of the district. The Mid Nottinghamshire Farmlands RCA borders the Trent Washlands to the west with the East Nottinghamshire Sandlands RCA to the East.

The Trent Valley is an average of 2-3 kilometres wide through the District. Upstream from Newark there are stretches of old degraded river bluffs and in places steep, wooded river cliffs are a feature rising above the otherwise flat alluvial floodplain and shallow terraces. Downstream from Newark the RCA broadens out and as it gets further north is virtually indiscernible in terms of topography from the adjacent RCAs.

River Trent at Farndon, Credit : Nottinghamshire Wildife Trust

The larger and more extensive terraces flanking the river corridor downstream of Newark comprise deep permeable sandy and coarse sandy soils in glaciofluvial drift. The alluvial soils of the Trent Valley are mottled clay and clay loam soils, developed in greyish and brownish alluvium.

The River Trent (and its tributaries) is obviously the major feature within this RCA and it is of national importance. The River is tidal as far down as Cromwell Lock and a number of coastal species, including a common seal have been recorded.

Otter and water vole used to be reasonably widespread along the river and its tributaries but declined dramatically in the latter part of the last century, to extinction in the case of the otter. There have been a few records of the otter visiting the Trent again in recent years but no breeding records. The breeding water vole population did not disappear altogether but it is still a shadow of its former extent.

The river is a nationally significant migratory corridor for a range of waders and wildfowl as well as providing permanent habitat for such species as kingfisher and heron. Salmon and barbel used to be features of the river when it was higher quality than it is today. Rudd, roach and pike now characterise its fish population.

A band of riverside grassland remains in places but this is just a remnant of its former coverage and it has generally been subject to agricultural improvement. In places it is separated from the river by high flood banks and only a comparatively small area is subject to regular seasonal flooding. This grassland tends to be low in species diversity but is important for foraging and breeding waders (e.g. redshank, lapwing and snipe) and wildfowl (e.g. wigeon and teal).

Besthorpe Heronry, Credit : Nottinghamshire Wildlife Trust

Gravel extraction has left in its wake large areas of open water, some of which have been designed for wildlife with extensive shallows and reedbeds. In combination with the river and the riparian grasslands these are valuable biodiversity features, attracting waders, wildfowl, warblers and buntings.

There is also the potential for breeding bittern to be attracted back to the area by the extensive new reedbeds near to Langford Lowfields and Besthorpe north of Newark.

Arable agriculture is the dominant land-use, making cereal field margins and hedgerows (the enclosure pattern is still in evidence) important biodiversity features throughout much of the RCA, especially further away from the Trent.

There are considerable areas of urban and post industrial habitat in Newark, including railway cuttings/embankments, private gardens, parks, road verges, allotments and areas of 'waste ground'.

This is not a wooded landscape but a scattering of willow holts, other small riparian woodlands, occasional pockets of parkland near to settlements and specimen trees (mainly willows, some of which are pollarded) do remain along the Trent and its tributaries. The Trent valley supports a good diversity of tree and shrub willows largely as a result of the presence in the past of many willow holts along the river that provided cuttings for the basket making industry. Few of these holts now remain as they have been cleared and converted to agriculture or re-planted with commercial species such as poplars.

The only SSSI in the RCA is a Trentside grassland site, Hoveringham Pastures SSSI, notified for the botanical interest of its neutral grassland and hedgerows. A remnant of a formerly much more widespread resource.

A fairly wide range of common species and some of the species on the LBAP list of species of conservation concern are known to occur across the RCA. The species selected in the table below are those which occur reasonably frequently and/or can be used as indicators of the health of the key habitat features of the RCA.

Key Biodiversity Features of the Trent Washlands RCA

(a) Habitats

Habitats	***Status***
Rivers and Streams	LBAP
Unimproved neutral grassland	UKBAP & LBAP
Lowland wet grassland	UKBAP &LBAP
Reedbed	UKBAP &LBAP
Eutrophic and mesotrophic standing waters	UKBAP & LBAP
Cereal field margins	UKBAP
Urban and post industrial	LBAP

(b) Species

Species	***Status***
Water vole	UKBAP and LBAP
Otter	UKBAP and LBAP
Bats (some species)	UKBAP & LBAP
Brown hare	UKBAP
Reed bunting	UKBAP
Barn owl	LBAP
Great crested newt	UKBAP

The East Nottinghamshire Sandlands Regional Character Area

The East Nottinghamshire Sandlands RCA lies along the eastern edge of Nottinghamshire. It includes all of the area within Newark and Sherwood east of the Trent Washlands and north of Newark.

It is a generally flat, low lying area falling within the broad vale of the Trent. A covering of glaciofluvial drift flattens the landform to a large extent although in places the underlying clays and mudstones (a narrow outcrop of Rhaetic beds and Reddish Mercia Mudstones) stand out as low, rounded hills, rising up to 20 metres above the surrounding plain.

Slightly stoney sandy gleys have developed in the glaciofluvial drift. Hiistorically these were soils with poor natural drainage but modern artificial drainage means that most are now well drained. The soils of the Rhaetic beds and the Mercia Mudstones are stoneless or slightly stoney, silty clay loams and clay loams. These soils have slowly permeable subsoils and are prone to seasonal waterlogging where they have not been artificially drained.

To the south of North Clifton the Trent has cut into the soft mudstone, forming a steep-sided river cliff.

Blown sands (probably accumulated by strong westerly or south-westerly winds at the end of the ice age) occur as a series of low ridges and hillocks overlooking the Trent. Well drained, stoneless sands are typical of the blown sands. These soils are highly susceptible to summer drought.

The RCA is drained to the west by the Trent and to the east by the Witham. A network of drains, dykes and small streams, which are lined by willows in places is a distinctive characteristic of the area, providing habitat for a range of plants, birds, invertebrates and small mammals.

In the main this RCA is an enclosed arable landscape, with some ancient hedgerows and many Enclosure period hedgerows remaining. Pine shelter belts are a landscape feature in parts. Woodlands are mainly small-medium scale, the larger ones being geometric-shaped, coniferous or mixed plantation woodlands. There is a small number of oak-birch woodlands, with bracken dominated ground flora and in places specimen oak trees in hedgerows are an important feature. All of the woodlands, hedgerows and specimen trees provide important habitat for a range of bird, invertebrate and small mammal species.

In the wider landscape arable agriculture dominates. However, close to the villages there are often limited areas of permanent grassland (which are sometimes ridge and furrow), and field ponds. The ponds provide important amphibian and aquatic invertebrate habitat.

In places, especially on the blown sands, a heathy character (bracken and gorse) prevails along roadside verges and woodland edges. Wavy hair grass, tormentil and heath bedstraw are characteristic species of areas of acid grassland.

There is one SSSI in this RCA, which is Spalford Warren, a mixed plantation woodland with a heathy ground flora, which is owned and managed by the Nottinghamshire Wildlife Trust. Sand sedge, ling heather and the nationally rare blue fescue grass are some of the specialities of this site.

A fairly wide range of common species and some of the species on

Spalford Warren SSSI, Credit : Nottinghamshire Wildlife Trust

the LBAP list of species of conservation concern are known to occur across the RCA. The species selected in the table below are those that occur reasonably frequently and/or can be used as indicators of the health of the key habitat features within this RCA.

Key Biodiversity Features of the East Nottinghamshire Sandlands RCA

(a) Habitats

Habitats	***Status***
Acid grassland	UKBAP & LBAP
Lowland heathland	UKBAP & LBAP
Eutrophic and mesotrophic standing waters	UKBAP & LBAP
Oak-birch woodland	LBAP
Unimproved neutral grassland	UKBAP & LBAP
Cereal field margins	UKBAP

(b) Species

Species	***Status***
Bats (some species)	UKBAP & LBAP
Water vole	UKBAP & LBAP
Brown hare	UKBAP
Barn owl	LBAP
Bullfinch	UKBAP
Great crested newt	UKBAP

The South Nottinghamshire Farmlands Regional Character Area

The South Nottinghamshire Farmlands RCA is a broad band of land extending from the southern edge of Greater Nottingham to the edge of Newark. Only a small area of the District, directly to the south of Newark encompassing the villages of Hawton, Cotham and Elston, is within this RCA.

This is an area of generally flat-gently rolling topography, which dips to the south east towards the Nottinghamshire Wolds and the Vale of Belvoir. The Trent Valley and Newark form the boundaries to the north and west. The main rock type of the RCA is the Mercia Mudstone group with the occasional band of hard sandstone (skerries). Gypsum outcrops in this part of the District and is marked by the presence of a number of mines and plaster works.

Deep clayey alluvial soils are widespread on the valley floor of the River Devon. Gypsiferous soils are associated with the gypsum outcrops, otherwise the substrate comprises slightly stoney, sandy loam brown earth soils. Groundwater is the only real source of waterlogging in a generally intensively farmed area.

Arable agriculture dominates this enclosed landscape, meaning that cereal field margins and hedgerows are the most frequent biodiversity features. Woodland cover is limited. Therefore, much of the rest of the landscape and ecological diversity is associated with the small villages where small pockets of grassland and a few ancient hedgerows have remained intact.

There are no SSSIs in this part of the district. A limited range of common species and some of the species on the LBAP list of species of conservation concern are known to occur in the RCA. The

species selected in the table below are those that occur reasonably frequently and/or can be used as indicators of the health of the key habitat features within this RCA.

Key Biodiversity Features of the South Nottinghamshire Farmlands RCA

(a) Habitats

Habitats	***Status***
Unimproved neutral grassland	UKBAP & LBAP
Cereal field margins	UKBAP
Ancient species rich hedgerows	UKBAP

(b) Species

Species	***Status***
Brown hare	UKBAP
Bullfinch	UKBAP
Grizzled skipper	LBAP

The Sherwood Regional Character Area

The Sherwood Natural Area boundary and the Sherwood RCA boundary are almost identical.

The Sherwood RCA occupies the western area of the District and extends beyond into adjoining districts. It is bordered to the east by the Mid Nottinghamshire Farmlands RCA. The topography of this RCA is described, in the Nottinghamshire Countryside Appraisal, as markedly undulating with stretches of plateau-like country between the river valleys. There is a general absence of surface drainage, apart from a few rivers (e.g. the Meden and the Maun). There are numerous dry valleys probably formed by snow melt in an historic climactic period.

Vicar Water, Credit : NSDC

The underlying rocks of the RCA are Permo-triassic sandstones in two recognisable formations: the Lenton formation and the Sherwood Sandstone formation. These formations both give rise to the well-drained sandy soils which characterise the region.

Well-drained coarse loamy soils are found on the lower slopes of the dry valleys. Podzolised soils are found locally under woodlands and very acidic well-drained sandy soils are also found under woodland and lowland heathland to the south and east of Mansfield. To the east of the RCA there are pockets of Mercia Mudstone which give rise to surface and ground water gleys, which are comparatively heavy in texture and have a high degree of soil moisture.

The Sherwood RCA has a very distinctive character and it supports biodiversity features of county, national and international importance.

At the landscape scale the Sherwood RCA is a mix of large areas of woodland (both coniferous and deciduous) and intensive arable agriculture, interspersed with pockets of heathland/acid grassland, wood pasture, old parkland, small woodlands and neutral grasslands in the River valleys.

The woodland varies from large scale conifer plantations, to small scale wet woodlands in the Maun, Meden and Rainworth Water Valleys to the internationally important oak-birch woodlands at the heart of Sherwood.

The oak-birch woodlands and the lowland wood pasture and parkland of the RCA support a wealth of wildlife. In parts of Sherwood there are veteran trees in excess of 500 years old, which support a rich and internationally important invertebrate fauna. There are exceptional beetle and spider populations in Birklands and Bilhaugh SSSI, which is also a national stronghold for the angle-striped sallow moth and the home of a nationally rare pseudo-scorpion. A number of bat species, red and fallow deer also thrive in the woodlands and wood pasture of Sherwood.

Much of the conifer woodland, especially Clipstone Forest retains heather, acid grassland, heathland habitat and the associated fauna of heathland in the rides and clearings. These conifer plantations, mainly under the management of Forest Enterprise, are vital biodiversity reservoirs. The only recent record for adder within the County is from Clipstone Forest. The rare nightjar and woodlark also like the habitat provided by the close proximity of heathland and young conifer plantations.

The remnant heaths and acid grasslands of the Rainworth, Edwinstowe and Ollerton/Walesby areas are vital components of the historic Sherwood character of this part of the district. Even in the intensive arable areas a strong heathy character prevails due to the presence of gorse and broom in the roadside verges.

Lowland heathland is an internationally rare and threatened habitat. Approximately 90% of Sherwood heath has been lost since 1922. Characteristic species of the true heaths include: ling heather, wavy hair grass and sheep's fescue. Specialities include: hoary ling (which is a local variant), petty whin and dwarf gorse. There are rare patches of wet heath, which are characterised by cross-leaved heath, purple moor grass and cotton grass. Nightjar and woodlark require heathland habitat in combination with woodland edge. Common lizard and adder (a county rare species) favour heathland habitat. A range of common and rare invertebrates also rely on heathland habitat for their survival. Notably the Portland and small chocolate tipped moths, both of which are nationally important species.

The small wet woodlands of the river valleys are an internationally important habitat and a UK priority Biodiversity habitat. Those that remain are a remnant of a habitat formerly much more widespread, but the District retains some of the largest remnants of wet woodland in the County. The best examples are characterised by alder and willows. Specialities include: greater tussock sedge, wood small reed and narrow-leaved buckler fern.

As well as the wet woodlands of the river and stream valleys there are also areas of neutral grassland on the alluvial soils. Those of the River Maun valley are the remnants of the once extensive Duke of Portland's water meadows.

Deep coal mining has had an extensive influence on the landscape of the Sherwood RCA. The spoil heaps, old colliery yards and lagoons offer enormous post industrial habitat opportunities. Rufford tip is a good example of where these opportunities have been maximised to good effect. The District Council's own Vicar Water site is another good example and one where further opportunities are presenting themselves in the near future. Thoresby tip, almost adjacent to the District Council managed Sherwood Heath Local Nature Reserve also presents an opportunity to create new Sherwood (woodland and heathland) habitats.

The ancient hunting forest character of Sherwood is reflected by the SSSIs in the District and in the rest of the RCA. Newark and Sherwood SSSIs include Rainworth Heath, Birklands and Bilhaugh (European candidate Special Area for Conservation, for its lowland oak pasture), Birklands West and Ollerton Corner, Clipstone Heath and Thoresby Lake. Rainworth Heath is owned/managed by the Nottinghamshire Wildlife Trust. Part of the Birklands and Blihaugh cSAC became Nottinghamshire's first National Nature Reserve in November 2002.

Sherwood Heath LNR, Credit : Sherwood Forest Trust

Key Biodiversity Features of the Sherwood RCA

(a) Habitats

Habitats	***Status***
Oak-birch woodland	LBAP
Wood pasture and parkland	UKBAP & LBAP
Lowland heathland	UKBAP & LBAP
Lowland acid grassland	UKBAP & LBAP
Wet woodland	UKBAP & LBAP
Neutral grassland	UKBAP & LBAP
Urban and post industrial habitats	LBAP
Rivers and streams	LBAP

(b) Species

Species	***Status***
Bats (some species)	UKBAP & LBAP
Water vole	UKBAP & LBAP
Brown hare	UKBAP
Bullfinch	UKBAP
Woodlark	UKBAP
Nightjar	UKBAP & LBAP