

# River Tees Rediscovered



February 2014

Natural Heritage Report



## Introduction

This report has been pulled together from information supplied by the Tees Valley Local Nature Partnership, with support from Wildflower Ark, as well as wider partner information to determine and support project elements for inclusion in River Tees Rediscovered.

## Introduction to Natural Heritage

Natural heritage refers to the sum total of the elements of biodiversity, including flora and fauna and ecosystem types, together with associated geological structures and formations (geo-diversity). Heritage is that which is inherited from past generations, maintained in the present, and bestowed to future generations. Natural Heritage, as defined at the World Heritage Convention in 1971, is; '(1) "Inherited habitats, species, ecosystems, geology and landforms, including those in and under water, to which people attach value." (2) "For the purpose of this Convention, the following shall be considered as "natural heritage":

- natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;
- geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;
- Natural sites or precisely delineated natural areas of outstanding universal value from the point view of science, conservation or natural beauty."

(Source:<http://www.english-heritage.org.uk/professional/advice/hpg/hpr-definitions/n/536373/>)

In the River Tees Rediscovered area, there are many heritage assets. A Heritage Asset comprises: 'A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest'. These include a wide variety of landscape area assets in each area. Landscape area assets are areas of land, which may include important animal habitats, or sites of geological importance, which, like heritage assets, are important to protect, maintain and preserve.

## Overview of the Natural Heritage

The River Tees Rediscovered project follows the slow-moving meandering River Tees as it passes across the low-lying land from south of Darlington to Stockton, through the dense conurbation of Teesside and into the Tees Estuary. It includes open countryside and farmland (mainly arable farming with some pasture and a good network of hedgerows), urban settlements with heavy industry and Teesmouth, a mosaic of estuarine habitat mostly reclaimed over the last two centuries for industry but still containing large areas of estuary-related habitats such as mud flats, grazing marsh, sand dunes and wetlands along with Open Mosaic Habitat (formerly Brownfield sites) on previously industrial land.

The area contains a good number of priority habitats and species both along the length of the river and especially within Teesmouth.

Broadleaved mixed woodland is found in places on the steep-sided banks of the Tees in Darlington and Stockton and there is a cluster of lowland meadow sites around Middleton St George. Traditional orchards are scattered along the river Tees corridor with a concentration around Yarm and there is a cluster of priority ponds around Eaglescliffe and Bowesfield, at Portrack and in Teesmouth at Saltholme, Greatham Creek, Corus and Coatham. Remnants of saltmarsh are still also found along the banks of the old route of the River Tees.

Teesmouth includes, at Seal Sands, one of the largest areas of intertidal mudflats on England's north-east coastland, at Greatham Creek, the largest area of saltmarsh between Lindisfarne National Nature Reserve to the north and the Humber Estuary to the south. Teesmouth also has coastal sand dunes at North and South Gare, coastal and floodplain grazing marsh, reedbeds, fens and saline lagoons. Together these habitats give a complex of wetlands, estuarine and maritime sites known as Teesmouth Flats and Marshes an area of considerable importance for its flora, invertebrate fauna, and bird life with multiple international and national designations for its assemblages of waders and waterfowl including red knot, common redshank and sandwich tern. Teesmouth also contains Open Mosaic Habitat (OMH) on previously developed land; the majority of sites consisting of open mosaic grassland, often with a small amount of scrub. Important species found within these sites include grey partridge, skylark, brown hare, purple milk-vetch and a number of nationally notable moth species. OMH is also found on the banks of the river Tees at Maze Park and Portrack.

There is a sizeable population of water voles at the RSPB Reserve at Saltholme and at Cowpen Marsh extending as far as Cowpen Bewley Woodland Park where there is a network of interconnecting ditches and other water bodies. Great crested newt is found around Darlington, Middleton St George and Eaglescliffe and at Cowpen Bewley.

There is a breeding population of 70–80 harbour seals in the Tees estuary and populations of common lizard are found south of the river on the South Gare dunes. Otters are regularly recorded around the North Tees Marshes from Saltholme to Greatham Creek and have been reported in Seaton Channel and at the mouth of the River Tees. They are also found on the lower reaches of Billingham Beck and Claxton Beck. Brown hare is found in good numbers around the industrial sites and grazing marsh areas of Teesmouth. Dingy skipper and Grayling butterflies have some of their most significant regional populations on the Teesmouth industrial sites and at Maze Park and Tees Marshalling Yards.

In addition to the over-wintering and passage waterfowl and wildfowl, Teesmouth is important for over-wintering mistle thrush and woodcock and also a large percentage of many breeding populations of bird species of key importance in the Lower Tees Valley such as lapwing, grasshopper warbler, reed bunting and skylark (listed as of red level of concern) and little tern, snipe, little grebe and whitethroat (listed as of amber level of concern). Nine of these species are also UK priority species. The Teesmouth area is one of the top five sites in the UK for breeding Common Tern.

Lesser spotted woodpecker is found in deciduous woodland along the banks of the River Tees in Darlington and soprano pipistrelle bat occurs along the River Tees from the western

boundary of Darlington to Middleton St George. Harvest mouse has been recorded within the Bowesfield Nature Reserve.

A number of UK Priority fish species are found in the River Tees and its tributaries.

Salmon is distributed throughout the Tees and is increasing in numbers (although still falling below the conservation limit set by the Tees Salmon Action Plan) whilst numbers of brown trout in the Tees have declined as a result of degraded and fragmented habitat, barriers to migration and pollution. Sea lamprey is present in the Tees (distribution unknown) and brook lamprey is present throughout the Tees and can be found in the Leven and Skerne tributaries.

*Dr Sue Antrobus, Tees Valley Wildlife Trust*

The Tees once abounded with many species of migratory and non-migratory fish. These included Burbot, a freshwater member of the cod family, sparring, a relation to the herring and the now-extinct European sturgeon.

These latter were (and still are) crown property, a right that extended to the Bishops of Durham. However, this proved not to be such a privilege for Bishop Cosin, when upon being presented with 5 sturgeon caught from the Tees had then to buy 11 gallons of white wine and a further 16 of vinegar with which to pickle them at a princely sum of 5l 17s 1d. He grumblingly wrote to the fishkeeper of the Tees asking him to 'send no more' and added that he 'needn't have charged him for the dill and rosemary!'

The last Sturgeon known sturgeon captured in the Tees was in 1854 and was 7'5" long and weighed 8.5 stone and it was exhibited alive in Darlington. The presence of these monsters in the Tees could have given rise to mythical creatures such as the Sockburn Worm dragon and 'Peg Powler', a green haired witch of the water who would lure children to the edge and drag them to the depths. There are records of sturgeon taking swimmers, and their armour plating does resemble the scales often depicted on drawings of dragons. Drowning was a common occurrence in the Tees, and so the use of these myths was doubtless a good tool for parents to keep children from straying too far in.

For centuries the Tees salmon provided a livelihood for many netsmen and an important food source for the local population. In 1854 Grimble wrote that the total number of fish taken in the salmon nets was 10 463 with a further 1456 being caught on rod and line along the Tees. This had led to many disputes between netsmen until 1455 when bylaws were introduced creating a 5s licence fee made payable to the local diocese. The biggest complaint from netsmen then was the proliferation of porpoises around Teesmouth!

Pollution from the industrial Teesside and flushings from the lead mine 'hushes' in the Upper Teesdale workings rapidly destroyed the salmon fishery until in 1928, the Tees was declared 'dead' as a salmon river. This remained the case until 1983 until a pollution incident in Upper Teesdale resulted in a catastrophic fish kill over a 26 mile length of river. Amongst the dead fish were a small number of very large salmon, the discovery of which lent impetus to the groundswell of public support to clean up the river.

The river's salmon population is slowly recovering, but there is still much work to be done to improve habitat and migration opportunities for all species, not least the European eel, itself

now on the IUCN's list of most at risk species. It is unlikely Sturgeon will ever be seen in the Tees again, but there is optimism that burbot, spurling and smelt will someday return.

*Ben Lamb, Tees Rivers Trust*

## Natural Environment Designations

### Introduction

England is covered by a range of environmental designations, established to conserve and enhance areas and features of particular environmental interest. Designations are given only on the basis of detailed information about the ecology of sites, the level of designation thereby confers conservation priority in addition to an appropriate degree of legal or policy protection.

Details of environmental designations which have been applied in the Landscape Area are described below.

### Special Protection Areas (SPA)

Special Protection Areas (SPA) are strictly protected sites classified under the European Directive 79/409 on the Conservation of Wild Birds, also known as the Birds Directive. They are classified for rare and vulnerable birds, listed in Annex I to the Directive, and for regularly occurring migratory species. They are part of the Natural 2000 network of protected sites created by the Habitat and Birds European Directives. Most are also designated Sites of Special Scientific Interest (SSSI).

### Sites of Special Scientific Interest (SSSI)

Sites of Special Scientific Interest (SSSIs) are the country's very best wildlife and geological sites. There are over 4,000 SSSIs in England, covering around seven per cent of the country's land area. They include some of our most spectacular and beautiful habitats and support rare plants and animals. SSSIs are notified by Natural England.

### National Nature Reserves (NNR)

National Nature Reserves (NNRs) have been established to protect and manage the most important areas of wildlife habitat and geological formations in Britain, and as places for scientific research. They are some of the finest sites in England for wildlife and geology and are of national and often international importance. They are either owned or controlled by Natural England or held by approved bodies such as Wildlife Trusts.

### Ramsar sites

The Convention on Wetlands of International Importance, called the Ramsar Convention, is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. The Ramsar Convention is the only global environmental treaty that deals with a particular ecosystem.

## Local Sites

Local Sites are non-statutory areas of local importance for nature. Local Sites are selected through a process set out in government guidance, published by Defra and they are afforded protection through the Local Planning System. Local Sites include Local Wildlife Sites (LWS) and Local Geological Sites (LGS).

Local Wildlife Sites support both locally and nationally threatened wildlife, and many sites will contain habitats and species that are priorities under county or UK Biodiversity Action Plans. They are far more widely dispersed than the statutorily designated sites described above and represent a much wider range of habitats and species.

In the Tees Valley, Local Wildlife Sites are selected by a Local Sites Partnership which consists of all the area's local authorities, as well as the governmental environmental agencies, the local Wildlife and other local wildlife conservation groups.

Local Geological Sites have replaced what were previously termed Regionally Important Geological Sites (RIGS), and are selected by voluntary geoconservation groups, such as the Tees Valley RIGS Group. Sites are selected for their geological interest, particularly where they are of value for scientific and educational purposes.

## Local Nature Reserves

Local Nature Reserves (LNR) are chosen to benefit both people and wildlife. Sites can be designated where they offer people special opportunities to study or learn about nature or simply to enjoy it.

LNRs must be controlled by the local authority through ownership, lease or agreement with the owner. The main aim must be to care for the natural features which make the site special.

## Ancient and Semi Natural Woodland

Ancient woodland is land that has had a continuous woodland cover since at least 1600 AD, and may be ancient semi-natural woodland (ASNW), which retains a 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; or plantation on ancient woodland sites (PAWS), where the original tree cover has been felled and replaced by planting, often with conifers, and usually over the last century.

In the Tees Valley, all ancient woodlands have been selected as Local Wildlife Sites.

## Natural Environment Designations

Designation	Site Name	Reason for Designation	Grid Reference
Special Protection Area (SPA)	Teesmouth and Cleveland Coast	Non-breeding populations of red knot, common redshank and sandwich tern and a breeding population of little tern. Also designated for waterbird assemblage.	NZ561 267
National Nature Reserve (NNR)	Teesmouth	Covers two areas - North Gare, an area of dunes and grazing marsh north of the power station, and Seal Sands, one of the largest areas of intertidal mudflats on England's north-east coast.	NZ52917 25994
Ramsar site (Wetlands of international importance)	Teesmouth and Cleveland Coast	Populations of common redshank and red knot occurring at levels of international importance; assemblages of waterfowl of international importance with peak counts in winter.	NZ561 267
Site of Special Scientific Interest (SSSI)	Tees and Hartlepool foreshore and wetlands	Comprises several coastal areas which are an integral part of the complex of wetlands, estuarine and maritime sites supporting the internationally important population of wildfowl and waders on the Tees Estuary.	NZ 516348, NZ 519327, NZ 517261, NZ 493232, NZ 505224, NZ 509229, NZ 513230, NZ 524220
Site of Special Scientific Interest (SSSI)	Cowpen Marsh	Forms a part of 'Teesmouth Flats and Marshes', a complex of sites of international importance for overwintering shore birds. It includes the largest saltmarsh between Lindisfarne National Nature Reserve to the north and the Humber Estuary to the south.	NZ 500529
Site of Special Scientific Interest (SSSI)	Seal Sands	Forms a part of 'Teesmouth Flats and Marshes', a complex of sites of international importance for overwintering shore birds. It is the only extensive area of intertidal mudflats, with tidal channels on the East coast of England between the Lindisfarne National Nature Reserve to the north and the Humber Estuary to the south.	NZ 529260
Site of Special Scientific Interest (SSSI)	Seaton Dunes and Common	Forms a part of 'Teesmouth Flats and Marshes'. It is an area of considerable importance for its flora, invertebrate fauna, and bird life. The range of habitats present include sandy, muddy and rocky foreshore, dunes, dune slacks and dune grassland, as well as relict saltmarsh, grazed freshwater marsh with dykes (known locally as fleets and stells) pools and seawalls.	NZ 535285

Designation	Site Name	Reason for Designation	Grid Reference
Site of Special Scientific Interest (SSSI)	South Gare and Coatham sands	Forms a part of 'Teesmouth Flats and Marshes'. It is of considerable interest for its flora, invertebrate fauna and birdlife. The range of habitats present includes extensive tracts of intertidal mud and sand, sand dunes, saltmarsh and freshwater marsh which have all developed since the construction of the South Gare breakwater with tipped slag during the 1860s. Also exposed at low tide are areas of rocky foreshore along the breakwater, three slag banks and Coatham Rocks.	NZ 547262-NZ 617264
Local Wildlife Site (LWS)	Janet's Meadow	Species -rich grassland along the river Tees.	NZ224 144
Local Wildlife Site (LWS)	Low Coniscliffe Tees Bank	Narrow strip of deciduous woodland with Willow and Hawthorn. Breeding Lesser Spotted Woodpecker.	NZ248 136
Local Wildlife Site (LWS)	Blackwell Grange Golf Course	Ponds supporting great crested newt.	NZ279 129
Local Wildlife Site (LWS)	River Tees Woods	A narrow bank of deciduous semi-natural woodland.	NZ275 110
Local Wildlife Site (LWS)	The Whinnies	Mosaic site of calcareous wildflower meadow, damp meadow, scrub, early successional brownfield and seasonal wetlands. Dingy skipper, forester moth and emperor dragonfly.	NZ355 136
Local Wildlife Site (LWS)	Bowlhole Wood	Ancient semi-natural woodland on a steep bank of the River Tees.	NZ37248 09988
Local Wildlife Site (LWS)	Newsham Banks Grassland	Wildflower-rich neutral grassland	NZ38293 10860
Local Wildlife Site (LWS)	Newsham Wood	An area of ancient woodland and broadleaved woodland which has been planted on former ancient woodland.	NZ38636 11182
Local Wildlife Site (LWS)	Aislaby Banks	Species-rich neutral grassland with wet fens and flushes	NZ40396 12050
Local Wildlife Site (LWS)	Yarm Churchyard	A churchyard with sandstone masonry west of Yarm High Street. The stonework supports one nationally rare lichen and one nationally scarce lichen.	NZ41646 12911



Designation	Site Name	Reason for Designation	Grid Reference
Local Wildlife Site (LWS)	Clockhouse and Rookery Wood	Mixed Woodland, predominantly Ancient Semi-natural, along the southern bank of the River Tees at Yarm.	NZ42472 12215
Local Wildlife Site (LWS)	Quarry Wood	Woodland supporting a population of the nationally-scarce white-letter hairstreak butterfly	NZ42807 15336
Local Geological Site (LGS)	Barwick Dyke Quarry	Disused quarry into the Cleveland Dyke	NZ43203 15205
Local Geological Site (LGS)	Barwick Sandstone Quarry	Disused quarry showing unique yellow Sherwood sandstone exposure.	NZ43517 15296
Local Wildlife Site (LWS)	Thornaby Wood	An area of ancient woodland and broadleaved woodland which has been planted on former ancient woodland.	NZ45033 15074
Local Wildlife Site (LWS)	Bassleton Wood	Mixed Woodland, predominantly Ancient Semi-natural, along the southern bank of the River Tees near Thornaby. The area includes a reedbed at the confluence of Bassleton Beck with the River Tees	NZ44420 15612
Local Wildlife Site (LWS)	The Holmes	Herb-rich grassland along the eastern bank of the River Tees south of Bainbridge Wood and north of Bassleton Wood	NZ44521 16133
Local Wildlife Site (LWS)	Bowesfield Nature Reserve	An area of restored floodplain on the River Tees, opposite The Holmes. The site supports Harvest Mouse, and has lakes, areas of wet grassland and reedbeds which support significant numbers of over-wintering birds.	NZ44438 16123
Local Wildlife Site (LWS)	Black Bobby's Field	Neutral grassland with wetland and ponds adjacent to the River Tees in Thornaby	NZ44762 16680
Local Wildlife Site (LWS)	Old River Tees	Remnant saltmarsh and reedbeds along the old course of the River Tees to the east of Teesside Retail Park and the west of the A19. The site supports water vole.	NZ47090 17977
Local Wildlife Site (LWS)	Portrack Marsh	Area of undisturbed wetland supporting significant populations of over-wintering birds. The site is also important for butterflies and harvest mouse.	NZ46690 19480
Local Wildlife Site (LWS)	Portrack Meadows	A former industrial site on the north bank of the River Tees, between the A19 fly-over and Newport Bridge. The site comprises a central area of urban grassland with surrounding scrub, an area of reedbed, and a brackish pool with remnant saltmarsh.	NZ47541 19767

Designation	Site Name	Reason for Designation	Grid Reference
Local Wildlife Site (LWS)	Maze Park	Species rich dry grassland characterised by wild carrot, carline thistle, and common centaury. A nationally scarce butterfly, dingy skipper, is present.	NZ469192
Local Wildlife Site (LWS)	Teesaurus Park	Reclaimed area of former steelworks supporting herb-rich grassland with kidney vetch, vipers bugloss great lettuce and tansy.	NZ486218
Local Wildlife Site (LWS)	Coatham Marsh	Herb-rich coastal grassland with areas of wetland which are significant for breeding and over-wintering birds.	NZ585 247
Local Wildlife Site (LWS)	Greatham Creek North Bank	Small area of saltmarsh with additional ornithological interest	NZ51307 25525
Local Wildlife Site (LWS)	Greenabella Marsh (2)	Rough grassland with wetland areas. Water vole is present and the site has significant bird populations and high numbers of amphibians. Dingy skipper butterfly is also supported.	NZ51170 25879
Local Wildlife Site (LWS)	Greatham North West	Remnants of saltmarsh vegetation in tidal creeks cut off by a sea wall. The site is also of significant ornithological interest and is important for breeding lapwing.	NZ50753 25906, NZ50441 26080
Local Wildlife Site (LWS)	Phillips Tank Farm	Areas of industrial grassland and wetland. The grassland habitats support a calcareous flora. A substantial population of dingy skipper butterfly is present. At least four amphibian species are present, including great crested newt.	NZ50745 26676
Local Wildlife Site (LWS)	Hartlepool Power Station	Ungrazed grassland with pools and large areas of scrub. The breeding bird community includes stonechat, sedge warbler & grasshopper warbler. Common lizard has been recorded.	NZ52573 27551
Local Wildlife Site (LWS)	Zinc Works Field	An area of reclaimed land immediately adjacent to Seaton Channel which supports important wintering and breeding bird populations.	NZ53414 27032
Local Nature Reserve (LNR)	The Whinnies	Mosaic site of calcareous wildflower meadow, damp meadow, scrub, early successional brownfield and seasonal wetlands	NZ36248 13756
Local Nature Reserve (LNR)	Quarry Wood	This woodland within Preston Park was a former Victorian Quarry that has now been reclaimed by nature and is partly flooded.	NZ42776 15350
Local Nature Reserve (LNR)	Bassleton Wood and The Holmes	Deciduous woodland on the banks of the Tees.	NZ44447 16148

Designation	Site Name	Reason for Designation	Grid Reference
Local Nature Reserve (LNR)	Black Bobby's Field Thornaby	Developing woodland, wet meadows, a large pond and a fish haven connected to the river. A footpath elevated for much of its length on an earthen mound goes around the site giving good views of the meadows, ponds and river.	NZ44822 16649
Local Nature Reserve (LNR)	Seaton Dunes and Common SSSI	Seaton Common covers approximately 75 hectares and its primary importance is as a wet grassland which attracts vast numbers of passage migrants over winter and as a breeding ground for birds in the summer months. Seaton Dunes covers approximately 32 hectares and is the largest sand dune system between Lindisfarne to the north and the Humber to the south.	NZ52757 28555

## UK Habitats and Species of Principle Importance

The Natural Environment and Rural Communities (NERC) Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list contains 56 Habitats and 943 Species of Principal Importance which have been identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework.

The tables below describe the 4 habitats and 37 species from the UK lists which occur in the River Tees Rediscovered landscape area, giving an indication of their status and the locations in which they are found.

Table of UK Habitats of Principle Importance Occurring in the Landscape Area

COMMON NAME	SCIENTIFIC NAME	DESCRIPTION AND STATUS
Common Toad	<i>Bufo bufo</i>	<p>Although usually a solitary animal, in the breeding season large numbers of toads converge on breeding ponds. The common toad seems to be in decline and is threatened by habitat loss, especially by drainage of its breeding sites.</p> <p>The toad is the commonest and most widespread amphibian in the Tees Valley. It can be found in brackish pools close to the river mouth at Seaton Common, Greenabella Marsh and the Coatham, in greenspaces and gardens throughout the conurbation and in farm ponds along the Tees to Piercebridge.</p>
Great Crested Newt	<i>Triturus cristatus</i>	<p>Our biggest newt, the great crested newt is almost black in colour, with spotted flanks and a striking, orange belly. The males have a long, wavy crest along the body and on the tail during the breeding season. Since the 1940s, populations of this species have declined across its range, due to the drainage of land for agriculture and the loss of ponds through development.</p> <p>Unlike toads, great crested newts do not seem to tolerate the brackish waters of the estuary. They are however, found on industrial sites to the south of Hartlepool on the western fringe of Stockton and through much of Darlington.</p>
Skylark	<i>Alauda arvensis subsp. arvensis</i>	<p>The skylark is found everywhere in the UK from lowland farmland to upland moorland. Often inconspicuous on the ground, it is easy to see when in its distinctive song flight. Skylark numbers have declined such that there are now only 10% of the numbers that were present 30 years ago. This massive decline is mainly due to changes in farming practices relating to the timing of planting of cereal crops.</p> <p>There are an estimated 1630 breeding pairs of skylark in Cleveland and it seems that the species' use of industrial and post-industrial sites around Teesmouth has allowed it to avoid some of the pressures experienced in farmland habitat.</p>
Linnet	<i>Carduelis cannabina</i>	<p>This small bird in the finch family derives its scientific name from its fondness for hemp and its English name</p>

COMMON NAME	SCIENTIFIC NAME	DESCRIPTION AND STATUS
	<i>subsp. autochthona/cannabina</i>	<p>from its liking for seeds of flax, from which linen is made. In Britain, populations are declining, attributed to increasing use of herbicides, aggressive scrub removal and excessive hedge trimming.</p> <p>The linnet is present as a breeding bird in all but the most urbanised parts of the landscape area. The presence of gorse thickets, infrequently trimmed hedgerows and scrub are key to the survival of the species in this area.</p>
Common Cuckoo	<i>Cuculus canorus</i>	<p>This species is a widespread summer migrant to Europe. The common cuckoo's global population is estimated to have declined by 89% over the past 40 years.</p> <p>Small numbers of cuckoo breed in the Tees landscape area, on the open habitats of North Tees and on farmland between Stockton and Piercebridge.</p>
Yellowhammer	<i>Emberiza citrinella</i>	<p>The male yellowhammer has a bright yellow head, yellow under-parts, and a heavily streaked brown back. In parts of Europe it is in serious decline; in the UK populations fell by 54% between 1970 and 2003. It is most commonly found on lowland arable and mixed farmland, probably due to the greater availability of seeds. It nests in hedges, patches of scrub, and ditches, especially if these have a wide grass margin next to them and a cereal crop next to the margin.</p> <p>This bird is absent from urban Teesside, but thrives in the agricultural area around Darlington and up to the western fringe of Stockton.</p>
Reed Bunting	<i>Emberiza schoeniclus</i>	<p>The reed bunting is a medium sized bird with a small but sturdy seed-eater's bill. Predominantly a farmland and wetland bird it is typically found in wet vegetation, where singing males can be seen perched on top of a bush or reed stem. A decline in the breeding population was recorded from 1969-2007.</p> <p>The course of the River Tees represents a stronghold for the reed bunting with significant numbers present from Yarm to the river mouth.</p>
Herring Gull	<i>Larus argentatus subsp.</i>	<p>One of the best known of all gulls along the shores of western Europe. Despite increases at urban and some inland site, the total herring gull population is now at its lowest level since monitoring began in 1969/70. The</p>

COMMON NAME	SCIENTIFIC NAME	DESCRIPTION AND STATUS
	<i>argenteus</i>	<p>reason for the decline is not well understood; factors could include the spread of botulism from scavenged food and reductions in discards from fisheries.</p> <p>Populations on the Tees live on industrial buildings in Hartlepool and the Tees estuary. The area holds around 1% of the British population making it nationally significant for the future of this bird.</p>
Grasshopper Warbler	<i>Locustella naevia</i>	<p>This small bird is found in short dense vegetation, often close to water. It is very difficult to see except sometimes when singing from a prominent position. The song, which gives this species its name, is a monotonous mechanical insect-like reeling. The number of birds may be on the decline because of habitat loss, although total population size is large and the species has an extensive range.</p> <p>The local population of this species appears to also be in decline although it seems to be making increasing use of territories bordering urban areas including Billingham, Middlesbrough, Ingleby Barwick and Darlington.</p>
Curlew	<i>Numenius arquata</i>	<p>The curlew is the largest European wading bird, instantly recognisable on winter estuaries or summer moors by its long, down-curved bill, long legs and evocative call. Once a common bird, its numbers are noticeably declining.</p> <p>The curlew is a common sight on the flats and marshes of the Tees in winter. Most leave the area to breed on the North York Moors or the Pennine hills, with just a few pairs choosing to breed on farmland between Stockton and Darlington.</p>
House Sparrow	<i>Passer domesticus</i>	<p>Monitoring suggests a severe decline in the UK house sparrow population, recently estimated as dropping by 71 per cent between 1977 and 2008 with substantial declines in both rural and urban populations.</p> <p>The house sparrow is still widely distributed in the Tees Valley and is present in the urban centres as well as on the neighbouring farmland. More detailed studies show that the breeding density is declining here at a similar rate to other parts of northern Britain, but less severely than in the south.</p>

COMMON NAME	SCIENTIFIC NAME	DESCRIPTION AND STATUS
Tree Sparrow	<i>Passer montanus</i>	<p>In the UK there has been a huge decline in tree sparrow numbers (92% between 1970 and 2009, which is probably the result of agricultural intensification and specialisation, particularly the increased use of herbicides. A trend towards autumn-sown crops, at the expense of spring-sown crops that produce stubble fields over winter, plus the increased use of insecticides, will have reduced the amount of insect food available for nestlings. More recent data shows that the trend has since improved. In the Tees Valley, a study of tree sparrows in 1993 estimated a breeding population of about 135 pairs distributed in 10 loose breeding colonies scattered throughout the old county of Cleveland. Recent data (2011) from the Teesmouth Bird Clubs puts estimates at Breeding pairs at 261.</p>
Grey Partridge	<i>Perdix perdix</i>	<p>The species is rapidly declining in the UK (84% decline between 1970 and 1998 and has declined by a further 54% between 1995-2009). The drastic decline in this bird's range and abundance is a result of agricultural intensification, resulting in loss of insect food sources on farmland. In the Tees Valley there are estimated to be 300-350 breeding pairs. There are also small populations on some industrial sites on Teesside.</p>
Dunnock (Hedge Accentor)	<i>Prunella modularis subsp. occidentalis</i>	<p>The dunnock is similar in size to the house sparrow, although it is a sleeker bird with a fine bill. Dunnock populations fell dramatically during the 1970s and 1980s but appear to have stabilised.</p> <p>The dunnock is widespread in the Tees Valley; thriving in residential gardens, parks, deciduous woodlands and even in the ornamental shrubberies of retail and business parks.</p>
Bullfinch	<i>Pyrrhula pyrrhula subsp. pileata</i>	<p>The Bullfinch is a large, plump finch which feeds on buds and fruit in woodlands, hedgerows, parklands, gardens and orchards. Bullfinch numbers decreased significantly over recent decades, but have since been recovering. Changes in agricultural practices, such as the removal of hedgerows and the loss of woodland habitat, has had detrimental effects on this species.</p> <p>Habitats along the Tees from Piercebridge to the very edge of Stockton, support valuable breeding populations of bullfinch.</p>



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Starling	<i>Sturnus vulgaris subsp. vulgaris</i>	<p>Starlings are very familiar birds of farmland, parks, gardens and towns. Although one of the UK's most common garden birds, the starling is declining elsewhere, leading to its status of conservation concern.</p> <p>The starling is still widespread and common in the Tees Valley with a clear preference for built-up areas with large populations present in Darlington, Stockton and Middlesbrough. Winter flocks are swollen with migrant birds from northern Europe and these form dramatic roosts in reedbeds at Saltholme and Bowesfield or on man-made structures such as the Victoria bridge over the Tees in Stockton and the Transporter Bridge in Middlesbrough.</p>
Song Thrush	<i>Turdus philomelos subsp. clarkei</i>	<p>The Song Thrush is a small, familiar songbird, commonly found in parks and gardens, woodland and scrub. Living up to its name, it has a beautiful, loud song with repeating phrases. Song thrush numbers have decreased by 73% in farmland and 49% in woodland habitats, believed to be the result of hedgerow removal and increased use of pesticides.</p> <p>Song thrush are notably absent from the treeless North Tees marshes and from the area's urban centres. They also appear to be struggling on farmland in the Tees Valley, but breeding populations are good in the residential parts of Stockton, Eaglescliffe and Yarm</p>
Lapwing	<i>Vanellus vanellus</i>	<p>Familiar birds of farmlands and wetlands, lapwings can often be seen wheeling through winter skies in large, black and white flocks. Once very common, the lapwing has suffered a serious decline in numbers over recent years as a result of changes in land use and farming practices. These ground-nesting birds need low-disturbance areas to breed, and shallow waters to feed.</p> <p>Large flocks are still a common winter sight at Saltholme, Coatham and Bowesfield and many pairs stay to breed in the area around North Tees and on farmland to west of Stockton.</p>
European Eel	<i>Anguilla anguilla</i>	<p>Eels are a catadromous species living in fresh water and migrating to the marine environment to breed. Recruitment of the European glass eels has declined by between 95 - 99% since 1979. It is listed as critically endangered by the International Union for Conservation of Nature. Numerous factors are responsible for the</p>

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		<p>decline in eel numbers, and include barriers to migration, hydropower turbines, loss of wetland habitat and the introduction of the parasitic nematode <i>Anguillicola crassus</i>. The Tees Barrage has some opportunity for glass eel migration incorporated into its design, but escapement of adult silver eels around the barrage is unknown. Very little is known about the current population and extent of eels in the Tees.</p>
Atlantic Salmon	<i>Salmo salar</i>	<p>Once abundant in the Tees, salmon numbers declined with the growth of industry in the lower Tees, to the extent that the river was considered to be devoid of this fish between the 1920s and 1983. Ironically, a pollution incident in Teesdale revealed that some salmon were still managing to migrate through Teesside's 'anoxic plug' and less and cleaner industry has seen numbers gradually increase. Salmon are an important food source for a wide range of predators including otters, seals and goosander. Salmon need clean, aerated water and clean substrates to successfully spawn in.</p> <p>Egg survival is compromised by fine sediment smothering reeds and 'spikes' of nutrient, such as ammonia, from field run-off. Invertebrates, the primary food source of salmon fry, are similarly impacted. Salmon are an anadromous species and can complete numerous migrations in a lifetime. The Tees Barrage presents a problem to the recovery of this species in the river, at both inward and seaward migrations, although recent modifications to the canoe slalom may improve the situation. Other barriers are being addressed through Water Framework Directive initiatives.</p>
Brown/Sea Trout	<i>Salmo trutta</i>	<p>Brown trout require clean, aerated water and clean substrates to successfully spawn in. Egg survival is compromised by fine sediment smothering reeds and 'spikes' of nutrient, such as ammonia, from field run-off. Invertebrates, the primary food source of trout fry are similarly impacted. Brown trout are potentially anadromous, migrating to estuarine waters and returning to freshwater to spawn. The reasons for this are as yet unknown. Numbers of brown trout in the Tees have declined as a result of degraded and fragmented habitat, barriers to migration and pollution.</p>
River Lamprey	<i>Lampetra fluviatilis</i>	<p>The river lamprey is found in coastal waters, estuaries and accessible rivers. The species is normally anadromous, and pollution or artificial obstacles such as weirs or dams impede migration. The UK populations</p>

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		are considered important for the conservation of the species at an EU level.
Sea Lamprey	<i>Petromyzon marinus</i>	The sea lamprey is a primitive, jawless fish resembling an eel. It is the largest of the lampreys found in the UK. It occurs in estuaries and easily accessible rivers, and is an anadromous species. Sea lampreys need clean gravel for spawning, and marginal silt or sand for the burrowing juvenile ammocoetes. Sea lampreys have a preference for warm waters in which to spawn. Features such as weirs and dams, as well as polluted sections of river, may impede migration to spawning grounds. Sea lampreys seem to be relatively poor at ascending obstacles to migration, and are frequently restricted to the lower reaches of rivers. The Tees barrage presents a considerable barrier to migrating sea lamprey.
Water Vole	<i>Arvicola terrestris</i>	Once a familiar sight in lowland Britain water vole populations have been plummeting. It is believed to be our most declining mammal with the Mammal Society estimating that it is now absent from over 90% of sites occupied in the 1900's. The reasons for its decline are complex but involve a combination of loss and fragmentation of becksides habitats, changes in watercourse management, and predation by mink which have spread through our countryside. In the Tees Valley local declines have mirrored the national pattern; however water voles do thrive in parts of the Tees Valley. One example is the urban Becks of Middlesbrough.
Hedgehog	<i>Erinaceus europaeus</i>	The once common hedgehog is now under threat from development and habitat loss. Gardening in a wildlife-friendly way, can help support this species to find a home and to move safely between habitats to find mates and food.  Hedgehogs are fairly common in residential parts of the Tees Valley, but little is known of their status in the farmed environment.
Brown Hare	<i>Lepus europaeus</i>	This once common mammal has had substantial population declines in Britain during the twentieth century, especially since the 1960's. The National Hare survey in 2001 has estimated the current British population to be between 800,000 and 1,250,000 which is believed to be an 80% reduction since 1880. The decline in abundance is related to the simplification of the agricultural landscape in Britain. Increased intensification and farm specialisation, plus changes in planting and cropping regimes. It is widespread throughout the Tees Valley and

COMMON NAME	SCIENTIFIC NAME	DESCRIPTION AND STATUS
		appears to be doing well in the industrial brownfield habitats around the Tees estuary.
Otter	<i>Lutra lutra</i>	<p>A rare but widespread animal, now found in much of the country, although still absent from parts of central and southern England. The otter was nearly wiped out during the 20th century through a combination of pesticide poisoning, persecution and habitat destruction.</p> <p>The otter returned to the Tees at the turn of the century after some 30 years absence from the area. Sightings were confirmed at Portrack Marsh at the centre of the conurbation in 2004 and since then signs have been regularly recorded at Bowesfield, on the Middlesbrough Becks and around the North Tees.</p>
Harvest Mouse	<i>Micromys minutus</i>	<p>The tiny harvest mouse lives in long tussocky grassland, reedbeds, hedgerows and around woodland edges. They build a spherical nest of tightly woven grass, high up amongst the tall grasses. The loss of field margins, hedgerows and grassland habitats is a threat to this declining species.</p> <p>Harvest mouse has been recorded on farmland around Darlington and at the Bowesfield nature reserve on the Tees in Stockton. A re-introduction programme has previously established new populations at Cowpen Bewley in North Tees.</p>
Noctule Bat	<i>Nyctalus noctula</i>	<p>Bats are widespread throughout Britain in both rural and urban habitats. Foraging for flying invertebrates takes place in woodland and wetland habitats, and linear landscape features are important to bats.</p> <p>All bat species have shown a dramatic decline in numbers in the last 50 years, usually attributed to the loss of roosting and feeding sites, use of pesticides and disturbance. The need for a range of roost sites makes bats more vulnerable when habitat is lost or fragmented.</p> <p>Important features for bats along the Tees include deciduous woodland, mature riverside trees, old buildings, churches and bridges. The river and adjacent wetlands are important as a source of invertebrate prey.</p>
Common Seal	<i>Phoca vitulina</i>	The common or harbour seal is widely distributed in northern hemisphere waters in Britain, the largest populations are around the Scottish coastline and in The Wash. The species is not threatened, but is prone to

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		phocine distemper outbreaks, such as in 1988, when 3,000 common seal deaths were reported in British waters. Seals have lived in the Tees estuary for centuries, declined through the nineteenth century and by the 1930s had disappeared. Disturbance by shipping, habitat loss, pollution and persecution by fishermen were contributing factors. Seals returned to the estuary in the 1980s after improvements in water quality. There is now a small but successful breeding population at Seal Sands, which also uses haul out sites at Greatham Creek and Billingham Beck.
Dingy Skipper	<i>Erynnis tages</i>	The Dingy Skipper is locally distributed throughout Britain and Ireland, but has declined rapidly in recent years. One of the main threats is loss of suitable habitat due to the encroachment of tall herbaceous vegetation and scrub as well as loss of brownfield sites to development. The Tees Valley is a regional stronghold for the Dingy Skipper. There are colonies throughout the brownfield sites of the Tees Estuary. Key sites include Graythorp, Greenabella Marsh, Maze Park, Portrack Marsh, Seal Sands, South Gare, and Coatham marsh and dunes.
Grayling	<i>Hipparchia semele</i>	This is a widespread species but is declining in many areas, particularly inland. In The Tees Valley Grayling colonies are mainly associated with the old industrial sites of the Tees estuary. Key sites are Greenabella Marsh, Maze Park, Seal Sands, South Gare and Coatham Marsh.
White Letter Hairstreak	<i>Satyrrium w-album</i>	<p>This small butterfly breeds on elm trees, their preference for the tops of trees means they are hard to spot and easily missed. A key identification feature is the white W-shaped line on the underside of the wing from which it gains its name. The species is estimated to have suffered a 99% population decline over the last 25 years in the UK and the decline may in part be due to the loss of their larval food plant due to Dutch elm disease.</p> <p>White letter hairstreak is scarce in the Tees Valley, but known to be present at Preston Hall. The establishment of elm young elm suckers as a feature of hedgerows and woods combined with the fact that the female butterflies are able to travel several kilometres in search of food plants means there is potential for some recovery of this species in the area.</p>
Crescent	<i>Celaena leucostigma</i>	This is a species of damp, marshy woodland and moorland. It flies in August and September, the eggs overwintering and hatching in spring when the larvae feed on the stems of marshland plants, such as yellow flag.

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		<p>The species has declined by 85% over the last 35 years.</p> <p>Crescent has been recorded on a number of industrial sites around the Tees Estuary including the BP Cats terminal, Northumbrian Water's works at Cowpen Bewley and Dabholme and at Coatham Marsh.</p>
Small Square-spot	<i>Diarsia rubi</i>	<p>Found throughout Britain this moth species prefers damp and marshy places. Once common and widespread, this is one of our most rapidly declining moths. Further research is needed to discover the reasons for its demise.</p> <p>Small square-spot has been recorded in recent years on sites in the North Tees, at Coatham Marsh and on Billingham Beck, close to its confluence with the Tees.</p>
Purple Milk-vetch	<i>Astragalus danicus</i>	<p>National populations were stable until 1930, since when it has declined substantially on the chalk of southern England and limestone of north east England largely because of agricultural improvement and a lack of grazing. The Vascular Plant Red Data List for Great Britain (2005) lists the plant as endangered because of a reduction in population size of more than 50% over the last 10 years.</p> <p>In the Tees Valley it grows on sand dunes and coastal grasslands along the coast with records from Hart Warren Dunes, Seaton Dunes and Common, North Gare, South Gare, Coatham Dunes, Coatham Marsh and The Stray Redcar.</p>
Flat-sedge	<i>Blysmus compressus</i>	<p>This sedge is widespread in Britain, but it is a localised and rapidly declining species. It is found in open, sedge-rich areas in calcareous flushes, marshes, fens, damp grassland and pond and stream borders. It also occurs in brackish ditches at the head of saltmarshes. Its decline is believed to be due to a variety of causes related to grassland drainage and improvement as well as eutrophication and the cessation of grazing. In the Tees Valley it has been recorded at two coastal ponds near Redcar, including the TVWT reserve at Coatham.</p>

Table of UK Species of Principle Importance Occurring in the Landscape Area

COMMON NAME	SCIENTIFIC NAME	DESCRIPTION AND STATUS
Common Toad	<i>Bufo bufo</i>	<p>Although usually a solitary animal, in the breeding season large numbers of toads converge on breeding ponds. The common toad seems to be in decline and is threatened by habitat loss, especially by drainage of its breeding sites.</p> <p>The toad is the commonest and most widespread amphibian in the Tees Valley. It can be found in brackish pools close to the river mouth at Seaton Common, Greenabella Marsh and the Coatham, in greenspaces and gardens throughout the conurbation and in farm ponds along the Tees to Piercebridge.</p>
Great Crested Newt	<i>Triturus cristatus</i>	<p>Our biggest newt, the great crested newt is almost black in colour, with spotted flanks and a striking, orange belly. The males have a long, wavy crest along the body and on the tail during the breeding season. Since the 1940s, populations of this species have declined across its range, due to the drainage of land for agriculture and the loss of ponds through development.</p> <p>Unlike toads, great crested newts do not seem to tolerate the brackish waters of the estuary. They are however, found on industrial sites to the south of Hartlepool on the western fringe of Stockton and through much of Darlington.</p>
Skylark	<i>Alauda arvensis subsp. arvensis</i>	<p>The skylark is found everywhere in the UK from lowland farmland to upland moorland. Often inconspicuous on the ground, it is easy to see when in its distinctive song flight. Skylark numbers have declined such that there are now only 10% of the numbers that were present 30 years ago. This massive decline is mainly due to changes in farming practices relating to the timing of planting of cereal crops.</p> <p>There are an estimated 1630 breeding pairs of skylark in Cleveland and it seems that the species' use of industrial and post-industrial sites around Teesmouth has allowed it to avoid some of the pressures experienced in farmland habitat.</p>
Linnet	<i>Carduelis cannabina subsp. autochthona/cannabina</i>	<p>This small bird in the finch family derives its scientific name from its fondness for hemp and its English name from its liking for seeds of flax, from which linen is made. In Britain, populations are declining, attributed to increasing use of herbicides, aggressive scrub</p>

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		<p>removal and excessive hedge trimming.</p> <p>The linnet is present as a breeding bird in all but the most urbanised parts of the landscape area. The presence of gorse thickets, infrequently trimmed hedgerows and scrub are key to the survival of the species in this area.</p>
Common Cuckoo	<i>Cuculus canorus</i>	<p>This species is a widespread summer migrant to Europe. The common cuckoo's global population is estimated to have declined by 89% over the past 40 years.</p> <p>Small numbers of cuckoo breed in the Tees landscape area, on the open habitats of North Tees and on farmland between Stockton and Piercebridge.</p>
Yellowhammer	<i>Emberiza citrinella</i>	<p>The male yellowhammer has a bright yellow head, yellow under-parts, and a heavily streaked brown back. In parts of Europe it is in serious decline; in the UK populations fell by 54% between 1970 and 2003. It is most commonly found on lowland arable and mixed farmland, probably due to the greater availability of seeds. It nests in hedges, patches of scrub, and ditches, especially if these have a wide grass margin next to them and a cereal crop next to the margin.</p> <p>This bird is absent from urban Teesside, but thrives in the agricultural area around Darlington and up to the western fringe of Stockton.</p>
Reed Bunting	<i>Emberiza schoeniclus</i>	<p>The reed bunting is a medium sized bird with a small but sturdy seed-eater's bill. Predominantly a farmland and wetland bird it is typically found in wet vegetation, where singing males can be seen perched on top of a bush or reed stem. A decline in the breeding population was recorded from 1969-2007.</p> <p>The course of the River Tees represents a stronghold for the reed bunting with significant numbers present from Yarm to the river mouth.</p>
Herring Gull	<i>Larus argentatus subsp. argentus</i>	<p>One of the best known of all gulls along the shores of western Europe. Despite increases at urban and some inland site, the total herring gull population is now at its lowest level since monitoring began in 1969/70. The reason for the decline is not well understood; factors could include the spread of botulism from scavenged food and reductions in discards from</p>



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		<p>fisheries.</p> <p>Populations on the Tees live on industrial buildings in Hartlepool and the Tees estuary. The area holds around 1% of the British population making it nationally significant for the future of this bird.</p>
Grasshopper Warbler	<i>Locustella naevia</i>	<p>This small bird is found in short dense vegetation, often close to water. It is very difficult to see except sometimes when singing from a prominent position. The song, which gives this species its name, is a monotonous mechanical insect-like reeling. The number of birds may be on the decline because of habitat loss, although total population size is large and the species has an extensive range.</p> <p>The local population of this species appears to also be in decline although it seems to be making increasing use of territories bordering urban areas including Billingham, Middlesbrough, Ingleby Barwick and Darlington.</p>
Curlew	<i>Numenius arquata</i>	<p>The curlew is the largest European wading bird, instantly recognisable on winter estuaries or summer moors by its long, down-curved bill, long legs and evocative call. Once a common bird, its numbers are noticeably declining.</p> <p>The curlew is a common sight on the flats and marshes of the Tees in winter. Most leave the area to breed on the North York Moors or the Pennine hills, with just a few pairs choosing to breed on farmland between Stockton and Darlington.</p>
House Sparrow	<i>Passer domesticus</i>	<p>Monitoring suggests a severe decline in the UK house sparrow population, recently estimated as dropping by 71 per cent between 1977 and 2008 with substantial declines in both rural and urban populations.</p> <p>The house sparrow is still widely distributed in the Tees Valley and is present in the urban centres as well as on the neighbouring farmland. More detailed studies show that the breeding density is declining here at a similar rate to other parts of northern Britain, but less severely than in the south.</p>
Tree Sparrow	<i>Passer montanus</i>	<p>In the UK there has been a huge decline in tree sparrow numbers (92% between 1970 and 2009, which is probably the result of agricultural intensification and specialisation, particularly the</p>

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		<p>increased use of herbicides. A trend towards autumn-sown crops, at the expense of spring-sown crops that produce stubble fields over winter, plus the increased use of insecticides, will have reduced the amount of insect food available for nestlings. More recent data shows that the trend has since improved. In the Tees Valley, a study of tree sparrows in 1993 estimated a breeding population of about 135 pairs distributed in 10 loose breeding colonies scattered throughout the old county of Cleveland. Recent data (2011) from the Teesmouth Bird Clubs puts estimates at Breeding pairs at 261.</p>
Grey Partridge	<i>Perdix perdix</i>	<p>The species is rapidly declining in the UK (84% decline between 1970 and 1998 and has declined by a further 54% between 1995-2009). The drastic decline in this bird's range and abundance is a result of agricultural intensification, resulting in loss of insect food sources on farmland. In the Tees Valley there are estimated to be 300-350 breeding pairs. There are also small populations on some industrial sites on Teesside.</p>
Dunnock (Hedge Accentor)	<i>Prunella modularis subsp. occidentalis</i>	<p>The dunnock is similar in size to the house sparrow, although it is a sleeker bird with a fine bill. Dunnock populations fell dramatically during the 1970s and 1980s but appear to have stabilised.</p> <p>The dunnock is widespread in the Tees Valley; thriving in residential gardens, parks, deciduous woodlands and even in the ornamental shrubberies of retail and business parks.</p>
Bullfinch	<i>Pyrrhula pyrrhula subsp. pileata</i>	<p>The Bullfinch is a large, plump finch which feeds on buds and fruit in woodlands, hedgerows, parklands, gardens and orchards. Bullfinch numbers decreased significantly over recent decades, but have since been recovering. Changes in agricultural practices, such as the removal of hedgerows and the loss of woodland habitat, has had detrimental effects on this species.</p> <p>Habitats along the Tees from Piercebridge to the very edge of Stockton, support valuable breeding populations of bullfinch.</p>
Starling	<i>Sturnus vulgaris subsp. vulgaris</i>	<p>Starlings are very familiar birds of farmland, parks, gardens and towns. Although one of the UK's most common garden birds, the starling is declining elsewhere, leading to its status of conservation concern.</p>

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		<p>The starling is still widespread and common in the Tees Valley with a clear preference for built-up areas with large populations present in Darlington, Stockton and Middlesbrough. Winter flocks are swollen with migrant birds from northern Europe and these form dramatic roosts in reedbeds at Saltholme and Bowesfield or on man-made structures such as the Victoria bridge over the Tees in Stockton and the Transporter Bridge in Middlesbrough.</p>
Song Thrush	<i>Turdus philomelos subsp. clarkei</i>	<p>The Song Thrush is a small, familiar songbird, commonly found in parks and gardens, woodland and scrub. Living up to its name, it has a beautiful, loud song with repeating phrases. Song thrush numbers have decreased by 73% in farmland and 49% in woodland habitats, believed to be the result of hedgerow removal and increased use of pesticides.</p> <p>Song thrush are notably absent from the treeless North Tees marshes and from the area's urban centres. They also appear to be struggling on farmland in the Tees Valley, but breeding populations are good in the residential parts of Stockton, Eaglescliffe and Yarm</p>
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		around the barrage is unknown. Very little is known about the current population and extent of eels in the Tees.
Atlantic Salmon	<i>Salmo salar</i>	<p>Once abundant in the Tees, salmon numbers declined with the growth of industry in the lower Tees, to the extent that the river was considered to be devoid of this fish between the 1920s and 1983. Ironically, a pollution incident in Teesdale revealed that some salmon were still managing to migrate through Teesside's 'anoxic plug' and less and cleaner industry has seen numbers gradually increase. Salmon are an important food source for a wide range of predators including otters, seals and goosander. Salmon need clean, aerated water and clean substrates to successfully spawn in.</p> <p>Egg survival is compromised by fine sediment smothering reeds and 'spikes' of nutrient, such as ammonia, from field run-off. Invertebrates, the primary food source of salmon fry, are similarly impacted. Salmon are an anadromous species and can complete numerous migrations in a lifetime. The Tees Barrage presents a problem to the recovery of this species in the river, at both inward and seaward migrations, although recent modifications to the canoe slalom may improve the situation. Other barriers are being addressed through Water Framework Directive initiatives.</p>
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Hedgehog	<i>Erinaceus europaeus</i>	<p>The once common hedgehog is now under threat from development and habitat loss. Gardening in a wildlife-friendly way, can help support this species to find a home and to move safely between habitats to find mates and food.</p> <p>Hedgehogs are fairly common in residential parts of the Tees Valley, but little is known of their status in the farmed environment.</p>
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		around the Tees estuary.
Otter	<i>Lutra lutra</i>	<p>A rare but widespread animal, now found in much of the country, although still absent from parts of central and southern England. The otter was nearly wiped out during the 20th century through a combination of pesticide poisoning, persecution and habitat destruction.</p> <p>The otter returned to the Tees at the turn of the century after some 30 years absence from the area. Sightings were confirmed at Portrack Marsh at the centre of the conurbation in 2004 and since then signs have been regularly recorded at Bowesfield, on the Middlesbrough Becks and around the North Tees.</p>
Harvest Mouse	<i>Micromys minutus</i>	<p>The tiny harvest mouse lives in long tussocky grassland, reedbeds, hedgerows and around woodland edges. They build a spherical nest of tightly woven grass, high up amongst the tall grasses. The loss of field margins, hedgerows and grassland habitats is a threat to this declining species.</p> <p>Harvest mouse has been recorded on farmland around Darlington and at the Bowesfield nature reserve on the Tees in Stockton. A re-introduction programme has previously established new populations at Cowpen Bewley in North Tees.</p>
Noctule Bat	<i>Nyctalus noctula</i>	<p>Bats are widespread throughout Britain in both rural and urban habitats. Foraging for flying invertebrates takes place in woodland and wetland habitats, and linear landscape features are important to bats.</p> <p>All bat species have shown a dramatic decline in numbers in the last 50 years, usually attributed to the loss of roosting and feeding sites, use of pesticides and disturbance. The need for a range of roost sites makes bats more vulnerable when habitat is lost or fragmented.</p> <p>Important features for bats along the Tees include deciduous woodland, mature riverside trees, old buildings, churches and bridges. The river and adjacent wetlands are important as a source of invertebrate prey.</p>
Common Seal	<i>Phoca vitulina</i>	The common or harbour seal is widely distributed in northern hemisphere waters in Britain, the largest populations are around the Scottish coastline and in The Wash. The species is not threatened, but is prone

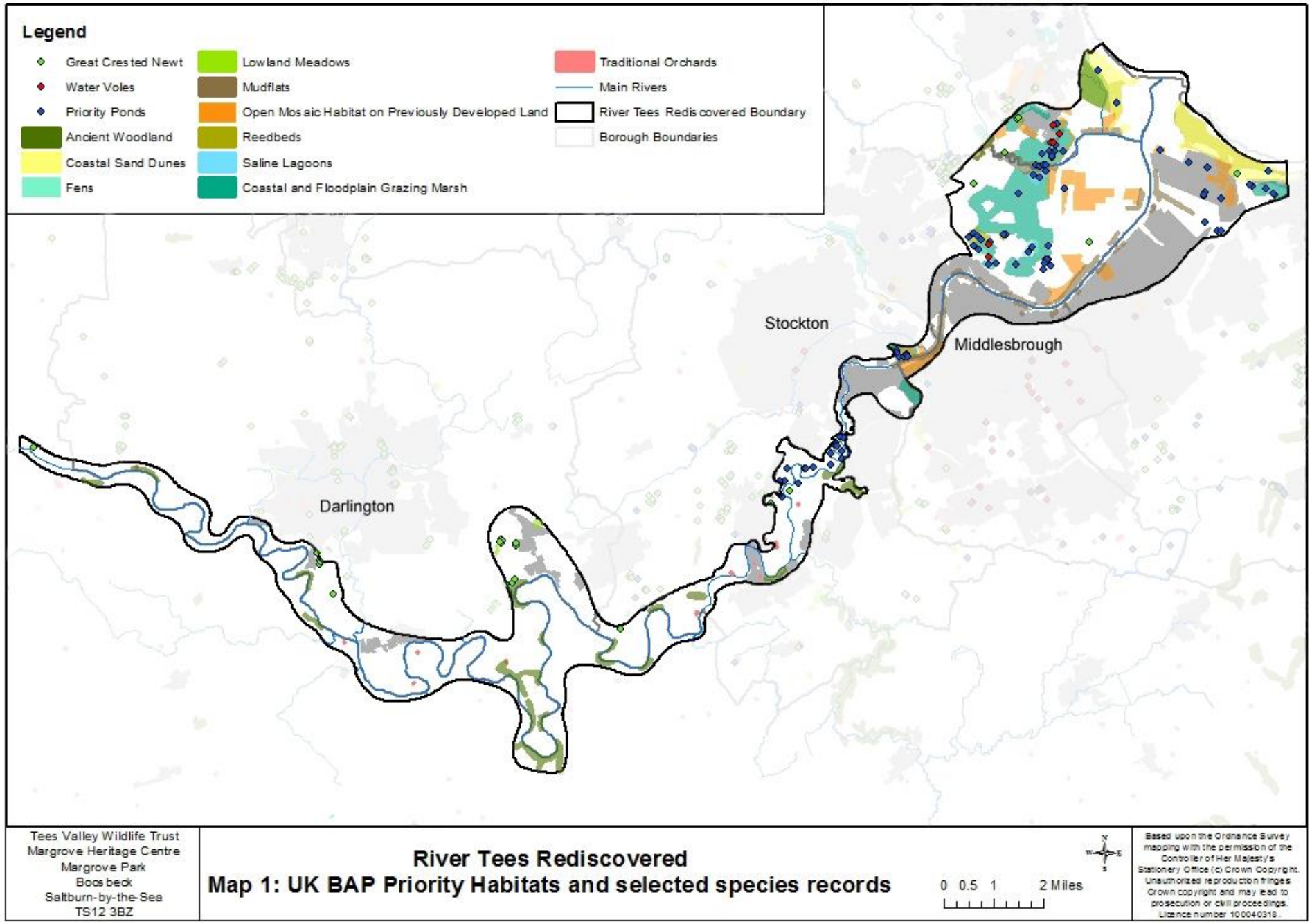
COMMON NAME	SCIENTIFIC NAME	DESCRIPTION AND STATUS
		<p>to phocine distemper outbreaks, such as in 1988, when 3,000 common seal deaths were reported in British waters. Seals have lived in the Tees estuary for centuries, declined through the nineteenth century and by the 1930s had disappeared. Disturbance by shipping, habitat loss, pollution and persecution by fishermen were contributing factors. Seals returned to the estuary in the 1980s after improvements in water quality. There is now a small but successful breeding population at Seal Sands, which also uses haul out sites at Greatham Creek and Billingham Beck.</p>
Dingy Skipper	<i>Erynnis tages</i>	<p>The Dingy Skipper is locally distributed throughout Britain and Ireland, but has declined rapidly in recent years. One of the main threats is loss of suitable habitat due to the encroachment of tall herbaceous vegetation and scrub as well as loss of brownfield sites to development. The Tees Valley is a regional stronghold for the Dingy Skipper. There are colonies throughout the brownfield sites of the Tees Estuary. Key sites include Graythorp, Greenabella Marsh, Maze Park, Portrack Marsh, Seal Sands, South Gare, and Coatham marsh and dunes.</p>
Grayling	<i>Hipparchia semele</i>	<p>This is a widespread species but is declining in many areas, particularly inland. In The Tees Valley Grayling colonies are mainly associated with the old industrial sites of the Tees estuary. Key sites are Greenabella Marsh, Maze Park, Seal Sands, South Gare and Coatham Marsh.</p>
White Letter Hairstreak	<i>Satyrrium w-album</i>	<p>This small butterfly breeds on elm trees, their preference for the tops of trees means they are hard to spot and easily missed. A key identification feature is the white W-shaped line on the underside of the wing from which it gains its name. The species is estimated to have suffered a 99% population decline over the last 25 years in the UK and the decline may in part be due to the loss of their larval food plant due to Dutch elm disease.</p> <p>White letter hairstreak is scarce in the Tees Valley, but known to be present at Preston Hall. The establishment of elm young elm suckers as a feature of hedgerows and woods combined with the fact that the female butterflies are able to travel several kilometres in search of food plants means there is potential for some recovery of this species in the area.</p>

COMMON NAME	SCIENTIFIC NAME	DESCRIPTION AND STATUS
Crescent	<i>Celaena leucostigma</i>	<p>This is a species of damp, marshy woodland and moorland. It flies in August and September, the eggs over-wintering and hatching in spring when the larvae feed on the stems of marshland plants, such as yellow flag. The species has declined by 85% over the last 35 years.</p> <p>Crescent has been recorded on a number of industrial sites around the Tees Estuary including the BP Cats terminal, Northumbrian Water's works at Cowpen Bewley and Dabholme and at Coatham Marsh.</p>
Small Square-spot	<i>Diarsia rubi</i>	<p>Found throughout Britain this moth species prefers damp and marshy places. Once common and widespread, this is one of our most rapidly declining moths. Further research is needed to discover the reasons for its demise.</p> <p>Small square-spot has been recorded in recent years on sites in the North Tees, at Coatham Marsh and on Billingham Beck, close to its confluence with the Tees.</p>
Purple Milk-vetch	<i>Astragalus danicus</i>	<p>National populations were stable until 1930, since when it has declined substantially on the chalk of southern England and limestone of north east England largely because of agricultural improvement and a lack of grazing. The Vascular Plant Red Data List for Great Britain (2005) lists the plant as endangered because of a reduction in population size of more than 50% over the last 10 years.</p> <p>In the Tees Valley it grows on sand dunes and coastal grasslands along the coast with records from Hart Warren Dunes, Seaton Dunes and Common, North Gare, South Gare, Coatham Dunes, Coatham Marsh and The Stray Redcar.</p>
Flat-sedge	<i>Blysmus compressus</i>	<p>This sedge is widespread in Britain, but it is a localised and rapidly declining species. It is found in open, sedge-rich areas in calcareous flushes, marshes, fens, damp grassland and pond and stream borders. It also occurs in brackish ditches at the head of saltmarshes. Its decline is believed to be due to a variety of causes related to grassland drainage and improvement as well as eutrophication and the cessation of grazing. In the Tees Valley it has been recorded at two coastal ponds near Redcar, including the TVWT reserve at Coatham.</p>

Source: Jeremy Garside, Tees Valley Wildlife Trust

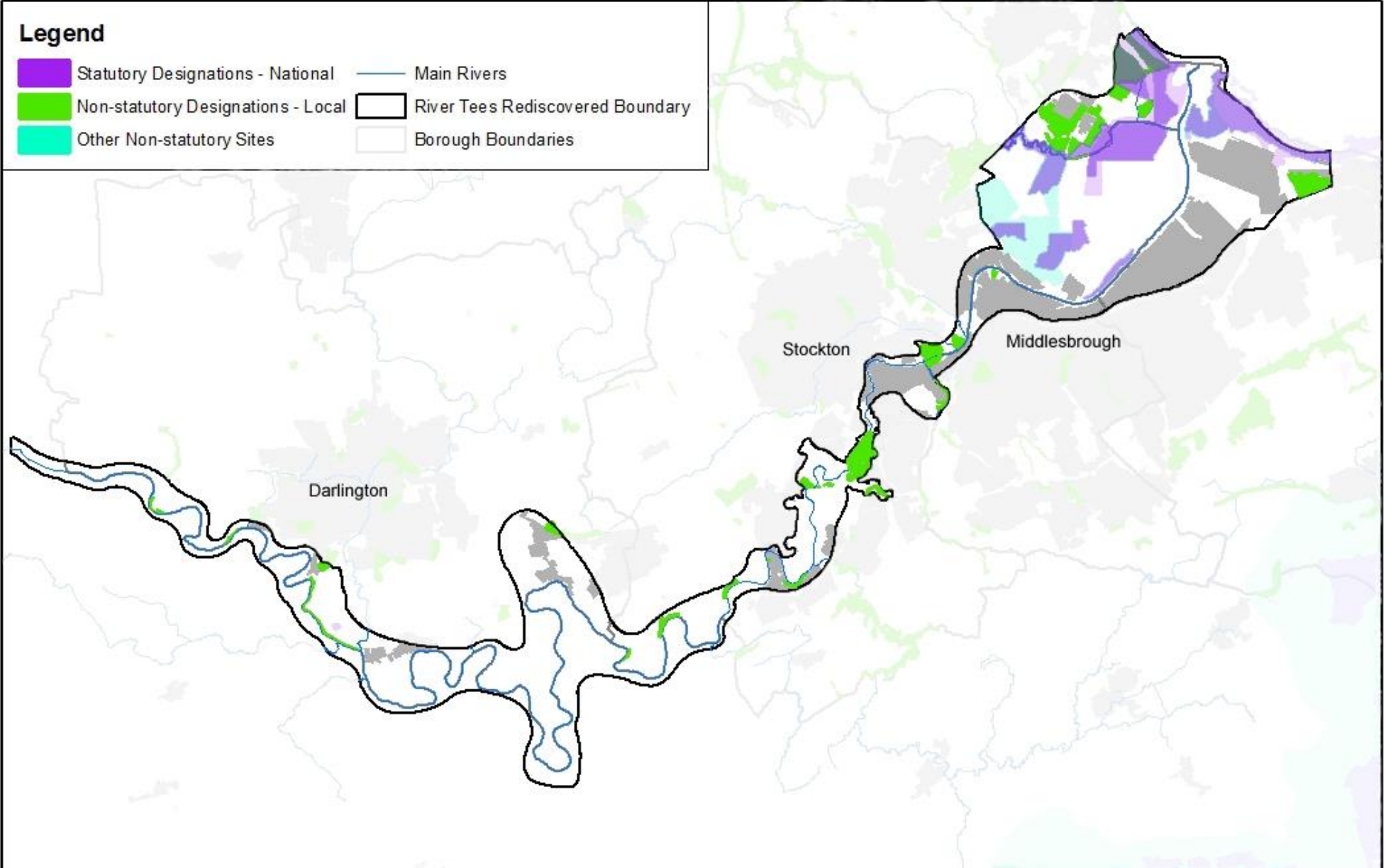






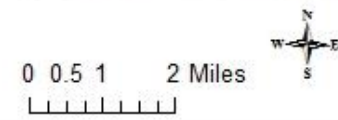
### Legend

- Statutory Designations - National
- Non-statutory Designations - Local
- Other Non-statutory Sites
- Main Rivers
- River Tees Rediscovered Boundary
- Borough Boundaries



Tees Valley Wildlife Trust  
Margrove Heritage Centre  
Margrove Park  
Boos beck  
Saltburn-by-the-Sea  
TS12 3BZ

## River Tees Rediscovered Map 2: Natural Environment Designations



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