# WILDLIFE OF THE TEES

River Tees Rediscovered

# Wildlife of the Tees

A Guide by
Jeremy Garside

This guide has been supported by the River Tees Rediscovered Landscape Partnership, thanks to money raised by National Lottery players and awarded through The National Lottery Heritage Fund.

It was compiled by Jeremy Garside,
Tees Valley Wildlife Trust
with support from
Groundwork NE & Cumbria

**CONTENTS** **Page**



## FOREWORD

Groundwork NE & Cumbria works on hundreds of projects every year, helping communities find practical solutions to challenges they face. The River Tees Rediscovered Landscape Partnership, with funding raised by National Lottery players and awarded by The National Lottery Heritage Fund, is an exciting initiative involving a wide range of partners, stretching from Piercebridge to the mouth of the Tees.

Our vision is for the Tees Valley to be renowned for its rich landscape, heritage and culture. We aim to connect people and communities to the built and natural heritage within the Tees Valley, bringing our heritage to life, by offering new ways for people to see, hear, touch and enjoy it. This is one of a series of projects which helps to increase learning about our landscape and its heritage.

We hope you enjoy it!

**Lucy Chapman**

River Tees Rediscovered Partnership Manager
Groundwork NE & Cumbria

River Tees Rediscovered

1

## Introduction

The River Tees rises high in the Pennines at Moorhouse, close to the border between County Durham and Cumbria and within metres of the source of the two other great rivers of North East England, the Wear and Tyne.

The journey of the Tees is, in comparison with other great rivers, short and steep. Through Upper Teesdale, in the high Pennines, it is young and fast, barely wider than a jump from one bank to the other. Its first great achievement is High Force, which is followed by its sequel, the smaller but more refined, Low Force. It has only travelled 30 miles by the time it is out of the hills and into maturity, a stately meandering sweep through the Tees Lowlands between Darlington and the North Sea.

This is the setting for the River Tees Rediscovered landscape area; a low-lying area, with a river very much at its heart. The river has been the major influence for human settlement and activity and it has always been at the centre of its natural environment and ecology.

Much attention is inevitably focussed on the industrial history of the Tees, the spreading towns which housed its workforce and the effect that this had on wildlife. First, in reclaiming the mudflats and marshes from nature and then the return of wildlife to the spaces that remained, as heavy industry declined or was better regulated.

This is only part of the story, because much of the River Tees Rediscovered landscape was never industrialised. The area has retained areas of ancient woodland and wildlife-rich hedgerows. There are greenspaces within its towns that retain features of past low-intensity farming and that have been created with the specific intention of providing new habitats for wildlife.

This guide explores and interprets this great biological diversity of the Tees Valley; the places and the plants and animals which inhabit them and which define this remarkable area.

The River Tees (Banks Group / Airfotos)



## The River Tees Rediscovered Landscape



The landscape area of River Tees Rediscovered follows the slow-moving, meandering river as it passes through farmland from Piercebridge to Stockton and on through the dense conurbation of Teesside, before it finally merges with the North Sea between the North and South Gares

**Piercebridge to Stockton – rural farmland**

The open countryside around Darlington and to the west of Stockton-on-Tees has rich alluvial soils and so is largely farmed, mainly for crops, but with some pastures, too. Wildlife benefits from a good network of hedgerows between fields and alongside country lanes.  Broadleaved mixed woodland is found in places on 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 corridor with a concentration around Yarm.

Hedges, small woodlands and rough pastures are important for a number of bird species which are declining across the UK, including yellowhammer, cuckoo, green woodpecker and bullfinch.

Ancient and semi-natural woodland survives along the banks of the River Tees and its tributaries, especially the steep Leven Valley. Woodland is generally restricted to the steeper slopes which had no value for agriculture. Ancient woodland is a precious habitat. It is scarce, irreplaceable and supports a vast diversity of wildlife including many rare and declining species. To be classified as Ancient, woodland cover must have been present on land since 1600. Before that time, planting of new woodland was uncommon, so these woods can be assumed to date back to the last ice age. Only 1.2% of Great Britain's land area has kept its ancient semi-natural woodland and those that remain are generally less than 50 acres in size.

Ancient woodland

### Darlington, Stockton and Middlesbrough - urban wildlife

The major towns of the Tees Valley are inevitably the sites where most changes have taken place to affect the natural landscape.

Remnant habitats, such as small meadows and woodlands, survived agricultural improvement only to be encapsulated by the spread of housing. There are ponds which were created as a result of human activity; old brick pits, gravel quarries or even fire-ponds for small airfields. These support toads, frog and sometimes the nationally protected great crested newt.

Other abandoned industrial sites support an open mosaic grassland with bare, stony patches. In places the substrate has such low nutrient content that wildflowers persist without competition from coarse grasses. Elsewhere, dense scrub has begun to proliferate with deep thickets of hawthorn, blackthorn and dog rose.

Finally, the outward spread of housing has released riverside land from intensive agriculture. This has allowed significant areas of the Tees floodplain to be returned to its natural function. Pools, marshes and wet woodlands have been reinstated and the river is permitted to breach its banks during times of flood.

Marshes (John Musham)





### The Tees Estuary

Teesmouth includes, at Seal Sands, one of the largest areas of intertidal mudflats on England's North East coast and, 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 and are 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.

### The River

The waters of the Tees are themselves a rich habitat for wildlife, more so since the European Urban Wastewater Directive of the 1990's gave drive to the removal of industrial and sewage pollution.

Salmon is distributed throughout the River Tees while numbers of brown trout in the River Tees have declined as a result of degraded and fragmented habitat, barriers to migration and pollution. Sea lamprey has been regularly recorded at the Tees Barrage and brook lamprey is also present throughout the Tees and can be found in the River Leven.

There is a breeding population of 70–80 harbour and grey seals which cluster around haul-outs on Seal Sands and Greatham Creek. They are renowned for a regular commute to catch salmon below the Tees Barrage and still occasionally succeed in overcoming this man-made obstacle and moving upriver as far as Yarm. Otters are spotted with remarkable regularity along the Tees through Stockton and around the North Tees Marshes from Saltholme to Greatham Creek and out to North Gare.

## Wildlife of the Tees

This section of the guide describes some of the species of wildlife which are most closely associated with the River Tees Rediscovered landscape area. Some of these are thriving in this area despite declines experienced elsewhere, all have been chosen which are doing well along the Tees compared to national declines, all chosen because of a special relationship to the Tees Valley. Further details of the habitats and sites inhabited or visited by these creatures can be found in a later section of the guide.

### Seals

In the 16th Century the Bishop of Durham owned all the produce of the River Tees and even its seals would have featured on the menu on special occasions. Early in the 19th Century, seals were still so numerous in the Tees as to pose a threat to the salmon fisheries. Later, with the rapid expansion of heavy industry, both salmon and seal populations crashed, so that by 1860 there were only 20 or 30 Tees seals left and no breeding taking place.

The industrial era was no time for seals and they were missing entirely from the Tees until the mid-1960's, when they began a slow recolonisation of the estuary and only began to successfully and regularly raise pups from around 2003.





The resident colony, found on Seal Sands, is made up of both harbour (common) seals and grey seals. The harbour seals raise their young on the mudflats during the summer months while the greys disperse to rocky coasts to have their pups during the autumn.

The seal is at the top of the food chain. An adult grey seal requires around 15 pounds of fish daily, so will inevitably ingest large quantities of any harmful substances that have got into the river ecosystem.

It could be said that the small colony of seals at Teesmouth is only tiny in proportion to the many thousands that live on British shores. However, it is a great symbol for this area, especially our ability to operate major industries alongside wildlife, if there are still seals on Seal Sands.

## Otter

The sight of an otter is still one of the most rewarding wildlife experiences in the UK. Pushed to the brink by hunting, habitat destruction and pesticides, the otter almost disappeared from rivers and waterways in England. Thankfully, after huge efforts to improve water quality and the banning of chemicals such as DDT, there are now increasingly good chances of spotting this enigmatic predator.

At one time, otters or signs of their activity were a common feature along most rural rivers. The Leven was particularly rich habitat for them and local names, such as Otter Hills Beck, a tributary of the Leven, record that fact to this day.

The otter disappeared from the Tees Valley in the mid-1970's following a long period of decline which was blamed on pollution, habitat damage and persecution. Some people believe the species was never completely extinguished in the area, with occasional reported sightings in the wilder beck valleys of East Cleveland. Its return to the Tees was first noticed in 2002 and 2003, with signs such as prints and spraints becoming increasingly common, and the first properly confirmed sighting of an otter along the Tees was made at Portrack Marsh in 2004.

The otter is now becoming an urban mammal in the Tees Valley, with regular reports from the Tees at Bowesfield, from Lustrum Beck in Stockton and Marton West Beck in Middlesbrough.





## Water Vole

As recently as the 1980's water voles were a common sight along the banks of the River Tees between Stockton and Yarm. During the 1990's, a series of nationwide surveys identified that the water vole had been suffering a steady and increasing decline and it is now believed that their populations have diminished by as much as 94% which is probably the most rapid and serious declines of any British wild mammal in recent times.

The cause of this decline is largely attributed to the American mink which was brought to Great Britain in the early 20th Century for fur farming, but became established in the wild after escapes and deliberate releases. They are opportunistic and voracious predators and will often kill more than they require for food. It is thought that, unlike other predators, they are able to enter water vole burrows and this has made them particularly vulnerable

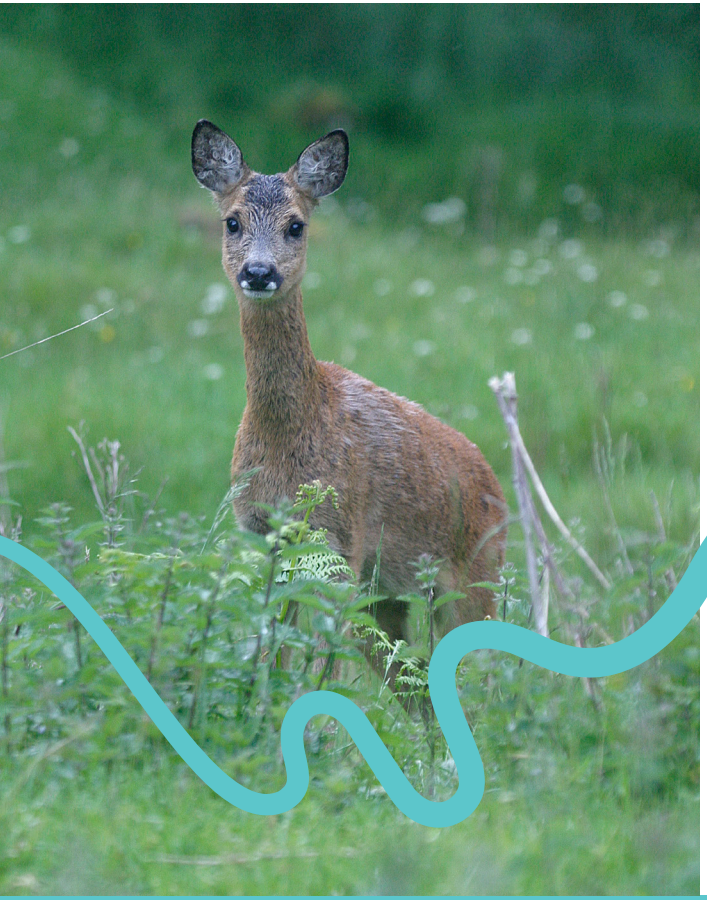
A visitor to the Middlesbrough's becks may still be lucky enough to catch a glimpse of a water vole. Small populations of water voles are also surviving in Billingham and Stockton.

The water vole is not a rat, but is a harmless vegetarian with a number of special adaptations to life in the water, such as furry round ears that act as flaps to keep the water out.

## Roe Deer

Although not often thought of as an urban mammal, Roe Deer are regular visitors to woodlands and pastures on the edge of towns. Once, a night-watchman working close to the Transporter Bridge reported seeing them swimming across the Tees at night to graze on old Middlesbrough's amenity greenspaces and ornamental trees.

It is not unexpected that you might also spot Roe Deer at Coatham Marsh, where the animals can roam freely across many acres of former industrial land, unperturbed by any requirement for site security passes or safety induction training! It is more of a surprise when they appear at Portrack Marsh, which is a relatively small site, very much at the centre of the Teesside conurbation



## Terns

Many of the birds that visit the River Tees through the winter months depart for upland breeding grounds in the spring, but their place is taken in the spring and summer months by the most elegant and delightful of all seabirds, the tern. They are appropriately described as "sea swallows" - sleek, fast and graceful. Four regular species of tern visit the Tees, and are described below.

## Sandwich Tern

The first arrival is the Sandwich Tern, which is usually seen from the last week of March, heading north to their nest sites on the Farne Islands. There are always a few Sandwich Terns offshore from April until October. Often the birds congregate here again at the end of the summer.

## Common Tern

The next arrival is the Common Tern and this one stays to breed here. They nest in colonies, which are often sited on artificial islands put out especially for them. Currently, the most active nesting colony is at Saltholme, with a smaller one at Portrack Marsh. Terns mount an aggressive guard over their nest sites; intruders are dive bombed and it is not unusual for them to draw blood from a human head.

## Arctic Tern

In late April, around the same time as the Common Terns arrive on Teesmouth, the Arctic Tern passes through. These will nest on the Farnes, the Scottish islands or perhaps even further north. The Arctic Tern has one of the most spectacular migrations of all birds - some will be nesting within the Arctic Circle in June and will spend the winter in Antarctic, at the other end of the world! In early May, in smaller numbers than the other terns, the Little Terns arrive.

## Little Tern

Little Terns are one of Britain's rarest seabirds and they nest in colonies along sand and shingle shores. This is a hazardous process with the eggs and young at risk from high tides, foxes, hedgehogs, kestrels and people. The eggs and chicks are superbly camouflaged and because the brooding white adults stand out like sore thumbs, they have to shoot off as soon as danger threatens.

## Ducks

There are 162 species of ducks, geese and swans which are found throughout the world in all sorts of wetland habitats from small ditches to the sea. They range in size from small teals to swans, and all are aquatic, with webbed feet and a broad, flattened bill.

## Shelduck

The Shelduck is one of the largest ducks; a handsome and distinctive creature which features on the logo of the Teesmouth Bird Club. It has a dark green head, red bill and chestnut-brown band across its white body.

Traditionally associated with coastal sites, the Shelduck has spread inland, although favours pools with sandy shores and gravel banks which provide their preferred feeding grounds.

Shelduck © Guy Edwardes 2020VISION

The Shelduck nests underground in old rabbit burrows, tree holes or even haystacks. During the 19th Century, it was persecuted for this habit in certain areas as it competed with rabbits which were food for many people.





## Teal

The Teal is our smallest duck. They are common and pretty dabbling ducks, which gather in large numbers in winter on pools, reservoirs and wet meadows. Many of these birds are migrants from the cold climes of the Baltic and Siberia.
Teal can be seen on many ponds, pools and lakes throughout the River Tees Rediscovered landscape area.

Teal © Guy Edwardes 2020VISION

## Mallard

The Mallard is the most familiar of all the dabbling ducks, found right across the River Tees Rediscovered area. They are commonly seen on park lakes as well as on wetland nature reserves, where they can gather in their hundreds during January and February.

Mallard © Mark Hamblin

The breeding plumage of the male Mallard includes a shiny green head, maroon-brown chest, yellow bill and curly black feathers just above the tail. Female Mallards are brown and mottled in comparison.

## Wigeon

The Wigeon is a medium-sized duck with a round head and short bill. Males are grey with a pink breast, orange head, yellow forehead and obvious white wing patches that can be seen when they fly. Females are similar to mallard females, but with rusty brown plumage and a pointed tail.

The Wigeon is a winter visitor that gathers in large numbers, particularly on wet grasslands, floodplain meadows, and nature reserve pools with gently sloping edges where they can easily get out onto the grassy banks. Wigeon can be spotted dabbling in close-knit groups or flying in tight formations over wetlands.

## Waders

A wading bird is water bird that feeds by wading along the edge of waterways, pools or beaches. They range in size, shape and colour and usually, but not always, have long legs and a long bill.

Long legs enable waders to forage in deep water and a long bill allows them to probe deep into the mud for their food. In practice, the length of their legs and shape of the bill can vary enormously depending on food preferences.

## Redshank

The Redshank is a large sandpiper with long, bright red legs. It is a typical wader, feeding in shallow water around lakes, marshes, mudflats and coastal wetlands.

Redshank are varied in their choice of food.  Sometimes they feed on salt and freshwater marshes, taking a variety of small worms and snails. At other times they feed on mudflats, taking small shrimps, as well as marine worms and snails. The Redshank using Teesmouth in winter, nest both in northern Britain and in Iceland.

They can be seen in small numbers anywhere on the tidal reaches of the river, from the coast to the Barrage. Sometimes they continue moving upriver to Bowesfield, but only when the weather is mild and the freshwater marshes are frost-free and remain soft enough to yield food.





## Sanderling

Sanderling by Cpt. Neil Aldridge

The Sanderling feeds in small flocks at the edge of the tide, scampering back and forth after the waves, looking for insects, crustaceans, worms, fish and even jellyfish. They breed in the Arctic, visiting Teesmouth (primarily Coatham and Seaton Sands) in the winter and when passing through on migration during spring and autumn. The distance they travel varies, but individuals have been known to make 32,000 km annual round-trips to their breeding and wintering grounds.

Sanderlings only have three toes on each foot; they are missing the hind toe, which gives them a distinctive running action.

## Knot

Knot feed only on marine animals; chiefly small mud-snails, mussels and other bivalve seashells.  They pick these from the surface of rocky shores or probe into the upper layers of mudflats.  The knot which visit Teesmouth nest in Greenland and Arctic Canada.

## Turnstone

Turnstone © Peter Cairns 2020VISION

Turnstone feed on rocky shores or on the seaweeds and flotsam thrown up by high winds and waves along the beaches. They take a variety of marine snails as well as mussels and sand hoppers. The Turnstone that are at Teesmouth between August and May will nest in Greenland and Iceland.

## Heron

These unmistakable, long-necked, long-legged wading birds fish patiently and in solitude on ponds and streams. There are generally a few to be seen on each of the wetland nature reserves; Portrack Marsh, Coatham Marsh or Bowesfield. Often, they are spooked by an approaching walker, and long before the intruder has seen them, they give out a disgruntled squawk and hoist themselves aloft on huge grey wings.

Sadly, Herons seem to have been disadvantaged by the changes to the River Tees resulting from the operation of the Barrage. The impounded river is generally too steep for the birds, who like to wade along shallower margins to catch fish. In pre-barrage days, the hawthorn clump on Bowesfield's Horseshoe Bend would support a small nesting colony of around nine birds. Herons are largely sedentary and most remain close to the colony in which they were born. Often, they use the same nests year after year; every time making small additions and carrying out repairs until the nests are several feet across. The first clutch of eggs is laid in February, earlier than most birds. Incubation is carried out by males during the day and by females at night. Both parents subsequently feed the young by regurgitating small fish, or partially digested larger fish into the bottom of the nest.






## Cormorant

Cormorants are present at the coast throughout the year and are frequently seen flying upriver and around the Tees Barrage. They are instantly recognisable with large black bodies and hooked necks. They are also distinctively large, reaching nearly a metre in length when fully grown.

Cormorants are the only diving birds which do not produce a waterproofing oil on their feathers, so consequently, after a period of swimming they have to hold their wings out to the wind while they dry off. At first it seems like an accident of evolution that they have not been given a waterproof finish, but in fact the wetter feathers give them an increased weight and efficiency in the water, enabling the magnificent swimming ability of these birds.

Cormorants catch fish by out-swimming them. They have powerful, muscled legs and broad webbed feet to aid this task. Most other diving birds collect their catch in the surface waters, but the cormorant goes right to the bed of the river or sea to collect the fattest fish.

Cormorant © Peter Cairns 2020VISION

## Kingfisher

The Kingfisher is a tropical beauty, an unmistakable flash of gold and translucent blue, seen momentarily, weaving along the Tees or its smaller tributaries such as Billingham or Lustrum Beck. Their tropical colouring is not without cause; they are believed to have originated in the tropics where their numbers are still greatest. The fact that they have spread to cooler regions like ours, is a sign of their ability to adapt. No predator can go beyond the range of its prey and so the kingfisher depends on water quality to levels at which sticklebacks, diving beetles and amphibians can thrive.

Kingfishers make their nest in a steep bank of soft mud close to the water's edge. A purchase on the bank is first made by flying at it, beak first. When enough of a ledge has been formed, the bird then stands and digs, using its beak like a spade and clawing with its toes like a terrier. The nesting tunnel may be a few feet long, providing warmth and security for raising a brood. The tropical plumage of the Kingfisher is no camouflage, and it has been discovered that the meat of this bird is particularly foul tasting. Many brightly coloured creatures use bright colours as a defence in this manner.

Kingfishers are skilful hunters and particularly adept at taking fish. These will be beaten against a branch or stone and then swallowed head-first to ensure that the scales do not catch in the throat.





## Barn Owl

Barn Owls have been declining in numbers since the 1930's and one of the reasons for this is the loss of nesting sites such as old hedgerow trees and traditional barn buildings. Fortunately, barn owls will readily use appropriately built and located artificial nest boxes. One of the tasks of River Tees Rediscovered's Wings of the Tees project was to support and rebuild the River Tees Barn Owl population by engaging landowners and erecting specially constructed barn owl boxes.

In addition to nest sites, Barn Owls also require suitable hunting habitat; grasslands where they can find the mice and field voles that form their diet. The involvement of landowners is a crucial part of the project, because the average Barn Owl diet equates to three mice per day and there is little point erecting a box in an area where sufficient food is unavailable.

The Wings of the Tees project produced results from the start. A Barn Owl box erected near Piercebridge at the beginning of March had hatched chicks by 10th May. In the first year, five boxes were occupied and fledged young. Barn Owls were not restricted to traditional farmland territory - with the provision of boxes they were able to expand onto nature reserves and grassland sites within the urban and industrial parts of Teesside, bringing the spectacular sight of Barn Owls at dusk to new audiences.

## Starling

At dusk in the cold air of winter, Portrack Marsh is witness to an amazing wildlife phenomenon.  Thousands or even hundreds of thousands of starlings buzz and squawk in a huge flock over the grey waters of the Tees, before settling for a damp roost among the reeds fringing Portrack's pools. Starlings leave their roosts during the day and go off to feed, some up to 20 miles away. They return in the afternoon and the large flocks or "murmurations" usually start to form an hour or so before sunset. Murmurations can be seen in small numbers at many places across the country, but are at their most dazzling at a few select sites where numbers can reach hundreds of thousands of birds.





Grayling Butterfly © Margaret Holland

## Grayling Butterfly

The Grayling Butterfly has suffered national declines and is in the top ten of Britain's most threatened butterfly species. Despite this, it is thriving along the Tees where it shows a preference for patches of bare ground on former industrial land from Portrack to the river. The first records of the Grayling on Teesside were made as recently as 2001, at the then newly established Maze Park nature reserve. Up to then, the nearest known colonies were in Northumberland, around Holy Island, and in the Yorkshire Wolds. The Maze Park Graylings probably originated on the adjacent railway marshalling yards, where they would have gone unnoticed, being inaccessible to the general public. They could even have been living there for considerable time, perhaps imported on railway ballast stone which sometimes produces clumps of coastal wildflowers such as bladder campion.

The Grayling is a species of butterfly that prefers open habitats with sparse vegetation and plenty of bare ground. Here, the butterfly can bask and males can keep any eye out for passing females.  These conditions are naturally provided by coastal sand dunes, dry heathlands or calcareous grasslands, but the butterflies seem to have taken to the man-made equivalent of Teesside's old industrial grasslands.

In recent years, the Grayling has spread out along the Tees corridor, and may be found at suitable sites all the way to South Gare. Maze Park remains one of the most accessible sites to see this butterfly, which is on the wing for a very short period of the year, from mid-July until August.

### Dingy Skipper

As its name suggests, the Dingy Skipper is not one of Britain's brightest butterflies. It lives in places where its main foodplant, common bird's-foot trefoil, is abundant and usually where bare ground is also present. The butterfly is often found on old industrial land and other vacant urban sites, although more natural habitats, such as dunes, woodland rides and grasslands are also used.

Dingy Skippers emerge in early May and are usually around only until mid-June. In recent years, the Dingy Skipper has been lost from up to 40% of its former range and this is thought to be caused either through re-development of urban sites, or through sites becoming overgrown by scrub and rank vegetation. Management work at Maze Park is carried out to ensure conditions are kept right for Dingy Skipper, Grayling and other butterflies.





### White-letter Hairstreak

The White-letter Hairstreak butterfly gets its name from a white line in the shape of the letter "w" etched on the underside of its hind wing. The caterpillars of the species feed upon elm trees, particularly those growing in hedgerows or at the woodland edge, where the treetop is not in the shade of other trees. This dependence on elm meant that the butterfly disappeared from many sites where it was once common when Dutch elm disease killed over 10 million trees in the 1970s and 1980s. In the Tees Valley, only one colony was thought to have survived this devastation, and this was confined to a single wych elm tree in Thorpe Wood Local Nature Reserve at Wynyard Woodland Park.

Happily, many elm trees which appeared dead had actually survived, sending up new growth from their roots. These young elm suckers have become a feature of hedgerows and woods, although it is thought they will not grow into the majestic elm trees that were seen in the past. This is because once they reach a certain girth they are once-again susceptible to the elm bark beetle which carries the disease. The good news, however, is that the White-letter Hairstreak can not only make use of the young elms, but also that the female butterflies are able to travel several kilometres in search of food plants and so have been able to colonise many areas where elms are re-growing.

In recent years, the White-letter Hairstreak has turned up at Quarry Wood nature reserve in the grounds of Preston Park. The colony has been able to expand onto newly planted elm trees along the Tees at Bowesfield and Preston Farm.

### Dragonflies and damselflies

Dragonflies, and their close relatives the damselflies, are an ancient group of insects with a fossil history stretching back some 300 million years. Dragonflies are the larger, more robust creatures which hold their wings outstretched when at rest. Their eyes are enormous and actually touch on top of their heads. Damselflies are more delicate in comparison and when at rest they hold their wings closed together, over their slender bodies.

They are both voracious carnivores and will devour flies, bees, wasps, butterflies and mosquitoes, often seizing their prey in mid-flight.

Dragonflies are most likely to be seen on sunny days and even then they wait until the air is warmed up before they become active.

Dragonflies all need freshwater habitats in which to raise their young “larvae”. In sunny weather, the mature males spend much of their time at suitable breeding sites waiting for visiting females. The males defend these sites as territories from around mid-June, vigorously excluding neighbouring males.

While Dragonflies and Damselflies can be spotted on ponds and marshes anywhere along the Tees, the Wildlife Trust’s nature reserve at Bowesfield has proved particularly good for them. A total of fifteen different species have been recorded there including the banded demoiselle.





## Where to see wildlife

This section of the guide provides information on the best places to see wildlife in the River Tees Rediscovered landscape area. Many of these sites are managed as places where human visitors are given lower priority than their wild inhabitants. They have been kept intentionally natural, so go prepared with suitable footwear and clothing.

### Bowesfield and Preston Farm

At Bowesfield, three large, reed-fringed pools can be explored via a network of surfaced paths and bridges.  A longer footpath follows the riverbank and gives glimpses of birdlife using a sizeable area of undisturbed wetland contained within ditches and hedge banks. The reserve supports important numbers of ducks and wading birds including teal, curlew, gadwall, shoveler, ruff and golden plover. More than 100 different species of bird have been recorded.

The Preston Farm floodplain can be reached by following the Teesdale Way upstream and under the Queen Elizabeth Bridge. Preston Farm also contains new areas of open water and here the flood defence mounds along the Tees have been breached via a swale which will allow the land to flood when the river is in spate.

This land, contained in three large meanders of the River Tees, was all under agricultural use until the Trust began to restore it for wildlife in 2004. The Trust worked to re-establish the natural conditions of a floodplain, with extensive pools, ditches and reedbeds, which now form a rich corridor of wildlife habitat along the river.

The reserve also includes the steep slope on the edge of the floodplain and this has been planted with young trees which will eventually form an extensive area of broadleaved woodland.

In addition to its rich bird life, the site is a good place to see mammals. Otters have been seen on the reserve which provides them with a valuable stopping point on the river. Roe deer are often seen, especially at Preston Farm and the tiny harvest mouse has been recorded in the rough grassland.

Visitors can access the reserve through the Bowesfield development or, alternatively by following the Teesdale Way northwards (downstream) from Preston Park. A surfaced cycleway leads directly to Preston Farm.

**Coatham Marsh**

At the heart of Coatham Marsh is a series of pools and reed swamp; the last remaining wildlife habitats that have survived the industrial and urban reclamation of virtually the entire south Tees estuary. The reserve is bordered to the north by the dramatic Redcar blast furnace and to the south by residential areas of the town, but it still manages to provide a sanctuary for more than 200 species of bird and a wonderful variety of wildflowers.

Although it remained undeveloped, the marsh has not been untouched by human activity. Small hummocks visible within the site are believed to be evidence of medieval salt extraction, rabbits were farmed close by at Warrenby (where streets were named after Coatham's birds – plover, snipe, widgeon and teal) and a duck decoy was operated on the marsh until 1870.

A railway line and a freshwater fleet cut the reserve in two, although bridging points allow visitors to explore the whole of the reserve in a single visit. Two lakes on the southern side of the reserve; Long Lake and Round Lake, are man-made features associated with the extraction of soils used to cap mounds of furnace slag from the adjacent steelworks. These are fringed with dense reed-beds which provide nesting habitat for reed warbler, sedge warbler and grasshopper warbler in some years.

The mounds have been colonised by grasses and wildflowers with swathes of marsh orchids, clusters of bee orchids, as well as yellow rattle, eyebright and knapweed. Mammals such as fox and stoat can be seen and many smaller mammals must also be present as the grasslands are regularly visited by birds of prey including barn owl.

During the winter months, important numbers of ducks and waders including pochard, tufted duck and redshank fly in to Coatham Marsh to feed and rest. With its proximity to the coast, it sometimes receives rarer visitors such as stone curlew, little egret, spoonbill and mandarin duck.



4

## Maze Park

Maze Park is a green oasis right at the centre of Teesside. Visitors can climb one of its landscaped mounds to enjoy panoramic views of the conurbation. Much of the site has been planted with a variety of broad-leaved trees and is rapidly forming a surprising area of woodland for such a central urban location.

Glades and open grassland within the reserve have attracted more than 12 species of butterfly including the increasingly scarce grayling and dingy skipper. The steep river banks provide nesting habitat for a small colony of sand martins and give excellent views of common and grey seals which prey on salmon preparing to negotiate a passage through the Tees Barrage.

The Maze Park site was acquired by the Teesside Development Corporation in the late 1980's and was used to deposit the reclaimed substrates and soils from their reclamation of the extensive Head Wrightson works in Thornaby for the construction of the Teesdale business park. The landscaping of these waste materials formed the mounds which dominate Maze Park today.

The central mound is flat-topped and its plateau consists of the characteristic steelworks slag materials, presumably originating from the Thornaby blast furnace; one of the first of such structures on Teesside.

Maze Park © Eilis Sexton





The steelworks waste is lime-rich, low in nutrients and free-draining and its nearest natural equivalent would be chalk grasslands or base-rich sand dune systems. Typically, they contain an abundance of herb species including yellow wort, black medick, common centaury and bird's-foot trefoil. These grasslands form an open sward with patches of bare ground and are also noted for supporting two species of butterfly that have suffered significant declines across Britain – the grayling and dingy skipper. They also provide excellent habitat for bird species in national decline such as the grey partridge and skylark

The Trust was pleased to be able to protect such a classic example of Teesside slag grassland with its rich biodiversity and links with the area's industrial heritage, when it took over the site in 1998. As well as planting 6 hectares of woodland, the Trust constructed a network of surfaced paths and boardwalks to allow visitors to enjoy every part of Maze Park. The reserve incorporates the Sustrans National Cycle Route, which is part of the cycle network covering the whole of the UK and a valuable local commuter route between Stockton and Middlesbrough. Butterfly-styled metal cycle racks have been provided for cyclists wishing to stop and take a closer look.

## Portrack Marsh

Portrack Marsh is one of the area's most important wildlife sites despite its location at the very heart of Teesside. The wetland nature reserve attracts hundreds of birds each year and it provides a home to an exciting variety of mammals, amphibians, insects and wildflowers.

A network of surfaced footpaths allows visitors to explore reed beds from which views open out onto a series of shallow and deeper water pools.

During the winter months redshank and lapwing are present in good numbers; they feed on the river bank and take refuge on the marsh at high tide. Shoveler, pochard, tufted duck and teal frequent the pools, occasionally joined by goldeneye or scaup. Common snipe can number several hundred and kingfisher, grey wagtail and bullfinch are easy to spot, offering a touch of colour to brighten up the short, dull days.





In spring the reserve is visited by wheatear and whinchat. This is a reliable spot for grasshopper warbler and other common warblers including whitethroat, willow warbler, blackcap and sedge warbler. Sand martins are often the first of the summer migrants to arrive while common terns arrive in the second week of May and remain throughout the summer.

Summer is the quietest period for birds. Little grebe, coot, moorhen and lapwing all breed, as do mute swan and Canada goose. Little ringed plovers have bred in the past. Common terns resting on the main pool are sometimes joined by one or two Sandwich terns.

Wild flowers, butterflies and dragonflies provide the main interest of the summer months. Grey and common seals can be seen on the Tees, gorging themselves on salmon and sea trout, while otters have been spotted moving between the river and the reserve. Otter was first recorded on the marsh in 2004 having made a remarkable return to the Tees after being absent for some thirty years.

By late summer, significant amounts of mud can be exposed and waders such as dunlin, black-tailed godwit, greenshank and ruff can be seen probing for food. Gadwall and wigeon are at their commonest during the autumn passage.

## Redcar Rocks

Going down to a rocky shore is always rewarding, offering more adventure and discovery than virtually any other outing. Redcar Rocks are easy to get to and have a tremendous variety of plants and creatures awaiting detection. They are, in fact, a designated "Site of Special Scientific Interest".

The rocks are in two main groups, the West Scar opposite the Regent Cinema and the East Scar near the bus station. The West Scar is larger but mostly flat. The smaller East Scar has exciting gullies and crevices but be extra wary of being

caught on the rocks when the tide returns. As well as the seaweeds (it's mostly saw wrack, with its jagged edges, growing on the rocks, but there are kelps too at the seaward end) you can find plenty of creatures about too. Look out for shore crabs, star fish and the intricate brittle star. Wrap up well; it can be colder out there than on top of the hills. Watch your footing; it can be slippery and rocky in turns. Don't forget about the tide. The time flies by when you are investigating the amazing rocky shore world and it is too easy to get cut off. Finally, don't disturb anything, remember that you are visiting (and walking on) the homes of many small creatures, take away nothing that is still alive.

### Bassleton Woods and the Holmes

Bassleton Woods is a six-hectare strip of ancient woodland on the banks of the Tees in Thornaby. Ancient woodland is a precious habitat. It is scarce and irreplaceable and supports a vast diversity of wildlife including many scarce and declining species. It is important culturally, too, having been the backdrop to human activity and settlement over centuries.

Ancient Semi-Natural Woodland is a term which is used to define woodland that has existed continuously since 1600, only 1.2% of Great Britain's land area remains covered by this habitat type.

While Bassleton Woods can be traced back to the earliest maps, it is thought that most of its larger trees were felled for timber during the war. Despite this, many of the features of ancient woodland remain with a profusion of bluebells and wood anemones carpeting the ground in spring.

A series of ancient woodland can still be found along the Tees banks between Stockton and Piercebridge. It is thought that these have only survived where the ground is too steep for farming. Some of these woodlands can be visited along the Teesdale Way, while others are in private ownership and cannot be accessed.

A network of well-surfaced paths run through Bassleton Woods and out onto The Holmes - an area of low-lying former agricultural land in a loop of the Tees.





### Saltholme

Saltholme nature reserve and discovery park is a flagship site for the RSPB. The reserve was conceived by the Teesside Development Corporation in the early 1990's as a means of promoting the regeneration of the area from a past dominated by heavy industry. Much of the land at the centre of the Tees Flats and Marshes had been operated as test farms for ICI's fertilizer divisions. Following several years of work creating and improving wetland habitat, the construction of a state of the art visitor centre and a network of access routes and viewing hides, Saltholme was finally opened in February 2009, some ten years after the Development Corporation itself had closed.

In the winter, Saltholme's wetlands are home to large numbers of wildfowl and wading birds. In the spring and summer, many birds breed here including several species of ducks and common terns – which nest on specially-created islands surfaced with cockle shells. The islands provide the ideal nesting site for these birds, as they are away from predatory mammals and accidental trampling.

The site's reed beds benefit birds such as water rail, reed bunting and reed warbler, while the wet grassland areas of the reserve attract increasing numbers of wintering waders including lapwing, wigeon, redshank and snipe.

Water levels in the shallow open water pools and scrapes are carefully controlled to create muddy edges and bare areas for the large numbers of wading birds which stop off at the site during migration. Comfortable viewing hides and RSPB staff and volunteers make it easy for beginners to understand the birdlife and a variety of additional facilities and events make for an enjoyable experience.

**Seaton Common, Seaton Sands and the North Gare**

Set between the coastal town of Seaton Carew and the north Tees industrial sites, Seaton Common, Seaton Sands and the North Gare are accessed via a narrow tarmac track known as the North Gare Road.

Seaton Common covers approximately 75 hectares and contains a network of ditches through wet grassland which attracts vast numbers of over-wintering and migrating birds. It also provides an important breeding ground for birds in the summer months.

Cattle grazing is vital to the management of this site, keeping in check the rank grasses which would otherwise render this crucial feeding area unsuitable for many birds. The numerous dykes maintain water levels essential for wetland plants, amphibians, insects and birds. The Common holds much historical interest including the relics of the once thriving salt industry.

Seaton golf course separates the Common from Seaton Dunes; one of the largest dune systems between Lindisfarne and the Humber. These provide a wonderfully varied and rich habitat for many plants and animals and are still notable for short-eared owl.





**The South Gare and Coatham Sands**

The South Gare and Coatham Sands combine to form an area of 300 hectares of wildlife–rich habitats on the south side of the Tees Estuary. This complex of freshwater marshes, lagoons, dunes and golden sandy beaches are designated as being internationally important for wild birds, and yet the skyline continues to be dominated by the last remains of Redcar's steel industry. In fact, much of the area has developed since the construction of the South Gare breakwater between 1866 – 1888. The breakwater is 2.5 miles long and contains an estimated 5 million tons of slag from the local blast furnaces, which shows the vast size of the industry in that period.

The area is of considerable interest for its flora and invertebrate fauna as well as its birdlife. The range of habitats present includes extensive tracts of intertidal mud and sand, sand dunes, saltmarsh and freshwater marsh. Also exposed at low tide are areas of rocky foreshore along the breakwater, including the slag banks known as the German Charlies – named so after a First World War German ship that ran aground there.

The sand dunes are dominated by marram grass but also support one of the largest continuous stands of lyme grass in Britain, while the dune slacks support large stands of northern marsh orchid and fragrant orchid. Other plants of particular interest within the dune system are associated with lime-rich areas of tipped slag include yellow wort, lesser centaury and strawberry clover.

The invertebrate fauna of South Gare includes several species of butterfly, uncommon beetles and rare spiders.  Areas of mud and sand-flat on Bran Sands provide important winter-feeding grounds for bar-tailed godwit, curlew, redshank, dunlin and grey plover.

## Acknowledgements

This guide has been supported by the River Tees Rediscovered Landscape Partnership, thanks to money raised by National Lottery players and awarded through The National Lottery Heritage Fund.

**It was compiled by Jeremy Garside,**
**Tees Valley Wildlife Trust**
**with support from**
**Groundwork NE & Cumbria**