

Coastal wildlife guide



Introduction

Our coastline is a nature explorer's dream. With dramatic views along the coastline and out across the North Sea, it has unique qualities which come from its underlying geology, its natural vegetation and the influences of the sea.

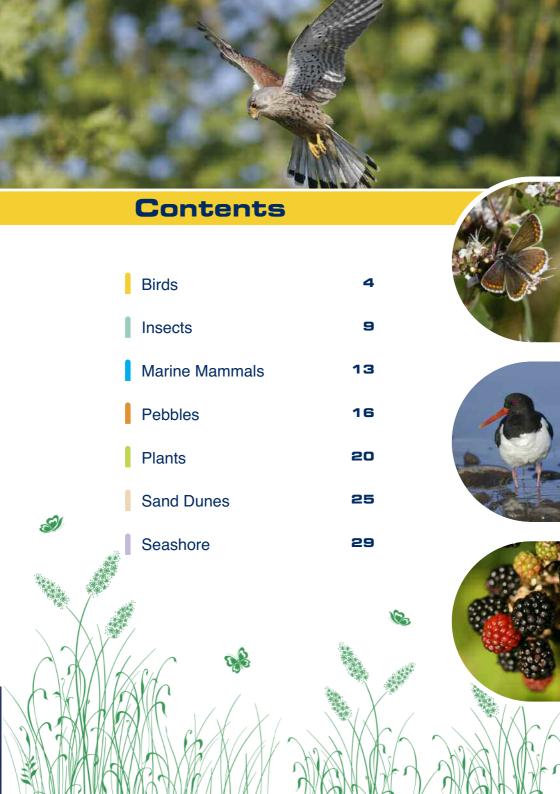
It is a wonderfully varied coastline of shallow bays and headlands with yellow limestone cliffs up to 30 metres high. The coastal slopes and grasslands are home to a fabulous array of wild flowers and insects, in contrast the wooded coastal denes are a mysterious landscape of tangled trees, roe deer and woodland birds.

This guide shows a small selection of some the fascinating features and wildlife you may see on your visit to our coast; from Hendon in the north to Hartlepool Headland in the south,

there is always something interesting to see, whatever the time of year.

Scan the code to find out more about Durham Heritage Coast.





The coast is a great place to see birds. In the autumn and spring lots of different types of passage migrant birds can be seen.

The UK's birds can be split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. The colour is shown next to the image.

Please keep your dogs on a lead to avoid disturbance to ground nesting birds in the summer and also over wintering birds.

Birds

Conservation priority: Red Amber

Green (



Cormorant (Phalacrocorax carbo)

Size: 80-100cm long.

Description: A large and mainly black waterbird with a long neck and often sits with its wings outstretched to dry them. The UK holds internationally important wintering numbers of cormorants.

Habitat: These birds can be seen on the coast and estuaries.

Food: Fish



Dunlin (Calidris alpina)

Size: 18cm in length.

Description: Dunlin have grey and white winter plumage and a black beak. These waders use their short black beak to feed on invertebrates that live in the upper surfaces of the sand.

Habitat: They can be found on sandy shores next to the

waters edge.

Food: Insects, snails and worms.



Fulmar (Fulmarus glacialis)

Size: Up to 50cm in length.

Description: This grey and white bird flies low over the sea. It glides and banks showing its white underparts. They feed in flocks out at sea. They defend their nests by spitting at intruders.

Habitat: Out at sea except at breeding times when they nest on cliffs.

Food: Fish waste and crustaceans.



Grey Partridge (Perdix perdix)

Size: Up to 30cm in length.

Description: These medium brown gamebirds have a horseshoe shaped mark on their breast and an orange brown face, with the males having brighter markings.

Habitat: Can be found in the fields, meadows, hedgerows and woodland edges along the coast.

Food: Leaves, seeds and insects.



Herring Gull (Larus argentatus)

Size: Up to 66cm in length.

Description: This large common gull is white and grey with pink legs and a yellow beak, with a red spot in the breeding season. The young of this bird are a speckled brown/grey changing to white and grey as they mature.

Habitat: These gulls can be found near the coast and

further inland scavenging.

Food: Scavenger.



Kestrel (Falco tinnunculus)

Size: Approximately 34cm in length.

Description: The kestrel is a brownish falcon with a grey tail and a black band on the end. It is the commonest falcon in Britain.

Habitat: Can be seen hovering over open grassland

along the coast.

Food: Small mammals and birds.



Kittiwake (Rissa tridactyla)

Size: Up to 40cm in length.

Description: It has a white head and breast with black tipped grey wings, a yellow beak and grey feet. It can be found nesting in large colonies from April to early summer on cliff edges.

Habitat: Often seen on the shore, out at sea or on cliff

edges.

Food: Fish, shrimps and worms.





Size: 24cm in length.

Description: It has light grey wings with a dark outside edge and a light underside. The beak and legs of this tern are yellow and the black cap on the head has a small white patch next to the beak. This is the smallest of Britain's breeding terns.

Habitat: There is a small breeding colony on the

Durham coast at Crimdon Dene mouth.

Food: Fish.



Oystercatcher (Haematopus ostralegus)

Size: Up to 43cm in length.

Description: This distinctive black and white wader has pink legs and an orange fast growing beak. The oystercatcher uses its long beak to feed on mussels, shellfish and other invertebrates.

Habitat: This bird can be found along the shoreline and

roosting in fields when the tide is in.

Food: Mussels and cockles on the coast.



Purple Sandpiper (Calidris maritima)

Size: Up to 21cm in length.

Description: This small wader favours rocky shores and can often be seen on piers and headlands. Its winter plumage is slate grey with a purple sheen on the back with a lighter underside. It has dull yellow legs and a black beak with a dull yellow base.

Habitat: The distribution of this bird on the Durham coast is mainly confined to the areas mentioned above.

Food: Winkles, insects, spiders, crustaceans, and plants.



Redshank (Tringa totanus)

Size: Up to 30cm in length.

Description: These medium brown gamebirds have a horseshoe shaped mark on their breast and an orange brown face, with the males having brighter markings.

Habitat: Can be found in the fields, meadows, hedgerows and woodland edges along the coast.

Food: Leaves, seeds and insects.



Sanderling (Calidris alba)

Size: 18cm in length.

Description: Sanderling are similar to dunlin with a pure white breast, grey back, black beak and legs in winter plumage. These birds can also be seen on the shore in the winter and travel up to the arctic to breed in the summer.

Habitat: The distribution of this bird on the Durham coast is mainly confined to the areas mentioned above.

Food: Winkles, insects, spiders, crustaceans, and plants.



Short-eared Owl (Asio flammeus)

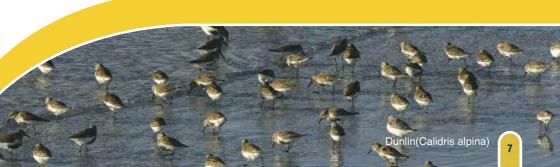
Size: Up to 38cm in length.

Description: This large owl is often seen hunting during daylight. It has short ear tufts as its name suggests and bright yellow eyes.

Habitat: This owl is found hunting over open country which enables the dark tail bars and dark patches on the wings to be visible.

Food: Small mammals.





Amber



Green



Size: Up to 18cm in length.

Description: These birds have a very distinctive sustained song as they fly high above the grassland areas where they nest. The plumage of this bird is a uniform brown colour with white feathers at the edges of the tail. Skylark numbers have risen dramatically across the Durham coast in the last four years.

Habitat: Grassland. **Food:** Seeds and insects.



Sparrowhawk (Accipiter nisus)

Size: Up to 38cm, the female of this species is larger than the male.

Description: The male sparrowhawk has a grey back and the female is browner, and both sexes have a light speckled breast. They can be distinguished from a kestrel in flight as sparrowhawks chase songbirds rather than hover.

Habitat: They can be seen in woodland and grassland on the Durham coast.

Food: Small birds.



Turnstone (Arenaria interpres)

Size: Approximately 23cm in length.

Description: Turnstones tend to be found on the coast in the winter, when they have dark brown and white plumage on the underside with orange legs.

Habitat: These waders can be found on rocky shores turning over stones and weed to expose invertebrates to feed on.

Food: Insects, crustaceans and molluscs.



The Magnesian limestone grasslands and the wooded denes host a wide and varied invertebrate population. This section shows a small number of the common and more unusual invertebrates found on the coast.

Insects

Burnet Moth (Zygaena filipendulae)

Size: 3.8cm wingspan.

Description: This brightly coloured species of day flying moth is one of the commonest day flying moth species on the coast.

Food plant: The caterpillars of this species also feed on birdsfoot trefoil along with other legume species.

Flight time: June to August.

Habitat: Areas where birds-foot trefoil is common.



Cistus Forester (Adscita geryon)

Size: Approximately 1cm in length.

Description: This is a small attractive, bright metallic green day flying moth. They are attracted to grassland flowers such as rock rose, birdsfoot trefoil and thyme.

Food plant: Caterpillars of this moth feed on rock rose.

Flight time: The adults are on wing from late June to early July.



Common Blue (Polyommatus icarus)

Size: 3.5cm wingspan.

Description: The only blue butterfly to be found on the

Durham Coast.

Food plant: Caterpillars of this species feed on birdsfoot trefoil.

Flight time: Adults can be seen in flight from June to July. **Habitat:** Cliff top grassland and meadows where birdsfoot

trefoil grows.



Common Green Grasshopper (Omocestus viridulus)

Size: 17-20mm body length.

Description: Usually green in colour but can be brown. The hind legs are enlarged and modified for jumping. The song is a continuous chirp for 20 seconds or more and the whole body quivers as the legs move up and down.

Food plant: Mainly grass.

Habitat: Grass and other low-growing vegetation.



Dingy Skipper (Erynnis tages)

Size: 2.5cm wingspan.

Description: This small dull coloured butterfly resembles a day flying moth from a distance.

Food plant: The caterpillars of this butterfly feed on

birdsfoot trefoil.

Flight time: May and early June.

Habitat: This butterfly can be found on sparse grassland with birdsfoot trefoil on the Durham Coast.



Glow worm (Lampyris noctiluca)

Size: Adult size approximately 1.5cm.

Description: Glow worms are beetles related to the tropical fireflies. The female of this species is wingless and glows constantly as opposed to the lava of both sexes, which glows faintly, but stops when disturbed.

Flight time: Adults May to August.

Habitat: Have been discovered in one locality on the

Durham Coast.



Green Tiger Beetle (Cicindela campestris)

Size: Adult size approximately 1.5cm.

Description: Both the larva and the adult of this beetle are carnivorous as the larva lives in a 30 cm deep hole and waits to catch passing ants and other insects.

Habitat: This butterfly can be found on sparse grassland with birdsfoot trefoil on the Durham Coast.



Large Skipper (Ochlodes venata)

Size: 3.5cm wingspan.

Description: This orangey brown butterfly is one of the largest of the skipper butterflies. The adults of this species are very territorial and perch on grass stems to look out for rivals and pursue them out of their territory.

Flight time: Early June to mid July.

Habitat: Can be found on most coastal grassland.



Meadow Brown (Maniola jurtina)

Size: 5cm wingspan.

Description: This brown butterfly has prominent dark

eyespots on the underside of the upper wing.

Food plant: The caterpillars feed on fine grasses.

Flight time: June to August.

Habitat: This butterfly can be found on all grassland

along the Durham coast.



Size: 2.8 cm wingspan.

Description: This butterfly is found only on Magnesian limestone grassland in County Durham. The northern brown argus in Durham was thought to be a separate sub-species.

Food plant: The caterpillars of this butterfly feed exclusively

on rock rose.

Habitat: These butterflies are only found where this rock rose

is abundant with bare areas of soil.



Ringlet (Aphantopus hyperantus)

Size: 4.8cm wingspan.

Description: This butterfly is a uniform grey-brown with distinctive light ringed dark eyespots, which gives this butterfly its name.

Food plant: The caterpillars of this butterfly also feed on

grasses, in damper sheltered areas.

Flight time: June to August.

Habitat: Sheltered grassland areas of the coast.

Small Skipper (Thymelicus sylvestris)

Size: 3.2cm wingspan.

Description: This bright orangey brown butterfly is similar but smaller than the large skipper along with a brighter orangey colour. They can often be found drinking nectar from flowers such as field scabious and knapweed.

Food plant: The caterpillars feed mainly on

Yorkshire Fog.

Flight time: June to July.

Habitat: This butterfly can be found on most coastal

grassland.



Wall (Lasiommata megera)

Size: 5cm wingspan.

Description: This orange and brown butterfly has a distinctive pattern of dark eyespots and lines across the bright orange upper surface of its wings.

Food plant: The caterpillars of this butterfly feed on

many types of grasses.

Flight time: The first brown butterflies come into flight

in May and June.

Habitat: Adults are found on most coastal grassland.



White Lipped Banded Snail (Cepaea hortensis)

Size: Up to 1.6cm wide and 2cm high.

Description: These yellow and black banded snails resemble the dark lipped banded snail except for the light shell lip of this snail. Some individuals of this species are a bright yellow in colour, compared to the banded green grey individuals.

Habitat: These snails live on thick damp vegetation on coastal grassland.



White-tailed Bumble Bee (Bombus lucorum)

Size: 20-22mm

Description: As the name suggests, the tail is white occasionally with a pinkish tinge. They are social and usually make their nests underground. Bees have broad and usually hairy back legs. Under a microscope the hairs on the bee are feathery and this helps the pollen to stick to it.

Food plant: Pollen and nectar.

Habitat: Gardens and other wildflower areas.



Wolf Spider (Arctosa perita)

Size: This spider is between 1-2cm.

Description: The legs and abdomen have clear white spotted markings, with the rest of the body being a sandy brown colour. These spiders are in the wolf spider family and chase their prey rather than catch them in a web.

Habitat: They live in sandy places such as sand dunes along the coast, where they inhabit and hatch their egg sacs in web coated holes.



These animals can be looked out for from high points along the coast and areas with a wide view of the sea. The ideal conditions for spotting these creatures is a calm sea with little wind and bright but not too much sun on the sea.

Marine mammals

Bottle Nosed Dolphin (Tursiops truncatus)

Size: 1.3m at birth and up to 3.9m long at maturity.

Description/Behaviour: They are dark grey in colouration with the calves being a much lighter shade of grey. The dorsal fin is curved back and quite prominent.

Food: Fish

Sightings: They are usually seen in small pods and occasionally solitary dolphins appear along the coast.

Did you know?: Flipper was a bottle nose dolphin.



Common Seal (Phoca vitulina)

Size: Mature males measure 1.7m in length.

Description/Behaviour: They are coloured a darker grey on the back fading to light grey with numerous dark spots on the underside.

Food: Fish and shellfish.

Sightings: The common seal is seen throughout the year, but less frequently than the grey seal.

Did you know?: A nickname for common seal pups is 'Howlers' due to their calling.

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Grey Seal (Halichoerus grypus)

Size: Males can be up to 2.3m in length.

Description/Behaviour: Grey seals are rather variable in colour and have a noticeable Roman nose. This is the largest of our native seals.

Food: Fish and shellfish.

Sightings: They are the most frequently spotted seal, seen throughout the year basking on rocky outcrops or with their head out of the water (called 'bottling').

Did you know?: The spotted coat on each seal is unique to each individual just like a leopards spots.



Harbour Porpoise (Phocoena phocoena)

Size: Up to 1.55m at maturity.

Description/Behaviour: Almost black in colour with a light

underside and small triangular fin. Mainly seen swimming slowly, rarely breaching and occasionally charging through the water.

Food: Fish

Sightings: They can be seen throughout the year with sightings becoming more common in the summer.

Did you know?: These porpoises are shy of boats

unlike dolphins.



Minke Whale (Balaenoptera acutorostrata)

Size: Up to 10m at maturity.

Description: They are dark grey in colour with a white underside and noticeable white bands on their pectoral fins. They have a small sickle shaped dorsal fin two thirds of the way along their back.

Food: Plankton, krill and small fish.

Sightings: There are occasional annual sightings of this whale at all times of the year along the Durham Coast.

Did you know?: Newborn calves have to swim to the surface within 10 seconds for their first breath of air.



White Beaked Dolphin (Lagenorhynchus albirostris)

Size: 2.8m at maturity.

Description/Behaviour: These dolphins are almost black with a distinctive white beak and white patch behind a tall dorsal fin. They are often seen in pods of up to 20, where they can be seen jumping, breaching and charging through the water.

Food: Fish.

Sightings: Mainly seen in the summer and autumn months.





Where are good observation sites?

Possible observation points are:

South Shields Pier, Lizard Point/Souter Lighthouse, Whitburn Bird Observatory, Roker Pier, Seaham, Noses Point, Dawdon, Beacon Hill, Blackhall beach (occasional seals), Hartlepool Headland, Seaton Carew.

Finding marine mammals on the beach:

Seals: Watch from a distance.

Do not approach the animal. Seals regularly haul out on our coasts - it is part of their normal behaviour. Therefore, finding a seal on the beach does not mean there is necessarily a problem. A healthy seal should be left well alone. However, if you see a seal that may be abandoned, thin or ill, then call the RSPCA for advice and assistance. Always keep dogs on a lead near injured seals and do not touch them as they could give a nasty bite.

Dolphins, whales and porpoises:

A whale, dolphin or porpoise stranded on the beach is not a usual occurrence. These animals do not beach themselves under normal circumstances, and they will require assistance. Please do not return them to the sea as they may need a period of recovery before they are fit enough to swim strongly.

Anyone finding a stranded dolphin, whale or porpoise should report it immediately taking great care when approaching stranded animals because of possible disease transmission.

Useful numbers:

RSPCA hotline: 0300 1234 999.

UK Cetacean Strandings Investigation Programme (CSIP) 0800 652 033



The beaches on this section of coast contain a remarkable variety of pebbles. Some are fragments from the adjoining cliffs, but others have much more distant origins. Many have been carried here by ice sheets during the last ice age; others are the results of human activity. This guide illustrates and describes briefly some of the most common of these. The detailed texture of many rocks is often best seen when damp, some of the pebbles in this guide have been photographed when wet. A one penny piece is included for scale.

Pebbles

Artificial materials

Brick

Not a natural rock, but a common type of pebble on most beaches. Made of baked clay or shale, oval pebbles of bright orange or pale yellow brick are common on most beaches where building waste has been dumped.



Slag

Another man-made material, the waste from iron smelting or locally glass making. Slag is very hard, forms rather irregular-shaped pebbles and is usually noticeably heavy. Its abundance on most beaches, where large quantities were once dumped, recalls the former iron and glass-making industries of the area.



Glass

Usually the most strikingly coloured pebbles on any beach, rounded pebbles of glass, have been formed by the rounding action of the sea on old bottles and blocks of glass dumped on the coast.



Rocks carried by ice sheets

Granite

A variety of granite pebbles are common. Most obvious are pink granite, composed mainly of crystals of feldspar (pink), quartz (colourless or white) and mica (black or silvery shining plates). Granite is an igneous rock, formed by cooling and crystallisation of molten magma deep within the Earth.

The granite pebbles found here were carried by ice sheets from southern Scotland, the Cheviots, and in some cases Scandinavia.

A selection of granite pebbles

Larvikite

Another man-made material, the waste from iron smelting or locally glass making. Slag is very hard, forms rather irregular-shaped pebbles and is usually noticeably heavy. Its abundance on most beaches, where large quantities were once dumped, recalls the former iron and glass-making industries of the area.



Fossilised coral in limestone

Limestone

As well as the local cream coloured Magnesian Limestone, the beaches contain numerous pebbles of mid to dark grey limestone in which fragments of fossilised shells and corals may often be seen.

These are Lower Carboniferous limestones, formed as sediment on the sea floor, about 350 million years ago. These rocks occur in the Northern Pennines and Northumberland. They were carried to the Durham coast by ice sheets during the last glacial period that ended about 11,000 years ago.



Carboniferous limestone with traces of shell fossils

Whinstone

The local name for the rock called 'dolerite'. This occurs in a large sheet, known as the Whin Sill, over large areas of Northumberland and the Northern Pennines. It was injected as molten rock (magma), about 295 million years ago, between the earlier-formed layers of sandstone and limestone.

Its pebbles are usually rounded or oval and have a distinctive speckled appearance. This is because dolerite is made up of tiny interlocking crystals of feldspar (white), pyroxene (blackish green) and iron oxides (black and metallic). These are best seen on freshly broken surfaces. Being a very hard rock, 'whinstone' is used to surface most of the region's roads.

Whinstone was carried to the coast by ice sheets.

Typical 'whinstone' pebble (left) with broken surface (right) showing its constituent minerals



Local rocks

Magnesian limestone

Immediately recognisable by its pale cream colour, the same as that of the rock in the adjacent cliffs, its pebbles are commonly smoothly round or oval.

This limestone formed as sediment on the floor of the Zechstein Sea, an early ancestor of the present North Sea, during Permian times, about 290 million years ago. The area we know as the Durham coast then lay a short distance north of the equator.



Rocks from the coal mines

Coal

Because coal is a soft and brittle rock, its pebbles are usually small, and often rather angular. They are easily recognisable by their jet-black colour, often with bright glossy surfaces, and are very light in weight.

Coal is fossilised plant debris that formed in swamp forests about 310 million years ago, during Carboniferous times, when County Durham lay almost astride the equator.

Although the Durham Coal Measures lie deeply buried beneath the coast, coal pebbles are a result of dumping of mine waste onto the beaches.



Ironstone

Nodules of 'clay ironstone' are common in the hales of the Coal Measures. Ironstone pebbles are usually mid-brown on the outside, but rather dull brownish grey when broken, and can easily be recognised by their flattened shape, and by their great weight: they may contain up to around 25% iron.

Some ironstones contain cracks filled with white or pale cream calcite crystals. These are called 'septarian nodules'. Others contain abundant fossils of mussel-like molluscs.



Brown ironstone pebble (left) with grey broken surface (right)



Ironstone septarian nodule



Ironstone with fossilised 'mussel' shells

Pyrite

Because of its brassy yellow metallic appearance, this mineral is sometimes called 'fools' gold'. Coal miners knew it as 'brass'.

Pyrite is common in coal-bearing rocks and, being hard and heavy, it survives as pebbles on beaches. Its pebbles sometimes have a dark brown outer surface. The very dark brown sand on some beaches is composed mostly of pyrite grains.

In contact with air and water, pyrite breaks down to form bright yellow crusts of iron sulphate minerals on some beaches, often accompanied by a strong acidic sulphur smell.



Sandstone

Much of the local Coal Measures sandstone is pale fawn or brown and commonly forms round, oval or sometimes flat, pebbles.

Sandstone is simply compacted and hardened sand, deposited mainly by rivers during the Carboniferous Period. Most of the coal-forming forests grew on banks of this sand. The dark bands in these sandstone pebbles are the layers in which the original sand was formed.

Sandstone was common in the coal mine waste dumped onto the beaches.





Shale

Shale is typically a soft dark grey rock. Because it naturally splits into thin sheets, its pebbles are normally thin and often almost disk-like.

Shale is hard compacted mud that formed along with coal, about 310 million years ago.

Vast amounts of shale, dumped on the beaches from the local coal mines, have quickly been rounded by the sea into pebbles.



Rocks dumped on the beaches

Flint

Distinguished by its grey or brown colour, its hardness, and its smooth, rather waxy, appearance. Broken surfaces (which may be dangerously sharp - hence its use by stone age peoples in making tools) are typically curved, and resemble shells, a feature known as 'conchoidal' fracture.

Flint occurs as layers within the Chalk of southern England. Almost all of the flint found here was brought as gravel ballast in coal ships returning to the North East from southern ports during the peak years of the coastal coal trade. Vast quantities of flint gravel were dumped at ports such as Sunderland and Seaham.



This section of coast is unique as it is the only stretch of Magnesian limestone grassland occurring on the coast of England. This is referred to as the 'paramaritime magnesian limestone grassland' and hosts a diverse plant community. This section shows a collection of some of the most popular and beautiful plants found on the coast.

Please do not pick or uproot wild flowers and plants.

Plants

Ash (Fraxinus excelsior)

Size: Up to 30m high.

Description: The leaves consist of a central stem with seven constituent leaflets. In the winter the dark brown/black buds can be seen on grey twigs.

Habitat: This is one of the most common native trees in

the wooded denes of the Durham Coast.



Bee Orchid (Ophrys apifera)

Size: From 20-50cm tall.

Description: The flowering stem has 3-10 flowers per spike, each flower mimics a single female bee tricking male bees to mate with the flower and pollinate them. In this country, the species of bee doesn't occur, so most bee orchids are self pollinated.

Flowering time: July.

Habitat: This orchid occurs in meadows along the

Durham Coast.



Birdseye Primrose (Primula farinosa)

Size: Low growing, 10-20cm.

Description: Its flowers are also similar in form to cowslips as they are borne on a long stem but are pink

instead of yellow.

Flowering time: May to July.

Habitat: This is found in isolated pockets on the cliff

and coastal grassland.



Birdsfoot Trefoil (Lotus Corniculatus)

Size: Low growing, 10-20 cm.

Description: A creeping perennial with five leaflets to each leaf and is in the legume family, as are peas and beans. It has two to five yellow pea-like flowers per head.

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Flowering time: It can flower from late spring to late

summer.

Habitat: Most grassland on the coast.



Black or Common Knapweed (Centaurea nigra)

Size: 15-60cm tall.

Description: The flowers are 2-4cm across and pink purple in colour. It looks similar to a thistle but has no spines. The leaves are long and pointed and the lower leaves are sparsely toothed.

Flowering time: June to September.

Habitat: Fields, coastal slopes and the railway

embankment.



Bloody Cranesbill (Geranium sanguineum)

Size: Up to 50cm tall.

Description: This herbaceous perennial has deeply divided leaves with bright pink five petalled flowers.

Flowering time: May to September.

Habitat: It occurs throughout the coastal area of Durham especially on the cliff edges but not in the

wooded denes.



Blue Moor Grass (Sesleria caerulea)

Size: 10-45cm high.

Description: This is a distinctive blue looking fine

grass, which flowers early in the year.

Habitat: Grassland where this grass occurs is a

nationally scarce habitat. This habitat is

frequentlyassociated with Magnesian Limestone, but occurs infrequently on the Durham Coast cliff edges.



Butterwort (Pinguicula vulgaris)

Size: 10-20 cm when flowering.

Description: It takes the form of a rosette of pale green sticky leaves that trap insects and has single violet flowers. This is the only insectivorous plant found on the

Durham coast.

Flowering time: May to July.

Habitat: This plant occurs rarely on the Durham Coast where damp areas are created by flushes seeping

through the limestone.



Common Rock Rose (Helianthemum nummularium)

Size: Growing 10-30cm high, mainly low lying.

Description: This perennial dwarf shrub has small elongated leaves and flowers from May to September with yellow to cream five petalled flowers.

Flowering time: May to September.

Habitat: This plant favours the limey rocky areas of Magnesian Limestone grassland found on the Durham Coast.



Common Spotted Orchid (Dactylorhiza fuchsii)

Size: Flowering spikes between 15-60cm tall.

Description: It has long thin pointed leaves with numerous dark spots, with a conical flower head full of purple spotted flowers.

Flowering time: June to August.

Habitat: This is the most common orchid found on the Durham Coast, occurring on the cliff grassland and in meadows.





Cowslip (Primula veris)

Size: Flowering stem to 10-25 cm.

Description: Herbaceous perennial with a rosette of broad tongue like leaves. Bears clusters of yellow

five petalled flowers on a long stalk.

Flowering time: April to May.

Habitat: Can be found on cliff grasslands and

meadows on the Durham Coast.



Early Purple Orchid (Orchis mascula)

Size: Up to 10-25cm tall.

Description: Its flower spike has loosely packed purple and white flowers with purple spots.

Flowering time: One of the first orchids to flower on

the Durham Coast, in April to June.

Habitat: Found on cliff top Magnesian Limestone

grassland and meadows.



Fragrant orchid (Gymnadenia conopsea)

Size: Can be up to 50cm high.

Description: It has broad unspotted leaves, narrowing as they go up the flower spike. The flower spike is composed of tightly packed pink, fragrant flowers as its name suggests.

Flowering time: June to July.

Habitat: Can be found on cliff grasslands and

meadows on the Durham Coast.





Juniper (Juniperus communis)

Size: Growing to 6m tall, in upright form, but on the coast is lower growing.

Description: This conifer has small needle like leaves, growing close to the ground. It forms green berries ripening to purple throughout the year. This is the smallest of Britain's three native conifers, and gin is flavoured with its berries.

Habitat: It occurs sparsely on cliffs and coastal grassland, but on the coast is much lower growing.



Wild Marjoram (Origanum vulgare)

Size: Growing 30-60cm high.

Description: This is a wild species of the cultivated herb. It has pointed aromatic leaves with large heads of small purple flowers. These flowers provide lots of nectar and can attract several species of butterflies in sheltered spots.

Flowering time: July to September.

Habitat: Coastal grassland and meadows.



Yew (Taxus baccata)

Size: It grows to 20m tall.

Description: It has dark green blade like evergreen needles and red berries. This is one of the longest-lived trees in Britain, living to over a thousand years old.

Habitat: These trees can be found in the wooded denes along the coast, with some fine examples growing over limestone in Castle Eden Dene.





Sand dunes are a fragile habitat with both natural and man-made erosion creating sudden changes. Sand dunes are found on the section of coast from Crimdon to Hartlepool.

Sand dunes

Creeping Cinquefoil (Potentilla reptans)

Size: 10-20cm high.

Description: This is a low growing creeping perennial, spreading by a system of long unbranching stems. The leaves of this plant are divided into five toothed leaflets, with five petalled yellow, buttercup like flowers.

Flowering time: June to August.



Fairy Flax (Linum cartharticum)

Size: Up to 20cm high.

Description: The leaves of this small annual are arranged in opposite pairs on its delicate stems, with loose clusters of white flowers with five narrow petals.

Flowering time: May to September

Habitat: This occurs on dune and coastal grassland.



Lyme Grass (Leymus arenarius)

Size: Growing between 60cm and 1.6m high.

Description: This is more of a clump forming grass with stout rhizomes. The flower heads are between 15-30cm and are more loose and coarse than marram grass flowers.

Flowering time: June to August.



Marram Grass (Ammophila arenaria)

Size: Up to 1m high.

Description: This grass has sharp leaves, which are rolled in on themselves. This spreads and stabilises the

sand dunes by its creeping rhizomes.

Flowering time: Flowers in July, producing long

compact flower heads.



Prickly Saltwort (Prickly Saltwort)

Size: 10-30cm high.

Description: This is a short prickly annual with a loosely creeping form. The leaves of these plants are succulent with green bract like flowers borne at the base.

Flowering time: July to October.

Habitat: This is another plant that occurs just above the strandline and can be found throughout the coastal area.



Purple Milk Vetch (Astragalus danicus)

Size: Up to 30cm high.

Description: The leaves have lots of leaflets along a single leaf stem, with approximately four purple flowers arranged in a cluster.

Flowering time: June.

Habitat: This plant is not restricted just to dunes, it can

occur on other soils on limestone.



Pyramidal Orchid (Anacamptis pyramidalis)

Size: Up to 30cm high.

Description: As its name suggests, the flower head has a pyramidal form, composed of lots of individual flowers. The flowers resemble the fragrant orchid, but the plant tends to be smaller and more pyramidal, with leaves that tightly clasp the stem.

Flowering time: July.



Red Fescue (Festuca rubra)

Size: Up to 1m high.

Description: This tall loose flowered grass, as with some of the grasses mentioned above, has strong

creeping rhizomes.

Habitat: Red fescue is a common grass on dune grassland behind the sand dunes of the Durham coast.



Sand Couch (Elytrigia junceum)

Size: 20-60cm high.

Description: This medium sized grass has long horizontal rhizomes which can help to bind and stabilise sand dunes

Stabilise saila dulles.

Flowering time: July to October.

Habitat: This is another plant that occurs just above the strandline and can be found throughout the

coastal area.



Sand Sedge (Carex arenaria)

Size: Up to 90cm high.

Description: This sedge has long creeping rhizomes similar to the dune grasses. This helps to stabilise dune slopes.

The stems of sedges are triangular in cross section in comparison to the round cross section of grass stems.

This sedge bears clusters of flowers up the flowering stem, arranged in a roughly triangular shape.



Sea Buckthorn (Hippophae rhamnoides)

Size: Up to 2.6m high.

Description: Its leaves are long and thin and pointed, resembling willow leaves with a silver underside.

This flowering shrub has bright orange berries, with green flowers.

Habitat: This shrub can be found on dunes where it has probably been introduced.



Sea Rocket (Cakile maritima)

Size: 30-60cm high.

Description: This branching plant has deeply lobed

leaves, with 4 petalled white to lilac flowers.

Flowering time: June to August.

Habitat: This plant occurs on sea sand, sand dunes

and shingle close to the shore.



Sea Sandwort (Honkenya peploides)

Size: 10-30cm high.

Description: Low growing creeping perennial. It has fleshy oval leaves and fleshy stems that bear five tiny petalled flowers followed by green pea like fruits.

Habitat: This plant grows just above the strand line on

sandy or shingle areas of the coast.



Yarrow (Achillea millefolium)

Size: 30cm high.

Description: This is a common flower of the dune grassland. The leaves are deeply and finely divided. The flower heads are like clusters of daisies and are

white to pink in colour.

Flowering time: June to November.

Habitat: Common on other areas of coastal grassland.





The seashore is a fascinating place to explore the many creatures living on the rocky shore and in rock pools. There are some great opportunities to discover these habitats along the coast when the rocks are exposed at low tide. Check the tide times to avoid disappointment.

Seashore

Common Starfish (Asterias rubens)

Size: Maximum diameter 50cm.

Description: This is the most common starfish in Britain. It is orangey brown in colour and is a predator, preying mainly on mussels.

Habitat: Occurs on the lower shore, just above the low

water mark.



Edible Crab (Cancer pagurus)

Size: Exceeding 25cm in shell width.

Description: These crabs are generally reddy brown in colour with an oval 'pie crust' edged shell and can live as long as 20 years.

Habitat: Found in pools and under rocks on lower shore.



Shore Crab (Carcinus maenas)

Size: Maximum size of shell 6cm.

Description: Variable in colour with patterned shell.

Habitat: Found throughout the year in intertidal pools, under seaweed or under rocks, on lower and upper

shore.



Seaweeds

Bladder Wrack (Fucus vesiculosus)

Size: The frond is up to 1m long.

Description: This seaweed is a dark brown with paired

air filled bladders along the fronds.

Habitat: It occurs on rocky shores from bedrock to small stones on the middle part of the shore.



Common Kelp ((Laminaria digitata)

Size: Can be 2m or more in length.

Description: This large brown seaweed has a long cylindrical stem with finger like fronds growing from a single frond as it matures.

Habitat: This seaweed normally occurs below the low water mark on rocky shores.



Saw Wrack (Fucus serratus)

Size: Up to 60 cm long.

Description: This seaweed has serrated edges to the fronds with no air filled bladders. It is normally olivebrown to orange-brown and can have slightly swollen reproductive parts on the ends of the fronds.

Habitat: Occurs on the lower shore.



Sea lettuce (Ulva lactuca)

Size: The frond is up to 40cm across.

Description: It has a broad green frond, which is thin but tough, resembling a lettuce leaf with a small

holdfast attaching it to rock.

Habitat: This seaweed occurs at all tidal levels.



Barnacle (Semibalanus balanoides)

Size: Up to 10mm in diameter at the base.

Description: Small filter feeding crustaceans.

Habitat: Common on sheltered rocky shores. Can be very abundant on the rocky areas of the Durham coast.

Breeds in autumn.



Beadlet Anenome (Actinia equina)

Size: The column of this anemone is up to 5cm high.

Description: It is usually red with blue spots at the base of the tentacles.

Habitat: Found on the mid to lower parts of rocky

shores.



Common Limpet (Patella vulgata)

Size: Up to 6cm in length.

Description: Has a roughly conical shell. Found on bare rock surfaces where it grazes algae and micro-

organisms from the surface.

Habitat: Common throughout the British and Durham

coast, breeding in October to December.



Common Mussel (Mytilus edulis)

Size: Up to 10cm long.

Description: This common bivalve is usually blue-purple through to black. They are common filter feeders

on all of the British coastline.

Habitat: They occur in abundant dense beds on rocky

areas of the Durham coast.



Common Periwinkle (Littorina littorea)

Size: Shell spiralling up to 3cm high.

Description: Has a hard operculum which seals the

dark spiral shell closed.

Habitat: Found on the upper to middle zones of the shore. Common on more sheltered weedy shores.



Dahlia Anenome (Urticina felina)

Size: Up to 10cm in diameter.

Description: This anemone is broader than the beadlet anemone. When its tentacles are withdrawn debris can be seen stuck to the outside of this anemone.

Habitat: Occurs on the lower parts of rocky shores.



Dog Whelk (Achillea millefolium)

Size: Shell, 4cm or more.

Description: High colour, very variable white to dark brown, occasionally with coloured banding.

brown, occasionally with coloured banding.

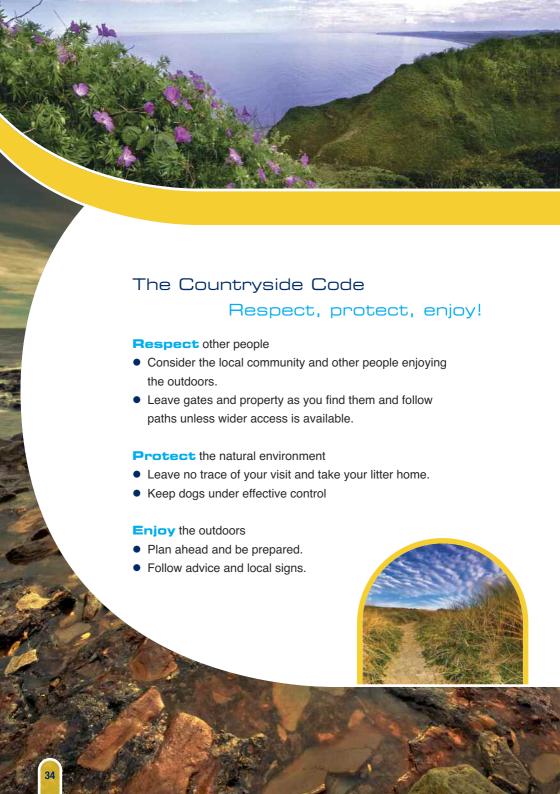
Habitat: Common on all rocky shores throughout the British coast. The dog whelk is a predator and feeds

mainly on mussels and barnacles.









Notes



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LOTTERY FUNDED

We have a number of village walks leaflets to download from our website. They are in PDF format but are also compatible to be read through the BLIO App on smartphones and tablets.

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