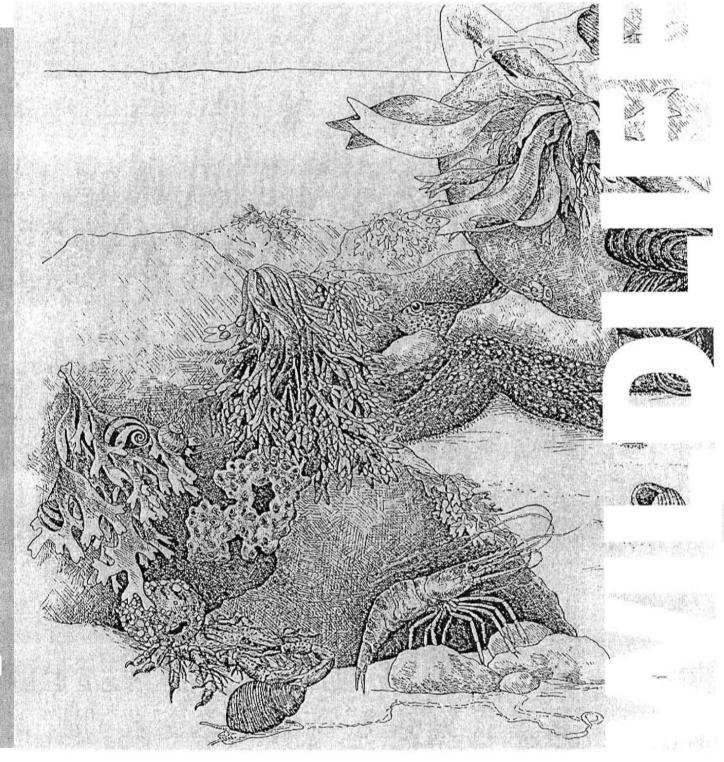
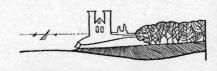
RECULVER COUNTRY PARK RESOURCE PACK



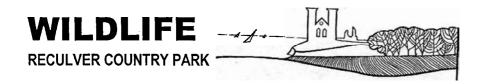


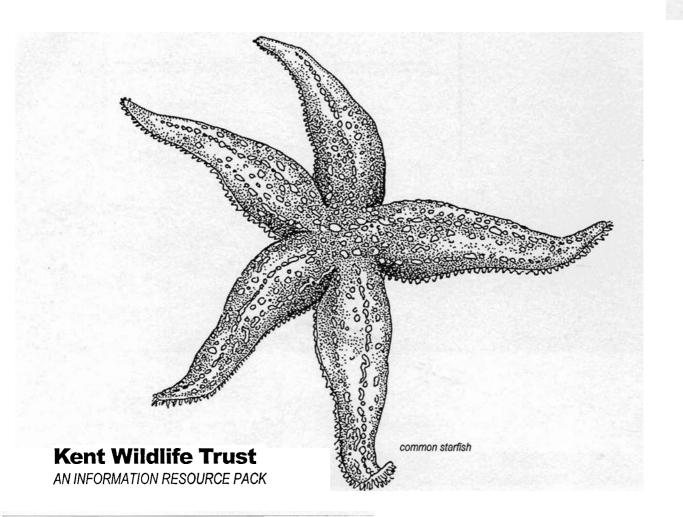












Reculver Country Park and the shoreline near the Visitor Centre offer some of the most interesting and varied habitats in Kent to study wildlife. Children and adults alike enjoy the accessible of the rock pools that are cut into the wave cut platform.

The wildlife of the site is supported by the extraordinary geology, which shows several sedimentary rocks named after the site. This and the range of coastal defences, a view of the new wind farm offshore and local history, offer interest to hundred's of schools and members of the public who visit the site each year.

Kent Wildlife Trust works in partnership with Canterbury City Council to manage the country park including the visitor centre, which offers more information about the site. The partnership also holds regular events and offers an education service which includes booked guides and the production of publications like this one, other publications can be seen at the Visitor Centre. The visitor centre offers a range of publications and memorabilia related to Reculver and is manned by local volunteers who often have an intimate knowledge of the local area.

If you are interested in supporting this team please contact Kent Wildlife Trust at Tyland Barn, full address and phone number on the back cover.

We hope this booklet will help you identify some of the wildlife of Reculver in their natural habitat and helps to give you even more enjoyment in looking at nature at this unique site.

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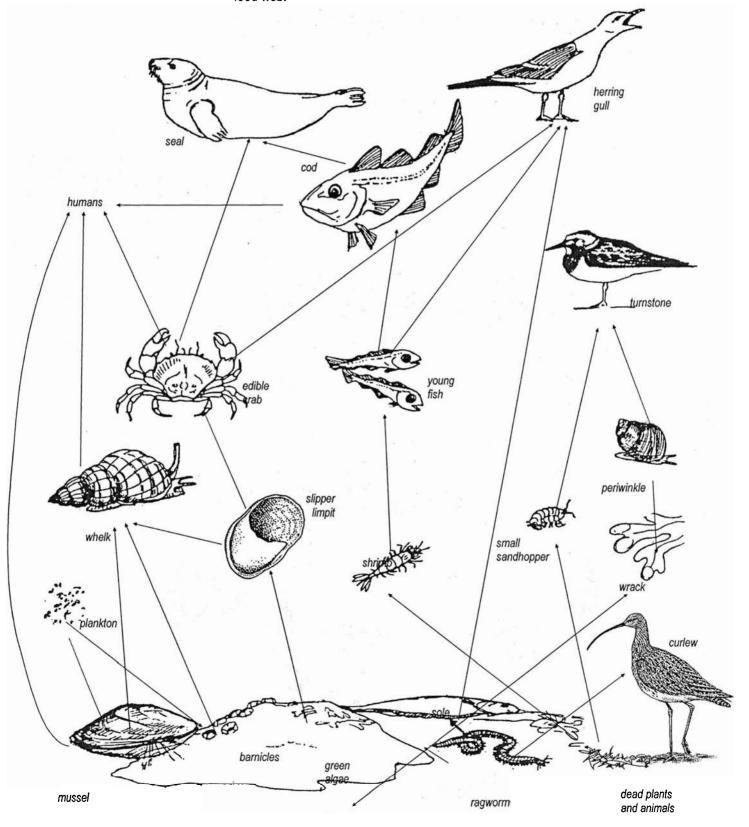
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Life between the Tides

The world of the Seashore

The world of the seashore is a network of life, with changes in numbers or feeding habits of one organism affecting many others in the web.

The sun's energy is captured by seaweeds on the shore and tiny phytoplankton in the water. Energy is transformed along a food chain as animals eat either plants, other animals, or dead organisms. As diets vary, so all living things become part of a complex food web.



Life beneath the sands

Lug worm

Worm casts are a common sight on the shore. They are produced by lugworms, which live in 'U'- shaped tubes in sand or mud. Mud is drawn down the tube causing a hollow in the surface. The mud is swallowed, any food in it is digested, and the waste ejected up to the surface where it forms a typical 'worm cast'. Anglers look for the pattern of hollows and casts when digging for bait.

Cockles, Tellin and Gapers

Many bivalves live out of sight buried beneath the sand and mud. They feed by extending a siphon up to the surface to draw in particles when the tide comes in. A second siphon exhales, getting rid of waste. Sometimes a bubble in the mud betrays their location at low tide.

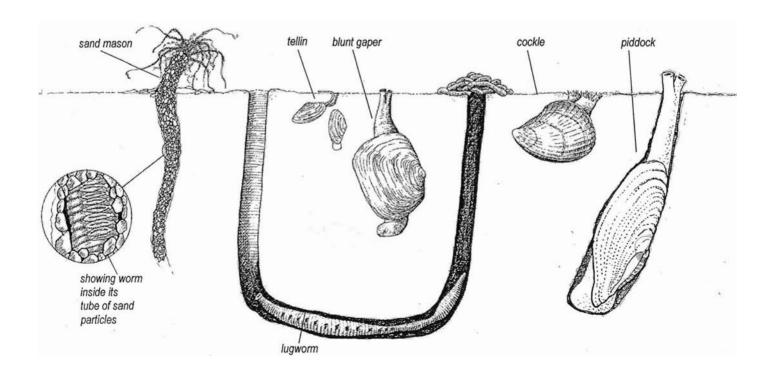
Sandmason worms

These worms live in a lined tube in the sand. The tube is formed of sand grains and shell fragments cemented together and can be up to 25cm. Long. A small section of the tube protrudes above the surface, and groups of them can be seen on the lower shore at low tide. The worm feeds by extending tentacles from the top of the tube when the tide is in.

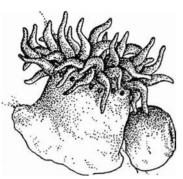
The American piddock

The piddock bores into the stiff clayey sands of the tidal zone. As the layer of sandstone erodes, the holes are seen clearly, sometimes with empty shells still inside them. Similar to our common piddock, this shellfish was introduced when oyster beds were relaid with stock from North America and is now found extensively around the coasts of the Thames estuary.

Other worms found in the sands and rocks include ragworm, which has bristles along each side and a red line down its back., and the very similar green leaf worm. The razor shell is another mollusc which can use its muscular foot to burrow down up to a depth of 1m into the sand.



hermit crab



beadlet

Life on the Rocks & in the Pool

In the spring Nudibranch sea slugs come into the shallow water to lay their eggs. When the tide is out they appear as spongy masses but in the water they extend two horn-like tentacles from the head and rings of feathery gills on their backs. The species shown here feeds on barnacles, but others eat sponges, sea-squirts and sea-mats.

Barnacles

The acorn barnacle can be found at Reculver but has been replaced largely by an introduced Australian species. The latter has only four plates compared with six in the acorn barnacle. They are a source of food for dog whelks and sea slugs.

Barnacles are crustaceans - like shrimps and prawns - but are permanently attached as adults to rocks.

Beadlet anemone

At low tide these animals look like blobs of red, green or brown jelly attached to the rocks or stones.

When covered by the sea, anemones look more like flowers. They feed by extending their tentacles to sting and paralyse shrimps or small fish. It's beadlets are visible as blue spots around the base of the ring of tentacles.

Slipper limpet

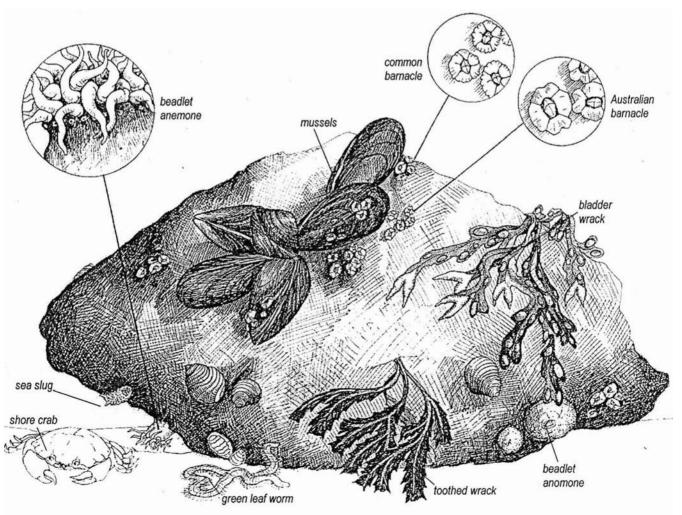
This mollusc has a protective hard shell, shaped like a slipper, hence its name. Limpits areoften found attached to each other in chains with the female at the bottom and the males above.

Mussel

This mollusc is a bivalve. It is one of the commonest shells found on the beach. Double sided, and attaches itself to rocks with threads.

Winkle

Winkles can be found all over the shoreline, where they feed on seaweed, often in gullies



Life along the Lower Shore sometimes washed up along the strandline

at the high water mark

Hornwrack Strand

Although it looks like a seaweed this is a colony of bryozoans, tiny animals which live together in a frond like mass. Each animal is in a seperate compartment only the size of a pin. It feeds by extending filaments, which cause a current of sea water to pass into the animal, from which food and oxygen are extracted.

Sea mats Lower shore

These are similar colonial bryozoans. Although the individual animals are tiny the colonies are quite easy to find growing in a layer on rocks and seaweeds on the lower shore.

'Mermaid's purse' Strand

A black leathery capsule with 'horns' at each comer is the empty egg case of a ray. The 'purses' are mainly from the Thornback ray (Raia clavata) and can be found all around the Kent coast, and here at Reculver. The estuary has a well established breeding ground around the windfarm area. When laid, each case contains one embryo which develops for up to five months before emerging as a young fish.

Spirorbis spirorbis Lower shore

Inside the tiny white spiral chalky tubes on seaweeds live minute tubeworms. The overall width of the spiral coverings is only about 4mm. The true home of this animal is the lower shore, but it can often be found attached to seaweed or man-made debris that have been washed up on the tideline.

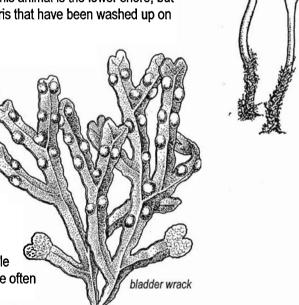
Sea urchins and starfish Lower shore

These animals have prickly spines on their skin and rows of tube suckers which they use to pull themselves along and hold onto rocks. Tests, empty shells, of the sea urchin and sea potato occasionally get washed up on the shore. Common starfish have 5 arms, and are sometimes found in the pools. Their arm tips curl up when the starfish moves. Brittle stars are common, but are hard to spot.

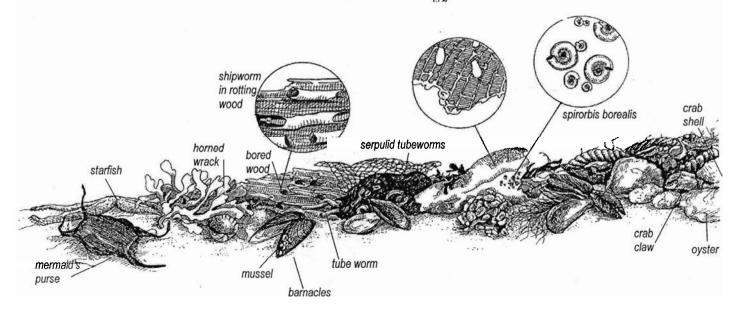
Extremely Fragile - so handle with great care.

Oyster Lower shore

A bivalve mollusc with two non identical halves. Oyters have been considered a delicacy since ancient times and Whistable oysters are famous on the North Kent coast. Empty shells are often found all over the beech.



oarweed

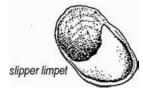


Strandline items

Empty shells and crab shells, seaweeds, mermaid's purses,

Star ascidian Lower shore

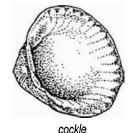
A colonial group of small sea squirts which live together in a protective layer of jelly. They form a flower-like pattern in which each 'petal' is one animal. These are grouped around a central opening which is an extended siphon, shared by the colony. With this siphon the animals draw in seawater from which they filter food and oxygen. They may be green, yellow, orange or blue.



Dead man's fingers Lower shore

The name commonly given to a soft coral which lives on the lower shore. It is not one animal but a whole colony; each animal catches its food with minute tentacles.

It is occasionally found washed up on the beach or sand flats and is itself sometimes colonised by other marine life. Look closely for sea squirts, another group of colonial animals, which may be attached to the surface. There may even be tiny porcelain crabs sheltering in its folds.



Long-clawed porcelain crab Lower shore

A tiny animal of the lower shore with a very small shell only 6 mm across. Three pairs of legs can be seen but the fourth is folded under the tail. It has long, fine antennae.



These are normally attached to stones on the lower shore but are often washed up on the beach. The spongy mass may consist of several thousand capsules - each containing many eggs. The animals are carnivorous and only 30 may develop, the remainder being a source of food for the survivors!



Jellyfish Lower shore

Soft creatures that swim by pulsing movements of their bodies. They catch prey with stinging cells on their tentacles. Sometimes jellyfish are washed up, onto the shore.

Leave well alone, although some are harmless, some have a dangerous sting.

Cuttlefish Strand

knotted wrack

These large soft molluscs have short stubby tentacles with suckers, Their white bone-like porous internal shells are often washed up in the strand line.

Also washed up are natural things like wood, shells, seaweed and man made materials such as plastic bottles and packaging. Some of them may have been in the sea for a very long time before the tide washed them up on the strandline.

Be very wary of items that look like metal, they may be dangerous. gooseberry sea-squirt porcelain crab star ascidian common piddock turnstones whelk whelk egg tellin dead man's bladder wrack fingers slipper limpet coral weed American piddock

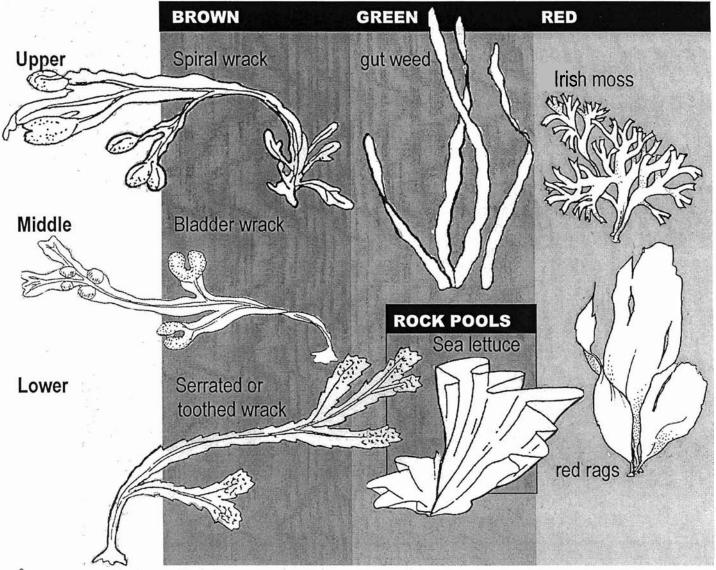
Seaweeds

Seaweeds all belong to the group of plants known as algae. They have no roots but are attached to rocks, wood, concrete or other seaweeds by a sticky cup or 'holdfast' to prevent them being carried away by the sea.

They absorb minerals from the sea and use sunlight to achieve photosynthesis and produce carbohydrates.

Colour and shape indicate zones on the beach

Different species occur in zones from the splash zone, through the upper shore, middle and lower shores and the sub-tidal zone. Those highest up the shore include spiral wrack and laver. On the upper shore we find the green Enteromorpha species - tubelike plants sometimes called gut weed, with sea lettuce in pools and wet places. On the middle shore, the brown bladder wrack and serrated or toothed wrack are more commonly found. Red seaweeds are to be found in the deeper water.



The Birdwatcher's Year

Reculver occupies an excellent situation for bird watching. These include resident species and many more which are visitors in summer or on various passage migration journeys in spring and autumn.

More than 150 species are regularly recorded and, together with the more unusual birds, an annual list of over 200 species are seen. Over 60 species have been recorded as breeding in the area.

Updated sightings of birds seen in Reculver Country Park are listed on the observation board, located in the porch of the visitor centre. Because of its importance as a migration area Reculver is regularly watched and recorded by the Kent Ornithological Society, and the British Trust for Ornithology (BTO) who organise a ringing programme throughout the year.

Ringed Plover

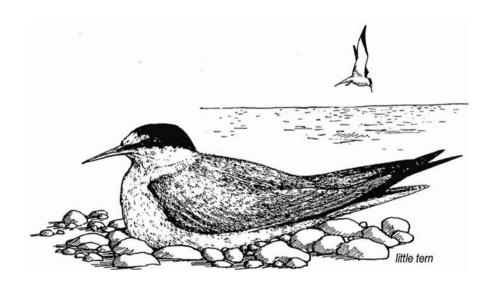
Plovers nest on the open beaches from May, laying four eggs in a shallow scrape. These are usually two broods but the bird is liable to disturbance by people using the beach area. To warn 'intruders' to the nest area the birds will fly or walk away across the beach and call repeatedly. They may feign a damaged wing, whilst calling to lead people away from the site.

Please respect these nest sites.

Do not remain in the area if the birds show any signs of distress.

Little terns

Little terms may also be seen on an open area. They will fly and call repeatedly to indicate possible nesting, swooping towards any intruder. These birds are specially protected under the Wildlife and Countryside Act 1981 and should not be disturbed at a nest site.



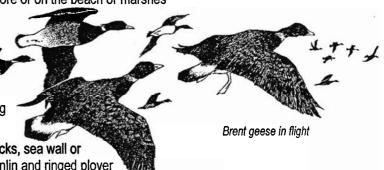


January and February

Winter visiting geese, ducks, gulls and waders are in good numbers. Cold severe weather often brings unusual species to rest or shelter close to the shore or on the beach or marshes inside the sea wall.

A flock of Brent geese is usually present. Eider, wigeon, red-throated diver, and great crested grebe may be seen resting on the sea with teal and mallard on the marshes. Wader numbers are at their peak with turnstone, redshank, grey plover, sanderling feeding on the tide line.

Purple sandpiper can occasionally be seen feeding on the rocks, sea wall or breakwaters, and oystercatchers, grey plover, sanderling, dunlin and ringed plover at a hightide roost on the beach at Coldharbour. Stonechats are seen along the sea wall. Hen harrier and short-eared owl regularly quarter the marshes - particularly towards dusk.



March and April

Migration time!

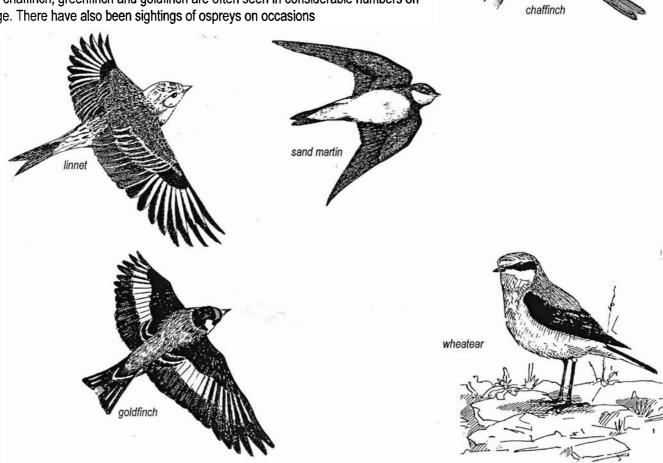
Many winter visitors now depart for their breeding areas.

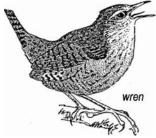
The migration of sea and land birds begins with many arriving from Europe and Africa to occupy breeding locations and many more on passage further north or west.

Brent geese leave for Russia, eider to Scotland and beyond; wheatears arrive en route to the moorlands and heathlands.

Sand martins return to their breeding colonies in the cliffs, closely followed by swallows, house martins, and swifts on their way to various locations. Many yellow wagtails move through on migration but some remain to breed inside the sea wall. Sandwich terms in late March are on passage for Norfolk followed by common tern and little tern for breeding areas nearby and in the Swale and Medway marshes.

Linnet, chaffinch, greenfinch and goldfinch are often seen in considerable numbers on passage. There have also been sightings of ospreys on occasions







May and June

Many migrants are still arriving and passing by - warblers, raptors and waders, hobby, whimbrel, greenshank, bar-tailed godwit and common sandpiper are regularly seen.

Strong north-east winds may bring gannets and skuas into view offshore. For others it is the season of nesting, breeding and feeding young. Many of our resident birds will be blackbird and song thrush, blue tit and wren.

Sandmartins are occupying their nest holes in the Glen and cliffs to form the largest coastal colony in Kent. Fulmars are seen visiting cliff nesting ledges. Ringed plovers nest on the open beaches. Little terns may be seen on the beach. They will display and call to lead you away. *Please do not disturb.*

Sedge warbler, reed warbler and reed bunting nest in the reedbeds of the dykes. Cuckoo frequently choose these species as foster parents and are regularly seen along the sea wall. Yellow wagtails, meadow pipit and skylark nest in the grassy areas inside the sea

wall and on the cliff tops. Close inshore, common and little tern are fishing - hovering and diving to take small fish from near the surface.

July and August

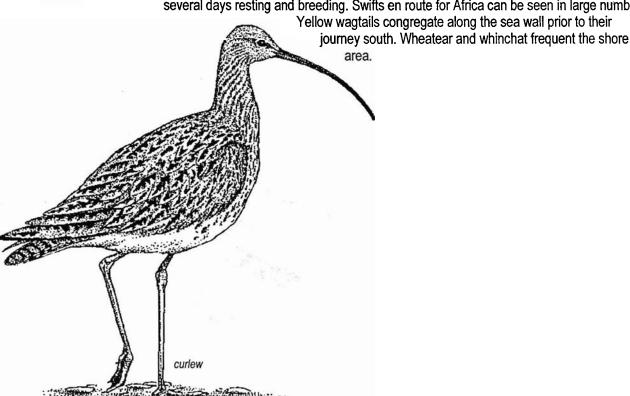


While some birds are still feeding young and raising second broods, many birds which have bred here are preparing for their return journeys.

Some early birds will leave but others will be seen on passage once their journey to the south. Waders begin arriving from their northern breeding grounds.

Common sandpiper, bar-tailed godwit, curlew, whimbrel, sanderling and dunlin are to be seen on the pools and shore line. Sandmartins are still rearing late broods. Goldfinches and linnet feed on ripening seed heads of flowers on the beach.

August sees the beginning of the return passage for the terns with common and Sandwich terns flying offshore. Small parties of black terns may be seen and remain in the area for several days resting and breeding. Swifts en route for Africa can be seen in large numbers.





September and October

Migration is now in full spate.

Many thousands of swallows and house martins pass through along the coast and our sand martin colony is also preparing to leave.

Chiffchaff, willow warbler, garden warbler and other small birds may be found in around Bishopstone Glen and the bushes in the area around the Towers.

Wader numbers increase - turnstone, sanderling, dunlin are nesting and feeding on the tideline.

Short-eared owls may be seen hunting over the marshes. There is a large sea bird passage which includes Sandwich, common and little terms with kittiwake and gannet often seen.

Wheatear and whinchat are on the sea wall, lapwing flocks build up and roost on the marshes, and kingfishers and grey wagtails may be seen near the fish farm and dykes.

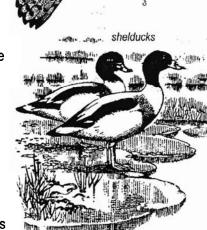
November and December

Redwing and fieldfare from Scandinavia and northern Europe arrive to feed on berries and fruits, often continuing on to other areas in mainland Europe.

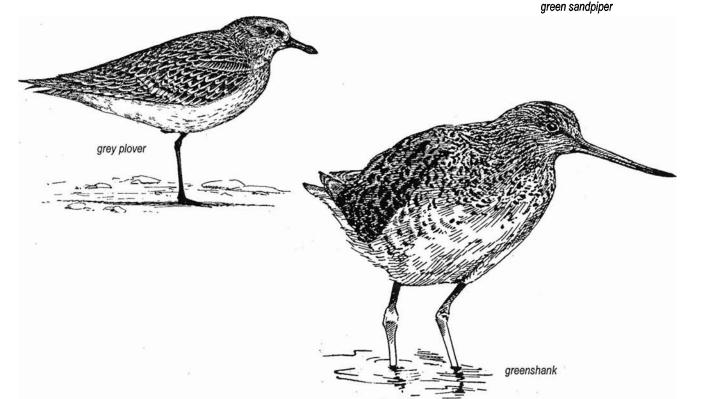
Flocks of Brent geese from Siberia will be seen on the shore and marsh. Sea passage birds include divers, grebes and red-breasted meganser. Snow bunting from Scotland and beyond arrive on the beach - frequently seen near to Coldharbour. Occasionally shore lark may also be seen. Black redstart may be seen on the sea wall, and in winter, flocks of goldfinch, linnet and greenfinch on the seed heads of beach and marsh plants. Hen harriers occasionally can be seen hunting over the marshes.

A sea watch may produce sightings of gannets, red-throated diver, great crested and rednecked grebe, common scoter on the sea or flying past. Occasionally, guillemot and
razorbill are recorded, sometimes being found as oiled casualties on the
tideline. Eider duck return and are regularly seen in small groups on the sea.

Teal and mallard are in good numbers on the marshes with some some wigeon
and shelduck. Pintail, goldeneye and long-tailed duck occasionally may be seen. Wader
numbers increase and golden plover will be seen over the marshes.



short eared owl



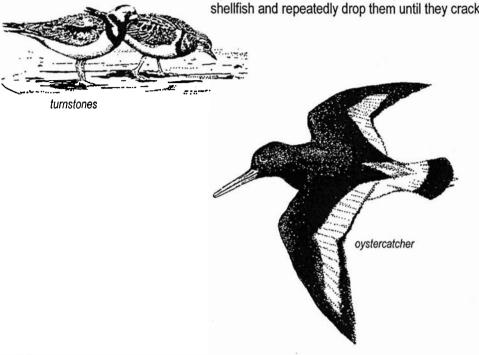
Shore feeders

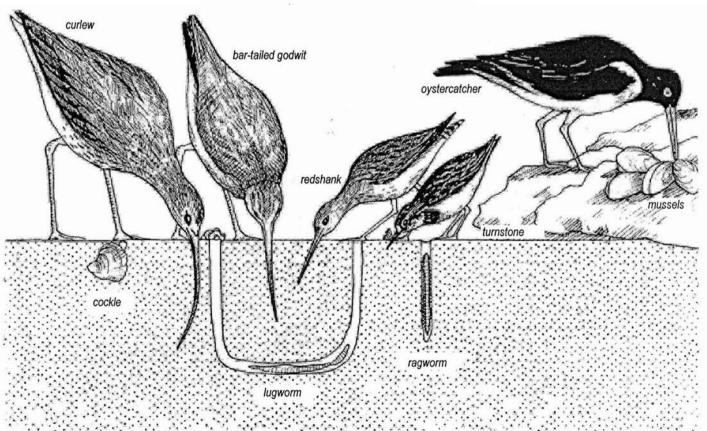
sandhopper

The tidal area provides feeding opportunities for a range of gulls and waders. Gulls have strong beaks for dealing with crabs, shellfish and carrion. Waders have bills which enable them to probe the sand and mud for worms, shrimps and sandhoppers, and for shellfish such as the Baltic tallin.

The length and type of bill enables different levels of sand to be searched, from the surface, under stones, shells and seaweeds by turnstones and sanderling, to the much deeper lugworms and Baltic tellin sought by the curlew with its 16cm. long bill.

Oystercatchers are able to force open mussels and cockles. Gulls may fly up with some shellfish and repeatedly drop them until they crack open on the rocky shore.





Migration

Ringing is carried out by the Kent
Ornithologal Society and the British Trust for Ornithology
(BTO) licenced members at various sites between
Bishopstone and Minnis Bay. Ringing together with regular bird
watching, has helped to build up a detailed picture of the species that
migrate through the area. For example, although black-headed gulls
and common gulls can be seen during almost any visit to the area,
ringing has shown that large numbers of both species arrive at the coast
during late summer and autumn.

Black-headed gulls reach Reculver from the breeding areas in Scandinavia, Northern Europe and even as far as Central Europe, whilst common gulls ringed during the winter have been recovered during summer in Finland and Norway, some 200 miles inside the Arctic Circle. During September, October and November large numbers of thrushes, starlings and finches are often seen pouring into Kent from the Continent, and ringing has shown their origins.

Blackbirds arrive here from northern Europe and Scandinavia, and starlings from northern Europe as far east in Russia as Moscow. Redwings and song thrushes also arrive from northern Europe during October and November. Ringing has shown that song thrushes often continue their journey to winter in Spain and Portugal, and redwings to southern France and Italy.

One often thinks of birds like wrens, robins and great tits as residents, which, in fact, the British population tends to be. However, during autumn they build up in numbers due to continental migrants, with examples including great tits from Latvia and Belgium, a wren from the Friesian Islands and robins from East Germany and Denmark.

During spring, many species of warblers together with species like whinchats, wheatears and yellow wagtails arrive here in order to breed in this country, before returning in autumn to the wintering areas in Africa.





common seagull

Reculver to Coldharbour

Although this section of the costal area is outside the Local Nature Reserve and SSSI. It still has a wide range of wildlife interests.

Reculver Fort and Church

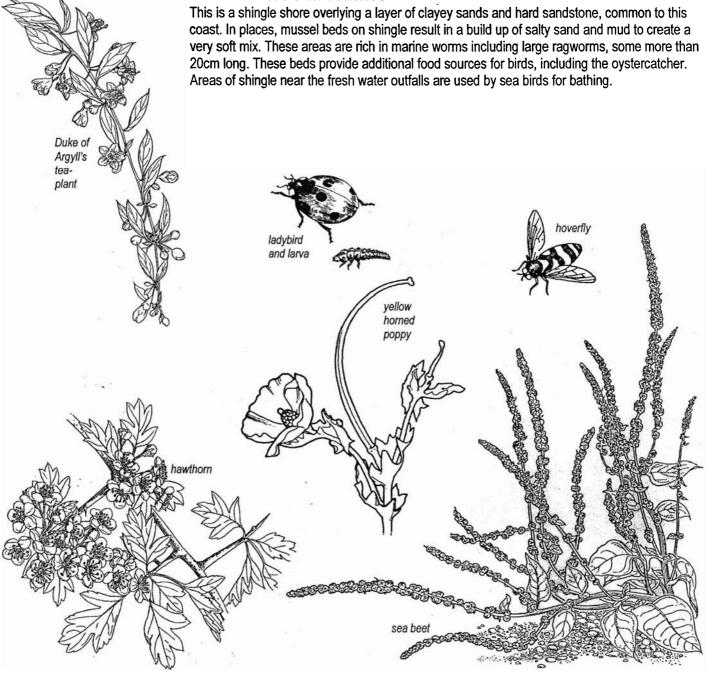
The fort is often overlooked for its considerable wildlife interest. There are fine plant communities, particularly near the walls and paths, which include Alexanders, pellitory- of- the wall, Duke of Argyll's tea plant, an introduction from China which is now naturalised in many coastal areas (The red berries are attractive to birds) plus common mallow and sea beet, together with elderberry and hawthorn. These provide nectar for insects, and bees, hoverflies and ladybirds are common. The area also provides food and shelter for birds, and in autumn it is particularly popular with migrating warblers.

Alexanders are now widely distributed over many coastal areas. This plant was introduced by the Romans as an all purpose spring vegetable. All parts are edible and may be used for wine making, as a cooked vegetable, in salads or as a pickle. The name is associated with its origin in Macedonia - the land of Alexander the Great.

The walls of the Roman fort provide a sheltered area for many plants which in turn are valuable for insects and birds.

The seashore and beaches





Inside the sea wall

to the east of the towers

Between the drainage dykes and the seawall is an area of grassland much colonised by common reed and many flowering plants, including spiny restharrow, dyer's greenweed, sea clover, broad leaved everlasting-pea, marjoram, basil, horseshoe vetch, salsify and various thistles.

This diversity provides opportunity for a wide range of butterflies including small tortoiseshell, peacock, marbled white, large and small white, green veined white, small heath, common blue, and small and large skippers. The migratory red admiral and painted lady are regularly seen and occasionally the clouded yellow is recorded. Moths include six spot burnet, cinnabar and silver 'Y'. The caterpillars of the cinnabar can seen in large numbers devouring the foliage of ragwort in July and August.

Although the former marshland is now under arable cultivation, the area has retained many marshside plants and the dyke system is extensive, with common reed and sea club rush communities.

The dyke flora is limited by agricultural run off and the necessary management of the reed beds to maintain the drainage system but they do support breeding birds such as nesting moorhen and coot, reed and sedge warblers, reed bunting and cuckoos looking for foster parents.

Yellow wagtail, meadow pipit and skylark nest in the grassy areas. In autumn and winter the marsh areas provide good opportunities for views of hunting kestrel, hen harrier and short eared owl.

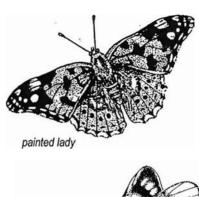
Several hundred Brent geese winter in the area and may use the marsh area and arable fields for roosting, then feeding on the foreshore.

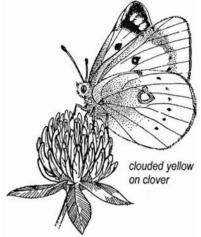
The banks provide good plant communities and public footpaths along some of the banks provide alternative walking to the promenade area.

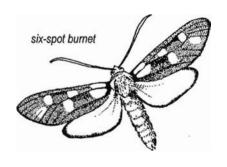
Coldharbour

This area, enclosed between the shingle sea defence and the promenade sea wall, results in a lagoon and saltmarsh complex of interest throughout the year. In winter the ridge is often used by snow bunting and the seaward side is a high tide roost for flocks of oystercatcher, turnstone, ringed plover and other waders.











broad buckler-fern

Bishopstone Glen and Cliffs

This area is of outstanding geological and biological interest, and has been designated a Site of Special Scientific Interest under the Wildlife and Countryside Act 1981.

The special Glen woodland and adjoining clifftop grassland areas are inportant habitats in Kent. The woodland area includes ash, field maple, hawthorn and blackthorn. Young small leaved elm is abundant throughout the Glen with; the older elms have succumbed to Dutch Elm disease. Other woody species include sea buckthorn, broom, gorse and alder buckthorn.

The sheltered damp conditions in the narrow valley provide a suitable environment for the growth of ferns, including hart's- tongue, broad buckler and soft shield. In the wetter areas at the head of the Glen are water dropwort and yellow flag. In the lower parts, nearer to the sea, sea club- rush and sea beet are found.

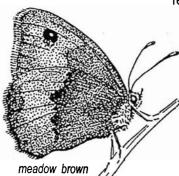
The woodland cover provides food and nesting opportunities for a range of resident and migrant birds, with shelter for many others which are on passage along the coast. Breeding species include lesser whitethroat, sparrowhawk, kestrel, woodpigeon, collared dove, jackdaw, blackcap, green woodpecker, great spotted woopecker, whitethroat, lesser whitethroat and chiffchaff in addition to the more usual thrushes, blackbird and the tit family.

The exposed sands of the cliff and Glen support a strong colony of sand martins which is one of the largest in Kent. Although much reduced by the population crash of this species in 1984, it has now recovered to between 100 and 200 pairs depending on migration conditions. The exposed sand face at the side of the valley is colonised by mining bees and two nationally rare burrowing species of digger wasps. Insect species generally are numerous throughout the area and are the subject of further research.

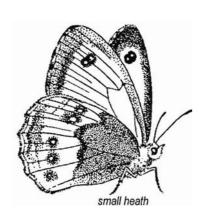
The area of unimproved grassland to the east of the Glen is managed by mowing for hay and there is a wide range of typical plant species including kidney vetch, ladies bedstraw, thrift, yellow oat-grass, early hair-grass, wild carrot, meadow vetchling, grass vetchling, bulbous buttercup and mouse ear hawkweed. Bird's-foot-trefoil and narrow-leaved bird's-foot-trefoil are common.

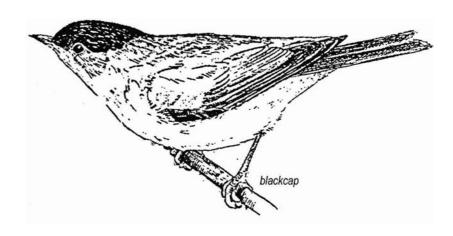
The grassland areas on both sides of the Glen is also ideal habitat for ground-nesting birds such as meadow pipits and skylarks, which can be seen in good numbers. It also supports a good number of species of butterflies and moths, with meadow brown, large and small skippers, common blue, small heath, speckled wood and the migrant species, painted lady being regularly seen.











Acknowledgements

Most of the material in this resource pack has been reproduced from the old displays in the Visitor Centre, at Reculver Country Park. The original text is by Kent Wildlife Trust and has been updated by Chas Matthews, Community Education Officer (E. Kent) with illustrations by Tessa Lovatt-Smith and with additional illustrations by Aubrey Warner. This pack has been produced by Kent Wildlife Trust who manages the Centre on behalf of Canterbury City Council.

Further Reading

Other Reculver publications can be seen and purchased at the Reculver Visitor Centre. Along with many other items of information relating to the Country Park and the surrounding area.

Useful Contacts

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