

Become a Beach Detective

Helping you explore
Suffolk's Beaches

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This booklet will help you identify some of the more common things you will find on Suffolk's shingle beaches, including the plants and birds that call them home.

The best place to look for treasures is the strandline – the line of washed-up seaweed marking the last highest tide.

Some safety tips for you and our wildlife

Seaweed, driftwood and empty shells all provide food or homes for wildlife so please don't take too many of these home.

Never take a living thing away.

The best time to be a beach detective is when the tide is going out. Search www.tidetimes.org.uk for this info.

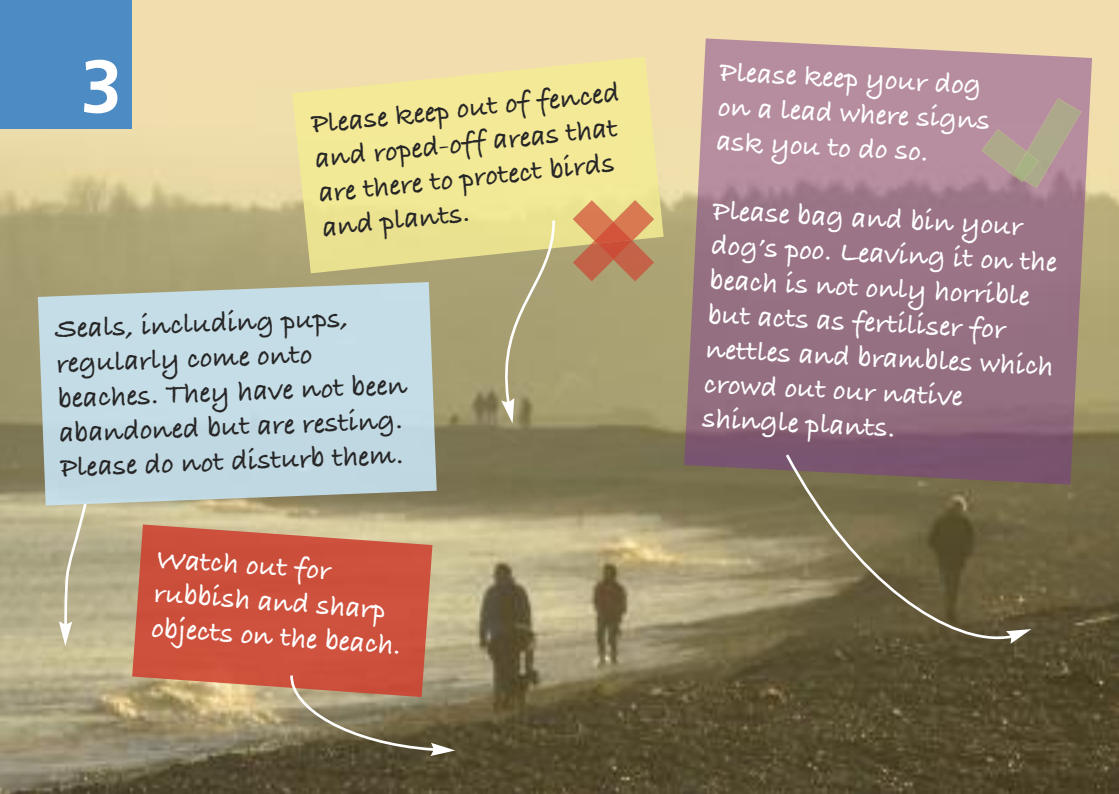
Please keep out of fenced and roped-off areas that are there to protect birds and plants.

Seals, including pups, regularly come onto beaches. They have not been abandoned but are resting. Please do not disturb them.

Watch out for rubbish and sharp objects on the beach.

Please keep your dog on a lead where signs ask you to do so.

Please bag and bin your dog's poo. Leaving it on the beach is not only horrible but acts as fertiliser for nettles and brambles which crowd out our native shingle plants.



4 The Shingle Beach

A shingle (stony) beach that can support plants is called vegetated shingle. This is a rare and fragile habitat so please keep off the plants and don't pick them!

It seems like there's a lot of vegetated shingle in Suffolk doesn't it? Actually it is rare worldwide and only found in three places in the world: North West Europe, Japan and New Zealand.

Sea Pea



Q How do plants grow where there is no soil, hardly any fresh water and it's very salty and windy?

A Specially adapted shingle plants have long tap roots, hard seed cases and hairs that act as sunscreen! Read more on page 17.

5 Flints



The most common stones on our shingle beaches are flints.



Flints were formed from the remains of sea sponges and other tiny sea creatures.



This is a fossilised sponge that is about 80 million years old.



6 Limpet Shells



Limpets move around when the tide is in and use their teeth to scrape algae off rock armour.



In Feb 2015 scientists said that these teeth were the strongest natural substance known to man!



The teeth of a limpet are found on its tongue!



When the tide goes out, they return 'home' to the same spot clamping down tightly to the rock and wait until the tide returns.

7 Whelk Shells



The large, very pale shell you might find belongs to the common whelk.



Whelk shells make good homes for hermit crabs.



Dog whelks use their rough tongue and acid to drill a hole in shells. They use acid to turn the shell's insides into soup and suck up the contents.



The dog whelk's shell colour is affected by what it eats.

8 Crab Shell



As crabs grow bigger they shed their shells which don't grow with them.



While they are waiting for their new shell to harden they are at risk of being eaten so they usually hide for a few days.



There are over 60 species in the UK, some of which we eat.

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Oyster Shells



One of the largest and most common shells found on the beach.



Oysters are bivalves meaning they have two valves (shells). The shells are joined along one edge by a hinge so they can open and close.



They look very different to the large white and purple oyster which is farmed along our shores.

10 Seaweed

Flies lay their eggs in seaweed on the beach. Both the flies and their eggs are tasty treats for birds.

There are over 650 types of seaweed in the UK.



Pigments mean seaweeds vary in colour from green to brown to red.



Some seaweeds have air sacs or bladders. These help lift them towards the light which they convert into food.



11 Hornwrack



I'm not seaweed! I'm a bryozoan or "moss animal."



If you hold hornwrack up to the light it looks like lace. Each hole once contained an animal.

Hornwrack is the remains of a colony of hundreds of tiny animals.

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Mermaid's Purses



Skate and ray egg cases have a 'horn' at each corner used to fix the egg case to seaweed or rock.

Shark egg cases have curly tendrils at both ends.



They all have the nickname "Mermaid's Purse".

13 Whelk Egg Cases



These are the egg cases of a common whelk.

The first eggs to hatch out into tiny shells usually devour their brothers and sisters!

Sailors once used them for washing so they are also known as "seawash balls".



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PLEASE - never litter! You could collect and take home any rubbish you find too.

Please don't let go of balloons. When balloons are released they don't disappear but come back to earth as rubbish.

Sea glass

Broken glass is dangerous on our beaches. Sometimes however pieces of glass which have been in the sea for a long time become smoothed and frosted and quite beautiful.



Cotton bud sticks that have been flushed down the loo wash up on beaches! Only flush pee, poo and paper and put everything else in the bin.



want to help? why not join a local beach clean? Check out the Marine Conservation Society's Beachwatch pages online.

16 Ground Nesting Birds

They are called Ground Nesting Birds because they lay their eggs without a nest straight on the shingle.

In Suffolk, Little Terns and Ringed Plovers are particularly at risk. If parent birds are disturbed they abandon their chicks or eggs – a tasty snack for a passing seagull! You can help by keeping out of roped or fenced-off areas and keeping your dog on a lead where signs ask you to.



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A little tern
and egg

A ringed
plover chick
and eggs

17 Shingle Beach Plants

The Yellow Horned Poppy plant is covered in fine hairs that act as a sunscreen by reflecting sunlight.



© Sarah B Wynne

TICK HERE WHEN YOU'VE FOUND A YELLOW HORNED POPPY

TICK HERE WHEN YOU'VE FOUND SEA KALE

TICK HERE WHEN YOU'VE FOUND SEA PEA

Sea Kale has thick tap roots that can grow to 2 metres long - that's as tall as an adult!

Please don't pick shingle plants.

Sea Pea seeds have a hard coat which can survive in seawater for up to 5 years. It takes the stones of a shingle beach to break them open.

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WELL DONE! YOU'RE A BEACH DETECTIVE NOW!

Send us a picture of your finds and let us know how you got on with #beachcombing

 @TouchingTheTide



This leaflet was produced as part of the Touching the Tide Landscape Partnership Scheme, funded by the Heritage Lottery Fund. Find out more and check out our cool crafts at www.touchingthetide.org.uk

Most of Suffolk's beaches are in the Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB). Explore and discover the outstanding landscape with the help of walking and cycling guides, most available free to download at www.suffolkcoastandheaths.org

Suffolk
Coast &
Heaths



Area of Outstanding Natural Beauty



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Take it with you next time you go to the beach and become a beach detective!

