

Shoreline detective

Please do not remove anything from the beach that may be alive, or may act as a home for wildlife.



www.wildlifewatch.org.uk Seaweed, pebbles, oyster shell & driftwood (c) Sarah Wynne / Mermaid's purse (c) Paul Naylor / Cockle shell (c) Sion Roberts / Cuttlefish bone (c) aSIMULAtor - flickr / Whelk eggs (c) gazzat - flickr / Whelk shell (c) Amy Lewis / Gull feather (c) NicoledaB - flickr

Download at https://www.wildlifewatch.org.uk/sites/default/files/2021-01/Shoreline%20detective_1.jpg

THINGS TO DO IN AUGUST

- Go to the beach and look for shells and objects on the sand
- Visit a heathland and smell the heather
- Listen for grasshoppers. How do they make their sound?
- Make a nature collage and take a photograph to take into school in September

RESOURCES

1. Top 10 strandline spots

[https://www.record-lrc.co.uk/Downloads/Top%2010%20strandline%20\(1\)\[12062020\].pdf](https://www.record-lrc.co.uk/Downloads/Top%2010%20strandline%20(1)[12062020].pdf)

2. Identify shells

<https://www.mba.ac.uk/shell-identification-key>

[https://record-](https://record-lrc.co.uk/Downloads/Shell%20identification%20February%202012%20version2%5B18042012%5D.pdf)

[lrc.co.uk/Downloads/Shell%20identification%20February%202012%20version2%5B18042012%5D.pdf](https://record-lrc.co.uk/Downloads/Shell%20identification%20February%202012%20version2%5B18042012%5D.pdf)

3. Do a coastal wordsearch

https://www.wildlifewatch.org.uk/sites/default/files/2021-01/coastal%20wordsearch_0.jpg

4. Make a seal mask

<https://www.wildlifewatch.org.uk/sites/default/files/2020-07/seal-mask.pdf>

5. Make an egg carton crab

<https://www.wildlifewatch.org.uk/sites/default/files/2020-08/Egg%20carton%20creatures.png>

6. Spot estuary wildlife

<https://www.wildlifewatch.org.uk/sites/default/files/2020-07/Estuary.jpg>

7. Craft: nature mandala

<https://www.wildlifewatch.org.uk/sites/default/files/2020-08/Nature%20mandala.jpg>

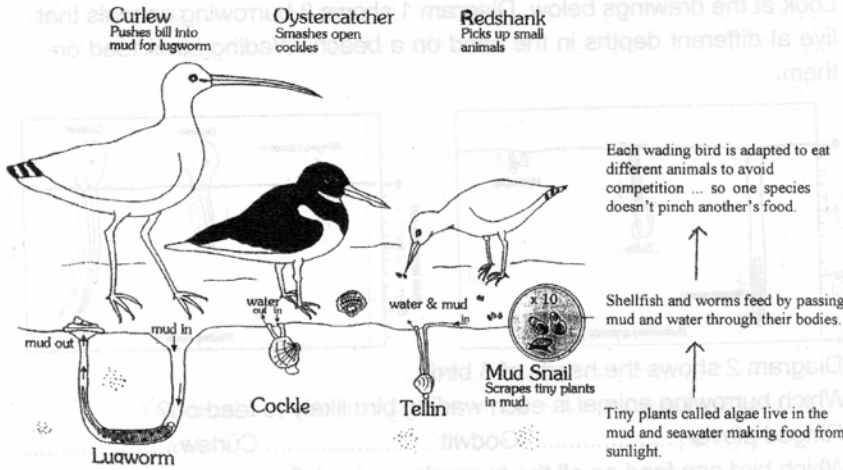
7. Look at the birds on the Dee or Mersey estuary.

What do they eat?

8. Why do they have

different length beaks?

Muddy Shore Food Chain



Look at the diagrams below. Diagram 1 shows three burrowing animals that live at different depths in the sand on a beach. Wading birds feed on them. Diagram 2 shows the heads of three wading birds.

Diagram 1.

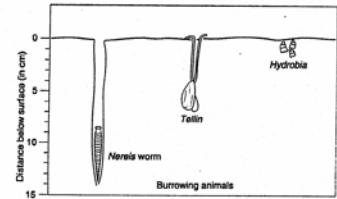
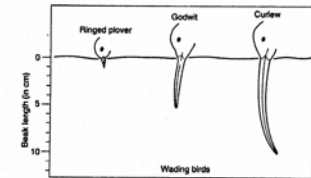


Diagram 2.



7. Which burrowing animal is each wading bird likely to feed on? (i) Ringed plover (ii) Godwit (iii) Curlew

8. Which bird is able to feed on all the burrowing animals?

9.



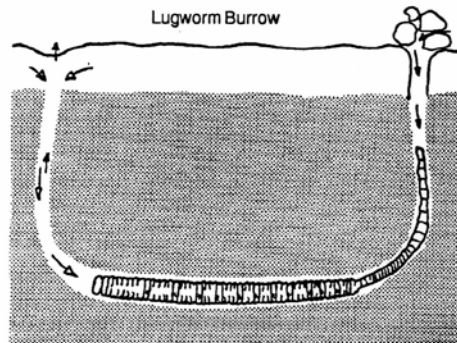
North Wirral Coastal Park - Information Sheet

Sand & Mud Habitats



At first sight the sand and mud is devoid of life, but on closer examination especially in areas where the surface is wet or muddy, you will find many forms of life.

The animals that live in this habitat need to be able to burrow to escape predators, many construct burrows and line them to prevent them from collapsing. The many small holes on the surface of the mud or sand are the entrances to these burrows.

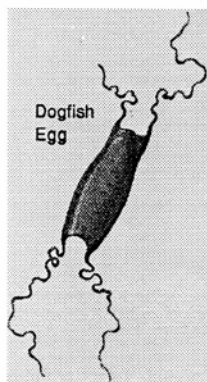


The most likely animal you are to see evidence of is the lugworm. Look for a "worm cast" on the surface and nearby a small hole or depression, between these two is a "U" shaped burrow with a lugworm living in it. The worm eats any food particles that fall into the depression and "excretes the undigested sand out the other end every 40-50 minutes. It breathes by pumping water through the burrow in the opposite direction, over the gills on the side of its body. Other worms to see are: ragworm, sand mason worm.

Another common animal to find is the cockle shell. The small shells of this mollusc litter the beach, but the animal when alive lives burrowed in the sand, with only two tubes reaching up to the surface of the sand to feed and breathe with. It does this when the tide is in and can suck in food particles on the surface of the

sand or filter out plankton, microscopic animals floating in the sea. They also have a muscular foot, which can dig the animal into the sand should danger appear, eg. a long billed bird like the oystercatcher. The cockle belongs to a group of animals called "Bivalves" because they have two shells surrounding their body, and other ones you are likely to see are: tellin, mussel, razor, trough shell, and sand gapers.

Another type of mollusc are the "Gastropods", or sea snails, which have only one shell which is often spiralled. The one you are most likely to find on the sand is the laver spire shell, but at 2-3mm long you will have to look closely!

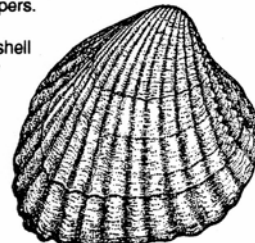


THE STRANDLINE

At the top of the beach you will usually find a line of debris or rubbish washed up and left by the last high tide. This is a good place to hunt for shells etc. but be careful and wear gloves.

One of the objects you may find is a "mermaid's purse", this is the empty egg case of a skate or a Dogfish. Another common find is the mass of egg cases of the whelk (a large sea snail), which looks like a bathroom sponge. Each mass will contain the egg cases of several female whelks, and from each egg case will hatch 10-20 whelks.

The sea potato is the empty skeleton of the common heart urchin, a type of sea urchin that is adapted to burrow through sand. When alive it is covered in spines, some of these with spade like ends which it uses to dig through the sand.



Cockle



Sea Potato