

An illlustrated splash-proof guide to investigating the plants and animals found on our beaches



INTRODUCTION

The County Borough of Neath Port Talbot includes 14 kms of coastline stretching from Margam Sands in the west to Crymlyn Burrows in the east (see map on the back page). Margam Sands are bounded to the north west by the southern edge of Port Talbot harbour and lead into Kenfig Sands to the south east (Bridgend County Borough Council). Aberavon Beach extends for 3 miles from the mouth of the River Afan to Witford Point and spit at the River Neath. Beyond this is Crymlyn Burrows and the boundary with the City and County of Swansea. At Margam, Aberavon and Crymlyn, small sections of a once extensive sand dune system can be seen, bordering the beaches.

We are very lucky to have a hectare of honeycomb worm reefs (Sabellaria alveolata). This habitat is nationally important and is included in the UK Biodiversity Action Plan (BAP) as requiring conservation action. Areas of mudflats are also a very important BAP habitat on a national level and there are over 31 hectares in the Borough. We have two species on our shores which are only found in southern/south-western Britain. These are the Volcano barnacle Balanus perforatus and the South-claw hermit crab Diogenes pugilator. Many other seashore habitats exist in the borough, including extensive sandy shores, rock pools, crevices, overhangs, bare rock and manmade structures e.g. breakwaters and piers. These habitats provide a home for many plants and animals and are best investigated at low tide.

This guide illustrates the more commonly found seashore plants and animals in our borough. It is designed to be a helpful aid to inspire further investigation of the local area and to open your eyes to the diversity of marine wildlife which can be found close to home. At first glance, sandy beaches appear barren. However, the guide illustrates the many animals that you can find living in and on the sand and in many other habitats, if you look closely.



HOW TO USE THIS GUIDE

This seashore pack concentrates on plants and animals found on the seashores of Neath Port Talbot and exposed between the tides in the intertidal area. Each habitat is colour coded for easy use. Only the most commonly found plants and animals have been included. The photographs are an aid to identification. When searching, look closely and think small. Follow the tide as it goes out, have fun and follow the seashore code below.

The Seashore Code:

Place overturned boulders, rocks and seaweed back where you found them and the right way up

- •Handle creatures with care and respect and always place them back where you found them as they may be guarding eggs
- ■Be careful not to trample any creatures or sensitive habitats tread lightly
- •Avoid using a net as this can damage delicate creatures
- •Only place one animal at a time in a bucket or tray to observe it more closely and always put them back where you found them
- Do not kick or prise limpets off the rocks as this may kill them
- •If you take shells home, make sure they are empty, as they may still contain live sea snails or hermit crabs
- •When bait-digging in sand or mud, always back-fill holes
- ■Take all your litter home and dispose of it correctly
- •Finally, for your own safety, check the tide times, wear suitable clothing and footwear and beware of slippery seaweed and sharp barnacles on the rocks!

Happy seashore discovery!

Don't forget to record what you find.



SAND

Wide expanses of sandy shores such as Aberavon and Margam Sands are very rich in animal life. These creatures spend much time buried in sand. They may use the sand for protection, feed in the sand, or on the surface. They have to have access to the surface to breathe and may leave a telltale hole or cast where they burrow. Look out for these and you may find the animal below.



The **Brittlestar** (Ophiura albida) burrows in muddy sand. It has 5 long slender arms.



The **Striped venus clam** (*Chamelea gallina*) has 3 brownish rays on its rough shell.



The large **Common whelk** (*Buccinum undatum*) feeds on tube worms and shellfish in muddy sand.



The **Sandstar** (*Astropecten irregularis*) has 5 arms fringed with spines. It feeds on worms and crabs.



The **Rayed trough shell** (*Mactra stultorum*) uses its foot to burrow in sand. The shell is smooth.



The **Necklace shell** (*Polinices catenus*) feeds on other shellfish by drilling into their shells with its tongue.

SAND



The **Lugworm** (*Arenicola diversicolor*) lives in a u-shaped burrow in the sand. It forms these casts on the surface and lives below.



The **Shore crab** (*Carcinas maenas*) may be brown or dark green. Its shell has five 'teeth' either side of the eyes.



The **Razor shell** (*Ensis* sp.) has a long shell. It has 2 siphons for feeding and breathing and a muscular foot for digging in the sand or mud.



The **Sand-mason worm** (*Lanice conchilega*) lives in a tough tube made of sand grains which pokes out of the sand.



The **South-claw hermit crab** (*Diogenes pugilator*) has a bigger left claw than the right.



The small white **Furrow shell** (*Abra nitida*) uses a siphon to feed. It lives in muddy sand, buried to about 70 mm.

ROCKPOOLS

Rock pools are difficult places to live. Conditions here vary greatly between high and low tide. Some animals shelter in them when the tide is out and others become trapped there. Rock pools are windows into the underwater world.



The **Edible crab** (*Carcinas maenas*) has a 'pie-crust' edge to its shell. It can live for over 20 years.



The **Beadlet anemone** (*Actinia equina*) has up to 200 tentacles armed with stinging cells. It uses these to catch its prey.



The **Hydroid** or sea fir (*Obelia longissima*) looks like a plant but is a colony of animals.



Hermit crabs often live in old common whelk shells. They change shells when the old one gets too small.



The **Grey sea slug** (*Aeolidia papillosa*) feeds on beadlet anemones. It has two pairs of tentacles on its head.



The **Edible periwinkle** (*Littorina littorea*) is a sea snail. It closes its shell with an 'operculum'.

ROCKS

Many types of animals are found attached to rocks, or they shelter under them. Try looking under overhangs and in crevices, you never know what you may find.



The **Common limpet** (*Patella vulgata*) uses its muscular foot to attach to rocks. It eats seaweeds.



The orange **Sponge** (*Hymeniacidon perleve*) is a group of simple animals.



Small **Acorn barnacles** cover bare rocks. The large purple, cone-shaped barnacle in the centre is the **Volcano barnacle** (*Balanus perforatus*).



The reef-building **Honeycomb worm** (*Sabellaria alveolata*) lives inside a tube that it makes from grains of sand or shell fragments.



The **Common mussel** (*Mytilus edulis*) attaches to rocks by a very strong 'byssus' thread.



Dog whelks (*Nucella lapillus*) lay yellowish egg capsules. They feed on barnacles and mussels by drilling into their shells with their tongue.

PLANTS

Plants found on the seashore are called seaweeds or marine algae. They can be seen growing on rocks and in rock pools. Seaweeds can be green, brown or red in colour.



Channelled wrack (Pelvetia canaliculata) is only found on the top of the shore. It is a small,



Bladder wrack (*Fucus vesiculosus*) has air bladders which act as floats.



Gutweed (*Ulva intestinalis*) can grow in fresh and salt water. It is bright green and crinkled.



Toothed or serrated wrack (*Fucus serratus*) has a jagged edge.



Purple laver (*Porphyra purpurea*) forms thin, long, narrow sheets and is boiled up to make the Welsh delicacy laver bread,



Irish moss or caragheen (*Chondrus crispus*) is used to thicken ice cream.

STRANDLINE

The strandline is the area at the top of the shore where natural and man-made objects are washed up by the tide, especially after storms.



The **Sea potato** (*Echinocardium cordatum*) lives deep down in the sand. Its fragile skeleton is often washed up.



The **Tube worm** (*Pectinaria koreni*) lives in a tube it makes from sand grains. Empty tubes are often found.



The empty shell of the **White piddock** (*Barnea candida*) can be found. It usually burrows in peat or soft rocks.



This is the empty shell of the **Green** shore urchin (*Psamechinus miliaris*). When alive, it lives under rocks and is covered in short sharp spines.



The empty egg-case of the **Lesser** spotted cat shark (*Scyliorhinus* caniculus) is also called a 'mermaid's purse'.



Dead, dried **Sandstars** are often found on the strandline after storms.

FURTHER INFORMATION

Neath Port Talbot Biodiversity Biodiversity Unit: The Unit's function is to address the pressures on biodiversity within Neath Port Talbot. Working closely other departments, outside organisations and volunteers, positive changes have been made. The Unit provides the secretariat for the Neath Port Talbot Biodiversity Forum and its charitable arm, Biodiversity Action. The Biodiversity Forum, with support from the Biodiversity Unit, produced the Local Biodiversity Action Plan (LBAP).

The plan is available to download from: www.npt.gov.uk/biodiversity

For more information, contact the Biodiversity team at:
Biodiversity Unit

Neath Port Talbot CBC

The Quays Brunel Way

Baglan Energy Park

Neath

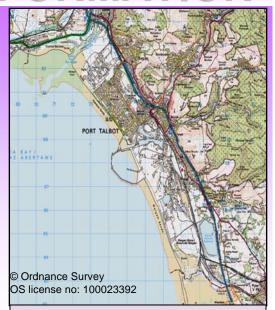
SA11 2GG

Tel: 01639 686149

Email: biodiversity@npt.gov.uk Web: www.npt.gov.uk/biodiversity



Guide researched and produced by Judith Oakley. All images taken locally © Judith Oakley www.oakleynaturalimages.com



To report your seashore sightings contact Marine Life Information Network (*MarLIN*) on 01752 63336 or see www.marlin.ac.uk

- •To report a live stranding of dolphins, porpoises, whales or marine turtles contact the RSPCA on 08705 555999
- •To report a dead stranding of dolphins, porpoises, whales or marine turtles contact Marine Environmental Monitoring on 01348 875000 or see www.strandings.com
- •For information on marine issues and how you can help - contact The Marine Conservation Society on 01989 566017 or see www.mcsuk.org
- •For general information on wildlife contact The Countryside Council for Wales on 01792 634960 or see www.ccw.gov.uk. Or
- •The Wildlife Trust of South and West Wales on 01656 724100 or see www.welshwildlife.org