Life among the Rocks

This rocky shore species identification sheet has been produced in collaboration with Coolum and North Shore Coast Care.

Use this rocky shore species identification sheet to explore the unique habitat of where the sea meets the land. Life is tough on the rocky shores between the tides, crashing waves, and the hot sun, but a range of animals and plants have adapted to survive in these challenging conditions.

Explore and remember these fantastic creatures by observing and taking photographs, rather than taking them home.

Dark Periwinkle
(Afrolittorina acutispira)

Upper shoreline / intertidal

Tiny sea snails (7 mm) that live in rock pits and crevices. Often only noticed when feeding on algae in the upper intertidal zone. They only occur in southern Qld and NSW and can live in very large groups, often together with Blue Periwinkle.

Gold-ring Cowrie
(Monetaria annulus)

Intertidal

Small cowrie snails (2-3 cm) with a distinctive yellow or orange band on their cream shell. They live under rocks and among seaweeds and emerge at night to graze on plants and algae.

Blue Periwinkle
(Austrolittorina unifasciata)

Upper shoreline / intertidal

Little sea snails (2.5 cm) often found clustering together at the highest tide level. They have whitish shells with a blue-grey band. They feed on algae and lichen and can survive well above the high tide level.

Serpent's-head Cowrie
(Monetaria caputserpentis)

Intertidal / shallow subtidal

Small cowrie sea snails (3-3.5 cm) that mostly live in rock pools under rocks and in crevices. Active at night, they use tentacles to find and capture small animals to feed on. Their shell is dark brown with white dots on the top.

Furrowed Clusterwink
(Planaxis sulcatus)

Upper shoreline / intertidal

Sea snails (3 cm) commonly seen in large clusters under rock shelves in rock pools. They spread out to feed on algae during incoming tides. Their shells are a dark brown/black with white spots and smooth furrows on the surface.

Spengler's Triton
(Cabestana spengleri)

Intertidal / shallow subtidal

Large predatory sea snails which feed on other animals such as sea squirts, snails, and worms. They have a light to dark brown shell and can grow to 15 cm but tend to be smaller in Queenslamd (6-8 cm).

Cone Snails
(Conus spp)

All habitats

Cone snails are a large group of **extremely venomous** sea snails. They use their venomous harpoon to paralyse animals to feed on. Cone shells come in different sizes, and a range of different colours and patterns. The two most common species on the Sunshine Coast are small with brown stripes or pink markings.

Mulberry Whelks
(Tenguella marginalba)

Intertidal / shallow subtidal

Small sea snails (2-3 cm) that like to eat barnacles and limpets. They drill a small hole in the shell of their prey and suck out the animal. They are light grey with dark knobs and often found above the high tide with limpets.

Cart-rut Whelk
(Dicathais orbita)

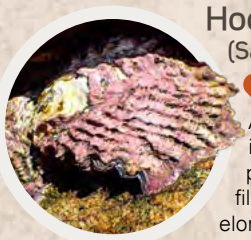
Intertidal / subtidal / surf zone

Large predatory sea snails (6-10 cm) that feed on barnacles, limpets or tubeworms by drilling a small hole in the shell of their prey and sucking out the animal. Their shell is light grey, white or cream with deep grooves on the surface giving it its name.

Zebra Snail
(Austrocochlea porcata)

Intertidal

Small sea snails (2.5-3.5 cm) with a distinct black and white striped pattern that live on rocks, sand, seagrass or mangroves. They are one of the most common snails found feeding on algae on the outgoing tide.



Hooded Oyster
(Saccostrea cucullata)

Upper shoreline / intertidal

A type of rock oyster often found in dense colonies. They feed by pumping water through their gills to filter out microalgae. They have a glossy, elongated pale purple surface with deep zig-zags on their shell and grow to 9 cm.

Spotted (Blotched) Pearl Oyster
(Pinctada maculata)

Intertidal / shallow subtidal

Spotted pearl oysters can grow to 5.5 cm and live attached to rocks or coral pieces. They can be seen feeding with open shells when covered by water. Their shells are yellow with purple, green or brown spots or ray markings.

Nerites
(Nerita spp.)

Intertidal

Sea snails (2-4 cm) that live on rocks, coral or sand and feed on algae. When alarmed, nerites retract into their hard, round shells and let go of the rock, bouncing down the rocks away from danger. Groups of **Black Nerites** (Nerita atramentosa) are very common on the Sunshine Coast.

Rose Barnacle
(Tesseropora rosea)

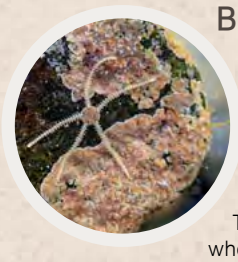
Intertidal / surf zone

Rose barnacles (2 cm) live attached to rocks where they use feeding arms to trap planktonic animals in the waves. Their shell consists of four wall plates and is white with pink. Predatory snails like the mulberry whelk feed on rose barnacles.

Common Limpet
(Cellana tramoserica)

Intertidal / shallow subtidal

Limpets (6.5 cm) feed by scraping algae from the rocks on exposed rocky shores. Their shells are white, yellow, orange, brown and black with deep radial ribs. Wrasses, oystercatchers and some sea snails feed on limpets.



Brittle Stars
(Ophiuroidea)

Subtidal

Brittle stars have five flexible slender arms, which they use to move around very fast. They often hide under rocks and rubble and are usually night active. Their arms are fragile and break easily when attacked by predators.

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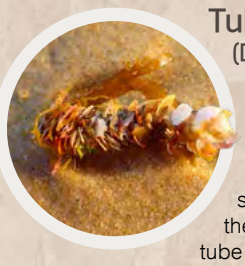
Bristle Worms
(Polychaeta)

Intertidal / subtidal

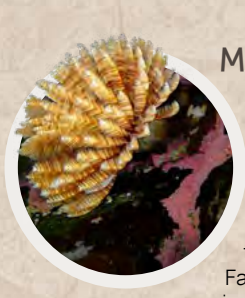
Marine bristle worms are named after the bristles on their body they use to crawl or swim around. The bristles break off easily when touched and penetrate the skin where they cause **painful irritation**. Bristle worms occur as free-wandering animals or as sedentary worms living in tubes or burrows.



Tube Beachworm
(Diopatra amboinensis)

Intertidal / subtidal

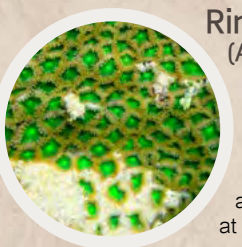
Sedentary bristle worms that grow to 30 cm and live in tough, parchment-like tubes. The worms collect fragments of shells, mud, gravel and seagrass, which they stick to the outside of their tube. The tube provides habitat to tiny animals, which the worms feed on.



Magnificent-banded Fan Worm
(Sabellastarte australiensis)

Intertidal / subtidal

Fan worms live in a flexible, leathery tube and have a feathery crown of tentacles on their head which they use to trap plankton. Fan worms will retreat into their tube at any sign of danger. Magnificent-banded fan worms grow to 20 cm and have red, yellow or brown tentacles with white bands.



Ringed Fleshy Coral
(Acanthastrea hemprichii)

Subtidal

Stony hard coral with fleshy, yellow to brown or grey tissue over the corallite skeleton. The polyps are green or brown and extend their feeding tentacles mostly at night.

Blue Soft Coral
(Latissimia opalia)

Subtidal

Vibrant blue-grey soft coral that forms large colonies on rock platforms. The polyps retract their long wavy tentacles when disturbed or exposed to air.

Green Zoanthid
(Parazoanthus sp)

Subtidal

These small, bright green animals are related to corals and sea anemones. Their colonies are often hidden in rocky crevices. Their anemone-like tentacles filter food from water.

Waratah (Red) Anemone
(Actinia tenebrosa)

Intertidal / shallow subtidal

Brilliant red anemones often found in crevices near rockpools. During low tide, they look like a small, red blob. When covered by water at high tide, they unfurl their bright red tentacles to catch prey such as small fish. Their young are released through their mouth as fully developed little anemones.

Green Snakelock Anemone
(Aulactinia veratra)

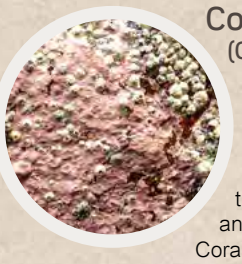
Intertidal / shallow subtidal

These anemones can grow up to 7 cm across and are attached to rocks, often in crevices. Their long green tentacles are used to catch prey. During low tide, they retain water and swell up to prevent drying out.

Sea Squirt / Cunjevoi
(Pyura stolonifera)

Intertidal

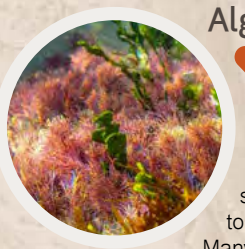
Cunjevoi colonies grow on rocks along the low-tide mark. At high tide they feed on plankton filtered from the water flowing through their body. During low tide, cunjevoi hold water to prevent drying out and at times squirt out a jet of water. Cunjevoi larvae look like tadpoles and swim around before attaching themselves to a suitable rock.



Coralline Algae
(Corallinales spp)

Intertidal / subtidal

A red algae that forms hard crusts on rocks, coral rubble, seagrass or other algae. Calcium carbonate deposits in their cell walls make these algae hard and give them their typical pink colour. Coralline algae play an important ecological role in coral reefs and many animals, including limpets and chitons, feed on them.



Algae

Intertidal / subtidal

Algae come in all sizes, colours and shapes. Like land plants, they need sunlight and CO_2 to survive. They absorb nutrients and CO_2 directly from sea water and are often found attached to rocky shores, reefs and sea floors. Many algae are seasonal and can cover large areas if the conditions are favourable.

Blue-lined Octopus
(Hapalochlaena fasciata)

Intertidal / subtidal

Small, **highly venomous** octopus (up to 15 cm) that displays iridescent blue lines and rings on the body when aggravated. At rest, this octopus is a mottled brown, well camouflaged among rocks and dead corals. Blue-lined octopuses use their toxin to catch prey, such as crabs.

Pale-lined Tropical Rock Crab
(Grapsus albolineatus)

Intertidal

Crabs (5-6 cm) with a flat, round body that is often green with red, blue and fine white lines with purple and white claws. They live in crevices and under rocks. They use their relatively small claws like scissors to snip and scrape seaweeds and other food from rocks.

Blue Mottled Swimmer Crab
(Thranita danae)

Intertidal

Common blueish purple crabs (7.5 cm) with pale spots on a smooth shell. The flattened last pair of legs identifies this crab as a swimmer crab. They live under stones, on reefs and on sandy mudflats.

Striped Agile Shore Crab / Flat Rock Crab
(Percnon planissimum)

Intertidal

Small crabs (2.5 cm) with long, spiny legs. Their flat body has a bright blue stripe down the middle. They mainly live under rocks or coral blocks.

Black Sea Cucumber
(Holothuria atra)

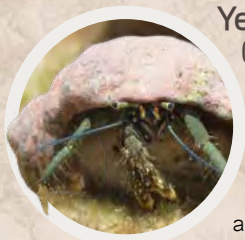
Intertidal / shallow subtidal

Black sea cucumbers that live under rocks or in the sand and are often covered in sand. They commonly grow to around 20 cm, but can get up to 60 cm. Their mouth is surrounded by 20 black tentacles, which sift through sediment for food. They move by squeezing up and stretching out their body. As a defence, they release a toxic red fluid.

White-speckled Sea Hare
(Aplysia argus)

Intertidal

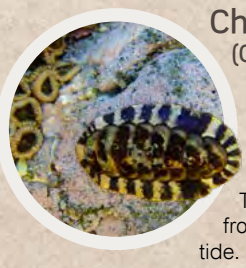
Large sea slugs (20-30 cm) with a soft body and no external shell. They are well camouflaged with a light brown to olive green body with black rings and lines. They live in rock pools and on rock platforms where they graze on algae. If threatened, sea hares release a purple dye to escape from predators.



Yellow-footed Hermit Crab
(Clibanarius virescens)

Intertidal / shallow subtidal

Common hermit crabs (25- 35 mm) that live in empty snail shells of increasing size as the crab grows. They have yellowish white bands on the end of all walking legs and claws. They live in shallow rock pools where they feed on soft organic matter.



Chitons
(Chitonidae)

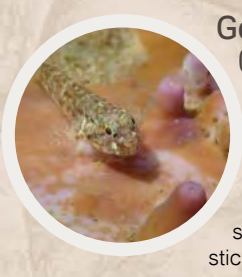
Intertidal / shallow subtidal

Flat sea snails (4-4.5 cm) that live in crevices or under rocks where they feed on algae and small invertebrates. They have an 8-plated shell to protect them from predators and drying out during low tide. Different species of chitons are distinguished by colour and their plates. Frequently observed on the Sunshine Coast are **Gaimard's Chiton** (Liolophura gaimardi) and **Oak Chiton** (Onithochiton quercinus).

Blennies
(Blenniidae)

Subtidal

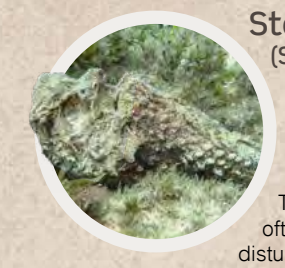
A family of small fish (7-10 cm) that inhabit shallow waters and live in rocky crevices or burrows. Some blennies can leave the water for short periods of time to move to another rock pool.



Gobies
(Gobiidae)

Subtidal

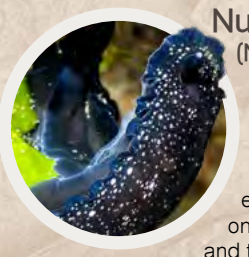
Small fish (< 10 cm) which generally live on the bottom of rock pools, coral reefs, and seagrass meadows. Their pelvic fins are fused to form a disc-shaped sucker, which helps gobies to stick to rocks and corals.



Stonefish
(Synanceia)

Subtidal

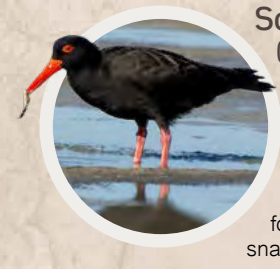
Highly venomous and camouflaged fish that look like rocks and live on shallow rocky reefs, coral, or rock pools. They usually lie motionless and are often partially buried in rubble or sand. If disturbed, they release venom through spines along their back.



Nudibranchs
(Nudibranchia)

Intertidal / subtidal

Sea slugs that come in many different sizes, shapes and colours. They do not have shells and they breathe through external gills on their back. The tentacles on their head are sensitive to smell, taste and touch. Nudibranchs live on the sea floor and some of them, like **Dendrodoris nigra** can be observed in rocky tide pools.



Sooty Oystercatcher
(Haematopus fuliginosus)

Intertidal

Resident black shorebird with a long red bill, red eyes and pink legs. Sooty Oystercatchers only live in Australia, where they prefer rocky shores. They forage in the intertidal zone, preying on snails, mussels, cunjevoi, sea urchins and small fish.

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