

# Intertidal Etiquette

**Do not touch anything unfamiliar** as some animals can bite, pinch, or sting to defend themselves.

**Do not handle animals** unless trained to do so. **Avoid using tools like tongs or chopsticks** to pick the animal up.

During guided walks, trained guides may bring animals that are relatively safe to touch. Handle them gently as they may be brittle, and **avoid passing them around or dropping them** which could cause them stress.

**Do not remove animals from their homes** as they are unlikely to survive for long. **Do photograph animals in their natural habitats** as this is less stressful for them.

**Watch where you step** to avoid trampling on any animals. There may also be sharp rocks, animals with spines, and other dangers that could cause injury.

All parks are shared spaces, so encourage others around you to **respect our wildlife** and **clear our trash**. Take nothing but photos and leave nothing but footprints.

## Sea Hare

Sea hares may look like alien blobs but they are actually sea slugs! They have two rabbit-like tentacles which provide them with a keen sense of smell. Touching them causes extreme stress, and sea hares will expel a purple, sticky slime as a defense mechanism.



Hairy Sea Hare

# 01

## Cone Snail

Cone snails come in a wide variety of sizes and beautiful shell patterns. However, don't let its appealing appearance fool you as they can deliver dangerous venom in a harpoon-like manner. Their stings have been known to be fatal to humans and these creatures should never be touched.



Textile Cone Snail

# 02

# 03

## Fan Clam



Fan Clam

Fan clams have thin, oval-shaped shells and can usually be found buried in the sand. The top, broader part of the shell that is exposed is razor sharp and people walking barefooted on the shores can unknowingly get serious cuts on their legs. Be careful where you step and always be in proper footwear to prevent injuries!

# 04

## Stone Fish



Hollow-cheeked Stone Fish

Stone fish are one of the most venomous fish in the sea. They are masters of camouflage and extra precaution is required to avoid them in the intertidal area. When stepped on, some stone fish possess spines that will inject a painful venom and can sometimes be fatal.

## Sand Dollar

Sand dollars appear flat and lifeless, but they are animals that are closely related to sea urchins. They resemble dollar coins, hence their name! Their bodies are stiffened with spines which help them to move. Do take note of where you step as they can be really fragile!



Cake Sand Dollar

# 05

## Anemone

Anemones may look very similar to flowers, but they are actually predatory marine animals. They make use of their tentacles with venomous stinging cells called cnidocytes to immobilise their prey. Be careful not to touch them as their tentacles may stick to your skin and irritate it.



Swimming Anemone

# 06



Haddon's Carpet Anemone

## Sea Star

Sea stars are intricate animals with thin tissue around their feet to help them breathe in the water. Do not lift the sea stars out of the water for long periods of time as they will suffocate, and be careful as our touch can easily harm their fragile structures.



Biscuit Sea Star

# 07

## Sea Cucumber

Sea cucumbers are soft and sensitive, but they are known for having a strong defensive mechanism. They can vomit out their internal organs, and become very sick. Some species like the Pink Warty Sea Cucumber and the Sea Apple Sea Cucumber also expel toxic substances when stressed.



Pink Warty Sea Cucumber



Sea Apple Sea Cucumber

# 08

# 09

## Sea Urchin



White Salmacis Sea Urchin

Sea urchins are the porcupines of the sea. Usually ball-shaped and covered with spines, these small creatures can cause great pain if you accidentally touch or step on them. Their spines are sharp enough to puncture your skin, and can break off and be embedded inside your body.

# 10

## Crab



Leaf Porter Crab

There exists thousands of species of crabs, making them an incredibly diverse group of animals. Small crabs only grow to about 3 cm in body width, and it can be fun to watch them scurry around. Larger crabs, on the other hand, may exhibit aggression and deliver a painful pinch if you go too close to them. Certain crabs such as the Mosaic Reef and Red Egg Crabs are toxic, as their diets include saponin-producing sea cucumbers, and would prove fatal to humans if consumed.



Stone Crab

## Horseshoe Crab

Horseshoe crabs are ancient arthropods and their name is derived from the horseshoe shape of their carapace. The horseshoe crab's tail, also known as the telson, may look scary but it is actually harmless. If you come across one that is upside down and struggling to flip itself over, give it a helping hand!



Coastal Horseshoe Crab

# 11

## Hermit Crab

Hermit crabs are not true crabs as they do not grow their own shells. Instead, they protect themselves using empty shells of other animals like snails. As they grow bigger, they will discard their current shells in search of larger ones. It is important that we do not collect shells on the shore as they might be potential homes for the hermit crabs.

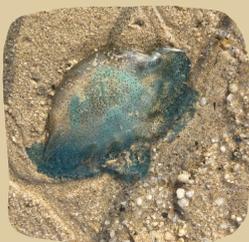


Orange-striped Hermit Crab

# 12

# 13

## Sea Jelly



Mangrove Jellyfish

Sea jellies are translucent and occasionally hard to spot, but they may be found in the intertidal area when stuck in pools or on the shore. While we may be tempted to save them, touching them may hurt you (and possibly be fatal) as their stingers remain active even after they're dead. This is why putting on covered shoes and long pants is strongly advised when moving about in the intertidal zone!

# 14

## Fireworm



Golden Fireworm

Fireworms are one of the most distinctive types of marine bristle worms, due to their elaborate and colourful bristles. However, the bristles are very sharp and filled with toxins. When stressed, the bristles break off into the skin, causing intense pain and burning. Do not touch these worms and wear long pants and covered shoes to protect yourselves.