

# HOW DOES PLASTIC ENDANGER MARINE ANIMALS?

## ENTANGLEMENT

Larger creatures like turtles, whales, dolphins and sharks can get entangled in discarded fishing line, **ghost nets** and plastic bags, causing a slow and painful death.

## SPOT THE DIFFERENCE

Sea creatures confuse plastic, for their natural food. Turtles mistake plastic bags for jellyfish. Sea birds are attracted to plastic fragments, thinking they're a tasty fish or squid dinner.

**Did You Know?**  
Yellowfin Tuna average 2m in length, can weigh up to 200kg and can swim at 75km/h!

## PLASTIC SNOW

94% of plastic sinks in water. Countless trillions of plastic particles are continuously drifting down into the ocean depths. Throughout our oceans, it is literally snowing plastic.

## FILTER FEEDERS

Filter feeders like **shellfish** and **sponges** catch tiny plastic particles along with their food. Their guts are full of plastic – something to think about if you like eating shellfish!

## TOXIC SEDIMENT

On the ocean floor, detritus feeders like **sea cucumbers**, **urchins** and **brittle stars** sift through the sediment for food. They are also eating plastic.

## PLASTIC DOESN'T BREAK DOWN. IT JUST GETS SMALLER

Every piece of plastic that ever entered the ocean is still there. Sunlight and the movement of waves and currents causes plastic to fragment into countless tiny pieces.

**Did You Know?**  
Seabirds swallow plastic at sea and then regurgitate it as food for their chicks when they get back to land. Many chicks die from eating plastic before they ever leave the nest.

## BIOACCUMULATION

The smallest sea creatures are eating toxin-covered plastic particles. They are eaten by larger creatures, passing toxins all the way up through the food chain.

## BY TOOTH & CLAW

Plastic on the ocean floor still accumulates in the food chain. **Crabs** prey on **shellfish**, **brittle stars**, **urchins** and **dead fish**, which have been eating plastic. Larger predators like **sharks**, **rays** and **octopus** will eat the crabs and shellfish.

## POISON PILLS

Most plastic isn't toxic itself, so why is it a problem? Plastic acts like a sponge in the ocean, mopping up nasty chemical pollution that humans put in the ocean. Plastic particles turn into **poison pills** that are many times **more toxic** than the surrounding water.

**X 1000 magnification**

Humans pollute the ocean with all sorts of **nasty toxic chemicals**:

- Pesticides
- Factory waste
- Cleaning products
- Heavy metals

Microscopic plastic particles **ADSORB** toxins from the surrounding water. They become concentrated **Poison Pills!**

The ocean is awash with trillions upon trillions of microscopic plastic particles. Each one is like a little **poison pill**.

The smallest creatures in the ocean are eating these toxic particles, which they mistake for their natural food

Toxins on the plastic particles are absorbed into creatures bodies when they eat them. **Many of these toxins cannot be excreted from a creature's body.**