# The problem with plastics

When plastics get into the ocean animals can mistake them for food. For example to a turtle a plastic bag looks like a jellyfish and they try to eat them. But they can't digest them and the plastic can kill turtles by blocking their intestines. Vanuatu is home to the critically endangered hawksbill and the endangered Leatherback turtle both of which eat jellyfish (and plastic bags).

Plastics can smother marine life. This photo was taken in Mele Bay. Fortunately the coral under the bag had not died yet and we removed it. But if it stayed with the handles wound around the base of the coral the coral would die. Corals need light to create energy and they need to catch small food particles passing by in the current. The plastic bag will have stopped both light and the current getting to the coral and it will have starved to death.

The biggest problem with man-made plastic is that nature has no way of breaking down plastics. So they stay in the environment for a very long time if not forever. They do 'degrade' but they don't 'biodegrade'. They degrade into smaller and smaller pieces and these microplastics can also be mistaken for food - they are about the same size as plankton. Small pieces of plastic have been found in all different types of marine animal all over the world including remote places. Vanuatu has lots of marine resources that we use for food. Plastics will probably be inside them too.

Nobody yet knows what the health consequences are for these animals or for us as we eat the plastic inside our food. But we do know when in the water plastics act like a magnet to persistent organic pollutants such as PCBs and TNT and these pollutants accumulate on the surface of the plastics and can be concentrated a million times. They are toxic in a number of ways; they can disrupt hormone actions in the body affecting reproduction, cause cancer and cause toxic effects in the brain. So it is not good for the ocean and it is not good for us that so much plastic is ending up in our seas.

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