# Turtles

**Like sharks, turtles have been swimming in our oceans since before the dinosaurs. But turtles have been around even longer, around 100 million years. And like the sharks, the advent of humans has been their greatest challenge.**

**There are seven different species of marine (or sea) turtles: Flatback Turtle, Green Turtle, Loggerhead Turtle, Olive Ridley, Leatherback, Hawksbill Turtle, and Kemps Ridley.**

All seven species of marine turtles are listed on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Three are classified as critically endangered by IUCN and a further three are classified as endangered.

How has this happened? Marine turtles face many threats:

- Marine debris - This could be considered the greatest threat to marine turtles as they often get entangled in discarded fishing gear, while leatherbacks are prone to mistaking plastic bags for the jellyfish that are their favourite food.
- Habitat loss and degradation - Coastal development affects turtles by degrading important nesting beaches, while lights from buildings and roads attract hatchlings and lead them away from the sea. The degradation of important feeding habitats such as seagrass beds or corals reefs also negatively affects marine turtle populations.
- Hunting and egg collection - Turtle eggs and meat and highly desirable, and hunting and egg collection are major causes of the drastic decline in marine turtle populations around the world, despite their protected status around the world.
- Incidental capture - Discarded fishing nets pose one of the greatest threats to marine turtles. As air breathers, getting caught in a net results in drowning. Turtles are frequently caught as bycatch - the catching of non-target fish and ocean wildlife by fishing vessels.
- Trade in shells – The shell of some turtles is also highly desirable, and an illegal trade of shells operates on a global scale.
- Climate change - The gender of incubating eggs is dependent on the temperature of the sand. Rising global temperatures as a result of climate change could alter the ratio of male and female hatchlings, affecting the overall health of marine turtle populations.

The odds are stacked against all marine creatures and there's no doubt that the loss of any creature as a result of human activity is upsetting, but losing a creature that has survived and swum the oceans for over 100 million years is particularly devastating.

## Life cycle of marine turtles

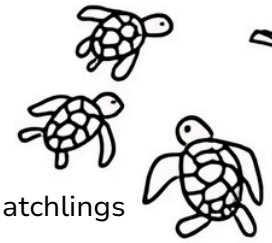
Marine turtles are large air-breathing reptiles. They live in all but the coldest of the world's oceans, and yet they only nest on tropical and subtropical beaches where the climate is warm enough to incubate their eggs. If you looked at the number of eggs female turtles lay (sometimes hundreds!) you would assume they would reproduce abundantly, however even in natural conditions very few young turtles will survive past their first year of life. This is because animals such as crabs, birds and foxes may catch the hatchlings on their way from the nest to the sea, and then many more small turtles are taken by fish once in the shallows.

Marine turtles take a long time to reach maturity (between 10 and 50 years!) and the many natural dangers faced by turtles during that time mean that as few as 1 in 1,000 eggs will survive to adulthood.

Most marine turtle species spend most of their lives in of their lives in the waters of continental shelves. Males never leave the sea and females will only come ashore to lay their eggs.

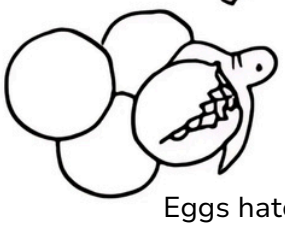
# Life cycle of marine turtles

After hatching, the baby turtles (hatchlings) run towards the sea, where they head for the open ocean

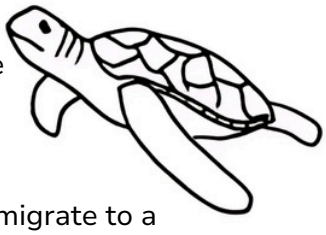


Hatchlings

At some point between the ages of 5 and 15 years, they leave the open ocean and head for a coastal feeding ground



Eggs hatching

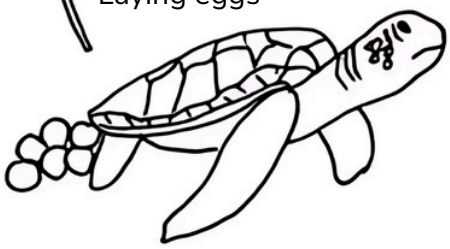


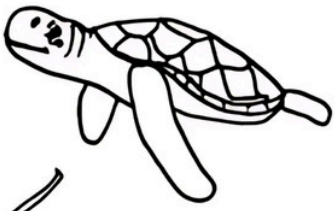
Juvenile turtles

When she has laid her eggs the female turtle will then make the long and dangerous swim back to her feeding areas

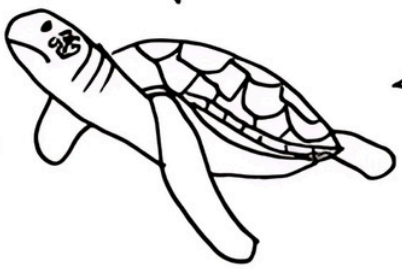
Turtles migrate to a feeding ground to mature

Laying eggs





Adult turtles



When they are ready to breed the female turtles travel back to the beach (or very close by) where they originally hatched

Adult turtles stay in their feeding ground and will stay there for life, apart from the times when they leave for breeding

## What can you do?

**Cut back on waste.** Think about what you're buying and ask yourself "Do I really need this?" and "Is there a waste-free alternative to this thing I want or need?" This means considering what the product is both made from and packaged in. Cut back on plastics where you can – especially single-use plastic products and those that can't be recycled. With any waste that you do create, make sure it gets into the correct bin (e.g. recycling or landfill) and stays there.

**Keep waste out of the sea.** This means keeping waste off the land and out of waterways, as waste will blow from the land into waterways and then into the sea. If you see some waste at the beach or the park or when just walking down the street, pick it up and put it in the bin.

**Buy sustainable seafood.** The most important thing you can do to help fish is to buy sustainable seafood. Look for the blue MSC logo when purchasing wild-caught seafood and the green ASC logo when purchasing farmed seafood. Make a commitment to only buy and eat seafood that has been harvested and produced to the highest sustainability standards.

You could also download the Australian Sustainable Seafood Guide to use when you go shopping: https://www.msc.org/en-au/what-you-can-do/eat-sustainable-seafood/sustainable-seafood-guide

You can also use the Good Fish sustainable seafood guide app: https://goodfish.org.au/resource/app-download/

**Take only what you need.** If you go fishing don't be a fool with fish. Only catch what you can eat and release the rest. And take your rubbish (including old fishing line and hooks) with you.

**Support the creation of more marine sanctuaries.** Write to your local member of parliament calling for greater protection of marine areas in your area or of those that you love.

**Adopt a beach (or creek).** If you live close to the coast, then volunteer your time to help keep your local beach clean or to help protect coastal habitats (including turtle nesting sites). If you don't live near the coast, then volunteer to clean up your local waterway. Improving the health of local waterways improves the health of the sea.

**Help change climate change.** The only way to address climate change is to dramatically cut our greenhouse gas emissions. While it is true that this requires governments and big businesses to take the biggest steps, there are steps we can all take. You can try increasing your energy efficiency by switching off your lights when you don't need them, choosing energy efficient appliances, and taking the bus instead of the car. You could also try shifting to renewable energy sources (like solar, wind and hydropower).


Become an Ocean Guardian and join the global movement now!

Go to the Blue website to become an ocean guardian and take action for our ocean (https://bluethefilm.org/take-action/)

**Reference list**


- Marine Turtles - https://wwf.panda.org/discover/our_focus/wildlife_practice/profiles/fish_marine/marine_turtles/
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