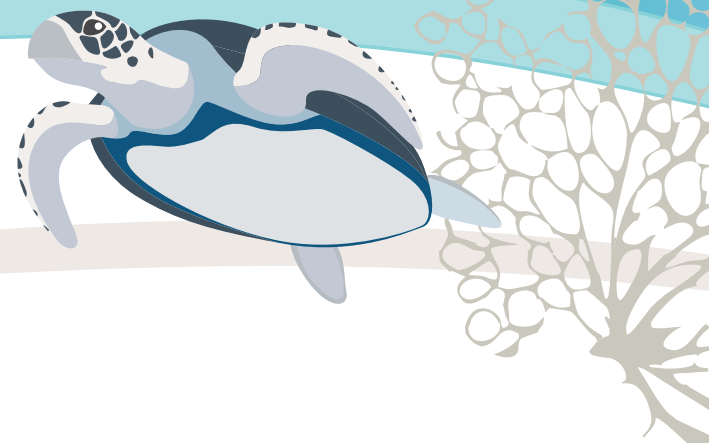
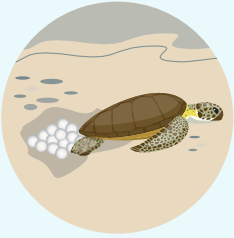


Sea Turtle Life Cycle

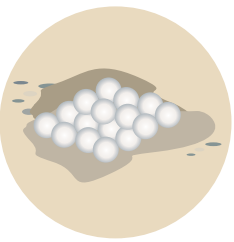


1 Laying Females



- ▶ Turtles lay between 50 and 150 eggs per clutch depending on species.
- ▶ Greens lay on average 110 and Hawksbills 130.
- ▶ Female turtles lay between 2 and 3 clutches in a season, 12 to 16 days apart
- ▶ Mature females return to their natal nesting beach every 2 to 5 years.

2 In the nest



- ▶ Temperature controls the sex - Higher temperatures produce female turtles
- ▶ Green turtles at 28°C the turtles are male and at 31°C they are female
- ▶ Temperature controls the time of hatching as it influences the growth rate of the embryos
- ▶ Time from lay to hatch is between 45 and 70 days.

3 Hatching



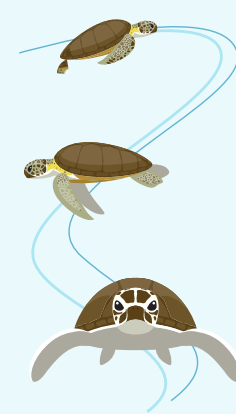
- ▶ The hatchlings have an egg tooth they use to get out of the egg.
- ▶ Once all have hatched they move about in the nest for about 24 to 48 hours crawling on top of each other. The hatchlings near the top of the nest disturb the sand over the nest which trickles down through the wriggling hatchlings to the bottom as thus raised the bottom of the nest making it easier for the hatchlings to crawl out.
- ▶ The hatching success is usually about 90% of the eggs for Green and Hawksbills.

4 Into the ocean



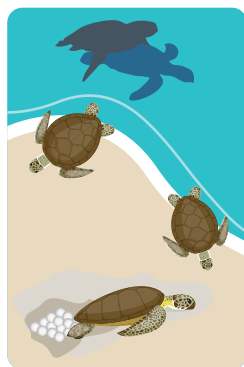
- ▶ The hatchlings emerge from the nest under the cover of night when there are less predators
- ▶ They make their way down the beach guided by the light of the moon on the water.
- ▶ For the next 4 days they compete a "frenzied swim" to the open ocean
- ▶ Drift in ocean currents
- ▶ Find floating flotsam such as seaweed feeding on larval crabs and shrimp and small jellyfish

5 Becoming adults



- ▶ Juvenile turtles stay in the open ocean feeding and growing until they are big enough to be safe from predators when they return to the coastal waters.
- ▶ The timing of the return to the coast varies with species and location.
- ▶ Hawksbills in the Indopacific return when their carapaces are about 35-40 cm - approximately 1 to 3 years old. Greens come back when they are 40 to 60cm long 3 to 4 years old.
- ▶ They change their diet to the adult diet once they have come back to the coast - Greens eat seagrass and algae and Hawksbills eat sponges and critters in the reef.

6 Maturity



- ▶ Turtles reach maturity at 10-40 years old depending on species.
- ▶ Hawksbills at 30 to 40 years
- ▶ Greens at 25-40 years
- ▶ Turtles return to their natal beach (the one where they were born) to breed
- ▶ Mating happens just off the coast
- ▶ Females crawl on to the beach, dig a pit and lay their eggs in the sand.

Species found in Vanuatu



GREEN TURTLES
(*Chelonia mydas*)

Most commonly seen

- ▶ Named for their green-coloured fat
- ▶ Large turtle with smooth carapace
- ▶ Feed on seagrass and algae - the only herbivorous sea turtle
- ▶ Often have a favorite sleeping place and use the same area for foraging grounds



HAWKSBILL TURTLES
(*Eretmochelys imbricata*)

Most commonly seen

- ▶ Named for their beak shaped mouths
- ▶ Feed on sponges and worms and crustaceans in the reef
- ▶ Famed for their beautiful shell



LOGGERHEAD TURTLES
(*Caretta caretta*)

Less commonly encountered

- ▶ Named for their big heads.
- ▶ Often have barnacles and algae on their shells
- ▶ Powerful jaws
- ▶ Eat crustaceans
- ▶ Only small numbers found nesting in Vanuatu and there is not a foraging population.



LEATHERBACK TURTLES
(*Dermochelys coriacea*)

Less commonly encountered

- ▶ Named for their lack of scales and leathery thickened skin.
- ▶ The largest of the marine turtles
- ▶ Live mostly in deep ocean only coming to coast to breed
- ▶ Feed on jellyfish
- ▶ Can dive to over a 1000m deep