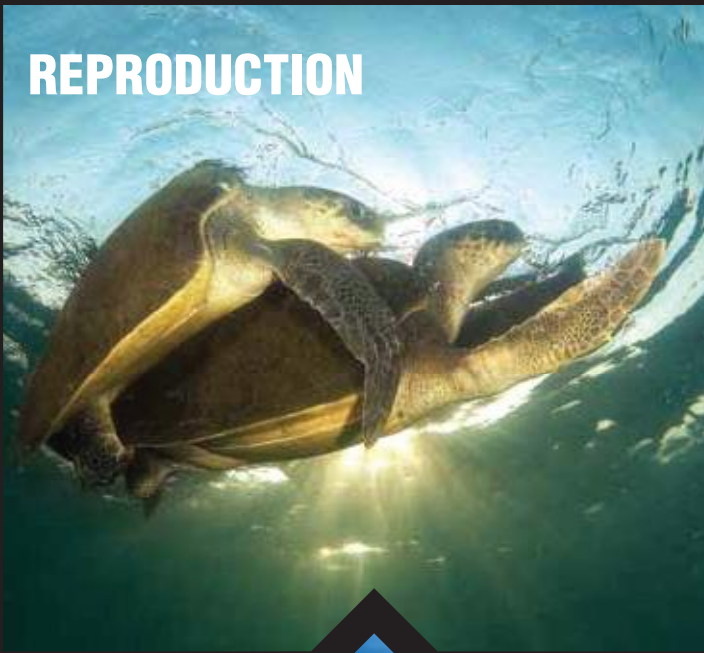


REPRODUCTION



NESTING



HATCHLINGS



**ADULT
MIGRATION**



**THE LOST YEAR
AND BEYOND**



LIFE HISTORY OF SEA TURTLES





Reproduction

Males and females begin the reproductive cycle by migrating from their feeding grounds to breeding grounds. Feeding and breeding grounds may be separated by several thousand kilometers. Courtship and mating occur primarily in the offshore waters of the breeding ground; the male mounts the female, holding her with claws in his foreflipper and proceeds to mate. Both males and females may mate with several different individuals.

Nesting

Several weeks after mating, the females come ashore to nest, mostly at night. They crawl above the high water mark, find a suitable nesting site, clear away the surface sand (making a body pit), and dig out a flask shaped nest with their hind flippers. This may be two to three feet deep depending on the size of the turtle. They lay about 100 – 150 eggs in the nest and fill it with sand; ridleys thump the nest with their body to compact their nest.

Once the turtle starts laying eggs, they go into a ‘nesting trance’ and are less easily disturbed during this stage. They then throw sand around the nest for camouflage and return to the sea. Most turtles nest more than once during a season, with roughly two weeks separating each nesting event. After they have completed nesting, they return to their feeding grounds until the next breeding migration. Intervals between breeding migration can range from a year to several years.

Hatchlings

The hatchlings develop in their nest over a period of 7 to 10 weeks. They hatch simultaneously over a few days and then emerge from the nest together (to swamp predators) usually at night. They head directly for the sea, which they locate using the brighter horizon, usually moon and starlight reflecting on the water's surface. Predators include crabs, birds, jackals, feral dogs, and many fish once they are in the sea. Sea turtle hatchlings spend the first couple of days of their lives in a “swimming frenzy” when they use stored energy reserves to get into the open sea. Beyond this, they spend many years in a variety of juvenile habitats until they join other adults at feeding areas. Less than one in a thousand hatchlings is believed to survive to adulthood.

The lost year and beyond

Young turtles spend their lives in a variety of foraging habitats. The hatchlings are usually carried on trans-oceanic gyres and currents. Sargassum driftlines (seaweed rafts) and FADs (Fish Aggregating Devices) have been found to be particularly important habitats for hatchling turtles.

Convergence fronts have also been found to be important foraging habitats for juveniles. Loggerheads are known to make trans-Pacific journeys in the course of their development. For very long, this pelagic phase of their life was a complete mystery to biologists and was known as the 'lost year'.

The juveniles and sub-adults of some species spend many years in near-shore developmental habitats after the pelagic stage. Development to maturity may take 10 to 15 years in most turtles and maybe 30 years or more in the herbivorous green turtles.



Migration

Sea turtles usually travel hundreds to thousands of kilometres from feeding to breeding ground. It has long been believed that sea turtles return to their natal beach (the beach where they were born) or group of beaches to lay eggs as adults. Recent genetic studies have substantiated this; some species may show greater precision in natal homing than others.

Adult turtles remain in their feeding areas until they have accumulated sufficient energy reserves to migrate to breeding areas for reproduction. Adult males and females migrate to breeding areas to mate and, in the case of females, to nest.