

Loggerhead turtles

Prelims: Current events of national and international importance | Conservation

Why in News?

Recently, Scientists noticed that the loggerheads turtle has been impacted in at least 4 ways by global warming.

- **Recent Findings** - Sea turtles are ***capital breeders***, relying on energy stored from years of ocean foraging to reproduce.
- Climate change is making parts of the Atlantic Ocean less productive, reducing their reproductive capacity.
- Rising sea levels are eroding and flooding nesting beaches, decreasing suitable nesting sites.
- Nest temperature determines hatchling sex; ***higher temperatures produce more females***, disturbing sex ratios.
- Female loggerheads now breed less frequently (every four years instead of two), lay fewer eggs, and are becoming smaller in size.
- Changes in ocean circulation affect migration routes and hatchling dispersal.
- Species are forced to shift habitats, increasing their risk of decline or extinction.

Loggerhead turtles

- **Nomenclature** - Named for their massive heads and powerful jaw muscles, loggerhead turtles (*Caretta caretta*) are the **world's largest hard-shelled turtles**.
- These ancient mariners are a **keystone species**, supporting over 100 different types of animals and plants that live directly on their shells.
- **Nesting Hotspots** - Florida (USA) hosts about 90% of U.S. nesting. Other major sites include Oman, Cabo Verde, Greece, and Australia.
- **Diet**- Primarily carnivorous, they use their strong jaws to crush hard-shelled prey like crabs, conchs, and sea urchins.
- **Lifespan** - They are long-lived, often reaching 70-80 years or more in the wild.
- **Navigation** - They possess an extraordinary "internal compass," using the Earth's magnetic field to navigate thousands of miles across ocean basins.
- **Reproduction** - Females exhibit natal homing, returning to the exact beach where they hatched decades earlier to lay their own eggs.
- **Conservation status** - IUCN - Vulnerable.
- **Threats** - Bycatch - Accidental capture in commercial fishing gear (trawls, longlines, and gillnets) is their primary threat.
- **Pollution** - They frequently mistake plastic debris for jellyfish, leading to fatal internal blockages.
- **Coastal Development** - Artificial lighting on beaches disorients hatchlings, leading them away from the ocean and toward hazards.



Reference

[The Hindu | Loggerhead turtles](#)