# SEA TURTLES

**ECOLOGICAL FUNCTIONS**
- Maintain healthy and productive habitats (sea grass beds, coral reefs, and coastal dunes)
- Provide key habitat for other marine life
- Help balancing marine food webs
- Transport essential nutrients from oceans to beaches

**LIFE-CYCLE**
- **Hatchlings emerge from nest** and race towards the sea.
- **Nesting on beach**
- **Females return to original birth site to breed**
- **Developmental migration**
- **Adults breeding migration to mating areas**
- **Lost years (5-20 years)**
- **Adults return to forage shallow areas until ready to breed again**
- **Return to near shore waters to mature and feed**
- **Maintain healthy and productive habitats**
  - Hawksbills allow corals to colonize and grow by removing sponges from reefs.
  - Leatherbacks are top jellyfish predators.

**THREATS**
- Egg poaching
- Direct consumption and illegal trade
- Fisheries bycatch and entanglement (trawlers, longlines, gill nets)
- Pets and invasive species
- Predation
- Pollution
- Coastal development and loss of nesting and foraging habitats
- Climate change (beach erosion, sea level rise, increase in sand temperature)

**CONSERVATION STATUS (CITES)**
- Hawksbill Turtle *Eretmochelys imbricata* CRITICALLY ENDANGERED
- Loggerhead Turtle *Caretta caretta* ENDANGERED
- Leatherback Turtle *Dermochelys coriacea* VULNERABLE

**MARINE TURTLES IN THE MESOAMERICAN REEF**

**PLAY A KEY ROLE MAINTAINING THE HEALTH OF THE MESOAMERICAN REEF**

**PROVIDE HABITAT**
Sea turtles offer an oasis to fish, sea birds, and epibionts in the open ocean. More than 100 different species have been identified on Loggerhead shells.

**NUTRIENT CYCLING FROM WATER TO LAND**
Sea turtles improve their nesting beaches by supplying a concentrated source of high-quality nutrients.

**MAINTAIN HEALTHY AND PRODUCTIVE HABITATS**
- Hawksbills allow corals to colonize and grow by removing sponges from reefs.
- Leatherbacks are top jellyfish predators.

**MAINTENANCE OF THE MESOAMERICAN REEF**

**CLIMATE CHANGE IMPACTS**
- Increase in sand temperature could skew sex ratios, resulting in more females.
- **LOW SURVIVORSHIP**
  - 90% of hatchlings do not survive for more than a year. Many become prey providing food for other animals on shore and at sea.

**MARINE TURTLES IN THE LIFE CYCLE**

- **Adults breeding migration to mating areas**
- **Females return to original birth site to breed**
- **Hatchlings emerge from nest** and race towards the sea.
- **Lost years (5-20 years)**

**Understanding marine turtle connectivity for better conservation management in the Mesoamerican Reef**

Sea turtles are highly migratory species depending on different habitats throughout their life-cycle. Understanding their use of key nesting and feeding habitats is vital for improving conservation and management efforts across the Mesoamerican Reef.

- **Caribbean Sea**
- **Gulf of Mexico**

**Egg poaching**
**Direct consumption and illegal trade**
**Fisheries bycatch and entanglement**
**Pets and invasive species**
**Predation**
**Pollution**
**Coastal development and loss of nesting and foraging habitats**
**Climate change (beach erosion, sea level rise, increase in sand temperature)**