



SEA TURTLES

Haley Carstens & Caroline Jasperse

SPECIES

There are Seven Species of Sea Turtles.

Green, Loggerhead, Kemp's Ridley, Olive Ridley, Hawksbill, Flatback, and Leatherback.

Two of the Seven Species are found in the waters near Saint John:

The Hawksbill Sea Turtle (*Eretmochelys imbricata*)

The Green Sea Turtle (*Chelonia mydas*)



HAWKSBILL SEA TURTLE

Small to Medium sized turtles that can weigh up to 200 pounds.

Adults live in healthy coral reef communities feeding primarily on certain types of ocean sponges.

Was named after its narrow head, and sharp bird-like beak used for cracking into crevices of coral reefs while it looks for food.

GREEN SEA TURTLE



Live in warm coastal waters of the tropical and subtropical oceans.

The pigment from their green diet colors their fat, which gives them their common name.

The population of female nesting green sea turtles are estimated to have dropped by 48% to 65% in the past 100 to 150 years.

HABITAT

Sea Turtles live in almost every Ocean Basin in the world.

They nest on Tropical and Subtropical beaches.

They migrate long distances to feed, but spend most of their lives in shallow waters such as reefs, bays, and inlets for the abundance of seagrass and algae to feed on.

DIET

Most Sea Turtles are Omnivorous and feed on simple Sea grasses and marine algae.

Hatchlings will also feed on small animals in order to get the large amount of energy they need for their initial phase of life.

Hawksbill Sea Turtles feed primarily on Sponges, but also eat other Invertebrates as well as some algae.

Green Sea Turtles sometimes eat sponges, salps, and jellyfish, but they mostly feed on plants like seagrass and algae.

IMPORTANCE

Sea Turtles are necessary for maintaining a healthy and balanced marine ecosystem, especially in seagrass beds and coral reefs.

They are a Keystone Species in their ecosystems.

Dune Vegetation on beaches is able to grow and become stronger with the presence of nutrients from Sea Turtle Eggs.

IMPORTANCE: HAWKSBILL SEA TURTLES

Hawksbill Sea Turtles help to maintain the abundance of Sea Sponges.

Without these turtles, the marine ecosystems of coral reefs could become overpopulated with sea sponges, disrupting the balance of life.



IMPORTANCE: GREEN SEA TURTLES

Green Sea Turtles are the lawn-mowers for many sea-grass beds.

Seagrass beds will grow healthier and faster with a daily trim.

Without Seagrass beds many species humans harvest would be lost.

THREATS: BACKGROUND

Only 1 in 1,000-10,000 hatchlings will survive to adulthood

Natural threats vs. Human threats

6 of the 7 species are endangered or threatened

Drastic decline in population: Leatherbacks have seen a decrease from ~25,000 to ~2,300



THREATS: BYCATCH AND POACHING

Entanglement in nets and traps meant for fishing often leads to injury and death

Over 250,000 turtles in the US each year suffer injury/death from fishing methods, particularly trawling

Harvested for their shells, meat, and eggs despite laws against the killing of sea turtles

Eggs are used as aphrodisiacs, shells and skins are used for ceremonial purposes

Problems with lack of enforcement and monitoring trade

THREATS: POLLUTION AND BEACH DEVELOPMENT

Pollutants such as oil, run-off, metals, chemicals, and plastics pose both immediate and long-term problems

FP disease in turtles has been linked to ocean pollution

Mistake plastic bags and debris for food

Construction and human activity result in erosion of beaches

Beach recreation and pollution along shorelines are obstacles for nesting females, and human activity affects incubation temperatures of nests

Light pollution confuses hatchlings

THREATS: CLIMATE CHANGE

Sea level rise and increased frequency of storms can both lead to loss of habitat

Hotter temperatures will affect incubation temperatures

A change in ocean currents due to warmer weather affects turtle's ability to migrate

Warmer waters results in coral bleaching, an important habitat for Hawksbill turtles

CONSERVATION: ENDANGERED SPECIES ACT

Law passed in 1973 to enforce agreements made at CITES

Designed to protect threatened species from human activity

All sea turtles in the US (6 species) are protected under this act, as well as listed as endangered or threatened

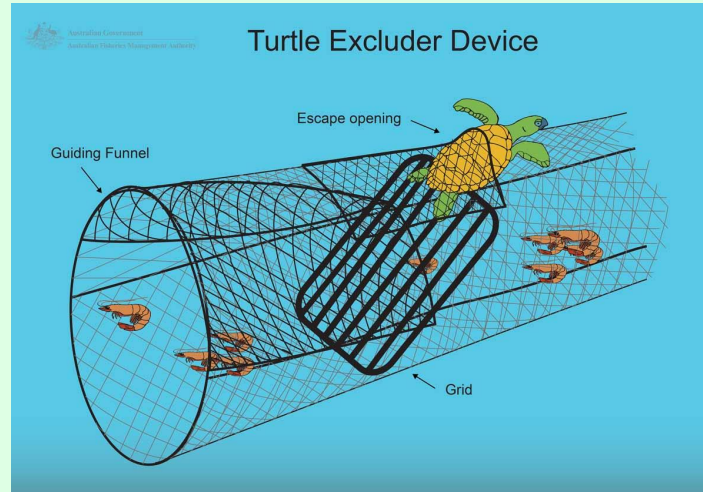
Has provisions for reducing bycatch and preserving nests

Even though some advancements have been made, the overall status of turtles has not improved

CONSERVATION: TURTLE EXCLUDER DEVICE

Device that allows turtles to escape when caught in a fisherman's net

Required by US law and all importers to US of seafood, but not always enforced



CONSERVATION: GRASSROOTS EFFORTS

Use of amber lights on beachfront property to combat light pollution

Local protection and tracking of sea turtle nests

Sea turtle monitoring using tracking devices to record migration

Rehabilitation centers are used to treat injured turtles and raise weak hatchlings for release

CONSERVATION: POPULATION TRENDS

Generally, we continue to see decreases in sea turtle populations across the globe; however, the comeback of sea turtles in some regions of the United States has been observed.

In North Carolina, both number of sea turtle nests and hatch success have increased each year over the past decade. Similar trends have been seen across the Southeast.

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