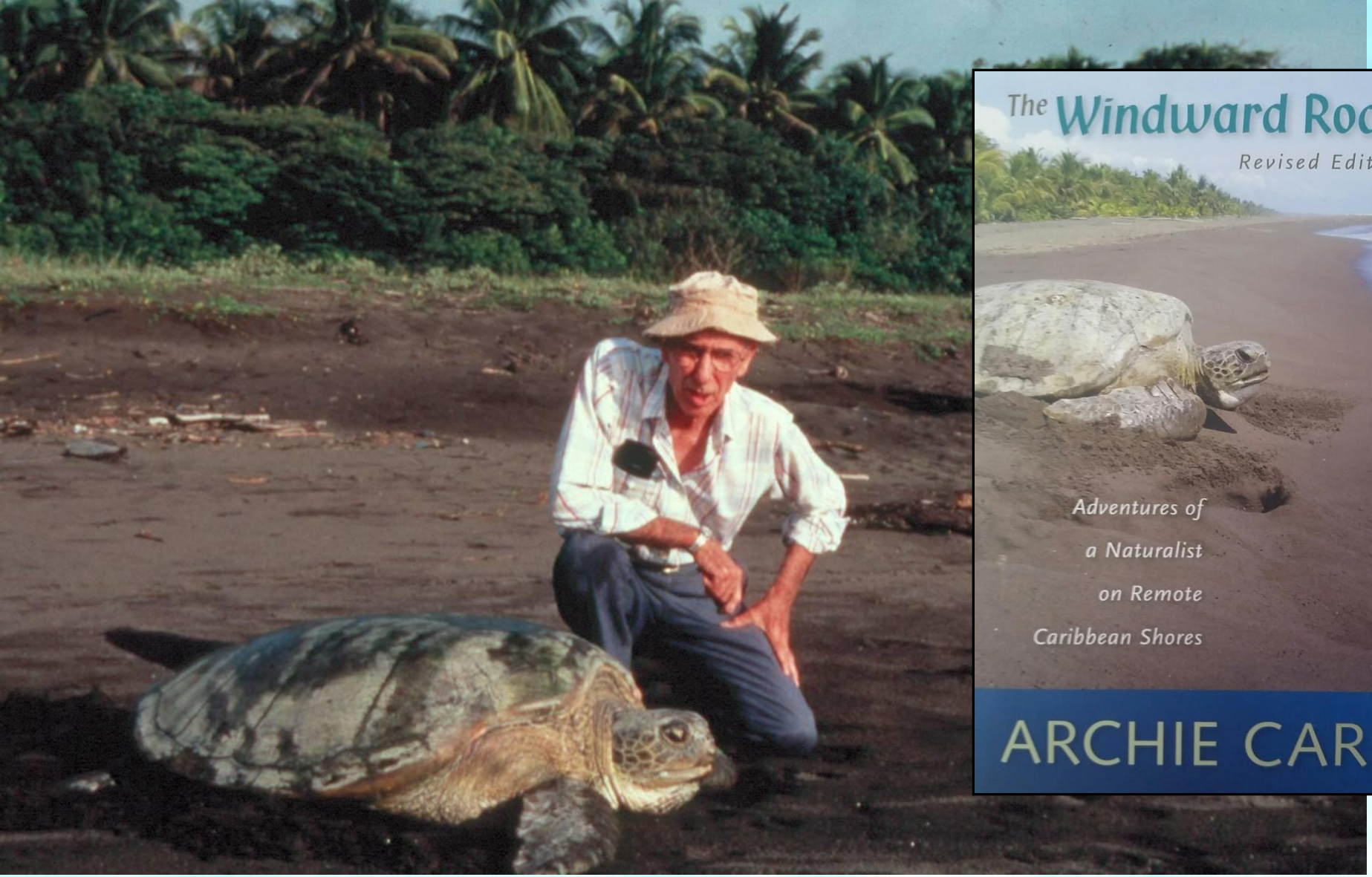

Sea Turtle
Conservancy
Evan Cooper,
Membership Coordinator
SEA TURTLE
CONSERVANCY
SINCE 1959

About Me!



Archie Carr wrote about the fate of sea turtles in The Windward Road, which led to the formation of STC in 1959 –

the world's first group dedicated to saving sea turtles.

Sea Turtle Conservancy

Protecting sea turtles and their habitats since 1959.

Mission: to ensure the survival of sea turtles through research, education, training, advocacy and protection of the natural habitats upon which they depend

- **Research**
- **Conservation**
- **Education/Training**
- **Advocacy**

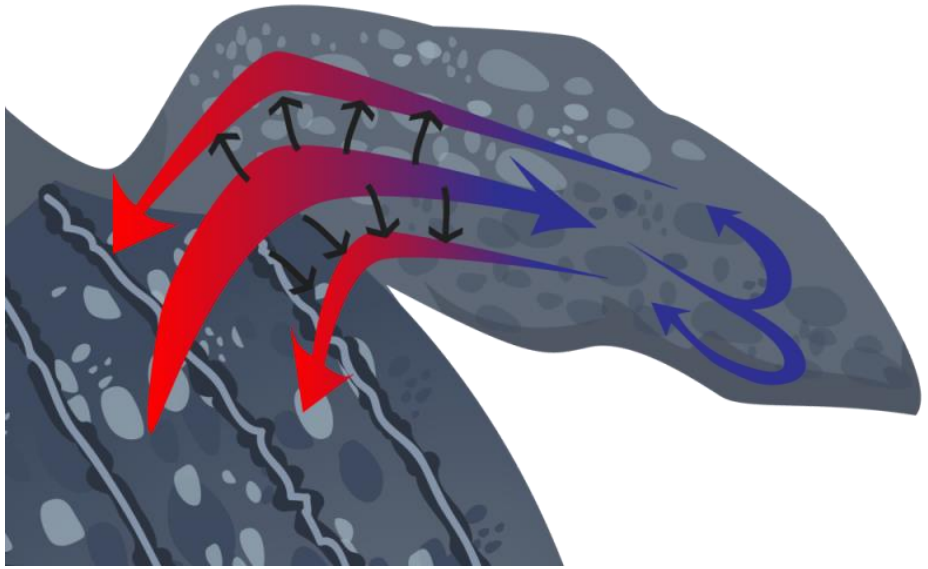
What is a Sea Turtle?

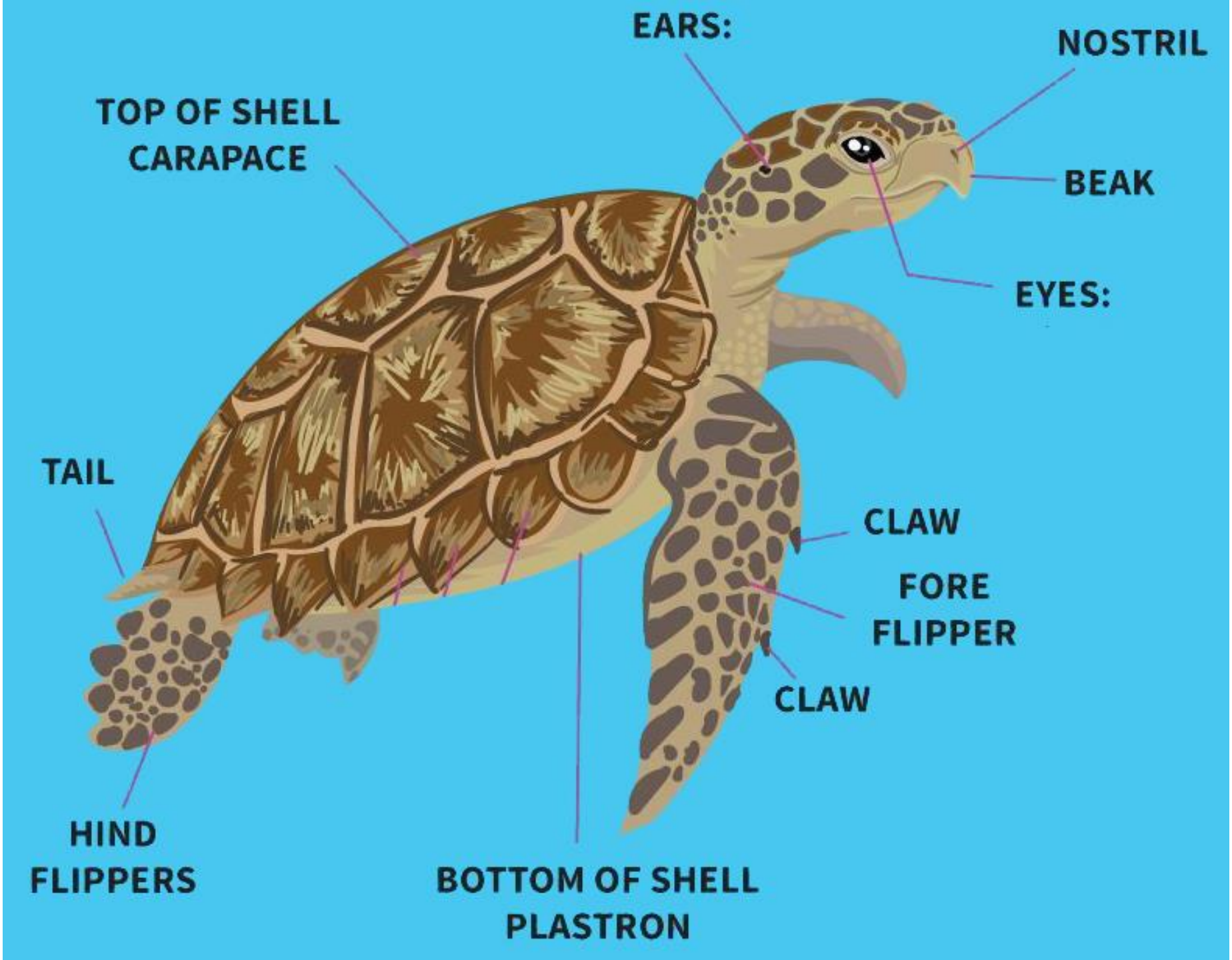
- Air breathing reptile.
- One of the very few totally marine reptiles.
- Spend about 99% of their lives in the water.
- Still lay their nests of eggs on land.
- Have flippers instead of legs and feet.
- Can not pull their legs or head into their shell.
- Probably can live to over 100 years old.

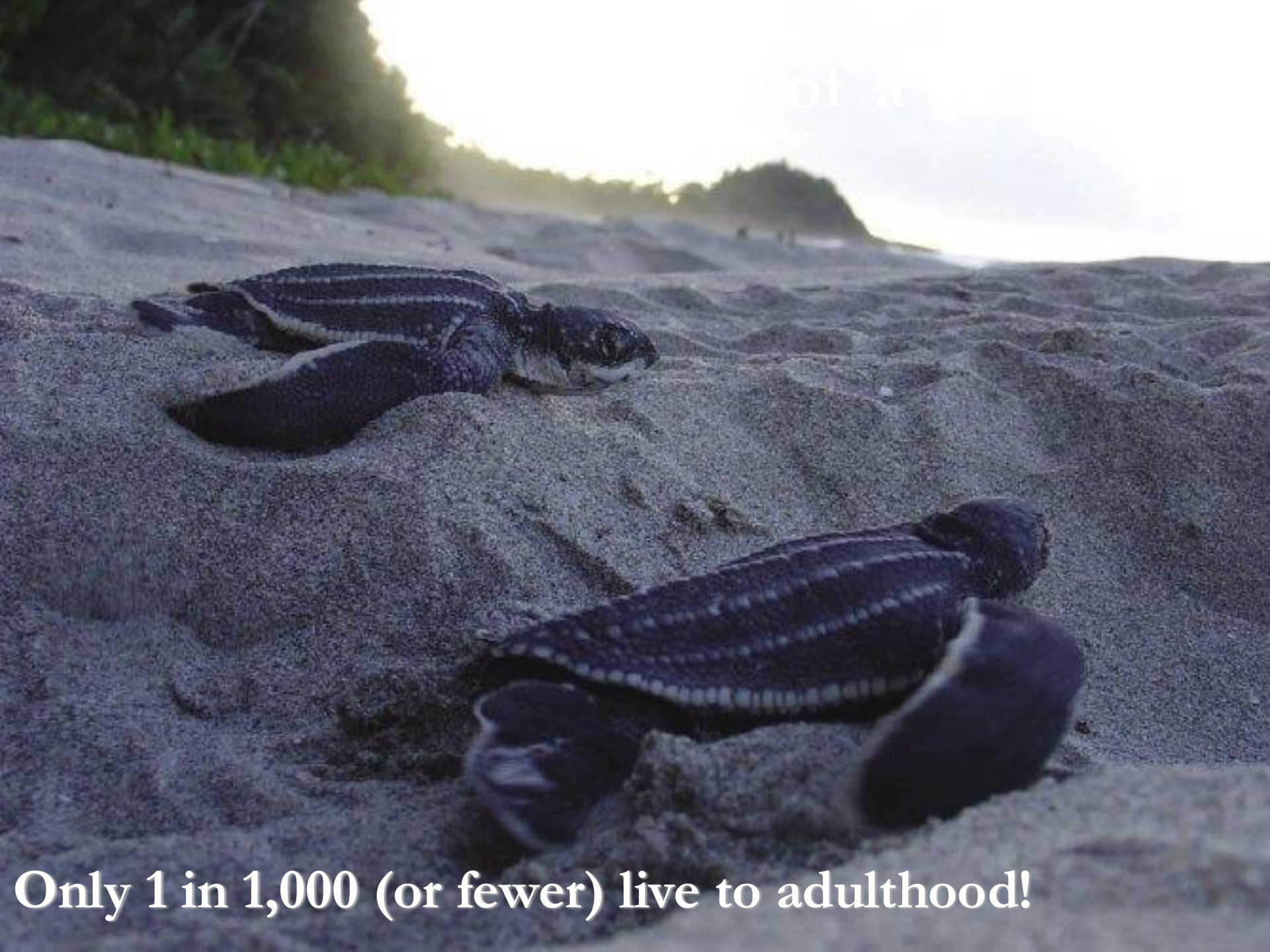
Role of Sea Turtles

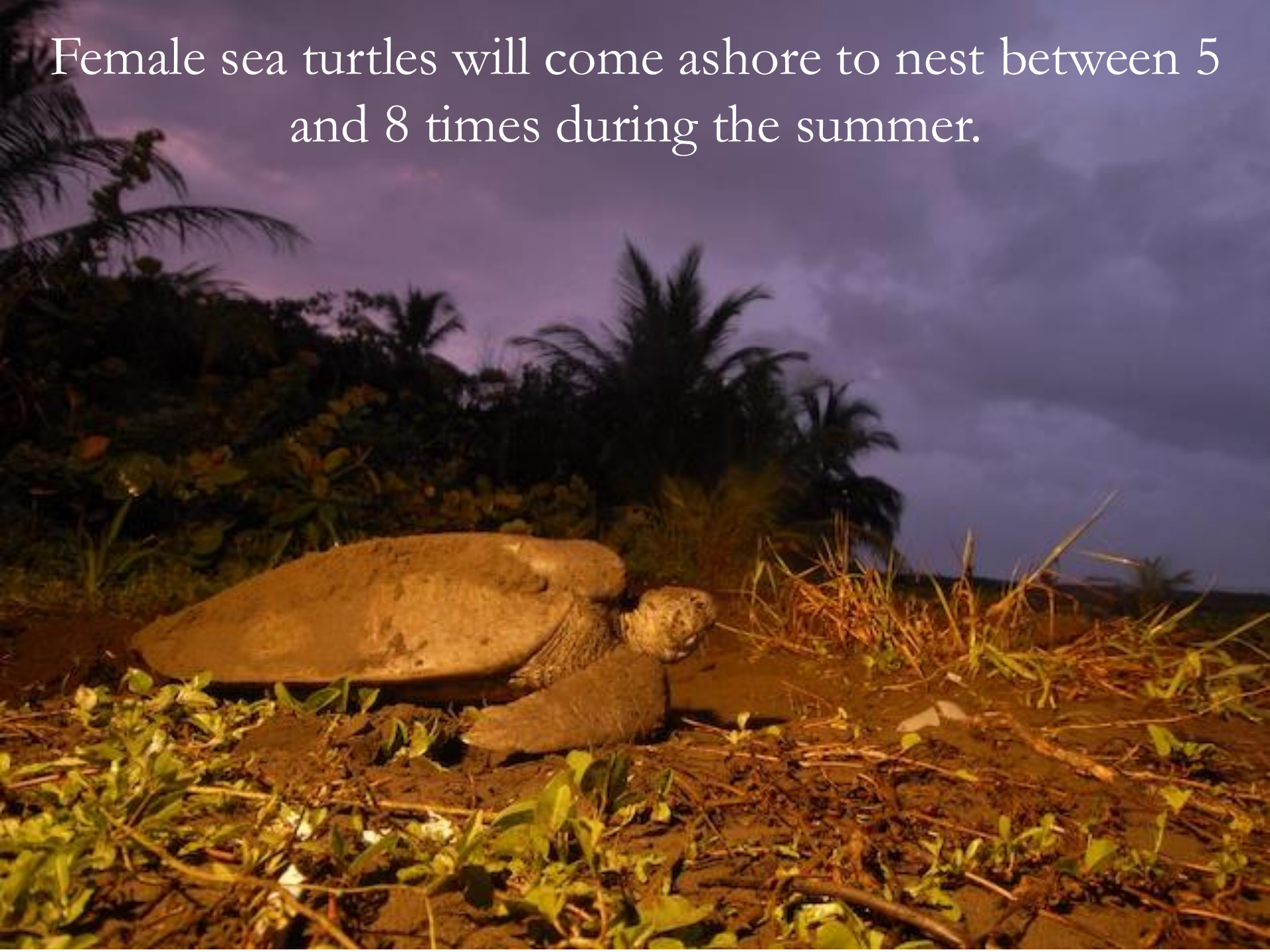
- Ecosystems are composed of plants and animals and their biological, chemical, and geological processes and interrelationships
- Removal of any single species can affect many others.
- Sea turtles are part of two ecosystems, the beach/dune system and the marine system.
- Loss of sea turtles would impact both of these systems, which would negatively affect humans.

Sea Turtle Adaptations



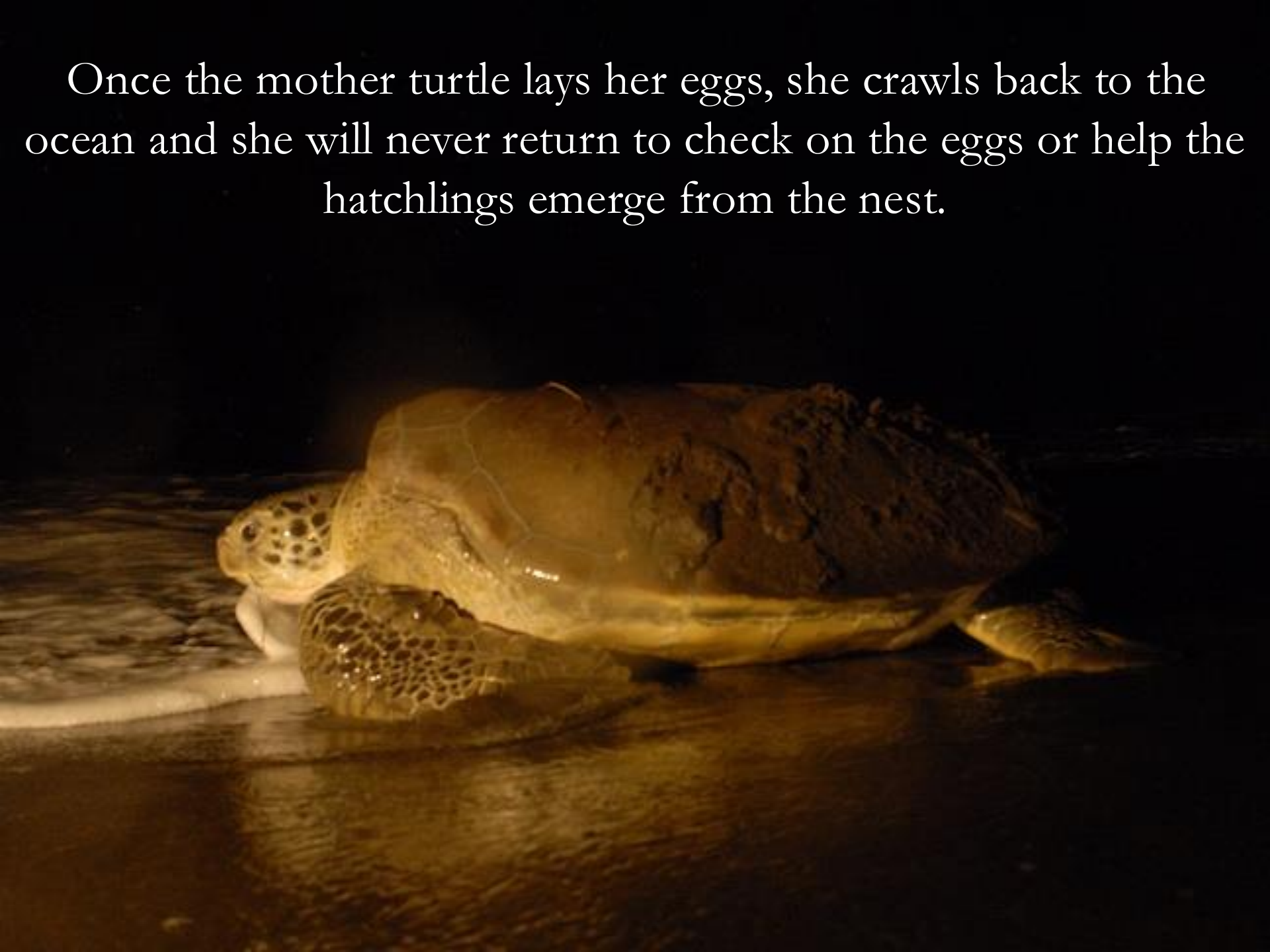

EARS:
NOSTRIL
TOP OF SHELL
CARAPACE
BEAK
EYES:
TAIL
CLAW
FORE
FLIPPER
CLAW
HIND
FLIPPERS
BOTTOM OF SHELL
PLASTRON


Only 1 in 1,000 (or fewer) live to adulthood!


Female sea turtles will come ashore to nest between 5 and 8 times during the summer.

Sea turtles can lay between 80 and 130 eggs in a single nest.

Once the mother turtle lays her eggs, she crawls back to the ocean and she will never return to check on the eggs or help the hatchlings emerge from the nest.

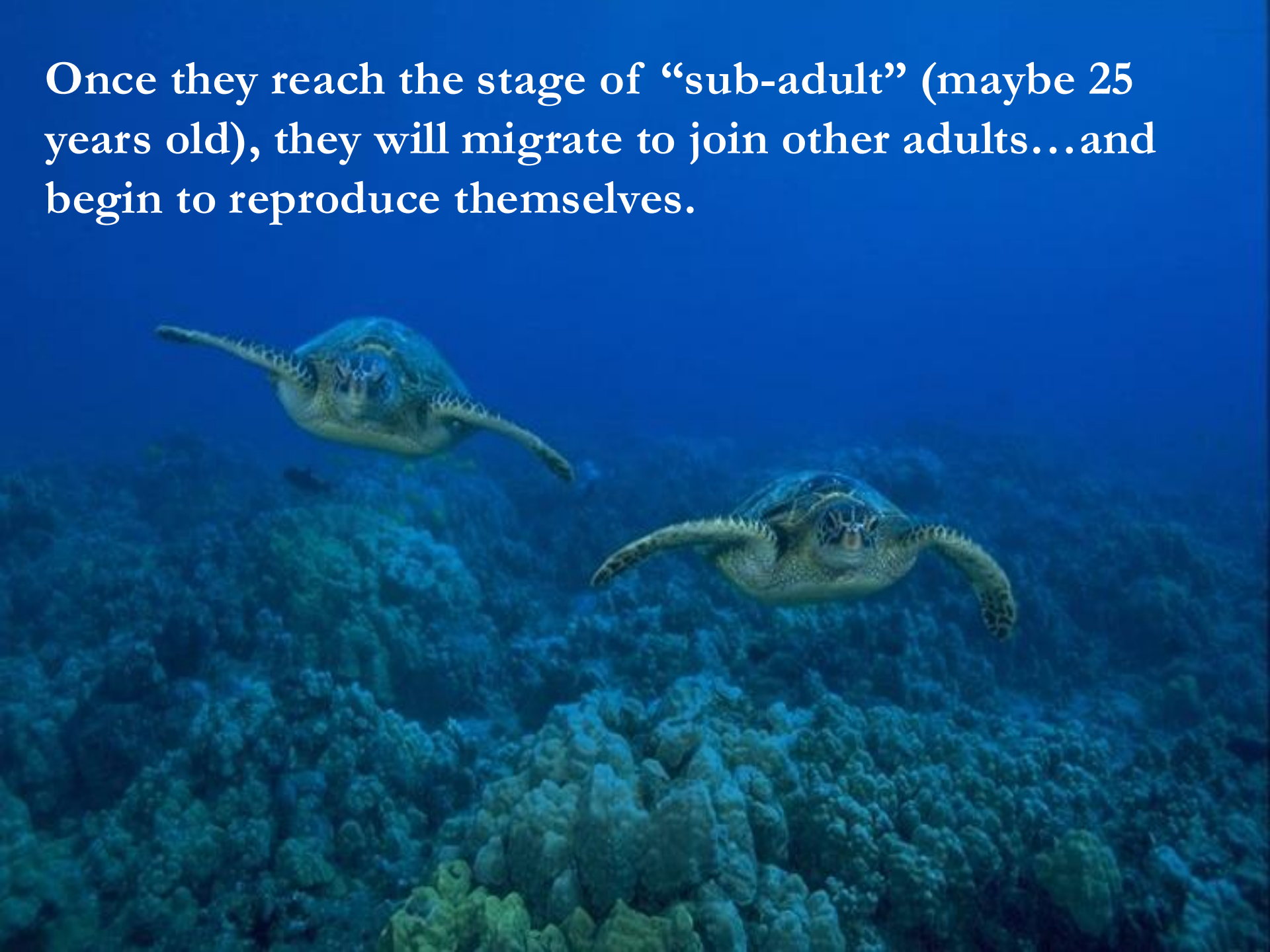


It takes between 55 and 65 days for the sea turtle eggs to hatch.


Hatchlings mostly live in floating seaweed for a period of years


After drifting in the open ocean for several years, juvenile turtles take up residency near the coast for a decade or more. We call this “Developmental Habitat.”

Once they reach the stage of “sub-adult” (maybe 25 years old), they will migrate to join other adults…and begin to reproduce themselves.

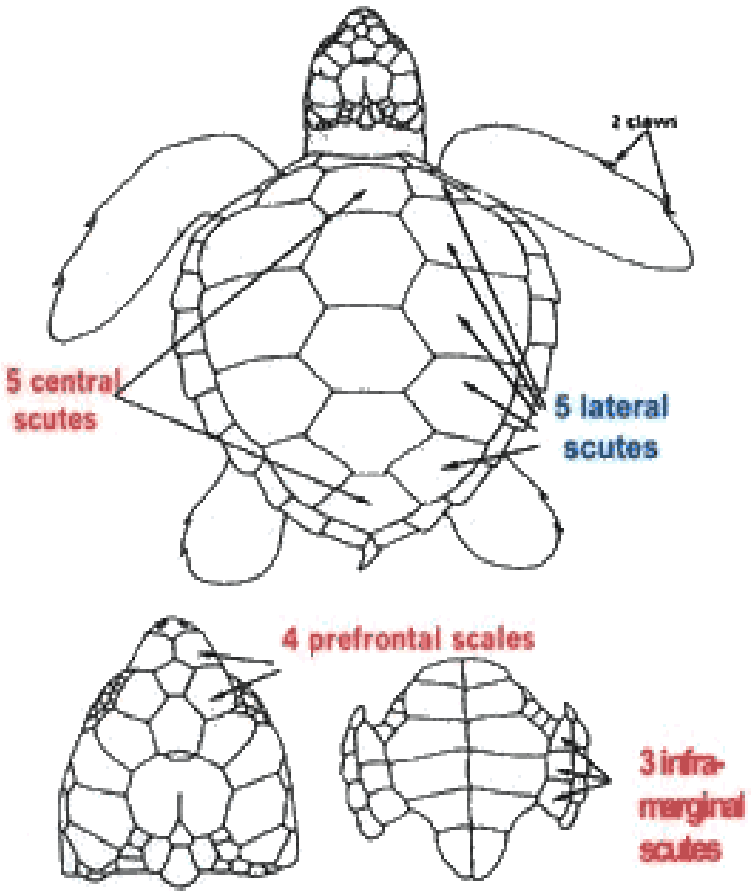


Sea Turtles Found in the Southeast United States - Size Comparison

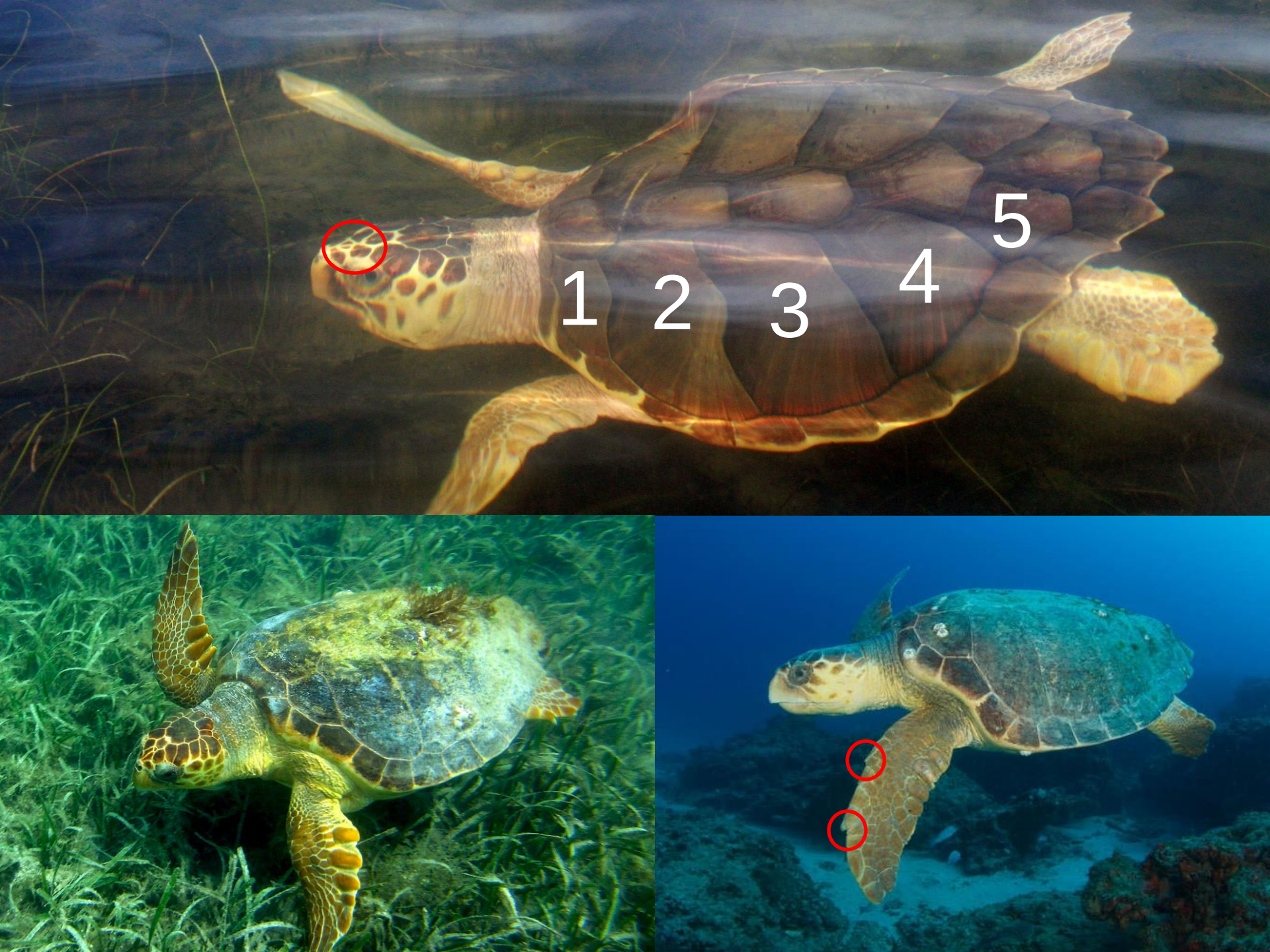
Leatherback


Loggerhead

Loggerhead ID

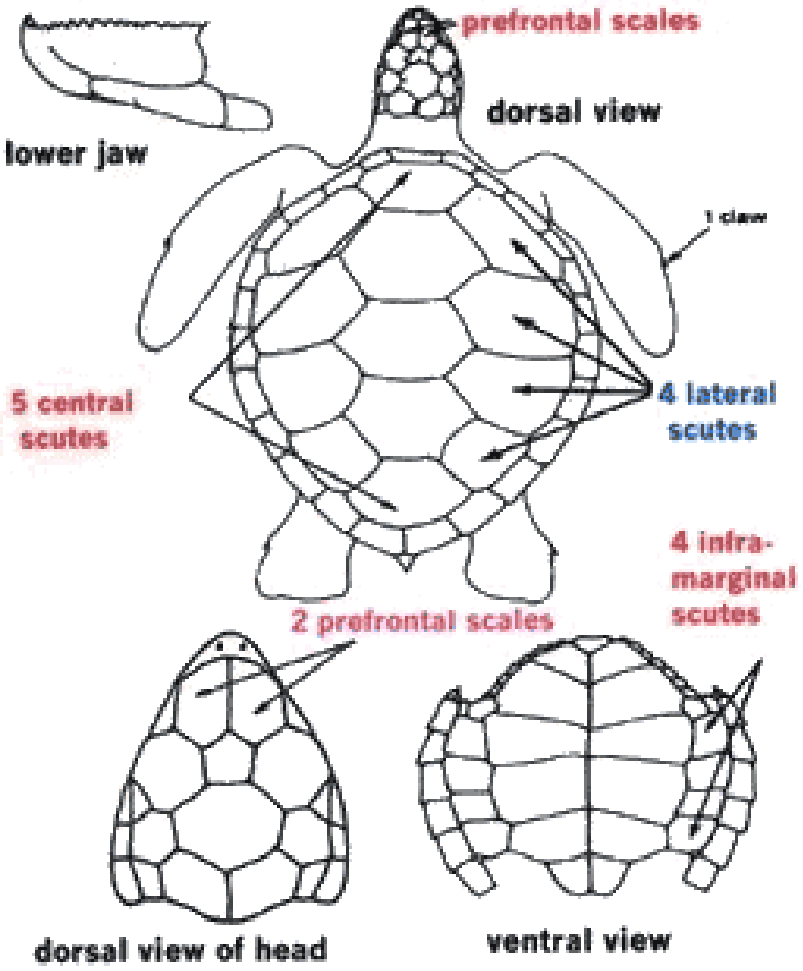


- Heart shaped shell
- Reddish/orange color
- 5 pairs of lateral scutes
- 5 central scutes
- 4 prefrontal scales
- 3 inframarginal scutes


1
2
3
4
5

Green

Green turtle ID

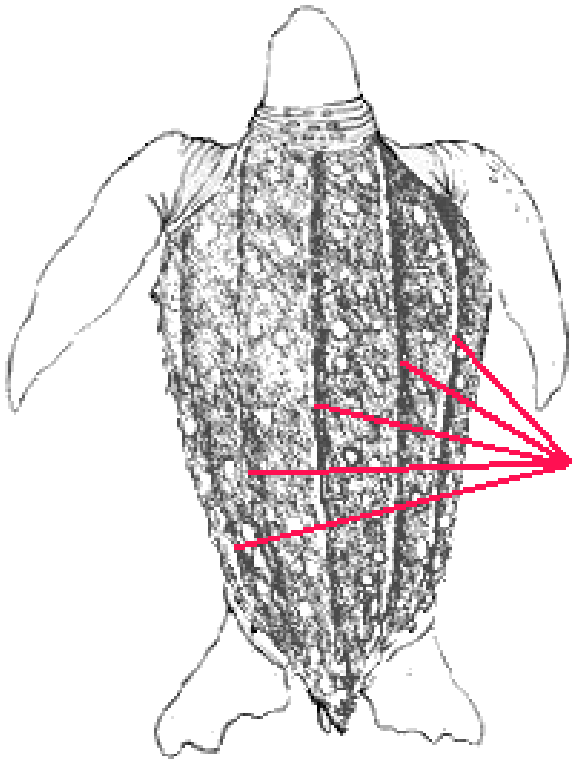


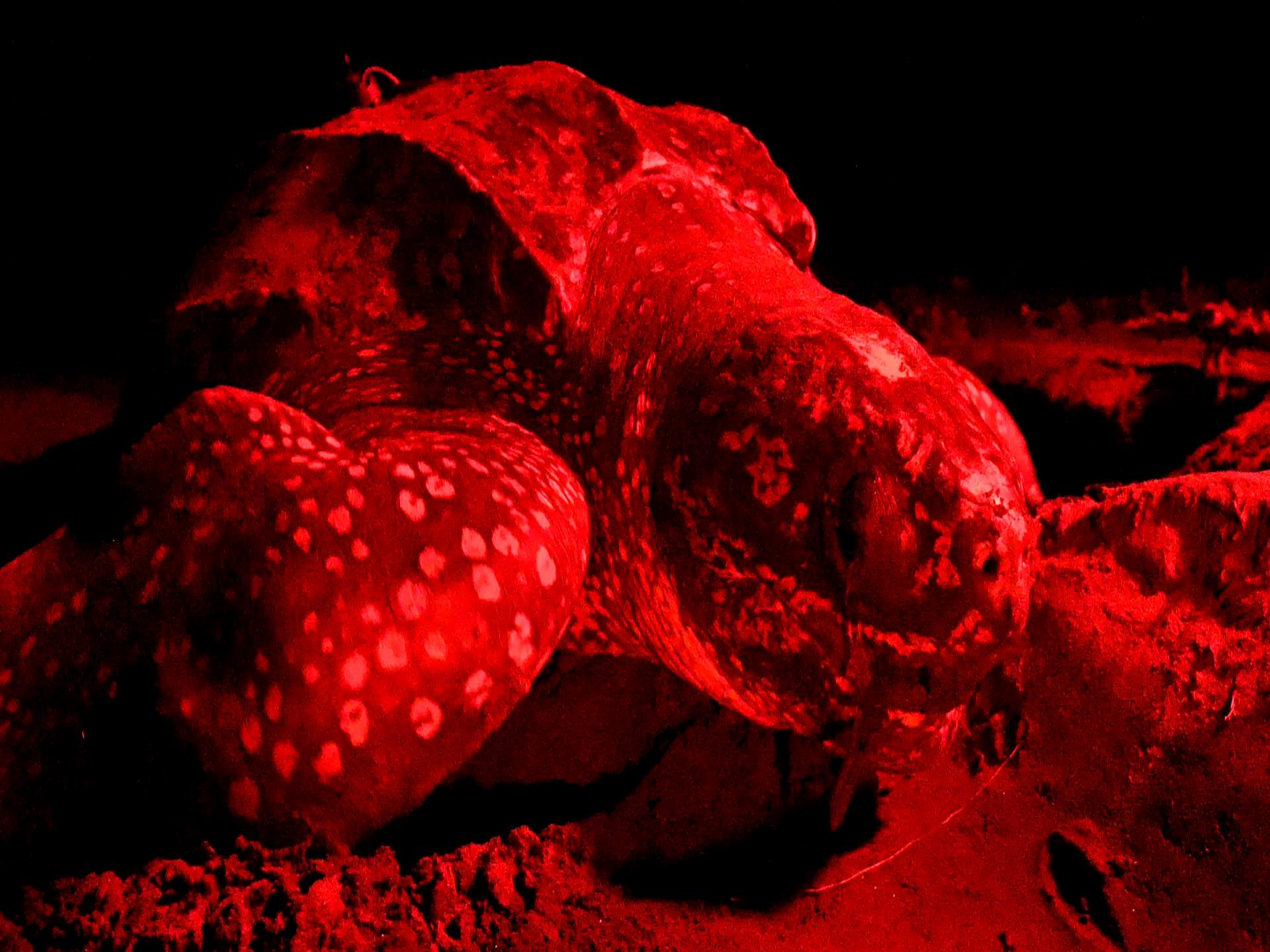
- Smooth oval shell
- Brown/yellow greenish color
- 4 pairs of lateral scutes
- 5 central scutes
- 2 prefrontal scales
- Serrated lower jaw


1
2
3
4
MY631

Leatherback

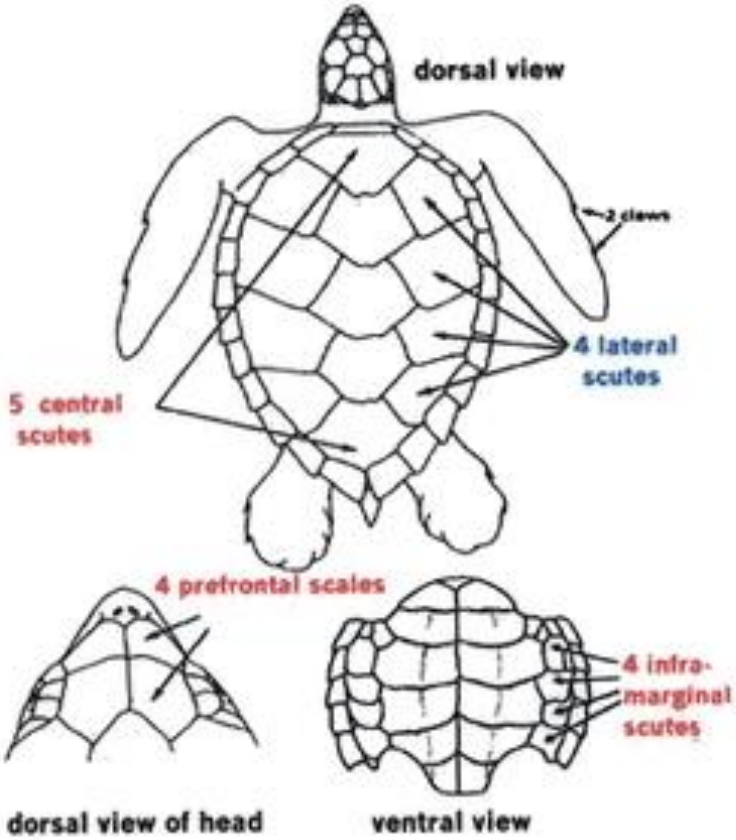
Top view





Hawksbill

Hawksbill ID

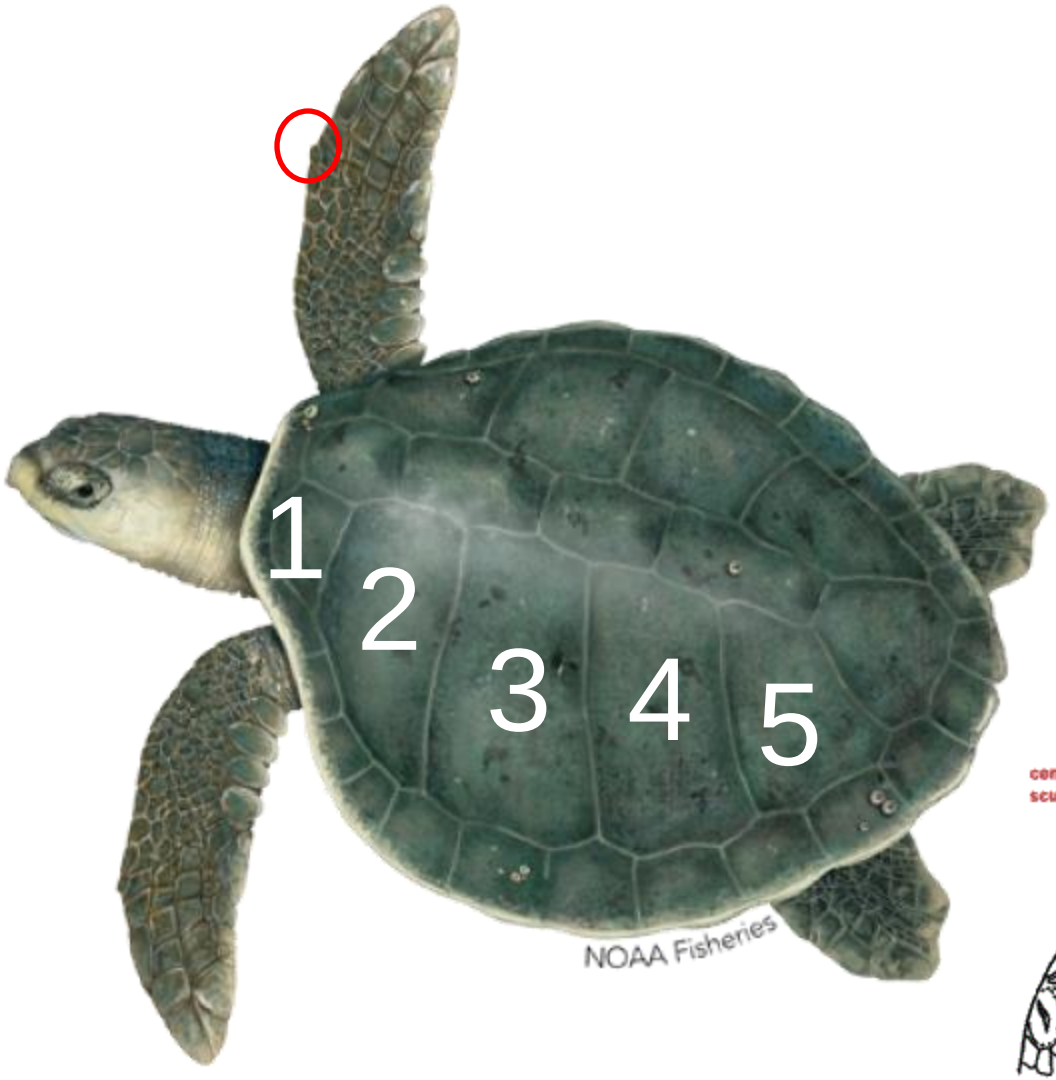


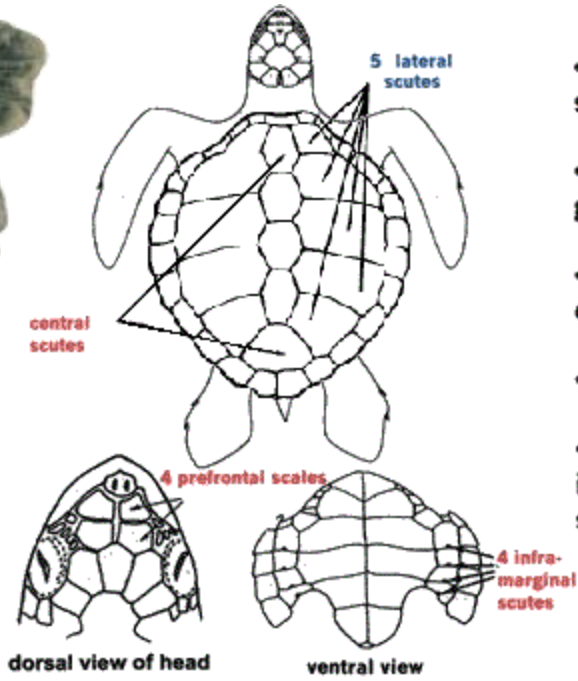
- Overlapping scutes
- Narrow shell
- Hawk-like beak
- 4 pairs of lateral scutes
- 5 central scutes
- 4 prefrontal scales

A detailed drawing of the parts of the Hawksbill Sea Turtle

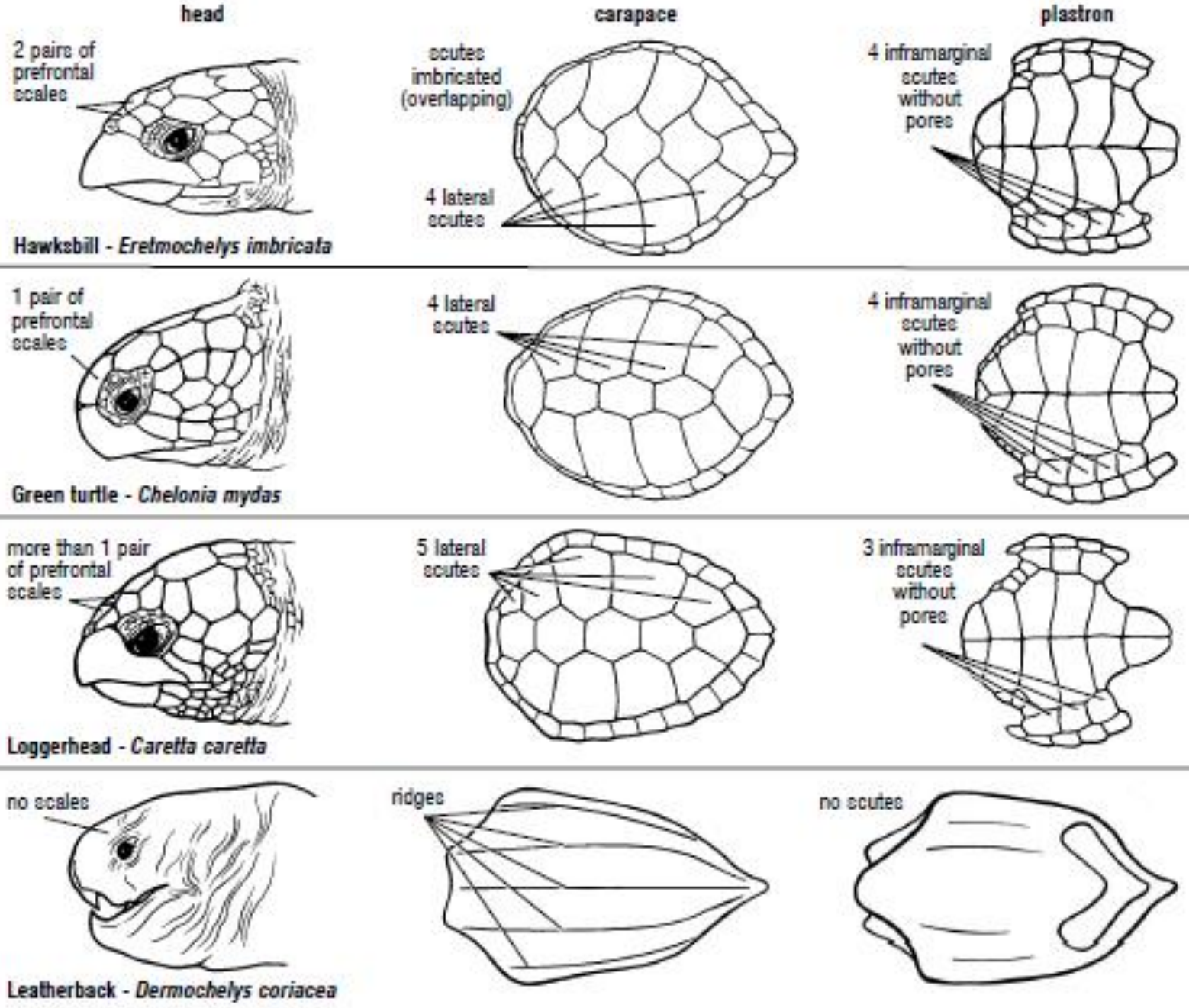
Kemp's Ridley Turtle

Kemp's Ridley ID

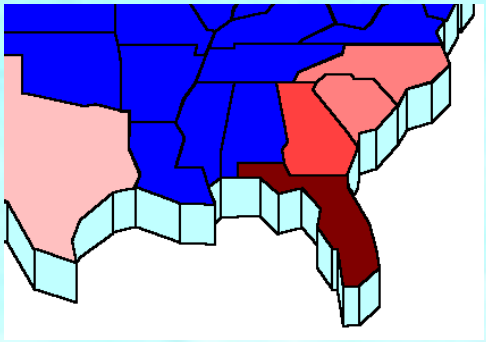




- Almost round-shaped shell
- Olive/grayish green color
- 5 pairs of lateral scutes
- 4 prefrontal scales
- 4 pairs inframarginal scutes

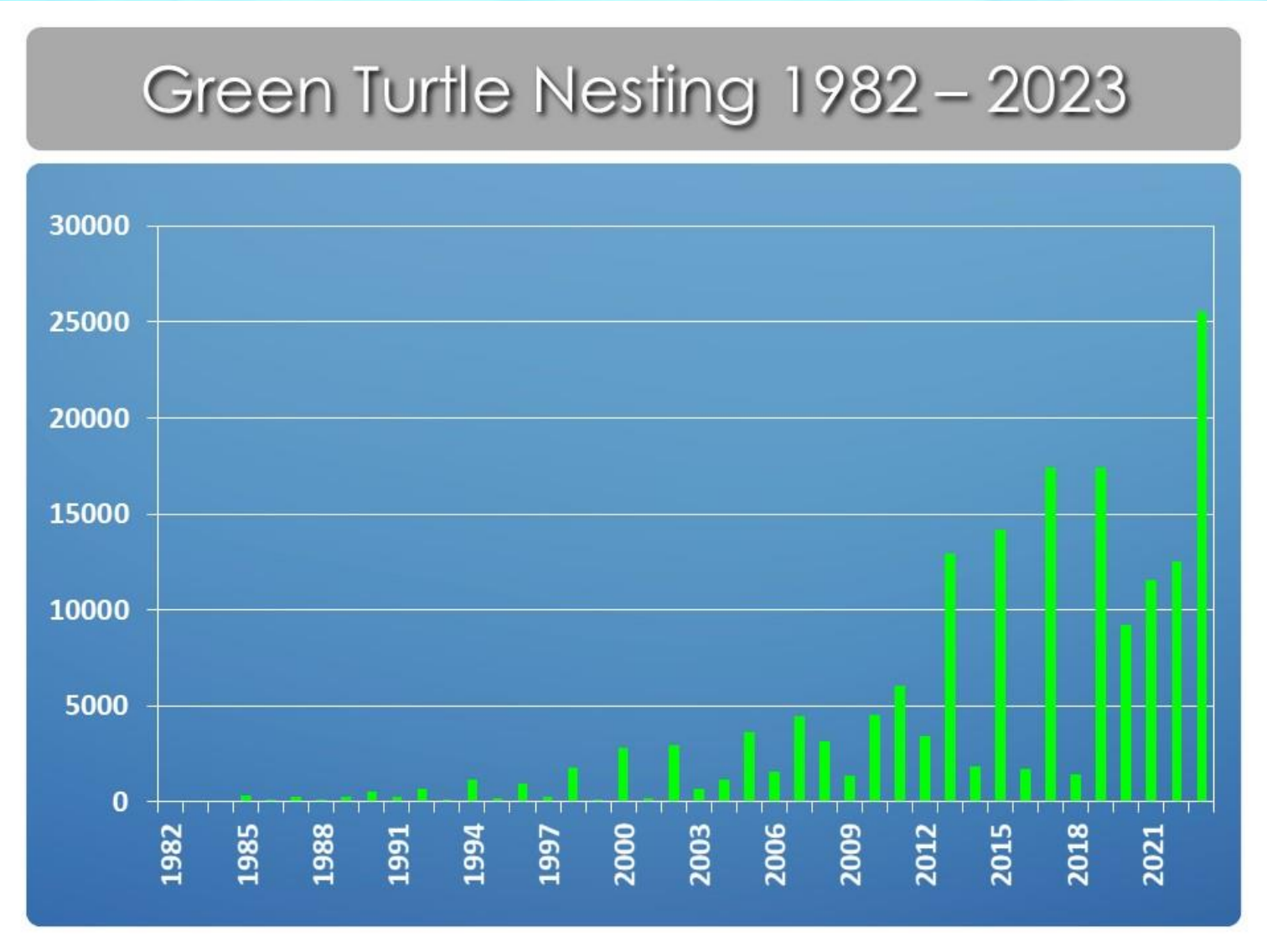

head
carapace
plastron
2 pairs of prefrontal scales
scutes imbricated (overlapping)
4 lateral scutes
4 inframarginal scutes without pores
Hawksbill - Eretmochelys imbricata
1 pair of prefrontal scales
4 lateral scutes
4 inframarginal scutes without pores
Green turtle - Chelonia mydas
more than 1 pair of prefrontal scales
5 lateral scutes
3 inframarginal scutes without pores
Loggerhead - Caretta caretta
no scales
ridges
no scutes
Leatherback - Dermochelys coriacea

In the U.S., STC is Focused on Florida's Sea Turtles and Nesting Beaches and Offshore Habitats



Over 90% of all Sea Turtle Nesting in the United States occurs on Florida Beaches—especially on the Central East Coast

2023 Nesting Numbers: Archie Carr Refuge



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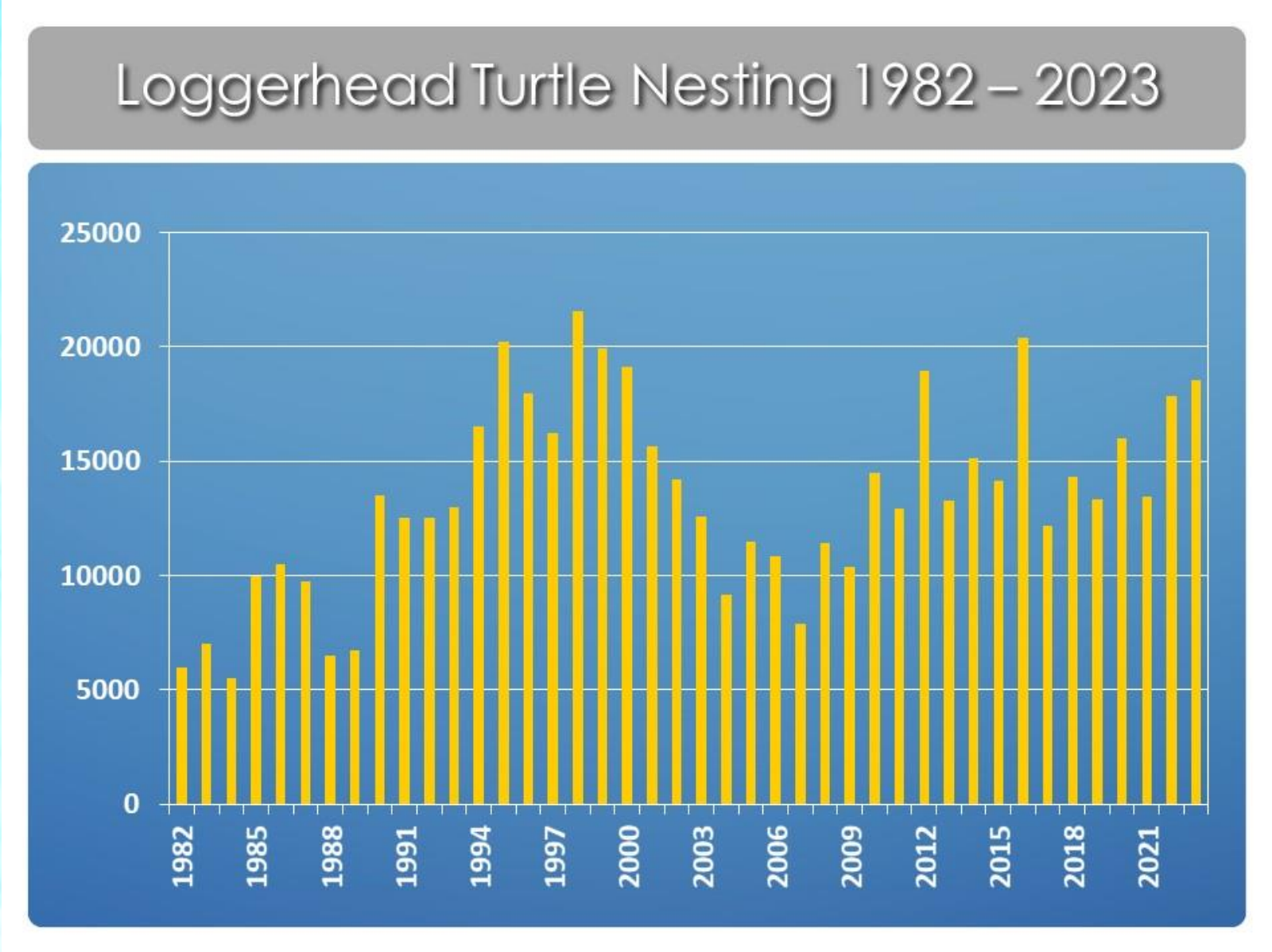

Natural Threats to Sea Turtles

THREATS


The Florida Legislature is in Session from March 4 through May 2.
Here are some bills we are watching.
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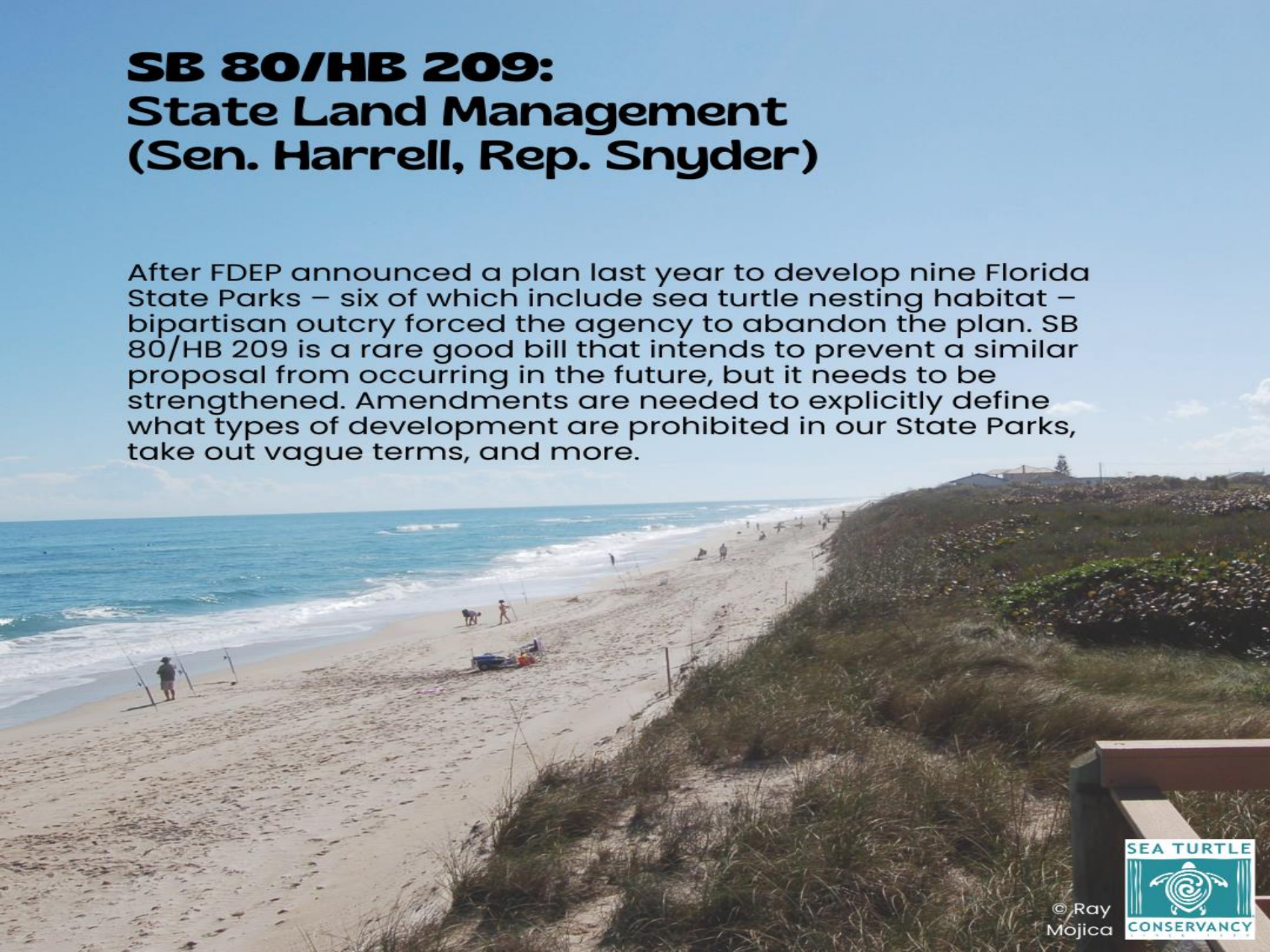
SEA TURTLE CONSERVANCY

SB 80/HB 209:
State Land Management
(Sen. Harrell, Rep. Snyder)

After FDEP announced a plan last year to develop nine Florida State Parks – six of which include sea turtle nesting habitat – bipartisan outcry forced the agency to abandon the plan. SB 80/HB 209 is a rare good bill that intends to prevent a similar proposal from occurring in the future, but it needs to be strengthened. Amendments are needed to explicitly define what types of development are prohibited in our State Parks, take out vague terms, and more.



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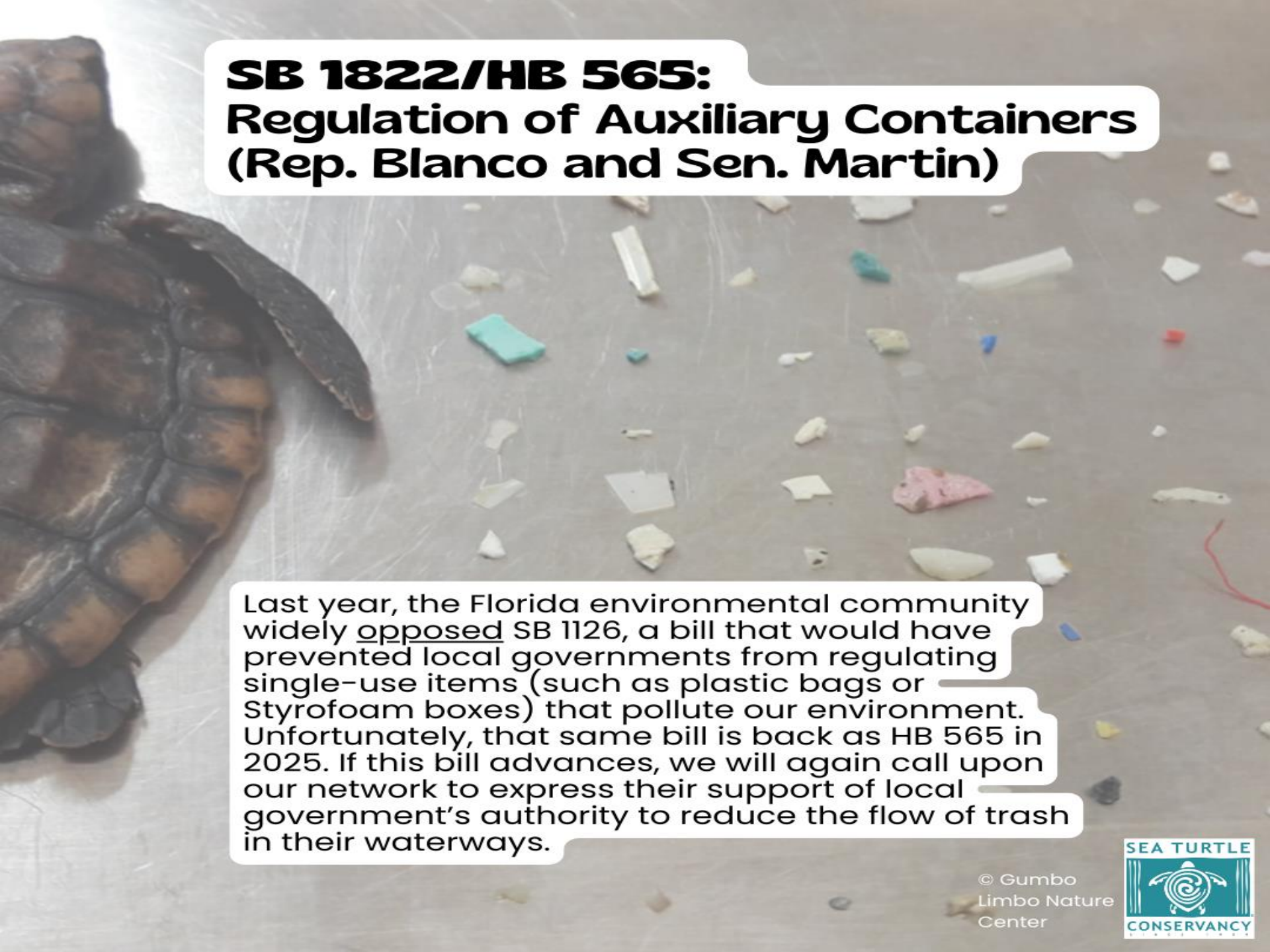
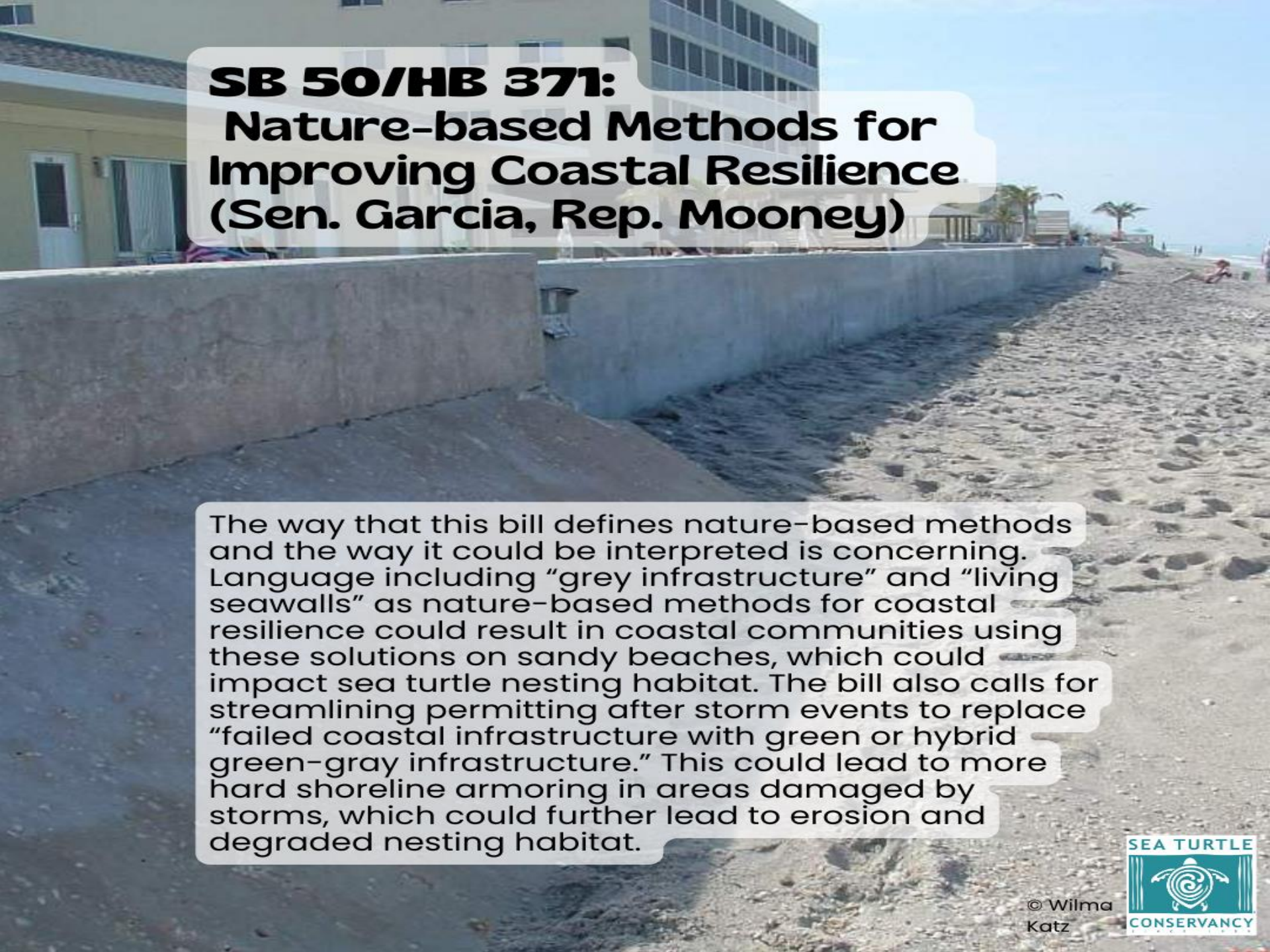
SB 1822/HB 565: Regulation of Auxiliary Containers (Rep. Blanco and Sen. Martin)



Last year, the Florida environmental community widely opposed SB 1126, a bill that would have prevented local governments from regulating single-use items (such as plastic bags or Styrofoam boxes) that pollute our environment. Unfortunately, that same bill is back as HB 565 in 2025. If this bill advances, we will again call upon our network to express their support of local government's authority to reduce the flow of trash in their waterways.

SEA TURTLE CONSERVANCY



SB 50/HB 371: Nature-based Methods for Improving Coastal Resilience (Sen. Garcia, Rep. Mooney)

The way that this bill defines nature-based methods and the way it could be interpreted is concerning. Language including "grey infrastructure" and "living seawalls" as nature-based methods for coastal resilience could result in coastal communities using these solutions on sandy beaches, which could impact sea turtle nesting habitat. The bill also calls for streamlining permitting after storm events to replace "failed coastal infrastructure with green or hybrid green-gray infrastructure." This could lead to more hard shoreline armoring in areas damaged by storms, which could further lead to erosion and degraded nesting habitat.

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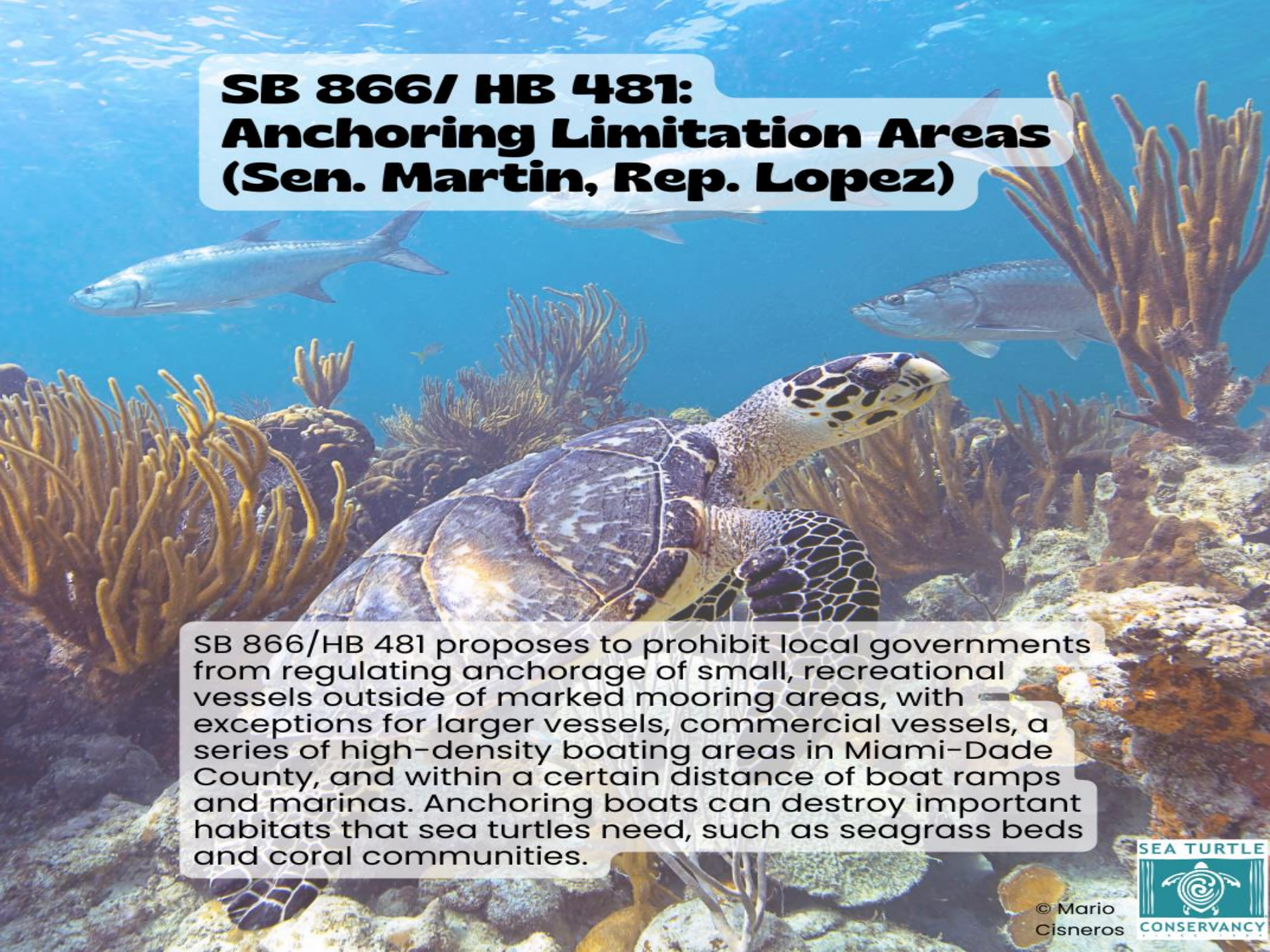
SB 866/ HB 481: Anchoring Limitation Areas (Sen. Martin, Rep. Lopez)



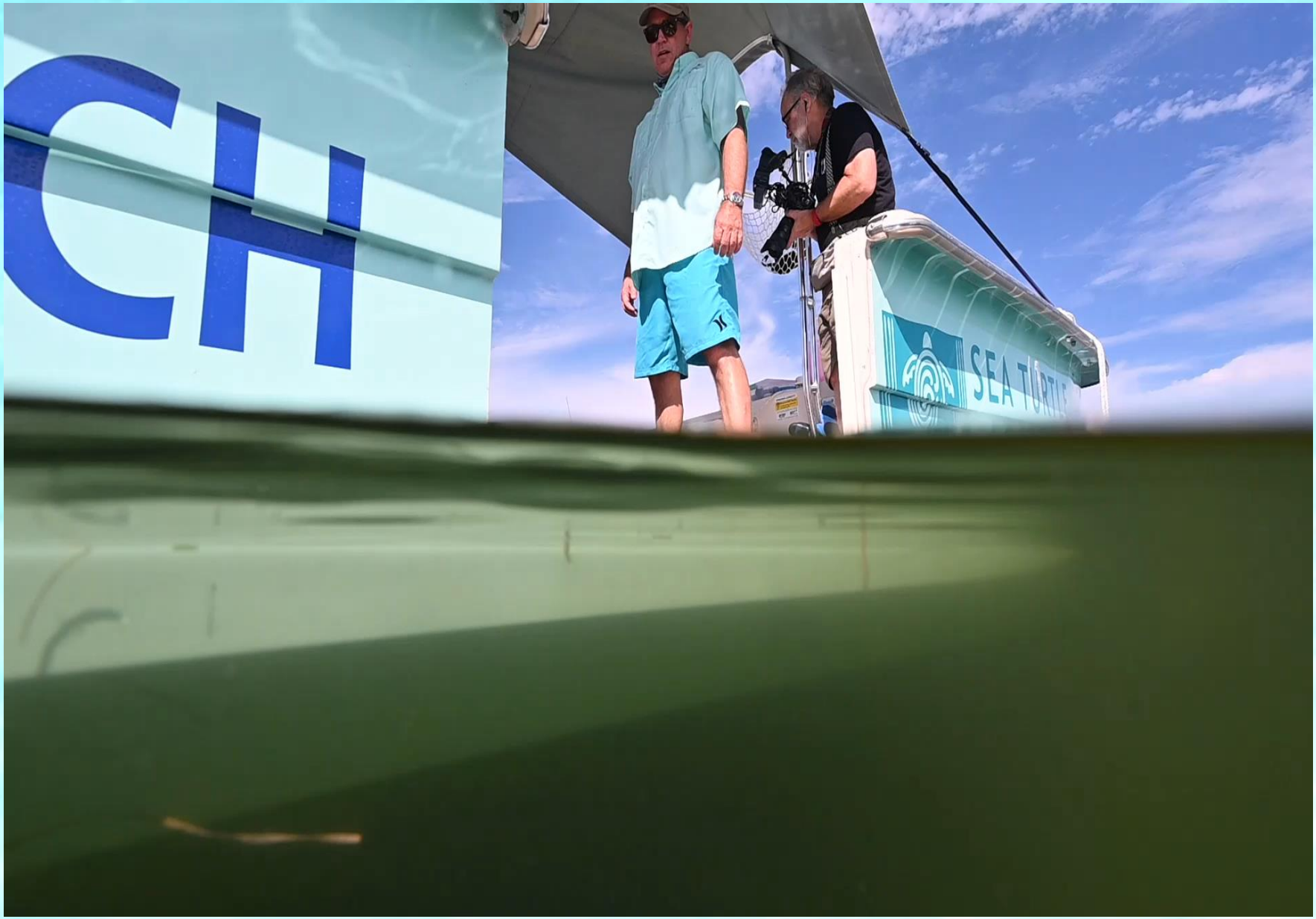
SB 866/HB 481 proposes to prohibit local governments from regulating anchorage of small, recreational vessels outside of marked mooring areas, with exceptions for larger vessels, commercial vessels, a series of high-density boating areas in Miami-Dade County, and within a certain distance of boat ramps and marinas. Anchoring boats can destroy important habitats that sea turtles need, such as seagrass beds and coral communities.

SEA TURTLE CONSERVANCY

Research & Monitoring on Beaches and at Sea

- Rigorous scientific methods carried out consistently
- Conducted in numerous countries
- Coordinated by trained biologists & using local staff and volunteers
- Data is properly stored, shared and published in peer reviewed journals
- Revealing critical new information about these turtle populations
- Tracking population trends, threats, impacts of climate change, etc.

In-Water Research in the Gulf of Mexico



The best part is releasing the turtles.

Beachfront Lighting Retrofit Program

- Long-wavelength LED lighting (like amber or red)
- Shielded lights
- Lower the elevation of lights

Since 2010: 311 properties retrofitted, nearly 30,000 lights replaced, 41 miles darkened

BEFORE

AFTER

Tour de Turtles – An Online Sea Turtle Race

www.tourdeturtles.org

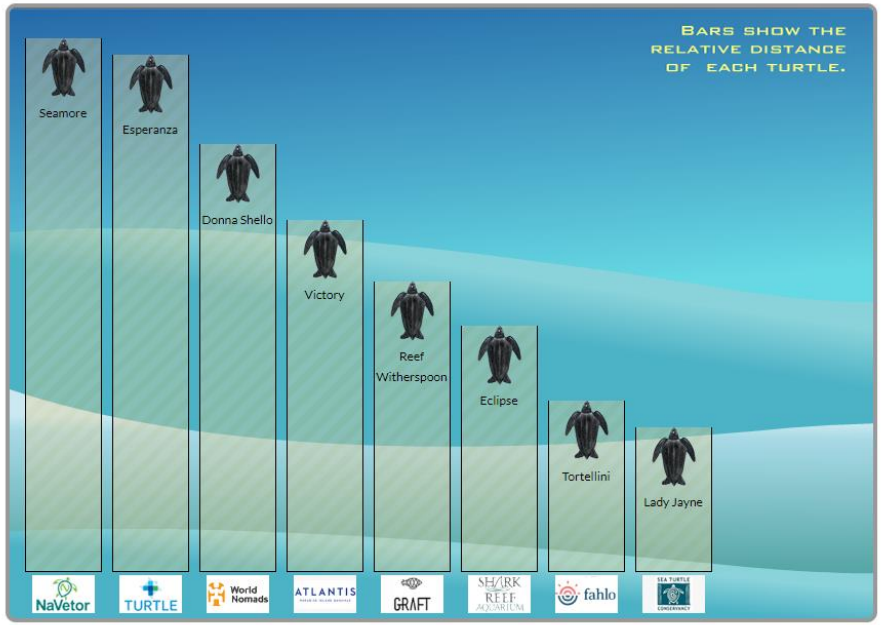
2024 Tour de Turtles

www.tourdeturtles.org

STC Turtle Tracker App

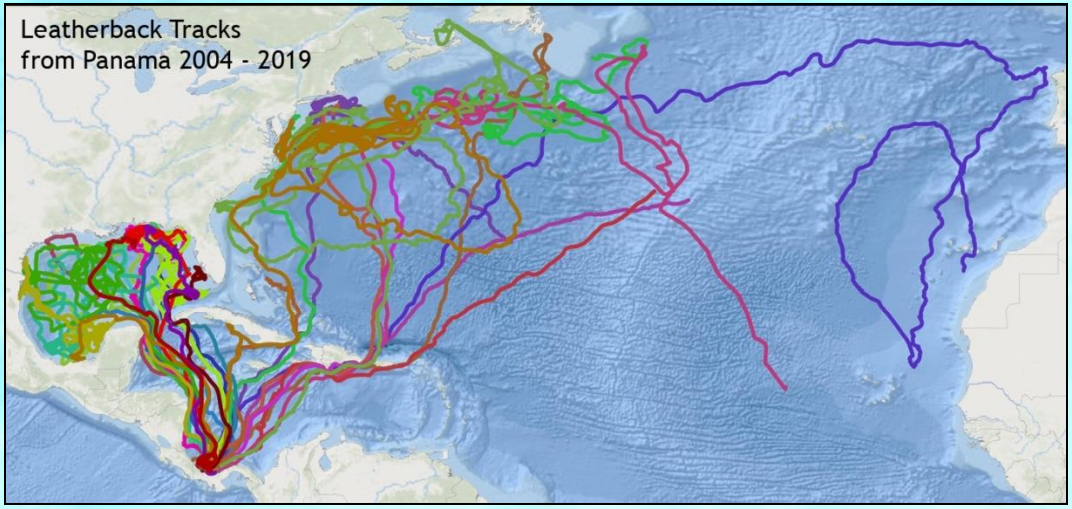
18 leatherback, green, hawksbill, and loggerhead sea turtles are participating

Public releases took place in Costa Rica, Panama, Nevis, and Florida.

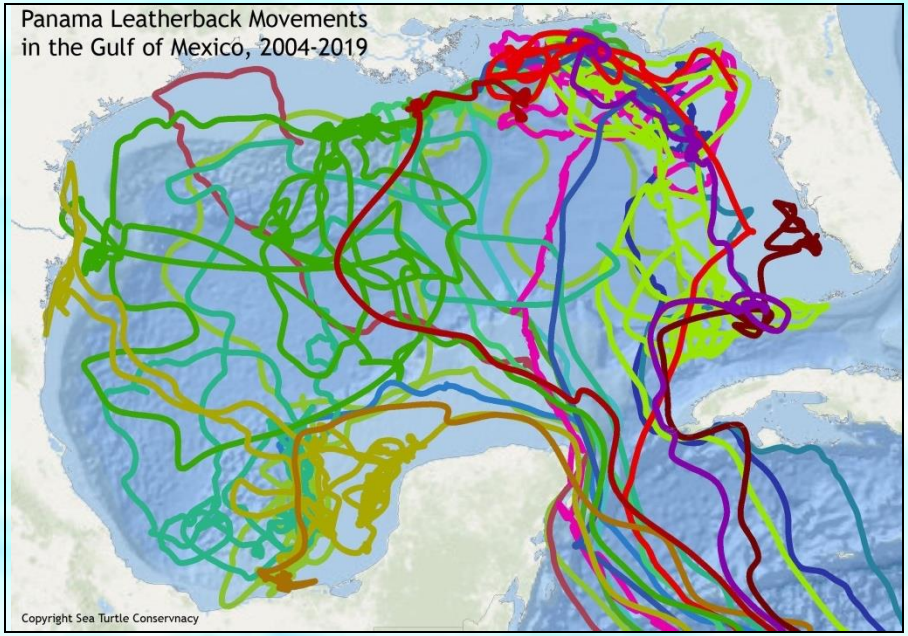


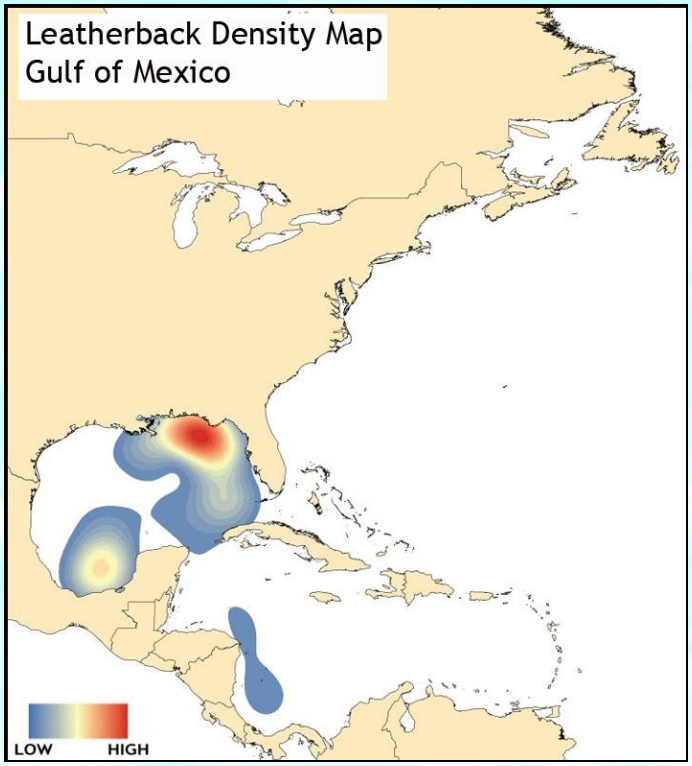
We can learn about where sea turtles travel by tracking them using satellites.

Satellite Tracks of Leatherbacks



Data from STC's migration tracking research in is helping inform resource managers and government agencies where funding is needed to protect leatherback in the Gulf of Mexico – including the investment of funds for mitigation efforts following the BP oil spill. Until STC discovered these movement patterns no one knew that Panama leatherbacks were impacted by the Deepwater Horizon Oil Spill.





Thank you!

www.conserveturtles.org