

Loggerhead Sea Turtle

142848- aka "Lenny"



Corinne De Keukelaere

142848- aka "Lenny" Travels

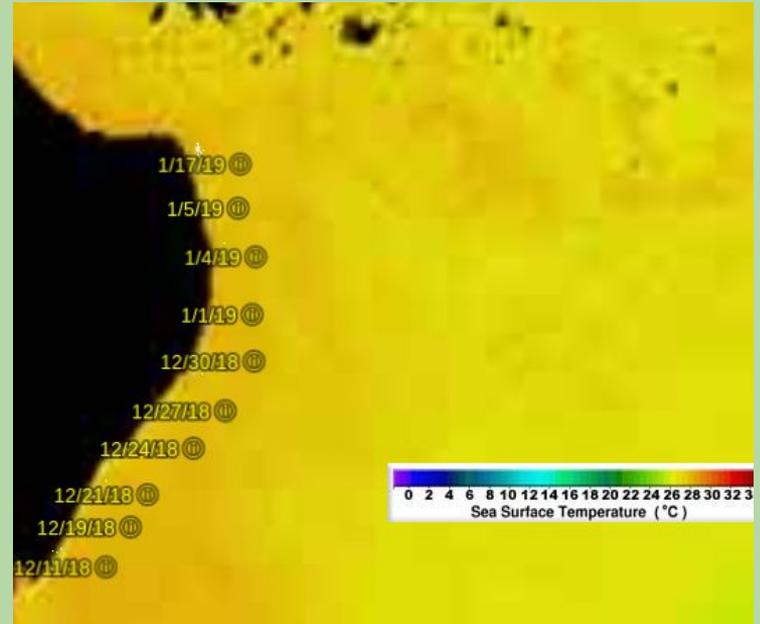
This Loggerhead Sea Turtle traveled up the coast of South America from Salvador to Rio Grande during the winter months from December 2018 to February/ March 2019.



Water Temperatures

The water temperatures ranged from 26- 28 degrees Celsius with the warmer waters being closer the the coast and warmer as you traveled toward the equator.

Loggerhead turtles prefer the more temperate waters on their journey to nesting areas and in search of food.



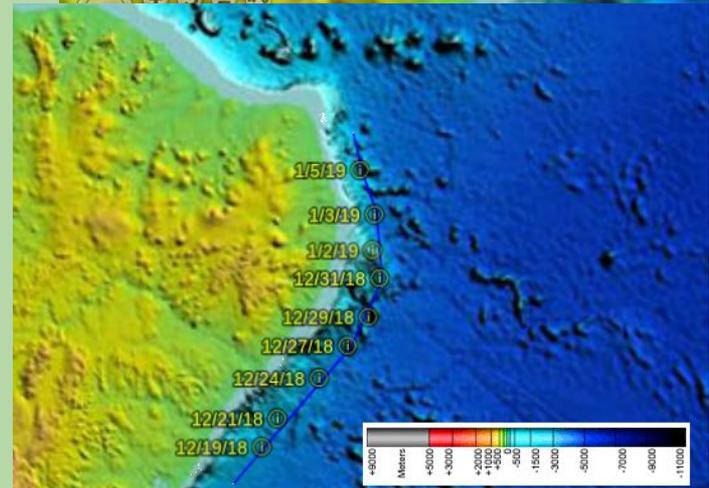
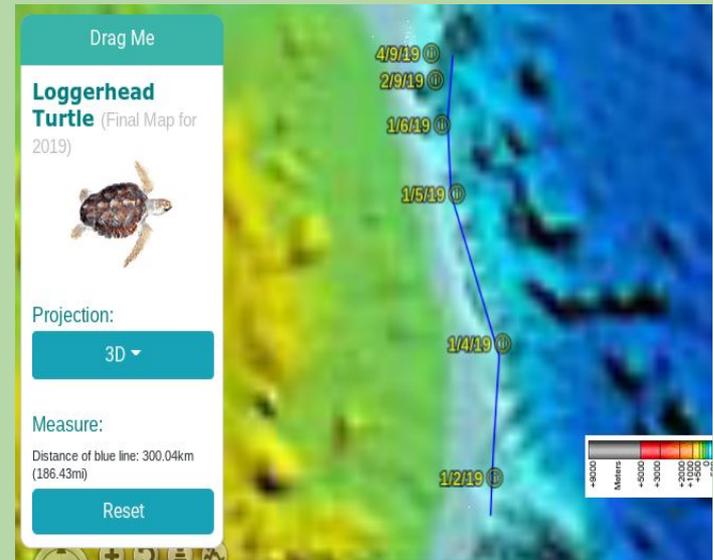
Loggerhead Diet

Loggerhead Sea Turtles are known for their large head and powerful jaw muscles that are used to crush their hard shelled prey. Juvenile turtles float in the ocean and feed on soft seaweed, jellyfish, and algae. Adults live closer to the coast and use their powerful jaw muscles to crush hard shells of prey like clams, lobster, muscles, horseshoe crabs.



Observations- Bathymetry

On 1/1/19 Loggerhead Sea Turtle was located at latitude -8.054 and longitude -34.678 between depths of 500- 1500 ft about 21.48 miles from the coast of the continent of South America. He traveled @ 186 miles north. The turtle seems to hug the continental shelf, not venturing out too far into deep waters. When measured from 12/19/18- 2/1/19 the loggerhead sea turtle traveled @ 570 miles or 917.33 km.



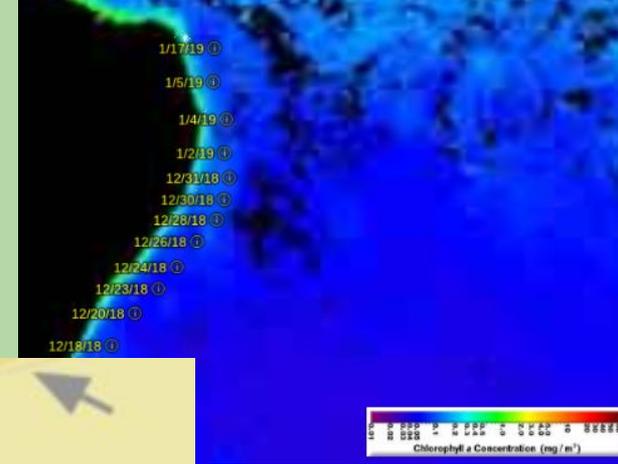
Justification- Bathymetry

It seems like this turtle is staying close to the continental shelf traveling toward the equator in the winter months in search of warmer water. This turtle has limited data because it seems the tracking data stops, maybe due to a lost tracking system so I only see data from December 2018 to April 2019. I infer this turtle is a female. My students name her "Lenny" before we really looked at how she traveled. Adult females return to the same beach each year to nest and lay eggs.



Observations- Phytoplankton & Winds/ Currents

The chlorophyll concentration around the coast is around 1.0mg/m³. The algae drops to @ .1 mg/m³ out where this turtle is swimming. There wasn't any data for currents during this time period, but I did find data for winds looking like a possible contribution to upwelling that this turtle could be in search of foods coming to the surface.



Justification- Phytoplankton

Since this Sea turtle is swimming more in the areas with the $.1 \text{ mg/m}^3$ I infer this is not a juvenile sea turtle who relies more on the floating algae and soft food sources. This sea turtle seems to be traveling to the warmer equatorial waters in search of the hard shelled organisms that might. The winds and currents could contribute to an upwelling changing the location of the food this sea turtle eats from the bottom of the ocean. Food might be plentiful closer to the warmer waters near the equator.

