Purpose:

To educate LCDC guests through interactions and a hands on learning experience in regards to a variety of adaptations amongst different eating/hunting habits within the Cheloniidae Family.

Objective:

Guests will be provided with common household objects that will allow them to further understand how different sea turtles eat their prey. (Common household objects are provided because it creates a connection between the individual and the sea turtle.)

Take Home:

Guests will be guided into a minor discussion regarding the struggles different sea turtles encounter in the wild. Human interaction throughout the world has made life difficult for the beloved sea turtles as well as other marine life. Plastics, debris, and other non-decomposable materials have invaded our planet’s ocean in addition to toxic waste. Individuals on land, either near or far from the coastline, are capable of making a difference. The ability to recycle and reuse plastics will help decrease the amount that ends up in our oceans. Participation in beach clean-ups or just picking up a piece of trash helps save a life of a wild animal each day.

Background:

Hawksbill – Hawksbill sea turtles have a sharp and narrow beak which allows them to hunt their prey between the crevices of coral reefs.

Green Sea Turtle – The Green Sea Turtles scissor-like jaw allows them to easily eat sea-grass and sea-lettuce off the sea floor.

Leatherback – Leatherback sea turtles have delicate jaws similar to those of a Green sea turtle since both turtles produce a scissor-like function.

Oliver Ridley – Oliver Ridley sea turtles have a smaller beak compared to other sea turtles. However, their jaw is able to perform a crushing action that breaks the shells of crabs and mollusks.

Loggerhead – Loggerhead sea turtles are found off the coast of Florida. While eating their prey, their jaw performs a pounding and crushing motion that breaks the shell which exposes the animal inside.
Materials:

- Ice Cube tray
- Sponges
- Saran Wrap
- Tweezers
- Nutcracker
- Walnuts
- Mortar & Pestle
- Ice Cubes
- Silicon Glove
- Plastic Jellyfish
- Grass
- Scissors

Experiment:

Hawksbill – Sponges are placed in an ice cube tray. The ice cube tray will then be covered with saran wrap. Each guest is allowed to pull out the sponges from the tray using tweezers. This activity simulates how the Hawksbill sea turtle receives his or her food from the crevices of the coral reefs.

Green Sea Turtle – Guests are allowed to use scissors to cut a few strands of grass to demonstrate how a Green Sea turtle obtains his food in the wild.

Leatherback – Guests put on a silicon glove and attempt to pick up multiple ice cups spread out inside of a container. This task is difficult and demonstrates how hard it is for the Leatherback’s to keep the jellyfish inside their mouth and into their stomach.

Oliver Ridley – Guests are given a walnut and a nutcracker and are allowed to crack it open if they can. This task demonstrates the cracking and crushing motion of the Oliver Ridley’s jaw.

Loggerhead – Guests are provided with a walnut, mortar and a pestle. The guest is then able to smash the walnut with a pounding force to crack the shell and expose the walnut. This experiment demonstrates the necessary functions a Loggerhead sea turtle must perform in order to eat his prey.