

# Human Impact Lab: Predator Interactions

## Loggerhead Marineline Center

Loggerhead Marineline Center is an ocean conservation organization and sea turtle hospital located adjacent to one of the most important sea turtle nesting beaches in the world. The Center features an on-site campus hospital, research laboratory, educational exhibits and aquariums, and also operates the Juno Beach Pier, which hosts world-class angling and sightseeing. The Center's conservation team works with 76 local and international organizations across six continents to form partnerships and share conservation initiatives and best practices that are core to its mission of ocean conservation. The Center is expanding and has launched its Waves of Progress capital expansion campaign, designed to accelerate and amplify LMC's conservation and education impact.

Our mission is to promote conservation of ocean ecosystems with a special focus on threatened and endangered sea turtles. Our vision is to be recognized locally and internationally as the leading authority in sea turtle education, research and rehabilitation.



## Lesson Objectives

- I can define the terms predator and prey and give examples of each term
- I can describe the major threats that sea turtles face in the wild

## Vocabulary

- Predator: an animal that naturally preys on others.
- Prey: an animal that is hunted or killed by another animal for food.
- Marine debris: any persistent solid material that is manufactured or processes and directly, or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or Great Lakes

## Material

- Kitchen tongs
- 3 pieces of recycled plastic
- 2 jump ropes



Visit [Marinelife.org](http://Marinelife.org) to learn more about Loggerhead Marineline Center!

# Sea Turtle Olympics

Directions: In this activity, you will take on the role of a sea turtle by trying to avoid their everyday threats for survival. Designate each of four corners of a room to one of the threats to a sea turtle: sharks, plastic pollution, boats, fishing net. Instruct the students to “swim” between obstacles by facing one side of the room and “flapping” their arms like flippers. Each obstacle activity is outlined below:

1. **Sharks:** Sharks are known natural predators to sea turtles and one of the only natural predators to adult sea turtles. In the wild, all life stages of a sea turtle, from hatchling to adult, can be seen as prey to a shark. In order to avoid being eaten, sea turtles must swim as fast as they can with the help of their large flippers. At this obstacle, direct the players to line up on one side of the room and try to get to the other side as quick as possible without getting “bit” by the designated “shark” who will be holding kitchen tongs. If you get “bit”, return to the start and try again.
2. **Plastic pollution:** One of the biggest problems that face our oceans today is plastic pollution. Plastic items, such as single use bags or water bottles, can often resemble food items for marine animals. For example, plastic bags floating in the water can look like jellyfish, a common food item of sea turtles. Once ingested by a sea turtle, the plastic cannot be properly digested and has the potential of becoming a deadly problem. At this obstacle, put four opaque containers on the floor with three of them containing plastic pollution items from your recycling bin at home. In the one remaining container, place a healthy food item such as a vegetable. Direct the players to take turns “foraging” by choosing one of the four containers. If a player chooses the healthy food item, they can continue to the next obstacle. If a player chooses a container with plastic pollution, return to the start of the Olympics course and begin again.
3. **Boat interaction:** Boat strikes are a major threat to sea turtles and one of the leading causes of sea turtle strandings in Florida waters. Sea turtles have lungs, which requires them to come up to the surface of the water in order to breathe. This makes them more vulnerable to get hit by a boat propeller. At this obstacle, inform the players that they will need to “swim” as fast as they can to the surface by doing 10 jumping jacks as fast as they can. After the 10 jumping jacks they are at the surface, direct them to take one giant deep breathe in, and then continue with 10 more jumping jacks as fast as they can to swim back down under the surface. Continue to the next obstacle.
4. **Fishing nets:** Another common marine debris item found in the ocean is abandoned fishing nets. Sea turtles and other marine animals often get accidentally trapped, or entangled, by these nets. Becoming entangled in a fishing net can cause sea turtles to lose mobility, causing them to not be able to swim to the surface to breathe. At this obstacle, place two jump ropes on the floor. Lay them out parallel to each other, and cross the ropes one over the other in an “X” fashion every two feet. Direct the players that they must walk across the “net” on the ground by only stepping in between the ropes. If a player touches a rope, they must return to the start of the Olympics and begin again.

