

## Sea Turtle Turmoil

Amy, Simone, Charlotte, Audrey, Alex L

**Ocean Literacy Principle:** #6 -*The ocean and humans are inextricably interconnected*

**Duration:** 1 hour - explanation + rounds

### Premise

Turtle bales (group of turtles) need to collect resources whilst migrating. As the game progresses they must watch out for hazards such as predators, nets, and indigestible foods.

### Who plays:

Students (elementary-high school)

### What is the purpose:

teach students about humans impact on the environment/pollution

### Where do we play:

Small field or a gym

### Why should we care:

starting a conversation about preservation will help slow the damage that has already occurred

### How to facilitate:

1. *Read story to group before starting game.*

→ Story Suggestions:

- (ages 4-8) You are a sea turtle in the Atlantic ocean. You and your bale (group of sea turtles) need to gather as many resources as possible to survive in the ocean. You need food, protection, and the ability to reproduce to survive. Be aware that in the ocean there are dangers you may encounter.
- (ages 9-12) You and your group are a bale of sea turtles migrating to warmer waters. You need to collect as many resources as possible. Such as jellyfish and seaweed. As the games progresses you must be cautious in the unknown waters as you collect your resources.
- (ages 12+) You are migrating to warmer waters to breed and reproduce. As the sea turtles are migrating, resources start to become less abundant as there is change in the environment. You will need to collect different resources such as jellyfish (food) and seaweed (habitat) to survive. Be careful as there are many pollutants in the ocean that may be perceived as food or habitat, which can affect the your bale's health and safety.

2. *Speak to relevant background info (found under round #) prior to starting each round.*

3. *Follow round directions.*

4. *Elaborate on teaching prompts.*

5. *Repeat steps 2-5 for all rounds.*

### Materials

Different coloured poker chips/coloured paper

- White + black dot
- Dark green
- Green
- White

Four bowls/tubs to place papers

### Activity

Kids are organized into four groups in four corners.

Each corner has its own receptacle and there is a bowl in the middle with all the chips used that round

#### *Round 1*

Background Info: Sea turtles need food and shelter to survive.

1. Chips are green and white
2. Kids are running one by one to grab a single chip each
3. After they are all collected, describe that green means shelter and white means food

Teaching prompt: Sea Turtles often primarily eat jellyfish and reside in coral reefs. These are essential for the survival of the species.

#### *Round 2*

Background Info: Pollutants are substances that are introduced into ecosystems by humans that are toxic or detrimental to wildlife and plants.

1. Chips are green and white
2. Kids are running one by one to grab a single chip each
3. After they are all collected, add dark green and white with black dot
4. After collected, describe that dark green means oil and white with black means plastic
5. Grab a volunteer who will be a predator

Teaching prompt: Over 100 million marine animals die from debris every year. More than half the sea turtles in the world have ingested some sort of plastic or trash that is introduced by humans. The sea turtle eats jellyfish which plastic bags are often confused for and are consumed. Oil spills can also block light and coat the sea turtles. Tragic.

#### *Round 3*

Background Info: Predators are a natural way of controlling population growth.

1. Chips are dark green and white with black
2. Kids are running one by one to grab a single chip each
3. Predator runs and tags people to go back to their team empty handed
4. After they are all collected, add green and white
5. Kids collect again and predator runs and tags people again
6. After collected, describe that green means oil, dark green means shelter, white with black means food, and white means plastic

7. Take 1-2 players from the team with the most oil and 1-2 players from the team with the most plastic. These students are going to be light/noise pollution.

Teaching prompt: Predators are a natural part of ecosystems and are not something that humans should intervene and protect prey from. However, some predators are introduced to ecosystems because of irresponsible humans domesticating and releasing foreign animals. This is dangerous to indigenous ecosystems and their inhabitants because these foreign organisms have no natural predator and population can not be controlled.

#### *Round 4*

Background Info: Light and noise pollution are produced by the movement of marine vessels and mass establishment of artificial lighting on coasts. Light and noise fills the water and conflicts with natural processes.

1. Chips are green and white.
2. Kids are running one by one to grab a single chip each.
3. Light/noise pollution students will stand still with a pivot foot trying to tag students collecting chips. Predator is still trying to tag students. When a student is tagged, they go back to their group empty handed.
4. After they are all collected, add dark green and white with black dot.
5. Light/noise pollution and predators continue to be an obstacle for sea turtles.
6. After collected, describe that dark green means oil and white with black means plastic.
7. Take a student from the team with the most plastic and a student from the team with the most oil. These students must hold hands run around as a "net".

Teaching prompt: Light and noise pollution drive turtles away from their natural feeding and nesting habits. Marine life can become disoriented, confused, or lost because of sensory overload. Light and noise pollution can lead to groups of animals separating because their avenues of communication and navigation are obstructed.

#### *Round 5*

Background Info: Commercial fisheries use big nets to catch immense amounts of seafood. Even when following "ethical" guidelines, other wildlife can still be affected.

1. Chips are dark green and white with black
2. Kids are running one by one to grab a single chip each.
3. Predator runs and tags people, light/noise pollution tags people, and the net runs around and tags people. People who are tagged go back to their team empty handed.
4. After they are all collected, add green and white.
5. Kids collect again and predator, net, and light/noise pollution continues to be obstacles.
6. After collected, describe that green means oil, dark green means shelter, white with black means food, and white means plastic.

Teaching prompt: 40% of wildlife caught in commercial fishing nets are discarded because they are not the intended species to be caught. Marine mammals, sea turtles,

seabirds, among others are the species accidentally caught most frequently. This greatly affects populations as these animals are either killed in the nets or are injured and released. In this final round, it should be very difficult to collect chips because of the diminished team sizes and the increased number of obstacles. Talk about how humans make the lives of the indigenous animals very difficult because of the multiple ways that humans impact the environment. There are many more ways that humans interfere with wildlife and habitats. What are some others that you (teacher) can think of?

### *Rounds*

(stopping between to elaborate on what our rounds represent in regards to human impact on the environment, don't explain that there's new bad things until the end of the round)

1. No bad things
2. Some pollutants
3. Pollutants + predator to tag players and send players back to team with no tokens
4. Pollutants + predator + noise pollution
5. Pollutants + players that have been tagged, become a net to capture/kill players

**ADAPT OR OMIT ROUNDS/TERMINOLOGY TO BE FIT FOR AGE AND MATURITY LEVELS.**