

Poaching Sea Turtles: Right or Wrong?



Objectives:

- Students will be able to list multiple reasons why people poach sea turtles.
- Students will be able to discuss the effects poaching has on sea turtle populations.
- Students will be able to write a persuasive argument based upon facts.

Suggested Grade Levels: 6-12

Subject Area: Science

Timeframe: One to two 50 minute class periods

Teacher Information:

When most students are asked for their opinions or feelings on people who poach animals illegally, most will respond immediately and negatively. One of the main threats to sea turtles is human overexploitation. The issue, however, is not black-and-white. What students may not realize is that people have a variety of reasons for poaching.

The issue becomes increasingly ambiguous, for example, when we find that human survival is dependent upon the use of an endangered species as a food source. The idea behind this lesson is for students to realize that poaching, while it does affect the sea turtle population negatively, is viewed by some as a necessity. How then do we work with these situations to create sustainability?

National Education Standards:

- NS.5-8.3
- NS.5-8.6
- NS.9-12.3
- NS.9-12.6
- NL-ENG.K-12.4
- NL-ENG.K-12.5



Materials:

- If doing the advanced lesson, a copy of “Money Talks: Economic Aspects of Marine Turtle Use and Conservation” for students. This article can be found at: <http://assets.panda.org/downloads/moneytalks.pdf>.
- If doing intermediate lesson, a copy of the fact sheet for students.
- If doing the debate lesson, role cards for students.

Extensions:

- For conservation efforts, see the Sea Turtle Conservation lesson.
- Extend the learning to other organisms. What other organisms are endangered due to poaching?
- Use the case studies within the article to study different cultures.
- Instead of writing position papers at the end of the lesson, set up a class blog where students must choose a side and defend their statements.

**Lesson:**

The lesson itself has three versions. The advanced lesson asks students to read a case study (“Money Talks: Economic Aspects of Marine Turtle Use and Conservation”) and write an essay. The intermediate lesson asks the students to read a note sheet of facts based upon the above mentioned case study. From here the teacher decides if the class will debate the issue or if each student will write an essay. Finally, the debate lesson asks each student to take on a role of a person who impacts sea turtles in some way. The teacher will set up a classroom debate on the ethics of turtle use.

Prior to each lesson, students should be aware of the IUCN Redlist status of the sea turtle species:

1. Loggerhead – endangered
2. Green – endangered
3. Leatherback – critically endangered
4. Hawksbill – critically endangered
5. Kemp’s ridley – critically endangered
6. Olive ridley – vulnerable
7. Flatback – data deficient (not enough information to determine status)

For more information about the status of sea turtles and other wildlife, see www.iucnredlist.org/



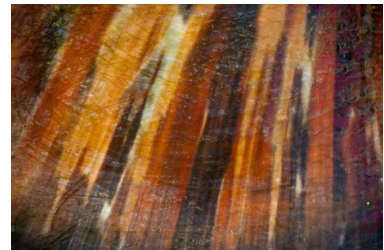
Advanced Lesson

1. This version of the lesson is appropriate for students in the upper grades, especially those taking higher-level sciences.
2. Ask students what they think about poaching and those who are involved.
3. Tell students that they will be reading a case study (see the link in the materials section). The reading level of the case study is advanced.
4. Discuss the main points of the study. For an additional discussion, ask students if the study changed their initial view on people who poach.
5. Ask students to write a position paper defending their stance on the question, "Is non-consumptive turtle use wrong?"



Intermediate Lesson

1. Ask students to read over the list of facts pulled from the case study.
2. Discuss the statements.
3. Ask students to write a position paper defending their stance on the question, "Is consumptive turtle use wrong?"



Debate Lesson

1. Ask students what they think about poaching and those who are involved.
2. Make a copy of the role cards. Distribute one per student. If your class size is greater than the number of available cards, assign a few of the same roles to multiple students.
3. Allow students a few minutes to read over their role cards and think about what they will say to the other students.
4. Tell the students that they will be debating the question, "Should humans be allowed to poach endangered or threatened sea turtles?" They will debate on one side or the other based upon the role in which they have been assigned.
5. Organize and set up a debate.
6. After the debate ask students if anyone has changed from their initial opinion on poaching.

Sea Turtle Fact Sheet

- Consumptive use of sea turtles refers to their use for eggs, meat, shells, oil, leather, or other products.
- Non-consumptive use of sea turtles refers to their use as a tourist attraction.
- Marine turtles serve as a source of food for coastal communities in some tropical and subtropical regions.
- 6 of the 7 sea turtle species are threatened or endangered.
- Sea turtles are predominantly found in areas where the economy is still developing.
- Illegal sale and trade of sea turtles, including eggs, is the way that some people make a living.
- Sea turtles are keystone species. For example, green sea turtles improve the health of sea grass beds which is one of the most valuable ecosystems in the world. Hawksbill turtles help to control the sponge population. Without this control, the population of corals would decrease further.
- Green sea turtle meat and other products are used for communal meals in Bali.
- Olive ridleys could be sold for their meat, leather and bone meal, providing income to Mexican fishermen.
- Nesting sea turtles attract many visitors to Costa Rica, providing tourism profits and jobs.
- Hawksbill turtles are killed for their shells which are used to make jewelry.
- Sea turtle eggs are collected as a source of food.
- In Ostional Wildlife Refuge in Costa Rica, people are permitted to take a number of olive ridley eggs during an *arribada*, or mass nesting. It is thought that when all eggs are left, the numbers of eggs cause nesting densities and bacterial build-up reduces hatching success.

For downloadable fact sheets on each species of sea turtles, please see:

- Loggerhead: <http://www.seeturtles.org/files/110.pdf>
- Green: www.seeturtles.org/files/106.pdf
- Leatherback: www.seeturtles.org/files/109.pdf
- Flatback: www.seeturtles.org/files/105.pdf
- Hawksbill: www.seeturtles.org/files/107.pdf
- Kemp's Ridley: www.seeturtles.org/files/108.pdf
- Olive Ridley: www.seeturtles.org/files/111.pdf



Works Cited:

Troeng, S. and Drews C. (2004) *Money Talks: Economic Aspects of Marine Turtle Use and Conservation*, WWF-International, Gland, Switzerland www.panda.org

Role Cards

<p>You are a scientist who studies green sea turtles. Without this species, the health of sea grass beds, an important ecosystem, would decline.</p>	<p>You are a scientist who studies hawksbill sea turtles. Without this species, the sponge population would grow and compete with corals for space.</p>	<p>You live in Bali, Indonesia and are of the Hindu religion. Green sea turtle meat is used as a part of your religion's rituals.</p>
<p>You are a fisherman in Mexico. Your family cannot survive off of your paycheck alone. You catch olive ridley sea turtles to sell for their meat, leather, and bone meal.</p>	<p>You live in Cuba and make extra money by catching hawksbill sea turtles illegally. You don't understand why it is still illegal to hunt the animal since their numbers have increased.</p>	<p>You are a tour guide at Tortuguero National Park in Costa Rica. You make a living by educating tourists on green sea turtles.</p>
<p>You own a hotel outside of Tortuguero National Park in Costa Rica. Your hotel is always booked around the time when green sea turtles nest.</p>	<p>You are a native Costa Rican who loves to surf. Every year tourists pack your town and beaches on their trip to see leatherback turtles. The tourists get in the way of your surfing.</p>	<p>You are a Miskitu Indian, native to Nicaragua. Your ancestors have been catching marine turtles for food for over 400 years.</p>
<p>You work at the market in Bluefields, Nicaragua. Your livelihood depends on selling green sea turtles caught by fishermen.</p>	<p>You are a Japanese jewelry designer who fashions all your pieces from hawksbill shells you import illegally from the Seychelles.</p>	<p>You live in the Seychelles where you illegally hunt for hawksbill sea turtles. You make a decent profit from the beautiful shells you export to Japan.</p>
<p>You work at a t-shirt stand in Turtle Island Park in Sebah, Malaysia. All shirts are turtle-themed for tourists to purchase.</p>	<p>You live in Maldives where turtle eggs have been collected as a source of food for centuries.</p>	<p>You are a volunteer with Projeto TAMAR, Brazil's marine turtle conservation program. You help to educate locals of the importance of sea turtles.</p>
<p>You formerly collected sea turtle eggs in Sri Lanka to make a living. The Turtle Conservation Project now employs you to patrol beaches at night to help ward off potential poachers.</p>	<p>You are employed by a group of scientists who are studying sea turtles in Trinidad and Tobago. Your role is to safely catch and tag the turtles.</p>	<p>You are a scuba guide in Barbados. Many of the tourists who take your tours are interested in diving specifically to see marine turtles.</p>