Activities Related to the Satellite Tracking of Sea Turtles

Provided by the
Caribbean Conservation Corporation & Sea Turtle Survival League

Biology

Species Identification
Compare your weight to that of a turtle
Guess where the turtles are heading
Why is the turtle traveling along its current path? What environmental factors might influence the track?
Describe the movements of the turtle. By looking at the turtle's movements, can you tell if she is migrating, nesting, or feeding?

Conservation

Make a list of threats to sea turtles. Which of threats is the turtle likely to encounter while nesting? while migrating? while feeding?
Prepare a report on your favorite species

Earth Science & Mathematics

Navigation - plot turtle locations *(Note: Data provided are approximations.)*
Use the map scale to estimate the total distance the turtle has traveled?
Calculate the number of days the turtle has been tracked.
Calculate the turtle's average daily distance traveled, and the average daily speed per hour and per day.
Are there points which seem suspicious? Identify and provide possible explanations.
What was the heading (compass direction) on each leg of the trip?
Calculate total distance traveled and straight line distance using the turtle's latitude and longitude location points. How does this number differ from your calculation using the map scale? Which is more accurate?
Calculate the turtle's average daily distance and average daily speed using your new calculation.
Compare average speed near nesting beach, during migration, and on foraging ground. Can you use speed to tell if the turtle was migrating, nesting or foraging?
Compare depths, where were most locations recorded?

Geography

Label all of the countries or states on the tracking map the turtle passes.
Ask students to label all of the territorial or state waters that a turtle passes through.

Resources & Hints

Biology

- Species information can be found at: http://www.cccturtle.org/sea-turtle-information.htm
- Migration information can be found at: http://www.cccturtle.org/behav.htm#mig

Conservation

- Threats can be found at: http://www.cccturtle.org/threats.htm

Earth Science & Mathematic

- Online Latitude/Longitude Distance Calculation to for use with the turtle's latitude and longitude location points http://www2.nau.edu/~cvm/latlongdist.html
- Online program to determine number of days between two dates for use with calculating daily and hourly speed: http://www.calendarhome.com/date.shtml

Geography

- By international law, the territorial waters, or exclusive economic zone, of each country extends 200 miles from shore. Many states also maintain jurisdiction over the waters extending from their shoreline. For example, US states have jurisdiction over waters extending out to 9 miles from shore, except for Texas and the west coast of Florida whose territorial waters extend 18 miles from shore.
- Great online mapping tool with States and Country names: http://maps.google.com
- Highly recommend downloading and using the free version of Google Earth for a wide range of Geographical topics: http://earth.google.com