

Cleaning Oiled Sea Turtles

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Objective:

The five species of sea turtles in the Gulf of Mexico were among the many threatened and endangered marine species adversely affected by the BP Deepwater Horizon oil spill in 2010. Many organizations in the Northern Gulf of Mexico responded with staff and volunteers to help rescue wild animals in distress due to contact with oil. Many of the larger marine organisms were sent to the Institute for Marine Mammal Studies in Gulfport, MS for cleaning and rehabilitation. This activity will show students one of the techniques employed by the animal rescue staff to clean sea turtles that showed visible signs of oil.

Time:

45 minutes

Vocabulary:

- Carapace – The “back” shell of a turtle, comprised of ribs and backbone
- Plastron – The “bottom” shell of a turtle, made up a formation of the collar bone
- Endangered Species – A species that has a very small population
- Threatened Species – A species that is in danger of being placed on the Endangered Species List
- Crude Oil – Unrefined fossil fuel oil
- Dispersants – Chemicals used to breakup oil molecules into smaller pieces

Materials:

- Plastic or wooden models of sea turtles (enough for groups of 3-5 students)
- 1 cup vegetable oil per turtle
- 1 Tablespoon coco powder per turtle
- 1 toothbrush per turtle
- Plastic bins (to collect oiled water)
- 1 five gallon bucket
- Dawn dish soap
- A water source
- Gloves for each student
- Aprons for everyone
- A small jar of mayonnaise

Procedure:

1. Mix 1 cup vegetable oil with 1 Tbls coco powder
2. Place turtle in plastic bin and pour oil mixture over turtle
3. Rub the oil all over the turtle
4. Holding the turtle over a bin, rinse the shell with clean water
5. Place a few drops of Dawn dish soap onto the turtle's carapace
6. Use the toothbrush to gently scrub the turtle's carapace
7. Working in small circles, scrub the entire shell (add a few more drops of dish soap if needed)
8. Rinse the carapace with fresh water – be careful to keep the head out of the water
9. Empty the oiled water into a separate container for proper disposal later
10. Holding the turtle's head up in a vertical position, place a few drops of dish soap on the plastron
11. Clean and rinse using the same method used to clean the carapace
12. Be sure to collect the oiled water in a separate container
13. Clean the flippers using the same technique. Start with the back flippers, rinse, and then clean the front flippers and rinse.
14. Change into clean gloves
15. Place a small amount of mayonnaise on your fingertip and spread it around the turtle's neck and head area.
16. Rub mayonnaise on top of head and under the chin
17. Next spread mayonnaise on the sides of the head
18. Using a toothbrush, clean the turtle's beak and mouth area
19. Be careful.... sea turtles will bite you!
20. Rinse the head and neck area with fresh, clean water
21. Using your finger, gently rub mayonnaise onto the upper and lower eyelids.
22. Clean and rinse one eye, then clean and rinse the other
23. Empty the oiled water into the container
24. Rinse the turtle with fresh water again
25. Empty the oiled water into the container

Explain:

The turtle is now ready to be placed into a saltwater holding pin. Monitor the turtle for 24 hours and repeat cleaning if needed. Activity and diet will be monitored for at least 3 weeks to ensure the animal is healthy. Once the animal is deemed safe by the veterinarian staff, it will be tagged and released back into the Gulf of Mexico.