



Discover how humans impact the world around them by simulating what happens to wildlife during an oil spill.

Materials

- Cotton balls
- Container (think of baking dishes/pans or large plastic food containers)
- Sponge
- Water
- Vegetable oil
- Dawn dish soap
- Paper towels
- Plastic straws
- Feathers (craft store)
- Fake fur or cloth scraps
- Pipet/turkey baster

Introduction

- Why is it important to respect nature and wildlife?
 - Talk about this in general, have girls answer honestly and talk about all the things they like about animals and the outdoors.
- What kinds of things do humans do that might harm wildlife?
 - Littering, engaging with wild animals, deforestation, etc.
- What was the BP Oil Spill Disaster in 2010?
 - This was the largest accidental ocean oil spill.
 - An oil spill is a form of pollution and happens when crude oil is released into the water or on land. A major cause is from large oil tankers or trucks accidentally spilling oil during transportation.
- What happens to marine life during an oil spill?
 - Marine life refers to all organisms that live in salt water—plants, animals, and microbes.
 - Oil on fur or feather prevents animals' coats from repelling water or insulating against cold temperature.
 - Eating or ingesting the oil can be poisonous.

Activity

- Removing Oil from Water
 - Cut the straw so that it fits across the width of your dish (connect straws together if your dish is wider than the length of one straw). Place the straw on the surface of the water and oil at one end of the dish and carefully move it towards the other end. You should be able to use the straw to push the oil around, leaving behind water that only has a small amount of oil left in it.
 - Use a cotton ball to try and remove small oil spots.
 - If you still have large amounts of oil, try using the turkey baster/pipet to suck it up.
 - Were you able to remove most of the oil? Which method worked best? Which method removed the most water along with the oil? Can you think of any other ways to remove more oil? Try any ideas you can think of!

Impact Questions

- Imagine if a bird were to land and dive for fish in the ocean where oil had leaked and then tried to fly.
 - Do you think the bird's now heavy, oil-coated feathers would have made flying difficult?

- How do you think soap would help? Is it safe for animals to clean themselves when coated in oil? Or is it better if humans help?
- When a real oil spill happens, clean-up crews use similar methods to either remove oil or contain it in a smaller area.
 - Which method did you find worked the best without removing much water?
 - Which one was the quickest?
 - After you cleaned up as much oil from your water as you could, there were probably still puddles of oil left on the surface and even small droplets that had sunk down into the water—this happens in real life, which makes it near impossible to remove ALL the oil from a spill.

Resources

- Program adapted from Home Science Tools. Click [here](#) to access the original activity.