



Challenger's Morning Science Segment:

June 29, 2015

Topic: Design an Experiment: Bird Food Preference

Build: Bird feeder for observation and data collection

Credit: http://www.audubonadventures.org/wild_about_birds_activity1.htm

Materials Needed:

Two empty, matching clean 2 liter bottles / permanent marker / scissors / measuring cup / two types of bird seed / string or suction cup

Building an observation bird feeder - Use a permanent marker to carefully draw on the bottle where you will be making your cuts, keeping at least 2 inches away from the base and leaving about 1/3 of the side of the bottle extending from base to the top. (The bottle will look similar to a large ladle after it's been cut.) Next, cut or hole-punch a hole near the top of the side "extension" on your feeder. This location is where you will tie yarn or use a suction cup for hanging. Repeat these steps so that you have two identically cut bottle feeders. Using a measuring cup, measure an amount of birdseed to be used and place in one of the bottle feeders. Measure the same amount of a second type of seed, and place in the second bottle feeder. Place feeders in a window to make feeding observations. On the next day, remove the birdseed and pour back into the measuring cup, one feeder at a time. Which side has less feed than when you started---what feed did the birds like the most?

The science [http://www.audubonadventures.org/wild_about_birds_activity1.htm] - This experiment allows observation of feed preferences of local birds. Keep as many variables constant as possible, such as amount of feed, appearance of feeders (identical), and the location where the experiment is held. Keeping the feeders in one location is critical. It is important to create a schedule for the start and end time of your experiments, recording important information such as feed used, predictions of results, bird observations, and recording of the results.

This activity ties into the following Challenger Camp: Animal Science, July 6-10 & July 13-17 [same camp offered during 2 different weeks], Grades 3-5 - This activity is one that will allow campers to use the scientific method from start to finish. Campers will not only design an experiment, but they will get to record results from their local environment. Campers will also extend their data collection and submit their bird observations to www.ebird.org to learn how to participate as local citizen scientists.