

# Investigation Methodology and Report

Date(s) of Experiment:

Question:

Prediction:

Hypothesis:

Materials Needed:

Dependent Variable:

Independent Variable:

Control Variable:

Other Variable(s):

Observations:

Results:

# Investigation Methodology and Report

**Date(s) of Experiment:** Ongoing since Sept 01, 2015 (start of school)

**Question:** Will blue jays come to the seed feeder, crop seeds, and fly away with them?

**Prediction:** We think that the blue jays will crop seeds and fly away with them, because winter is coming soon, and they will need to start caching seeds to have their winter supply.

**Hypothesis:** Blue jays will come to the feeder, crop seeds and fly away with them, most likely to eat some and cache some for winter, because less food is available during the winter such as seeds, fruit, and insects.

**Materials Needed:** window tray feeder; wild bird seed - especially a seed mix that contains peanuts (blue jays love peanuts!); camera or video recording device to record visits to feeder

**Dependent Variable:** behavioral: blue jays visiting feeder and cropping seeds (factor being tested)

**Independent Variable:** none for this experiment

**Control Variable(s):** location of feeder; mixed wild bird seed ; feeder location

**Other Variable(s):** weather, predators, students and activity in the room, activity in courtyard

**Observations:** 9/9: We finally spotted first 1 blue jay and then 3 blue jays in the courtyard on Wed, 9/9; throughout the day each class observed the blue jays vocalizing a "toodle-loo" call and also the standard blue jay vocalization; students also observed the blue jays flying nearby from tree to tree, vocalizing, but not attempting to go to the tray feeder; later in the day after all the students had left, Mrs. Curley observed a blue jay fly to the tray feeder and crop peanuts in his/her bill! The visit was captured on camera.

9/10 and 9/11: multiple visits to the feeders were observed directly by students throughout the day, with one observation recording 25 cropped seeds! Mrs. Curley deployed the game camera to try and capture feeder visits, but upon checking the data at the end of the day on 9/11, the data did not record (possible equipment malfunction).

**Results/Conclusion:** Blue jays do indeed crop seeds and fly away with them, most likely to cache them as a stored supply for the winter months ahead.

**Follow-up Investigations:** We will continue to observe blue jay behavior throughout the school year and try different experiments such as introducing independent variables such as different seed choice, peanuts vs. black oil sunflower seeds, different feeder locations, etc. to test the intelligence and element of choice that blue jays may display.