

CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

Name(s)

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Project Number

J2019

Project Title

Oil Spill Clean Up

Abstract

Objectives/Goals

The objective of my experiment was to determine which type of cleaning product removes the most oil from duck feathers in the case of an oil spill: Dawn Dishwashing Liquid, Witch Hazel or Baking Soda. My hypothesis was that Dawn Dishwashing Liquid would remove the most oil from duck feathers.

Methods/Materials

In the experiment, duck feathers were submerged in motor oil and then cleaned off with different cleaning products. The results were recorded by weighing the duck feathers on a pan balance before being submerged in oil, after being submerged in oil, and after cleaning off the oil. Three cleaning products were used; Dawn Dishwashing Liquid, Witch Hazel, and Baking Soda.

Results

It was found that the most effective cleaning product for removing oil from bird feathers was Dawn Dishwashing Liquid. It was also found that Baking Soda was even less effective than the control, water.

Conclusions/Discussion

In conclusion, my hypothesis was correct. Dawn Dishwashing Liquid was the most effective cleaning product for removing oil from duck feathers.

Summary Statement

My project tested which cleaning product removed the most oil from oiled duck feathers.

Help Received

Borrowed pan balance from science teacher. Parents bought materials and helped with calculations.