CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY

Name(s)
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Project Number
J1914

Project Title
Effect of Acid Rain on Barn Owl Pellets

Abstract

Objectives/Goals
The objective of the project is whether acid rain will affect the acidity in Barn Owl pellets dependent on source. The hypothesis states that there will be an increase in acidity of Barn Owl pellets from California due to the increase of acid rain in this area and its possible impact on the food chain of Barn Owls.

Methods/Materials
Barn Owl pellets and soil samples were collected from El Cajon, California and Springfield, Oregon. The pellets and soil samples were soaked in distilled water for 24 hours and then tested for pH readings.

Results
The results supported the hypothesis. The average pH from the pellets from California was lower and thus more acidic than the average pH readings from the pellets from Oregon. Oregon Barn Owl pellets had an average pH reading of 7.6. California Barn Owl pellets had an average pH reading of 6.9.

Conclusions/Discussion
In conclusion, research on acid rain reports that higher acidity in natural waters can change the concentrations of nutrients and poisons. This change may have an impact on the food chain of Barn Owls.

Summary Statement
My project is about determining whether acid rain will affect the acidity of Barn Owl pellets.

Help Received
My Mom helped me with the display board. My Grandma collected pellets in Oregon.