



**CALIFORNIA STATE SCIENCE FAIR  
2003 PROJECT SUMMARY**

<b>Name(s)</b> <b>Hannah M. Tillmann</b>	<b>Project Number</b> <b>J1924</b>
<b>Project Title</b> <b>Owl Pellets, Falcon Pellets, What's the Difference?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My project was to determine the difference between the pellets produced by owls and the pellets produced by falcons, by finding the percentage of bone that they contained. My hypothesis stated that I thought the owl would have a larger percentage of bone in its pellet than the falcon, because owls have less acid in their digestive juices which are necessary to digest bones. <b>Methods/Materials</b> In my experiment three owl pellets and three falcon pellets were needed. Each of these were weighed to find their masses. Then the owl pellets were dissected, and separated into two piles, one was fur and the other was bone. Both the fur's and the bones masses were found and by using those averages, I calculated the percentage of bone in the owl pellets. (I followed the same procedure for all three falcon pellets.) <b>Results</b> Results: I found out many things while doing my science project. The average mass of the owl pellets was 9 grams, and the average mass of the bone that they contained was 5.05 grams. In conclusion the average percent of bone in an owl's pellet was 56.1 percent. The average mass of the falcon pellets was 1.7 grams, and the average mass of bone that they contained was .38 grams. I found that there was 22.5 percent bone in the falcon's pellets. During my project I observed that the owl's pellets were of much more mass than the falcon's pellets. And that the owl pellets had a much higher percentage of bone in them. <b>Conclusions/Discussion</b> Conclusions: In my experiment I found that the owl pellets had 56.1 percent bone in them, and that the falcon's pellets had only 22.5 percent bone in them. My hypothesis was supported by my data. The hypothesis that I wrote stated that I thought there would be a higher percentage of bone in the owl's pellet than in the falcon's pellet. And in my experiment the owl pellet did have a higher percentage of bone in its pellet than that falcon. New Questions and Applications: A possible real life application to the knowledge that I gained through this project would be useful to find out if birds of prey digest differently than other birds of prey. If I were to do another science project on the same topic, I would investigate the difference between eagle pellets and owl pellets.	
<b>Summary Statement</b> the difference between the pellets produced by different birds of prey	
<b>Help Received</b> mother and father helped me to put my board together	