



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> <b>Brandon L. Storm</b>	<b>Project Number</b> <b>J1920</b>
<b>Project Title</b> <b>What's for Dinner? The Analysis of Juvenile vs. Adult Prey in Barn Owl Pellets</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The goal of this project is to determine if the common barn owl eats more juvenile prey than adult prey by dissecting and analyzing 140 owl pellets over a nine-month time span. It was hypothesized that on the graph the percentage of juvenile prey would be greater than the percentage of adult prey at the beginning of this project, but at the end of the project the percentage of adults would be higher. <b>Methods/Materials</b> Approximately 10 barn owl pellets were collected at each of two locations in the Fresno area about once every two weeks over a nine-month time span. The pellets were dissected and data were recorded in the logbook including the date, site, and number of how many juvenile prey and adult prey there were. You can tell if it is a juvenile or adult by looking to see if the two knobs at the end of the femur are attached. If they are then it was an adult, but if they are not then it was a juvenile. The percentage of juvenile and adult prey was determined for each date and location and graphs were made using Microsoft Excel. <b>Results</b> Towards the beginning of my project the number of juvenile prey was higher than the number of adult prey. On the first date of collection of this project on June 10, 2004 at one location there was a 77.78% juvenile prey and 22.22% adult prey. But at the end of the project on February 5, 2005 at this same location there was 33.33% juvenile prey and 66.67% adult prey. The percent of adult prey never exceeded the percent of juvenile prey at the other location, but when data from both locations were combined for the last collection there was 50% adult prey and 50% juvenile prey. <b>Conclusions/Discussion</b> In my hypothesis I had an educated guess that the owl would prefer juvenile over adult prey because they are more numerous and easier to catch. A large percent of rodents are born in late spring or early summer, which is about the time I started. Towards the end of the project the animals were starting to become adults before the next mating season and the owl ate more adults. I am planning on getting more results to find out what happens during the rest of this year and next year. These data may help farmers near known owl habitats and can provide information regarding rodent control.	
<b>Summary Statement</b> In this project I analyzed 140 barn owl pellets to determine if the barn owl prefers juvenile or adult prey and to determine if this preference changes overtime.	
<b>Help Received</b> Ms. Burleigh Lockwood, biologist, taught me how to analyze owl pellets. Dad drove me to the locations and taught me Microsoft Excel. Parents helped me print out and glue some pieces on the board. Mom helped me copy the application.	