



**CALIFORNIA STATE SCIENCE FAIR  
2010 PROJECT SUMMARY**

<b>Name(s)</b> <b>Bailee S. Nelson</b>	<b>Project Number</b> <b>J2415</b>
<b>Project Title</b> <b>Bug Appetite</b>	
<b>Abstract</b> <b>Objectives/Goals</b> In my project I am going to be putting a hog head in with Dermestid Beetles and another hog head in a container to decay naturally. I believe if the beetles are kept in the correct conditions then the hog head in with the beetles will be consumed before the hog head decaying naturally. I believe this because the Dermestid Beetles are able to consume a small animal head in less than 24 hours.	
<b>Methods/Materials</b> <b>Materials</b> 1. Colony of Dermestid Beetles 2. Two stripped hog heads 3. One spray bottle filled with water 4. Two large ventilated containers with lids 5. One large piece of Styrofoam 6. Heat lamp and reptile heating pad 7. Thermometer to make sure temperature is in the 60-70 degree mark. 8. Bedding such as shavings <b>Methods</b> 1. Order the beetles (order at least 4 weeks in advance) 2. Collect two hog heads, then cut away eyes, hair, tongue, brains and major fatty meat. 3. After the head are prepared, place one with the colony of beetles and the other in the second ventilated box. 4. Every two days spray a light mist of water over the beetles (put your hand and spray bottle in the container to accurately water the beetles). 5. Every day document the progress of both heads by taking notes and also taking pictures. 6. At the end of the two weeks document final results and when first head finished.	
<b>Results</b> After only 7 days the beetles had completely consumed the hog head leaving behind only the bone was left. On the other side with the natural head, nothing happened except the head dried out and was infested with maggots. This project was one of my favorite projects, out of many that I have done, because it was the most informational and it involved the outdoors, which is one of my favorite places. It shows me that even if something is small it doesn't mean that it isn't powerful.	
<b>Conclusions/Discussion</b> After finishing my results, I found that my hypothesis was correct. The beetles finished the head 7 days earlier than the natural decaying head. I gave the second head another week after the beetle head was finished hoping the decaying head would finish. It found out that natural head takes a really long time. I learned that my research helped me greatly in taking care of the beetles and keeping the beetles in the right conditions.	
<b>Summary Statement</b> My project is about how fast a colony of Dermestid beetles can consume a hog head before another hog head can decay naturally.	
<b>Help Received</b> Friend help clean the hog heads.	