



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Alisha M. Sanders	Project Number J1134
Project Title Which Product Removes the Most Oil from Oil Soaked Feathers?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective was to determine does Soft Soap, Johnson's Baby Shampoo, Dawn dish washing detergent, or plain tap water remove the most oil from oil soaked feathers? I thought that Dawn dish washing detergent would remove the most oil from the feathers because Dawn is advertised as an oil remover for dishes.</p> <p>Methods/Materials I first carefully controlled the weight and oiling of the feathers that were placed in groups of five feathers. I cleaned each group of feathers by shaking them in a jar of a solution for 30 seconds. I rinsed each feather in tap water and allowed them to dry for 12 hours. I repeated this process for the other three solutions(each solution had four trials). I compared the weight of the oiled feathers before and after cleaning to determine the amount of oil removed.</p> <p>Results In doing this experiment, I found that Dawn dishwashing detergent cleaned the most oil from the feathers. Johnson's Baby Shampoo worked second best, and Soft Soap only removed one tenth of a gram of oil more than plain tap water.</p> <p>Conclusions/Discussion In conclusion, I found that my hypothesis was correct, the Dawn dish washing detergent cleaned the most oil from the feathers. I think that these results will be able to help our environment. I recommend that environmentalists use Dawn dish washing detergent to help clean birds that are caught in oil spills.</p>	
Summary Statement I wanted to find which of four cleaning solutions would clean the most oil from oil soaked feathers.	
Help Received Parents for materials, grandparents for equipment and computer	