



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> <b>Brian J. Cook</b>	<b>Project Number</b> <b>J2208</b>
<b>Project Title</b> <b>How Does the Sweetness of the Nectar and the Color of the Feeder Affect the Amount Consumed by Hummingbirds?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of my experiment was to determine the ideal combination of nectar sweetness and feeder color to attract Hummingbirds. <b>Methods/Materials</b> Six identical clear glass bottles fitted with stopper and Hummingbird feed tube were suspended by copper wire onto a hook and were attached to a stake. Blue or Red colored paper was wrapped around each of the bottles to create two groups of colored feeders. Of the two color groups, there was three levels of sugar concentration for each feeder. <b>Results</b> Over the twenty day period, more nectar was consumed from the Red colored feeders than the blue colored feeders. Of the three concentrations of sugar tested in the experiment, the medium concentration of sugar had the highest amount of consumption. The highest concentration of sugar produced the second greatest amount of consumption. The lowest concentration of sugar produced the least amount of consumption. <b>Conclusions/Discussion</b> The best combination for attracting Hummingbirds is a Red feeder with nectar that has four cups of water per one cup of sugar ratio. If I were to conduct future experiments, I would test whether or not the shape of a Hummingbird feeder affects the amount of consumption.	
<b>Summary Statement</b> The purpose of my project was to determine the ideal combination of nectar sweetness and feeder color to attract Hummingbirds	
<b>Help Received</b> Dad helped hold the stakes in place while I constructed the stand for the Hummingbird feeder; Dr. Basilio signed the certification forms; Dad taught safety precautions when using a stove. Janica Henzie lended graduated cylinders to me and a helpful book that guided me throughout my experiment.	