



**CALIFORNIA STATE SCIENCE FAIR  
2016 PROJECT SUMMARY**

<b>Name(s)</b> Athena M. Bell	<b>Project Number</b>  36876
<b>Project Title</b> Hummingbirds and Their Feeding Habits	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective of this study is to determine what drought tolerant California native plants Hummingbird's will be attracted to and if it is the sugar level of the plant that attracts them or the color of the plant that attracts them.</p> <p><b>Methods/Materials</b> Three different colored plants (Salvia Greggii, Lavandula multifida and Cape Honeysuckle) were placed out to see which flower the hummingbirds were attracted to. The number of times the hummingbirds ate from each plant over a 30 minute period for seven days was observed and documented. Then the flower buds were placed in a test tube with 40 drops of distilled water the test tube was placed into a pot of boiling water to extract the sugar from the flower. Ten drops of Benedict's solution was then added to each test tube to test for sugar levels, the color changes that revealed sugar levels were observed and recorded.</p> <p><b>Results</b> The Hummingbirds consistently displayed a favorable response to the flower with the highest sugar content the Cape Honeysuckle. They did not favor the dark colored flower the lavandula multifida like I thought that they would.</p> <p><b>Conclusions/Discussion</b> When testing for sugar levels in the flowers the Cape Honeysuckle revealed a consistent rate of high sugar content, so we may conclude that this is why Hummingbirds ate more often from it. This study has helped me to identify which California native plants the Hummingbirds are most attracted to and what flowers I can put in my garden to help preserve and grow our Hummingbird population. In addition it will help all of us to keep a balance in our native eco system here in California.</p>	
<b>Summary Statement</b> By measuring the sugar content within three different flowers I was able to determine what flower Hummingbirds favor and why they favor that flower.	
<b>Help Received</b> I researched and did this experiment on my own. I used the internet to research ways to extract and test sugar levels. My Science teacher reviewed my process.	