



**CALIFORNIA STATE SCIENCE FAIR  
2012 PROJECT SUMMARY**

<b>Name(s)</b> <b>Margaret E. Donaho</b>	<b>Project Number</b> <b>J2202</b>
<b>Project Title</b> <b>Hummingbird Nectar Preference</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Is color important to a hummingbird when choosing food sources?</p> <p><b>Methods/Materials</b> Materials: 5 hummingbird feeders, sugar, water, non-toxic tasteless food color, journal, camera, ruler I made a sugar and water solution and added red, yellow, brown and black food color and put in feeders. I left one clear. I put them in a tree and observed and noted changes. I moved the feeders and continued observing. I refilled the feeders and changed the order to see which feeders were visited most.</p> <p><b>Results</b> When the feeders were placed in the tree, the hummingbirds went for the brighter colors instead of the darker ones. There was no significant change in the volume of dark nectar. After observing for several days, I moved the feeders to a new location. The hummingbirds continued to drink from the bright colors and did not drink from the dark colors. I saw hummingbirds drinking from the yellow and the clear feeders. Then I repositioned the feeders so that the dark colors replaced the bright colors. The dark color nectar volume went down and the bright colors were unchanged. I also saw hummingbirds feeding from the dark feeders.</p> <p><b>Conclusions/Discussion</b> I found out that lighter colors appeal to hummingbirds for finding food sources, but the location of the nectar was what kept them coming back to the same feeder regardless of the color of the nectar. Based on my observations, after I changed the feeder#s location from the tree to the railing, hummingbirds continued to prefer brighter color nectar instead of darker colors. The change in location did not change the color choice because it was like a new food source. After I changed the order of the feeders so that the black replaced the yellow, and the brown replaced the clear, they continued to drink from the locations of the yellow and clear feeders even though they were now the brown and black nectars. In conclusion, through my research and experimentation, I believe that at first color attracts them, but in the end, what matters is that they are able to locate a food source that they can continue to feed from. Even when there is a color choice they still choose the one they remember.</p>	
<b>Summary Statement</b> My project is about feeding habits of hummingbirds based on color of nectar.	
<b>Help Received</b> My mom helped me make the sugar solution. She also helped my purchase the feeders. She helped me with the display board and typing. My dad helped me make the graphs.	