



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Vianey Ellison; Josh Williams	Project Number S2305
Project Title The Impact of Increasing and Decreasing Food Sources on Hummingbird Behavior	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The goal of our project was to study the behavior of hummingbirds at artificial feeding sources.</p> <p>Methods/Materials We setup hummingbird feeders in the first phase of the study starting from 1 to 3 and then in the second phase of the study from 8 to 1 feeders and recorded the number of successful and attacked visits to a feeder area using forty-five minute viewing periods.</p> <p>Results We found that the higher the number of feeders, the greater the number of humming birds visited both sites and that birds were still very attached to the food source and defended it while there was plenty of nectar for all.</p> <p>Conclusions/Discussion We concluded that the higher number of feeders did not prevent the hummingbirds to attack each other#s and increased source of food attracted a higher number of hummingbirds than with a smaller number of feeders.</p>	
Summary Statement In adding and subtracting food sources from the area, we determined that number of artificial food sources was a significant factor in hummingbird behavior.	
Help Received Worked with guidance from Dr. Murielle Veniant as our mentor.	