



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Caleb Laures S. Empig	Project Number J2307
Project Title How Does the Distance from a Body of Water Affect Mosquito Population?	
Abstract Objectives/Goals The objective of this study is to determine whether the distance from a body of water affects the number of mosquitoes that could be counted at a site or location. Methods/Materials Experiment was done outdoors. Chose 4 sites located at different distances from a body of water (a marsh). Set up 3 mosquito traps at each site. Collected mosquito traps 24 hours later. Counted mosquitoes under a microscope. Used Microsoft Excel to calculate average counts per site. Also determined sex and species of mosquitoes. Results Site 1 (closest to the body of water) had more mosquitoes than Sites 3 and 4, which were further away. Interestingly, Site 2 had more mosquitoes than Site 1. One possible reason is that Site 2 was still close to water. The marsh was covered with tall foliage and might have obstructed my view of the water. Site 1 had an obvious pool of water. However, looking at Sites 1, 3 and 4, my data suggest that the closer you are to a body of water, the more mosquitoes would be present. Thus the distance is inversely related to the number of mosquitoes present. Conclusions/Discussion I measured the number of mosquitoes at different distances from a body of water. My results suggest that the further away one is from a body of water, the less mosquitoes will be present. This supports the fact that mosquitoes prefer being close to water, particularly since water is important for their life cycle. If there is any danger from being exposed to disease-carrying mosquitoes, my results suggest that people should avoid being close to bodies of water at times when mosquitoes are present in high numbers (for example, at dusk or dawn).	
Summary Statement I showed that the further away you are from a body of water, the less mosquitoes will be present.	
Help Received Mr. Robert Cummings from OCVCD chose site for study; assisted in setting up traps, counting mosquitoes under a microscope at his lab, also determining sex and species. My father helped in data analysis, graphing. Had helpful discussions with Mr. Cummings and my father regarding my data.	