



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Dustin A. Hartuv	Project Number S2205
Project Title Correlation between Habitat Quality, Abundance, and Diversity of California Birds	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The goal of the experiment was to identify whether species (of birds specifically) thrive more efficiently in higher habitat qualities. This was conducted because of inconsistent data conclusions in previous studies on habitat quality.</p> <p>Methods/Materials Materials for the study include a copy of Peterson Field Guide to Birds of Western North America, Fourth Edition, and one pair of Bushnell 7x35 binoculars. In an eight week period between November 30, 2014 and January 25, 2015, I observed ten species of common birds native to the Coastal sage scrub habitat in three different qualities of habitat: highly degraded, restoration in progress, and existing native, all found along the Palos Verdes Peninsula. Each habitat was observed once per week, for twenty minutes each.</p> <p>Results After the eight weeks, I averaged the amount of birds counted and found that with the exception of the house finch and the spotted towhee, all of the species of birds had the highest numbers in the restoration in progress habitat.</p> <p>Conclusions/Discussion These results most likely stem from the fact that types of feeding does not stay constant within different species of birds. As such, birds feeding on insects in open areas may thrive more efficiently in a restoration in progress habitat rather than a bird feeding on seeds. This information can be used to both quickly and efficiently raise the numbers of endangered species by correctly identifying whether one species thrives better in a specific habitat.</p>	
Summary Statement The focus of the project was to identify whether ten common species of birds native to the Coastal sage scrub habitat are more likely to thrive in a highly degraded, restoration in progress, or existing native habitat.	
Help Received Father helped take pictures of the birds; conservancy worker helped find locations for the habitats.	