



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Connor J. Hartigan	Project Number J2208
Project Title No Falcon Know Seagulls, Know Falcon No Seagulls: A Novel Approach to Bird Abatement	
Objectives/Goals My objective was to assess whether or not seagull behavior would be modified as a result of the presence of a falcon. My goal was to determine if the presence of a 'bird of prey' would alter the number of seagulls at a landfill. Further, my objective was to establish a protocol for cost effective and safe bird abatement programs that could be utilized by landfills, vineyards, amusement parks, resorts, airports, and ultimately beaches. At beaches, my goal is to impact improved water quality.	
Abstract Methods/Materials Method: 1) Arrive at landfill and follow safety procedures. 2) At sunrise begin taking photos of seagulls to determine a count. 3) Note location of seagulls -- usually hovering low to ground. 4) Falconer prepares birds by removing hood, attaching transfitter, remove leash. 5) Falconer releases falcon to fly towards seagull mass. 6) Falconer shoots flair gun to redirect seagulls and then moves to opposite side of the landfill. 7) Step 5 and 6 are repeated times. Materials: 2 falcons, quail meat for falcon training/conditioning, falcon perch, transmitter, hoods, cages, flair gun with 30 flairs, coaching whistle, vehicle to travel around bottom of landfill, camera.	
Results The results of my experiment were both interesting and impressive. After 30 minutes of stooping the falcon, half of the seagulls had left the landfill. Within an hour, zero seagulls remained at the landfill. Utilizing the falcon to scare away the seagulls had resulted in complete elimination of the entire seagull population within 60 minutes.	
Conclusions/Discussion In this experiment, I tested whether or not the use of the falcon would change the amount of seagulls at the landfill. The data supports my hypothesis. When I arrived at sunrise, I observed over a thousand seagulls. Within an hour, the falcon had scared away every seagull. My direct observation proves that having a falcon on site does directly impact seagull behavior and the number of seagulls present.	
Summary Statement A safe, cost-effective bird abatement program with an emphasis on the modification of animal behavior.	
Help Received My science instructors (Ms. Jenkin and Mrs. Rivero) for coaching, Mr. Herrera, the licensed falconer, my mom for help with editing and board assembly and Waste Management for allowing us to utilize their facility.	