



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Eduardo Cabrera	Project Number J1603
Project Title Statistical Reliability in a Marine Trapping System	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this statistical model was to examine if marine trapping systems frequently used along the coast line statistically represent the surrounding environment they are used in.</p> <p>Methods/Materials A mathematical model system was established by creating ten (10) five level #trapping models# and a randomly created environment to compare the smaller samples to. A t-Test was performed to see if data sets would meet statistical reliability at a 95% confidence level in the model.</p> <p>Results Generally, the trap models upon repeated tries did meet statistical reliability 90% of the time when t-Tested at a 95% confidence level.</p> <p>Conclusions/Discussion The statistical model in repeated samples did statistically support the methodology of the trapping system being currently used in many marine environments. Comparative real time data from several sources comes close to approximating the statistical model that was tested. This would indicate some degree of validity to the testing methodology being employed in surveying certain types of organisms in a marine environment.</p>	
Summary Statement The purpose of this statistical modeling was to examine if marine trapping systems frequently used along the coast line statistically represent the surrounding environment they are used in.	
Help Received My teacher Dr. Morse helped prepare the display board and mentored me about the subject matter.	