



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Rebecca A. Hubbard	Project Number J1913
Project Title The Effect of Color on the Behavior of Tidepool Sculpin	
Abstract Objectives/Goals The objective of my project is to find out how Tidepool Sculpin react to colors in their natural habitat. I believed that the sculpin would stay away from all the colors except for green because it is a relatively natural color. Methods/Materials I bought four differently colored six-inch square tiles: one yellow, one red, one green and one blue. I placed each tile in a tide pool containing at least two active sculpin. I observed the pool for two ten-minute periods, recording how many times the sculpin swam over the tile. I then observed the pool for another two ten-minute periods, but without the tiles. This time I counted how many times the sculpin swam over the area where the tile had been before. I considered this a run. I completed two runs for each color tile. Results The Tidepool Sculpin did not react to any of the colors. They did not favor green over red, blue or yellow. While the colors blue and yellow had results that were relatively the same, the results for red and green were greatly varied. The tidepool sculpin avoided the tiles more than they were attracted to them throughout the experiment. Conclusions/Discussion My conclusion is that the color of the tiles does not matter to the sculpin. This shows that the sculpin can recognize foreign objects in their tide pools, but this does not show if they can see colors or if colors matter to them.	
Summary Statement I studied the effect of colored tiles on the behavior of Tidepool Sculpin.	
Help Received My mom, Amy Hubbard and my two sisters sat at the tidepools with me and helped me record data. Linda Chilton of the Cabrillo Marine Aquarium gave me the idea for the project and let me work in the tidepools at Cabrillo Marine Life Preserve. She also gave me lots of information about sculpin.	