

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s) **Project Number** Brittany E. Alexander 22908 **Project Title** Does Depth Affect the Growth Rate of Balanus eburneus **Abstract Objectives/Goals** My goal was to see if the depth of tiles affected the growth rate and amount of Balant eburneus growing on them. I also wanted to study the life cycle of Balanus eburneus and also help ship builders and sailors of ships so they would know what depth Balanus eburneus prefer to attach so they would know what area of their ships they might have to give an extra coating of fowling and their problems with barnacles on ships. Methods/Materials (4) ceramic tiles (1) 4 1/2 foot piece of rope (1) thermometer (1) succy disc (string and gold metallic tissue paper) (1) pen and paper to record data and observations (1) digital camera (for pictures) (1) piece of acetate paper with grid print on it My results differed from my hypothesis because the 3rd tile had more starts and barnacles than tile 1, which I thought would have the most. I found out how this is possible. Barnacles are sensitive to UV light so they prefer to be away from the surface According to my research, barnacles prefer to be in the middle. When I found this out I was surprised. I didn't know barnacles were sensitive to UV light. That's just one of many surprising and interesting facts I fearned while doing this project. **Conclusions/Discussion** My conclusion was that the depth of the tiles did affect how many barnacles grew on each tile. The deeper the tiles were the more barnacles grew on them. Except my results turned out different. Tile 3 had the most barnacles and starts. Summary Statement Does death actually fect the growth rate of Balanus eburneus. **Help Received** Mr. Brent Susman and Professor Polne-Fulner (U.C.S.B) for their helping me choose my project and to my mom for driving me to check on my project every weekend.