

CALIFORNIA STATE SCIENCE FAIR 2017 PROJECT SUMMARY

Name(s)

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Project Number

J2204

Project Title

Shell Shocked: The Effects of Ocean Acidification on Shell Mass

Abstract

Objectives/Goals

The objective of this study is to determine whether or not ocean acidification is really the cause of decreasing shell mass in the ocean.

Methods/Materials

Variety of scallop shells, carbon dioxide pills, electronic scale, litmus paper/pH test, spring water **Results**

Overall there was a visible decrease in the mass of the shells in the acidic solution, mostly averaging around 0.05 grams per shell. However, mostly none of the shells in the normal water had any decrease, and the ones that did were due to slight inconsistencies in the massing.

Conclusions/Discussion

This project is crucial because it shows that ocean acidification is the true cause of what is causing the mass of shells to decrease. Now that this information is known, there can be measures implemented to slow down or prevent ocean acidification from happening.

Summary Statement

I tested whether or not ocean acidification is really causing the mass of shells to decrease by comparing the masses of shells over a thirty day period.

Help Received

None. I designed, built, and performed the experiment by myself.