

## CALIFORNIA STATE SCIENCE FAIR 2016 PROJECT SUMMARY

Name(s)	Project Number
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	36658
Project Title	$\sim$
An Analysis of the Effects of CO2 on the Dissolution CaCO3 in Marine	
Life	
Abstract	
Objectives/Goals	Pany Harine ecosystems at
risk of irreparable damage. The objective of this study was to isolate a correlation	on between levels of
carbon dioxide in an aqueous solution and calcium carbonate dissolution rates.	$\sim$
The correlation was calculated by setting clams into tanks with various concern	rations of $CO(2)$ , with one
being a control. The tanks were then all filled with water and CO(2) was pume except for the control. The clams were monitored weekly for pass, length we	ed into all of the tanks
tanks were monitored for CO(2) concentration, pH, and temperature.	iui, and volume loss. The
Results The data revealed a direct correlation between $CO(2)$ concentration and $CoCO(2)$	(3) dissolution rates
Conclusions/Discussion	(5) dissolution faces.
This corroborates the hypothesis that heightened CO( $\mathbf{n}$ concentrations in the at damage the CaCO(3) shells of marine invertebrates	tmosphere could severely
damage the CaCO(3) shells of marine invertebraits	
Summary Statement	
Clams were submerged in tanks with varying levels of added CO(2) and measu	red for changes mass,
width, length, and volume.	C I
Help Received	
The University of California, Riverside supplied us with materials like tanks, C the research performed was performed independently by the authors of this pro-	CO(2), and a fume hood, but ject and without the
guidance of the UCR faculty.	jeet and without the