



California Science Center
CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.) Erica Hooper; Jennifer Pacheco	Science Fair Use Only <h1 style="margin: 0;">S1211</h1>
Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9) Mighty Algae	Division _ Junior (6-8) <u>X</u> Senior (9-12)
Preferred Category (See page 5 for descriptions.) 5 - Earth Sciences/ Planetary Sciences/ Physical Environments	
Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.) Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.	
<p>The objective of the experiment was to observe the effects of various ocean pollutants on Cladophora algae. The specific purpose was to see if the algae could survive or adapt to the polluted environments. The method that the group took in order to measure the progress of the algae was by taking dissolved oxygen readings. There were various different containers of algae, the different pollutants that were added were as follows: waste (feces and urine), oil, and a "mixture" (cigarette butts, burnt paper, plastic, etc). Once the pollutants were added the group began to continually take dissolved oxygen readings to track its progress. In the process of adding the pollutants, we began to add ocean water in order to even out the water with the amount of pollutin that was continuously being added. Originally, the group thought that the pollutants would immediately stifle the algae and therefore kill it. Nevertheless, much to our astonishment the dissolved oxygen readings rose once the pollution was added. We then noticed that dissolved oxegyn readings did as expected begin to decline. However, in the week that we began to add ocean water, as mentioned above, the readings again began to increase. The results in the algae's dissolved oxegyn delinetate the final conclusion that the algae adapted to the polluted environments. In observing the exact process however, we concluded that it was most likely a combination of the addition of salt water and the adaptation that allowed the algae to survive.</p>	
Summary Statement (In one sentence, state what your project is about.) The effects of ocean pollution on Cladophora Algae.	
Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4. none	