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|  | Field Research and Experiments  In order to test the effects of coastal farming on marine algae I must find a spot with the ideal conditions. The ideal conditions would include a creek that runs through agricultural fields and joins the ocean at some point, the creek must contain testable levels of chemicals used in fertilizers (specifically nitrates and phosphates), and the ocean must have ecological changes in the distribution of algae. San Vicente Creek and the ocean at Fitzgerald Marine Reserve fulfill these requirements. To test the amount of chemicals in the water I must have Chemitests for nitrates and phosphates. It is also important to test the temperature, pH, dissolved oxygen, and salinity to see if something else is causing the change in ecosystem. It also can give data to how the chemicals are affecting the ecosystem. I must have access to an ion chromatography machine to further test the amount of chemicals and receive the exact amounts. Lastly, I must set up an experiment to test the growth rate of Ulva when exposed to various concentrations of nitrates. To do this I will set up an experiment of four fish tanks containing Ulva and feed three of them separate concentrations of fertilizer containing nitrates. In doing these experiments I should have strong evidence supporting my prediction that nitrates and other chemical greatly effect the success and distribution of Ulva lactua.  [Intro #1](http://docs.google.com/intro.html)  [Intro #2](http://docs.google.com/intro2.html)  [Intro #3](http://docs.google.com/intro3.html) |

*This Web Site is Best viewed with 256 or more colors.*

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