



**CALIFORNIA STATE SCIENCE FAIR  
2003 PROJECT SUMMARY**

<b>Name(s)</b> <b>Brandee L. Woolsey</b>	<b>Project Number</b> <b>S0815</b>
<b>Project Title</b> <b>How Does Runoff Affect the Growth and Development of Artemia nyos, Sea Monkeys?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My objective or goal of this experiment was to see how runoff affected the growth and development of Artemia Nyos, a type of brine shrimp very closely related to the type of microscopic organisms found in the Santa Monica Bay. Then using the information that I learned from this experiment and apply it to the microscopic organisms, in the Santa Monica Bay, to show, if my hypothesis is correct, that sooner or later this problem of runoff will affect us through the marine food chain. <b>Methods/Materials</b> Materials: three fourteen oz. containers, thirty oz. of distilled water, three set of instant life Sea Monkeys packets- that include a water purifier, food, and sea Monkey eggs , three oz. of motor oil, three oz. of raid, three oz. of fertilizer, three oz. of weed and grass killer, six oz. of water, five gallon bucket, twenty five oz. cup, and a fourth of a teaspoon.  I raised three container of Sea Monkeys, the first container recieved no runoff acting as my control variable. The second container recieved a homemade runoff solution half way through the experiment. The third container recieved the same homemade runoff, everyday of the experiment. <b>Results</b> My results show that the two conatiners that recieved runoff, their specimens died within three days. While the other container that did not recieve any runoff throughout this whole experiment basically did not change. <b>Conclusions/Discussion</b> The conclusion that I formed from my results are that the runoff, over time, built up in the Artemia Nyos' gills, making it impossible for them to breathe. Since the Artemia Nyos are very closely related to the Zooplakton that we can assume that the runoff will have the same affect on them. When this happens it will serverly cripple the marine food chain, which will soon cripple our food chain as well.	
<b>Summary Statement</b> To determine how runoff affects the growth and development of Artemia Nyos, Sea Monkeys	
<b>Help Received</b>	