



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

<b>Name(s)</b> <b>Ben J. Smith</b>	<b>Project Number</b> <b>J0622</b>
<b>Project Title</b> <b>Fossils of the Bay Point Formation</b>	
<b>Abstract</b> <b>Objectives/Goals</b> To discover what fossil life is found in the Torrey Pines Bay Point Formation compared to the fossil life found in the Point Loma Bay Point formation. <b>Methods/Materials</b> Fossils are collected using the random hoop toss method. A 304.8 millimeter hoop is tossed in a random area and nailed to the ground. A grid is put over the hoop and the location of each fossil in the hoop is documented. Dental picks and tweezers are used to remove the fossil to a plastic bag. In some cases, pictures are taken to document fossils. <b>Results</b> Fossils found in Point Loma included 36 <i>tivola stolorum</i> #clams#, 75 <i>cerithium atratum</i> #spiral snails#, 17 <i>calliostoma jujubinum</i> #snails#, 1 <i>memertea</i> #tube worm#, 1 <i>lima scalara</i> #scallop#, 8 <i>alosa sapidissima</i> #oysters#, 2 <i>crassostra gigas</i> #mussels#, 2 gastropods, 2 stereocidans, and 21 <i>dendirissurella scutellum</i> #Key Hole Limpets#. Fossils in Torrey Pines include 40 <i>tivola stolorum</i> #clams#, 1 <i>calliostoma jujubinum</i> #snail#, and 2 <i>crassostra gigas</i> #mussels#. "Clams# are the most common fossil in the Bay Point Formation. <b>Conclusions/Discussion</b> Fossil life in Torrey Pines is different to the fossil life in Point Loma. Point Loma had a greater variety of fossils, ten different species. Torrey Pines had a smaller variety, only three species. This may be due to a lack of tide pools that some animals depend on. Torrey Pines may not have had tide pools, just sandy beaches where clams can bury themselves in the sand. Point Loma may have had tide pools for animals like snails and keyhole limpets. Clams were common to both locations because clams are abundant and could adapt to living in both protected tide pool environments and rugged, unprotected seashores.	
<b>Summary Statement</b> This project compared the fossil populations found in the Bay Point Formation of Point Loma and Torrey Pines in San Diego, California.	
<b>Help Received</b> Parents drove and assisted me	