



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Teo A. Palmieri	Project Number S0898
Project Title Soil Compaction	
Objectives/Goals To test soil compaction in 5 different locations	
Methods/Materials Knitting needle Spool Rubber band Permanent Marker 5 1/2 pound weight Creek flood plain Creek bank Temperate forest Mountain Pasture land	
Abstract Results Most compact was the creek bank and the least compact was the creek flood plain	
Conclusions/Discussion My science fair is about soil compaction and which environments have the most and least compact soil. I observed, after averaging my data, the most compact soil was the creek bank at 1.85 cm, followed, in order, by pasture land at 7.0 cm, temperate forest at 8.0 cm, mountains at 10.33 cm, and creek at 14.2 cm. My hypothesis stated that the creek flood plain would be the least compact and the mountains would be the most compact. My data showed that the creek flood plain was the least compact and the creek bank was the most compact which made my hypothesis 50% correct. If I were to do this project again I would record weather patterns for 2 weeks before collecting data. I learned what to expect regarding soil compaction if I wanted to build a building in one of these 5 environments.	
Summary Statement Testing soil compaction in 5 different natural environments	
Help Received Mother helped with layout of board and brought me to the locations tested	