



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Adam J.P. Krause	Project Number S1610
Project Title Natural Reintroduction of Valley Live Oaks in an Abandoned Walnut Orchard in a Major Urban Park	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals I tried to show that there is a pattern for the new Valley Oak trees that are growing in an abandoned Walnut tree orchard in a city park.</p> <p>Methods/Materials I counted young Valley Oak trees. I located them in grid squares and showed how far they were from the big Valley Oaks around the edge of the orchard. The grid squares were already there as the Walnut trees were planted 60 feet apart in all directions. The young Valley Oaks inside each square were counted and recorded on a map. The only trees that were counted were trees above 3 feet in height and larger than one inch in diameter. The big Valley Oaks on the edges of the orchard were measured in diameter.</p> <p>Results There is a relationship in the number and locations of new trees that are growing and the locations of old trees that are next to the main road.</p> <p>Conclusions/Discussion I have shown that there is a concentration of naturally occurring Valley Oak trees. As of yet I have not proved why this happens, but some of the possible reasons would be, there is an underground stream effecting soil moisture, different places in the orchard have different levels of fertile land, the shadows from the established Walnut trees affect the new Valley Oaks, or even that squirrels bury nuts only in certain locations.</p>	
Summary Statement It is about the natural reintroduction of native vegetation in an urban park.	
Help Received Paul Krause (father) helped with the tree measurements; Mary Krause (mother) helped arrange the information on the poster; and Jena Krause (sister) also helped arrange the information on the poster.	