



CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s) B. Shayna Zeigen	Project Number J1035
Project Title Black vs. Tawny	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals This experiment was designed to find out which leopard coat color provided it more protection, black or tawny. My hypothesis was the standard leopard (tawny with black spots) would have better camouflage than that of the black leopard (dark brown with black spots).</p> <p>Methods/Materials To test this experiment, I set up two habitats, one similar to the one a standard leopard would be found in out in the wild and one that a black leopard would be found in in the wild. Testing seven participants, I asked them to find six standard leopard in five seconds for ten trials and then do the same with the black leopards in their habitat. I know because of dominant and recessive genes, that a black leopard could be found in the savannah and that a standard leopard could occasionally be found in the jungle. Because of this knowledge, I put the six standard leopards in the jungle (black leopard) habitat and the six black leopards in the savannah (standard leopard) habitat. The participants now had to find the standard and black leopards, but in switched habitats.</p> <p>Results The standard leopard proved much more protected by its coat in its most common habitat than the black leopard did in its. While the black leopard was being found over 50% of the time, the standard leopard stayed hidden and protected. Suprisingly, the black leopard was more successful when the habitats were switched, but by a much smaller margin.</p> <p>Conclusions/Discussion When the leopards were in their natural habitat, the standard leopard was clearly more successful at staying hidden. But, when they were in switched habitats, the black leopard proved more camouflaged at hiding. Although the black leopard and standard leopard were in a way more successful, the standard leopard stayed protected by a much larger difference than when the black leopard was protected. Since my question was which leopards' coat provided more protection in its own environment, my true conclusion is that the standard leopard and its coat are adapt its habitat than that of the black.</p>	
Summary Statement This project was meant to discover which leopard coat color provided it with more camouflage and protection.	
Help Received Mrs. Taylor helped me develop a working project idea; Mother, Father, and Randy helped by volunteering and buying supplies; Sharon, Janan, Jasmin, and Nicole helped by volunteering; Alex helped by giving my Zoo Tycoon; Mr. Whitaker helped by showing me how to do a graph; San Diego Zoo and RSD	