



**CALIFORNIA STATE SCIENCE FAIR  
2013 PROJECT SUMMARY**

<b>Name(s)</b> <b>Hannah Engel; Cassie Korb</b>	<b>Project Number</b> <b>J1209</b>
<b>Project Title</b> <b>Pacing Pets: The Effect of Roaming Space on Distance Walked in Pets</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Our main objective in doing this project is to spread awareness on pet obesity and get pets to lose weight, therefore giving them a better life without always being tired, and having trouble breathing because their weight is constricting their lungs.</p> <p><b>Methods/Materials</b> Procedure: Buy 6 pedometers, Buy 6 Saddles, Buy collars , Put Saddles on 6 chickens, Hook the pedometers on the bottom of the chicken's saddles at 8AM , Put 3 of the chickens in an enclosed space, Put the other 3 chickens in an area where they can roam free, Leave pedometers on for 12 hours, Take off pedometers at 8PM, Record the number of steps that were taken, Put pedometers on chickens the following day at 8AM , Switch the chickens so that the ones that were enclosed now roam free and the ones that were let roam free are now enclosed, Leave pedometers on for 12 hours, Take the pedometers off at 8 PM, Record the number of steps that were taken, Put collars on cats , Put pedometers on cat's collars at 8AM, The repeat steps 6 through 15 with cats, Put collars on dogs, Put pedometers on dogs collars at 8 AM, Repeat step 6 through 15 with dogs, Put collars on goats, Put pedometers goats collars at 8 AM, Repeat steps 6 through 15 with goats.</p> <p><b>Results</b> Every one of the 24 commonly owned mountain household pets took more steps and covered more distance in a 12 hour period if they were let roam free rather than being kept in an enclosed space. The goats took the most steps overall, covering the most distance, while in an enclosed and while they were let roam free. The chickens took the least amount of steps, and covered the least amount of distance. The results were amazing, every last one of them showing that animals will walk more if they are allowed an unlimited amount of space.</p> <p><b>Conclusions/Discussion</b> Our hypothesis was correct, every one of the 24 chickens, dogs, cats, and goats that we tested took more steps if they were let roam free, rather than being restricted to an enclosed space. Goats took more steps in meters, this was because they were allowed the biggest roaming area on the roam free day, not being denied any space and were let roam for 10#s to 100#s of acres. This shows that if your pet is allowed an unlimited amount of roaming space, it will walk more and get more exercise.</p>	
<b>Summary Statement</b> Our project is covering the subject of pet obesity through exercise, comparing the results distance covered and the number of steps taken in various 12 hour periods by common pets in mountain households.	
<b>Help Received</b> Science teacher helped explain written report process.	