



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Natalie A. Davis	Project Number J2405
Project Title Moon Phase Effects on Polish Rabbit Litter Size	
Abstract Objectives/Goals Does the lunar cycle affect the litter size in Polish rabbits? This project looks at the relationship between rabbit litter size and the moon's phase at the time the rabbit was bred. Rabbits do not have an estrus cycle, but are induced ovulates, releasing eggs only after they are bred. Therefore, they can be bred at any time of the month. My goal was to determine if the moon's phase at the time of breeding would affect the size of the litter. Methods/Materials Rabbit litter sizes vary depending on the breed, so I narrowed my study to Polish rabbits. A blind study was used to gather information from Polish rabbit breeders throughout the United States and Canada. My letter to the breeders stated that I was conducting a study to find out if weather at the time of breeding affected the litter size. I asked the breeders to submit: date of breeding, number of kits in the litter, zip code (I told them I would use the zip code to look up the weather on that date for that region). Using the information they submitted about breeding dates, I was able to determine what the moon's phase was at the time the does were bred. The results were divided into categories: full moon, new moon, waxing or waning moon. I then used the information about each individual litter to determine the average litter size for each category. Results My research from over 300 individual litters indicated that rabbits bred during a full moon phase had an average of more kits (3.2 kits), than rabbits bred during a new moon or a waxing/waning moon phase (2.8 and 2.7 kits). Conclusions/Discussion I have raised Polish rabbits for 4 years as a part of my 4H breeding project. The results of this study will help me and other rabbit breeders if we want to get the highest number of kits possible in a litter. As a part of my blind study I also asked the breeders for their zip codes. I would like to do further research to see if weather or length of day might also be a contributing factor to litter size.	
Summary Statement This project is the study of the relationship between the moon's phases at the time of breeding, and the sizes of litters in Polish rabbits	
Help Received Mother helped me cut and laminate the project.	