



**CALIFORNIA STATE SCIENCE FAIR  
2008 PROJECT SUMMARY**

<b>Name(s)</b> <b>Julia M. Riedelsheimer</b>	<b>Project Number</b> <b>J2011</b>
<b>Project Title</b> <b>Comparing Aggressive Behavior of Chicken Genders at Various Stages of Development</b>	
<b>Abstract</b> <b>Objectives/Goals</b> I will compare aggressive behavior in chicken genders at various stages of development. I will determine if roosters are more aggressive than hens when they encounter different challenge obstacles. I am using 10 roosters and 10 hens. I will do this investigation in a 7 by 4 foot rectangular box. I will test 5 chickens at a time: 3 roosters and 2 hens. I will put the chickens at one end of the box and the food at the other. I will measure aggressive behavior by timing to see which chicken gets to the feed first. The first challenge is a 10 inch wall to see how quickly the chickens get over the wall to the feed. The second challenge is to put a fan behind the food. The third challenge is a small feeding container. I will do 20 trials for every challenge. I will use 4 month old chickens and then I will repeat this investigation with three week old chicks and compare the results. I will learn if roosters are more aggressive in feeding then hens and at what stage this occurs. <b>Methods/Materials</b> 10 hens(4 months)10 roosters,7 by 4 foot box,10 inch board, feed,tape,fan,4 hen chicks, 4 rooster chicks,long feeder,small feeding container,stop watch <b>Results</b> Control with the 4 month old chickens, the hens the quickest average 38.70 seconds. 10 inch wall the roosters were first average 40.49 seconds. Strong wind the roosters first average 46.23 seconds. Single small feed container the roosters were first average 31.49 seconds. The results for the 3 week old chicks are still in progress. <b>Conclusions/Discussion</b> I learned that the roosters at four months of age, are more aggressive than hens when there are different challenges in place. When the hens and roosters were timed in the control, the hens on average got to the food first. When I placed different variables like the wall and the fan, the roosters showed their aggressiveness over the hens by getting to the food first. The challenge that showed the most difference was the small feed container. The chickens I used were only 4 months old and I can already see the aggressive behavior compared to the hens. I plan to continue this experiment with 3 week old chicks and compare the results. In my experiment so far I found that in a non-challenging environment the gender feeding habit did not change. When forced with a challenge the male definitely becomes more aggressive. Further testing with 3 week old chicks is necessary to see if this behavior continues.	
<b>Summary Statement</b> The purpose of my project is to compare aggressive behavior in chicken genders at various stages and determine if roosters are more aggressive then hens when they encounter different challenge obstacles.	
<b>Help Received</b> Mother helped type my report	