



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Haileigh K. Stainbrook	Project Number J1435
Project Title Nutritional Mineral or Formulated Drug: The Effects of Different Anthelmintics on Range Land Cattle, Year II	
Abstract Objectives/Goals The purpose of my experiment is to determine which anthelmintic would be most effective in reducing internal parasites in range land cattle. Methods/Materials I randomly placed 21 steers into three test groups and then took fecal samples rectally from each steer and administered the appropriate anthelmintic {Safe-Guard (fenbendazole) Paste 10%, Copper Sulfate, and Control}. Each group of seven were weighed and the weights were recorded. The whole group of 21 steers were released into their designated pasture. Every seven days, fecal samples and weights were taken by test groups until a significant reinfestation occurred in all three test groups. A complicated laboratory process was followed to observe the fecal samples for ova. Results Group one {Safe-Guard (fenbendazole) Paste 10% } had the largest decrease of internal parasites. Group two (Copper Sulfate) had fluctuating ova counts and the fastest weight gain. Group three (Control) had an overall higher infestation of ova and the slowest weight gain. Conclusions/Discussion In conclusion, it seemed that Safe-Guard (fenbendazole) Paste 10% worked better in controlling internal parasites. Copper Sulfate did have positive results, but would need to be administered more often and it would be more labor intensive. The cattle used seemed to be deficient in copper, so therefore, after receiving the Copper Sulfate, the cattle could utilize their feed and gain weight faster.	
Summary Statement My project was on the effects of different anthelmintics such as Safe-Guard (fenbendazole) Paste 10% and Copper Sulfate on range land cattle.	
Help Received Dr. LeRoy Krum provided lab equipment, books, and materials. Mom helped with the board and photos. Dad helped with the cattle.	