



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Steven S. Higginbotham	Project Number J1211
Project Title Impact of Gray Wolves on the Predator/Prey Relationship of the East Fork Winter Range	
Objectives/Goals The project goal/objective was to investigate and research the impact of wolves on the predator/prey relationship of the East Fork Winter Range and to determine their affect on other wildlife species that inhabit the range.	
Abstract	
Methods/Materials I completed extensive field work (my entire summer) at the range and conducted interviews with specialists. I counted carcasses I found on the range and attempted to determine the predator involved. I tracked and observed wolves and other wildlife species that inhabit the range and surrounding areas. I used the follow equipment: radio telemetry device, GPS, compass, topographical maps, binoculars, digital camera and field notebook.	
Results I discovered wolves have dispersed elk throughout the winter range and surrounding areas. The carcass count helped to determine the geographic locations on the range in which wolves prey on elk most often. I observed many elk staying at lower elevations throughout summer and during the calving season as the wolves head to higher elevations. During my field study I observed a healthy population of scavengers which have benefited from the wolves presence.	
Conclusions/Discussion Wolves have had a significant impact on the East Fork Winter Range. They have dispersed the large population of elk that winter there and in surroundng areas. This has helped habitat such as riparian areas which are healthier as the elk must constantly be alert, aware and on the move due to wolf predation. Wolves have also dispersed the coyote population which had taken a large toll on pronghorn fawns. Now there is a greater survival rate of fawns. Scavengers have more available food sources due to wolf kills. The wolves have proven to be a positive presence in the ecosystem.	
Summary Statement My project is focused on the impact of wolves on the predator/prey relationship on the East Fork Winter Range and their impact on other wildlife species that inhabit the range.	
Help Received Father helped type and tape board. Radio telemetry device used under the supervision of Wyoming Game and Fish Wolf Biologist	