

## CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J1024** 

## **Project Title**

# **Are Domestic Dogs and Wolves Similar in Their Hierarchical Behaviors?**

### Abstract

## Objectives/Goals

The objective was to see if a domestic dog pack's hierarchical behaviors were similar to those of wolves. **Methods/Materials** 

I observed seven domestic dogs on two acres of land and recorded hierarchical behaviors among the "pack." At three different intervals throughout my study I introduced eight bones to the pack in order to record the eating order, and observe whether or not it was affected by the social ranking. Upon obtaining a large sample of observations I then researched the hierarchical behaviors that are seen in wolves. To get my results I compared my research of wolves with my observations of the dogs.

## **Results**

My domestic dog pack did indeed exhibit hierarchical behaviors similar to those of wolves. Different degrees of submissiveness and aggressiveness were displayed by the pack of domestic dogs, and eating orders were affected by social ranking.

## **Conclusions/Discussion**

My hypothesis was correct, because the dogs displayed similar hierarchical behaviors to those of wolves. According to my study both species live by a highly organized rank system, as was demonstrated by their eating order, social interactions, etc. Although the majority of their behaviors were similar, there were some differences, such as in a wolf pack there are both a female and male Alpha, whereas in my study there was only one Alpha, as all of the dogs were spayed or neutered and a breeding pair was not necessary.

## **Summary Statement**

My project was about comparing hierarchical behaviors of dogs and wolves.

### Help Received

Project advisor Victor Aubin assisted me in putting the finishing touches on my project before reaching county.