

CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s) **Project Number Daniel Keeley; Kathryn Keeley J1915 Project Title Feeding Preferences of Woodland Birds** Abstract **Objectives/Goals** We did our project because we were interested in the eating habits of woodland birds. **Methods/Materials** We investigated the effects of location, environment, and seed type and tested the hypotheses by measuring the weight of seeds eaten and by observing which birds ate which seeds under different conditions. **Results** In our experiments that tested the effect of location, we found that birds preferred the feeder under a tree, and that the distance from the ground had no effect in the open, but did have some effect under a tree. In our experiments that tested the effect of environment, we showed that color of the bird feeder had little effect on bird preferences, the presence of a decoy-owl caused birds to avoid the feeder, but if the owl remained there for a week, birds became use to the owl and they were no longer affected by its presence. In our experiments that tested the effect of seed type, we discovered that birds preferred the bigger sunflower seeds and we found that birds avoided blue and red dyed seeds and greatly preferred the more natural yellow-dyed corn. In our experiments involving observations, we observed 14 bird species over 13.5 hours. There were strong preferences by species for different seeds. Also, some bird species preferred to feed on the ground and some preferred the feeder. In addition, when the owl was present at least one bird avoided the owl entirely. **Conclusions/Discussion** In conclusion, birds have definite preferences and birds differ in their preferences and ability to adapt to different conditions. **Summary Statement** In our project we wanted to see if seed-eating birds preferred different conditions during feeding. **Help Received**

Father helped build bird feeders and proofread report.