

# Factors that Affect Bird Activity and Diversity In Jefferson County in the Morning vs. the Afternoon

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My project compares bird activity in the morning and the afternoon to determine if the time of day and temperature affect the diversity and number of birds found in my yard. Ornithology, the study of birds, offers us valuable information about the health of our ecosystem. The more we know about bird behavior, the more we can help bird populations survive. I have been interested in birds since the age of six because they are so unique and different from any other animals. When my biology assignment was to research life in my yard or neighborhood, I jumped at the chance to study birds. My hypothesis was that there is higher bird activity in the morning than in the afternoon and that birds were more active when it was colder. I formed this hypothesis because I assumed that they needed more energy to stay warm. So over a span of three weeks in late November and early December, I collected data from the birds in my yard. I gathered data for fifteen minutes between 7:30 and 8:30 in the morning and the same between 3:00 and 4:00 in the afternoon. According to the data I collected, there is no significant difference between bird activity in the morning and in the afternoon. To create a more conclusive study, I will have to conduct further research and observations using more factors. Doing this research project did teach me more about the numbers and variety of birds in my area during the late fall and early winter. The results of my research contribute to the conservation of birds in North America through the work of the Cornell Lab of Ornithology. If through further study I find that the factors I measure make no significant difference, then it could mean that as temperatures warm due to climate change, birds may be able to adapt to these rapid changes in climate.