

Does Temperature Affect Black-capped Chickadee Visits to Feeders?

by Michael, Grade 8
Tualatin Valley Junior Academy,
Hillsboro, OR
Mr. Kahler

Introduction

While I was observing birds at the Tualatin Valley Junior Academy bird blind, I was wondering why sometimes there were more Black-capped Chickadees than other days. So I decided to test if temperature affected the amount of Black-capped Chickadees seen.

Procedures and materials

On days which we went out to the Downy Creek bird blind, we would follow the same procedure. First, while we were still in the classroom Mr. Kahler would give us the temperature, barometric pressure, humidity, etc. Once all that was recorded the class would walk down to the bird blind. There we would observe for usually about 25 minutes. After we finished Mr. Kahler would go over the data to make sure we all had the same number of each species of birds. The materials included binoculars, tally sheet, and a pencil.

Problem and hypothesis

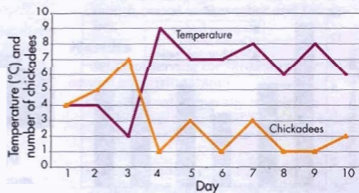
My hypothesis is: If the temperature is higher, then more Black-capped Chickadees will come to the feeder.

The variables that we kept constant were location, time of day, and (within 10 minutes) time. The things that changed were temperature, humidity, barometric pressure, and how many birds were observed.

Results

Over 10 days I observed a total of 27 Black-capped Chickadees. The most chickadees observed on one day was 7, and the least amount of chickadees observed was 1. There were 5 days that the temperature was below 7°C, and 5 times it was 7°C or above. On the days the temperature was below 7°C there was a total of 19 chickadees, the total of chickadees on days where the temperature was above 6°C was 9. On the day with the highest temperature, (9°C), there was only one chickadee ob-

Figure 1. Comparing number of chickadees to temperature



served, and on the day with the lowest temperature, (2°C) there were 7 chickadees.

Analysis and Conclusion

Data that I have collected prove that my hypothesis is neither correct nor incorrect. On the day with the temperature being the highest, there was only 1 bird seen. On the day with temperature being the lowest there was 7 birds seen. The reason I say my hypothesis wasn't proven is that when the temperature was in the middle, there were 2 or 3 birds seen. Even though this would seem that the temperature did affect the Black-capped Chickadees it just isn't enough difference between 1 or 2 birds. To make this experiment better for next time I would want to go out on a regular basis and over a longer period of time instead of about 25 minutes it should be about 45 minutes.

References

"Black-capped Chickadee." www.hww.ca/hww2.asp?id=29



Blue Jay

by Solomon and Bronner, Grade 7
F. D. R. Middle School, Ramsey, NJ • Mrs. Mueller