

How Does the Temperature Affect the Number of Song Sparrows We See?

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Introduction

When my 7th-grade class and I go out to the Tualatin Valley Academy bird blind, we see lots of birds and we record the amount of birds that we observe, sorting them by species. I noticed how the weather affects the amount of birds we see and how they act. This interested me, and I wondered how this affected one of the most commonly seen birds, the Song Sparrow. So I asked myself, how does temperature affect Song Sparrows?

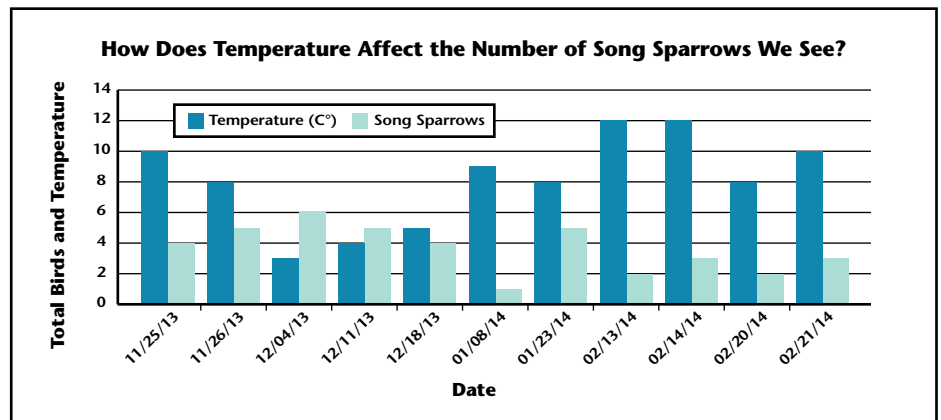
Hypothesis

My belief is that if the temperature is lower, then there will be more Song Sparrows. This is based off the fact that when the weather is colder, there is less food available elsewhere other than the feeders, so they come to our feeders.

BirdSleuth says: Most resident birds of temperate areas eat seeds, nuts, and berries; food that is found year round.



by Liliana, Grade 7, Liberty Middle School, West Orange, NY, Mrs. Villalobos



Materials

Tally sheet, pencil, binoculars, bird ID book, coat (just in case of not-so-pleasant weather), weather station (for measuring temperature and so on)

Methods

Once we gather the materials, we write down the temperature and the other information we might need from the weather station on the roof. Then we head out to the bird blind where we gather data by observing the birds that we see coming to the feeders. After we get back to the classroom, we enter the data into our eBird accounts.

Variables

The independent variable is the temperature because it can vary from day to day.

The dependent variable is the number of Song Sparrows that we see because that number is affected by the temperature.

Results

Our data show that there seem to be more Song Sparrows when the temperature is lower (see graph).

Discussion

Our observations supported the hypothesis. The hypothesis stated that there were more Song Sparrows at the feeders when the temperature is cooler. When the weather is warmer, fewer Song Sparrows visit the feeders. I think this is because of the lack of food elsewhere.

The temperature affects the birds' food supply. Cold temperatures seem to kill plants and cause the bugs to disappear, reducing food sources and other forms of nourishment. So, birds come to the feeders at the bird blind when it is cold. For example, on January 8th the temperature was higher than normal, and the Song Sparrow count was lower than average. However, on December 4th, the temperature was lower, and the Song Sparrow count higher. This shows that there are fewer Song Sparrows when the weather is warmer.

This is also true for almost all the birds that we see at the bird blind. They come to the feeders when their other food sources are harder to find. Temperature affects their everyday behavior and ability to find food. To me it's fascinating that something like temperature can affect something in such a way that it can change the very way they act.

References

- www.paulnoll.com/Oregon/Birds/climate-temperature.html