

# What Affects the Number of Sparrows Seen at the Downy Creek Bird Blind Over Time?

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

## Introduction

After a few weeks of bird watching the sparrows caught my attention. We didn't see too many of them. So I got curious and decided to look back to see if the amounts of sparrows seen has varied. To make this report more interesting I have decided to go back to when the first sets of data were collected for bird watching at the Downy Creek Bird Blind. Instead of just using one type of sparrow for this report, I have decided to use all of them. They include: Fox, Golden-crowned, House, Song, Lincoln's, White-crowned, and White-throated Sparrows. The question I have decided to answer for this report is: what affects the number of sparrows seen at the Downy Creek Bird Blind over time?

## Purpose

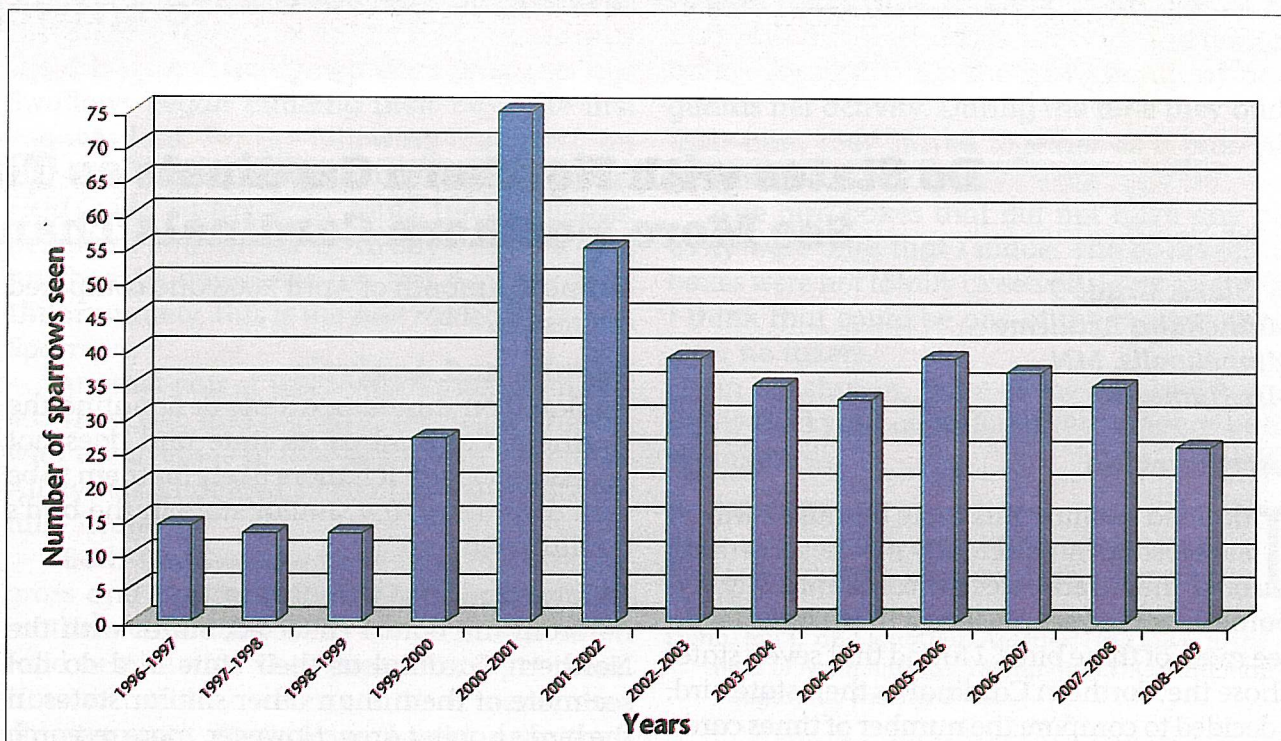
The purpose of my report is to find out what has caused the number of sparrows I see to change over a certain amount of time. I want to find out if it was the weather or houses being built and such. So I am going to do research on what different things have been going on since 1996. For example, were there more houses built near by, or if the weather patterns have changed. This will then help me figure out how much the number of sparrows seen has increased or decreased because of what changes in the environment have been made.

## Hypothesis

I have chosen to create a hypothesis for this report based on what my report is about and my hypotheses is: If the environment around the bird blind has changed, then fewer sparrows will be seen.

## Procedure

To be able to answer my question I will have to do some research on my topic. In addition, I will also have to look at the data collected from 1996 until my most recent recorded data. I will then look at my recent data and see if I can find out why the number of sparrows observed has been changing over the past few years. Then I will compare my data and things such as the weather and other changes in the environment to see if I can figure out what triggered some of the changes of the number of sparrows seen.



For this research report the independent variable would be the changes that occurred for the number of sparrows seen to change. And so my dependent variable would be the sparrows.

To do this research I have used the following materials; pencils, tally sheets, weatherbug.com, my bird identification field guide, tally sheets from the last twelve years of bird watching at Downy Creek, binoculars, bird feed, and the bird blind itself.

## Results

As I started to look at maps of the area around my school over the last thirteen years, I saw that many houses were built around the school especially near the bird blind. Also, across the street from our school many other commercial type buildings were built. So that could make an impact on the amounts of sparrows that have been seen. I have created a graph and a table. The table shows the greatest amount of each kind of sparrow seen from 1996 to 2009. The graph shows the total amount of sparrows seen per year.

If you look at the table and graphs it is very clear. You can see that the number of sparrows seen was at first very low. Slowly they started to appear more and then started to stop showing up so much. By looking at the table you can see that the House Sparrow has been the most commonly seen sparrow at the Downy Creek Bird Blind.

## Conclusions

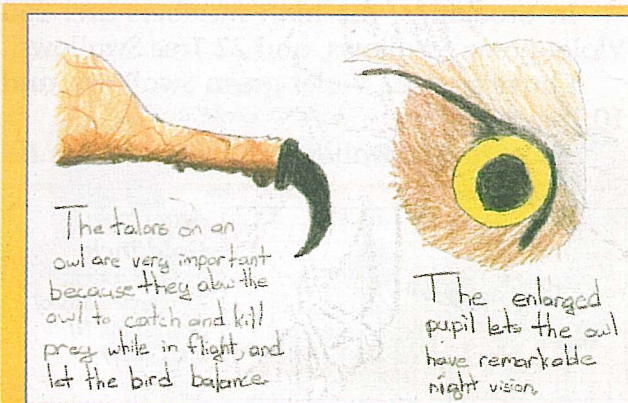
As I did my research I saw that while more homes and other buildings in the area were being built more sparrows started to be seen in the bird blind. It seems as if they then went to the forest behind our school causing them to be seen more at the Downy Creek Bird Blind. My hypothesis was wrong, I thought less sparrows would be seen but it turns out I was wrong. The conclusion I have come to is that have not been disappearing at the bird blind because of building development but rather been appearing more often.

By looking at maps around the school in 1996, there were hardly any other buildings near the school or close the Downy Creek Bird Blind. As time progressed, by 2002 the suburban development around the school had really increased. The weather hasn't impacted the amount of sparrows seen too much. Overall many sparrows are still seen daily at the Downy Creek Bird Blind.

## Bibliography

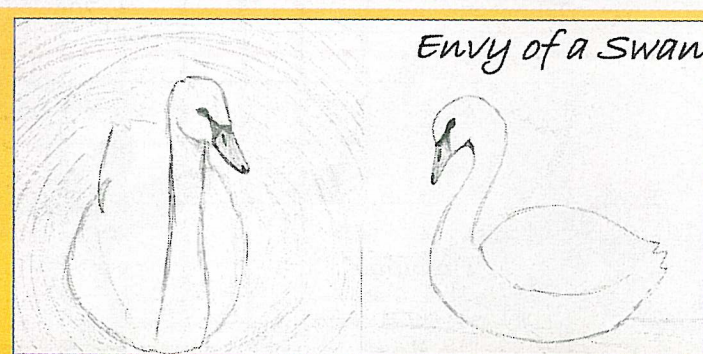
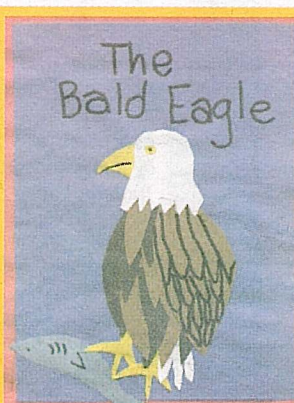
- eBird. 2009. eBird: An online database of bird distribution and abundance [web application]. Version 2. eBird, Ithaca, New York. Available: [www.ebird.org](http://www.ebird.org). Accessed: March 4, 2009
- Kahler, P (2008). Feeder Data. Retrieved March 1, 2009, from The Bird Blind at Downy Creek Web site: [www.tvja.org/science/feeder\\_data.htm](http://www.tvja.org/science/feeder_data.htm)
- (2009). Your Local Weather. Retrieved March 4, 2009, from WeatherBug Web site: <http://weather.weatherbug.com/OR/Portland-weather.html?zcode=ZWB60&stat=HILBR>

Greatest number in Year/ Bird Species	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Sparrow, Fox	8	3	3	2	5	3	2	3	3	2	1	1	4
Sparrow, Golden-crowned	2	5	5	4	4	4	2	1	2	2	3	4	1
Sparrow, House	0	0	0	18	60	41	30	25	20	26	27	26	6
Sparrow, Lincoln's	0	0	0	0	0	1	0	0	0	0	0	0	0
Sparrow, Song	4	4	5	3	6	5	5	5	7	6	4	4	15
Sparrow, White-crowned	0	0	0	0	0	0	0	0	0	2	0	0	0
Sparrow, White-throated	0	1	0	0	0	1	0	1	0	1	2	0	0
<b>Total</b>	<b>14</b>	<b>13</b>	<b>13</b>	<b>27</b>	<b>75</b>	<b>55</b>	<b>39</b>	<b>35</b>	<b>33</b>	<b>39</b>	<b>37</b>	<b>35</b>	<b>26</b>



**Owl Details**  
by Victoria, Grade 6  
Jenkins Middle School,  
Colorado Springs, CO  
Ms. Biggs

**Bald Eagle**  
by Mia, Grade 4  
Assumption School  
Morristown, NJ  
Ms. Cooney



**Swan** by Chalice, Grade 5  
Mountain Gap Middle School, Huntsville, AL, Mrs. Hill