# SNOWFALL CONTRIBUTIONS TO SCHOOL CALAMITY DAYS: A CLIMATOLOGICAL STUDY

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#### ABSTRACT

This project was started because of a previous project. When it came time to complete all the requirements to finish the project it would have cost at least eight hundred dollars for a weather balloon. The decision was to come up with another project dealing with snow since there weren't any projects dealing with snow. Let's get started. First, the needed materials before starting are, a centimeter marked ruler and hypothesis and a purpose or problem.

After getting a ruler in centimeter measurements, clipboard, and a writing utensil the next step is to record the problem and hypothesis. The hypothesis is "I believe the amount of calamity days (disaster or catastrophe days) have decreased. The problem or purpose of why this specific project was picked is everyone likes school closing days in the winter.

It was critical to figure out how snowfall affects our school calamity days. So every calamity day we have measurements would have to be taken. The Roswell Kent Middle School field is where the measurements were taken. Data was taken in centimeters instead of inches because Globe Protocol uses centimeters.

Then record the data on to the results sheet. Next, Is to come up with a title for the project which is, "Snowfall Contributions To School Calamity Days: A Climatological Study." As copies of the work fly fresh out of the printer, the last thing being worked on is the conclusion, which explains how could this experiment improve or lead into another study. Now everything is put together on the board. It's time to compete against the competition and make it to districts Science Fair.

## **HYPOTHESIS**

I believe the amount of calamity days have decreased.

## PROBLEM

I know everybody likes school closing days in the winter, including myself. So what I

wanted to figure out is how snowfall affects our school calamity days.

## MATERIALS

·Ruler with centimeter measurements

## PROTOCOL

·First I have to get my ruler that is marked in centimeters.

Next I have to go outside into the grass with snowfall coverage on it and measure the snow

with my ruler.

•At last, I need to record my data in my journal.

·Globe Protocol: Snow Depth

## RESULTS

1983-1984: February 28th, February 29th, and March 1st

1984-1985: January 22<sup>nd</sup>, and February 12<sup>th</sup>

1985-1986: None

1986-1987: February 9th, and March 31st

1987-1988: None

1988-1989: February 27<sup>th</sup>

1989-1990: December 22<sup>nd</sup> (Chill Factor)

1990-1991: February 15<sup>th</sup>

1991-1992: January 16th (Chill Factor -30)

1992-1993: February 18th (Chill Factor -25 -30) and February 19th (Chill Factor -20 -25)

1993-1994: January 14<sup>th</sup>, January 18<sup>th</sup> (Chill Factor -25) January 19<sup>th</sup> (Chill Factor -60)

1994-1995: February 6<sup>th</sup> (Chill Factor -15)

1995-1996: December 19<sup>th</sup>, December 20<sup>th</sup>, January 3<sup>rd</sup> and February 5<sup>th</sup> (Chill Factor -25)

1996-1997: January 13<sup>th</sup> (Chill Factor -20)

#### 1997-1998: None

1998-1999: January 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> (Ice-Chill Factor) January 11<sup>th</sup> (Chill Factor) January

13<sup>th</sup> (Ice) and January 14<sup>th</sup> (Ice and Snow)

1999-2000: None

2000-2001: March 6<sup>th</sup> (Ice and Snow)

2001-2002: None

2002-2003: January 27th (Chill Factor -19, Snow), January 29th (Ice and Snow), February 18th

(Depth of Snow, Unplowed streets, and Unshoveled Sidewalks)

2003-2004: January 26<sup>th</sup>, 27<sup>th</sup> and 28<sup>th</sup> (Chill Factor, Ice and Snow, Unshoveled Sidewalks and

Parking Lots) and March 16<sup>th</sup> (Snowstorm)

2004-2005: January 6<sup>th</sup> (Ice, Trees and Power Lines Down) and January 24<sup>th</sup> (Chill Factor -17)

2005-2006: None

2006-2007: February 5<sup>th</sup> and 6<sup>th</sup> (Wind Chill below 20) and February 13<sup>th</sup> (Heavy Snow)

2007-2008: February 1<sup>st</sup> (ice, Bad Road Conditions), February 11<sup>th</sup> (Snow and Wind Chill at -15

degrees) and February 26<sup>th</sup> (heavy snow)

2008-2009: December 19th (Ice Storm), January 15th (Severe Temperatures) and January 28th

(Heavy Snow Storm)

2009-2010: January 8<sup>th</sup> (District Wide Due to Snow) and February 26<sup>th</sup> (District Wide Due to

Snow)

2010-2011: December 13<sup>th</sup> (District Wide Due to Snow/Cold) and February 1<sup>st</sup>, 2<sup>nd</sup>, 22<sup>nd</sup> and 25<sup>th</sup>

(District Wide Due to Severe Weather-Ice and Snow)

2011-2012: None

2012-2013: None

### CONCLUSION

My hypothesis is I believe the amount of calamity days decreased. I ran into a lot of trouble before I was able to complete this experiment. First, I had a different project I started with, the title was "How Global Warning Affects the Ozone Layer and The Atmospheric layers" but I couldn't succeed in finishing the experiment because I needed a way to measure the temperatures of all the atmospheric layers. So then I had to squeeze in another project so I could get finished in time. So I thought this would be a good project because soon as I see Summit County and see Akron Public Schools under that category I get excited. The only risky problem about this project is I never once had to measure the snow depth because we haven't had a school calamity day yet. The other risky thing about this project is Akron Public Schools use inch measurements and GLOBE protocol uses centimeter measurements. There wasn't a long list of materials that had to be used I only used a centimeter marked ruler. This project could benefit scientist who study the Earth by showing all the different calamity day patterns and they'll be able to compare the similarities and differences.

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