# SNOWFALL CONTRIBUTIONS TO SCHOOL CALAMITY DAYS: A CLIMATOLOGICAL STUDY 

BY: ROMARRIUS MCELROY

ROSWELL KENT MS
1145 HAMMEL ST.
(330)-773-7631
(330)-773-6442(FAX)

## 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 28 ${ }^{\text {th }}$, February $29^{\text {th }}$, and March $1^{\text {st }}$

1984-1985: January 22 ${ }^{\text {nd }}$, and February $12^{\text {th }}$

1985-1986: None

1986-1987: February $9^{\text {th }}$, and March $31^{\text {st }}$

1987-1988: None

1988-1989: February $27^{\text {th }}$

1989-1990: December $22^{\text {nd }}$ (Chill Factor)

1990-1991: February $15^{\text {th }}$

1991-1992: January $16^{\text {th }}$ (Chill Factor -30)

1992-1993: February $18^{\text {th }}$ (Chill Factor -25-30) and February 19 ${ }^{\text {th }}$ (Chill Factor -20-25)

1993-1994: January $14^{\text {th }}$, January $18^{\text {th }}$ (Chill Factor -25) January $19^{\text {th }}$ (Chill Factor -60)

1994-1995: February $6^{\text {th }}$ (Chill Factor -15)

1995-1996: December 19 ${ }^{\text {th }}$, December $20^{\text {th }}$, January $3^{\text {rd }}$ and February $5^{\text {th }}$ (Chill Factor -25 )

1996-1997: January $13^{\text {th }}$ (Chill Factor -20)

1997-1998: None

1998-1999: January $4^{\text {th }}, 5^{\text {th }}$ and $6^{\text {th }}$ (Ice-Chill Factor) January $11^{\text {th }}$ (Chill Factor) January $13^{\text {th }}$ (Ice) and January $14^{\text {th }}$ (Ice and Snow)

1999-2000: None

2000-2001: March $6^{\text {th }}$ (Ice and Snow)

2001-2002: None

2002-2003: January $27^{\text {th }}$ (Chill Factor -19, Snow), January $29^{\text {th }}$ (Ice and Snow), February $18^{\text {th }}$
(Depth of Snow, Unplowed streets, and Unshoveled Sidewalks)

2003-2004: January $26^{\text {th }}, 27^{\text {th }}$ and $28^{\text {th }}$ (Chill Factor, Ice and Snow, Unshoveled Sidewalks and Parking Lots) and March $16^{\text {th }}$ (Snowstorm)

2004-2005: January $6^{\text {th }}$ (Ice, Trees and Power Lines Down) and January $24^{\text {th }}$ (Chill Factor -17)

2005-2006: None

2006-2007: February $5^{\text {th }}$ and $6^{\text {th }}$ (Wind Chill below 20) and February $13^{\text {th }}$ (Heavy Snow)

2007-2008: February $1^{\text {st }}$ (ice, Bad Road Conditions), February $11^{\text {th }}$ (Snow and Wind Chill at - 15
degrees) and February $26^{\text {th }}$ (heavy snow)

2008-2009: December $19^{\text {th }}$ (Ice Storm), January $15^{\text {th }}$ (Severe Temperatures) and January $28^{\text {th }}$ (Heavy Snow Storm)

2009-2010: January $8^{\text {th }}$ (District Wide Due to Snow) and February $26^{\text {th }}$ (District Wide Due to Snow)

2010-2011: December $13^{\text {th }}$ (District Wide Due to Snow/Cold) and February $1^{\text {st }}, 2^{\text {nd }}, 22^{\text {nd }}$ and $25^{\text {th }}$
(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.

## BIBLIOGRAPHY

Folk,D. weather assistant, Business Affairs Building, Personal communications, December 2012 to March 2013.

Frantz,S. science teacher, Roswell Kent Middle School, Personal Communication, December 2012 to March 2013.

Globe. (2012-2013). Data retrieved December 1st 2012 to February 14, 2013 from http://www.globe.gov

Google Earth (2012-2013). Data retrieved December 1st 2012 to February 14, 2013 from http://www.googlelmages.com

Johnson K. Science Teacher, Roswell Kent Middle School, Personal Communication, December 2012 to March 2013.

NOAA. (2012-2013). Data retrieved December 1st 2012 to February 14, 2013 from http://www.noaa.gov

Struble J. and M. Hedley. (2004, May). A community of learners. Science Teacher, 71 (5) 46-47.

Weather Underground.com (2102-2013). Data retrieved December $1^{\text {st }}, 2012$ to February 14,2013 from http://www.weatherunderground.com


