



Lesson: Stormy Stories

(To follow Amplify CKLA 4, Knowledge 1: Personal Narrative, Lesson 1: Introduction to Personal Narrative)

At a Glance

In this lesson, students use a variety of sources to learn about New Hampshire's weather and then write about a memory of a storm.

Primary Focus Objectives

- Students will read non-fiction text and identify key ideas about extreme weather.
- Students will analyze historic photographs and identify the weather event depicted.
- Students will write a brief personal narrative about a storm experience.

Formative Assessment

- Picture analysis
- Storm experience narrative

Standards

CCSS.ELA-LITERACY.RI.4.1

Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

CCSS.ELA-LITERACY.W.4.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

Materials

- Online or newspaper weather map for school's location
- Infographic: <u>Extreme New Hampshire Weather</u>
- Image set: Extreme Weather Events
- Focus Texts: "The Storm of 1826" and "The Ice Storm of 2008"
- "Stormy Stories" brainstorm template

Time Needed

Two 30-40 minute class sessions

Learning Activity

- 1. **Discuss the current weather.** Using a weather map found in a daily newspaper or online, conduct a brief whole group discussion about the weather forecast for the day or week. (5 minutes)
- 2. **Read about extreme weather.** Project and/or distribute copies of "Extreme New Hampshire Weather." Give students time to read about the extreme weather events and highlight or underline key details about each type. (15 minutes)
- 3. **Analyze historic photographs.** Provide small groups with an image set and label set. Give them time to discuss what they observe in the photographs and then match the captions to the correct image. (15 minutes)





- 4. **Read the Focus Texts.** Support students as they read and discuss samples of writing about real extreme weather events in New Hampshire. (15 minutes)
- 5. **Write personal narratives.** Using the writing process most familiar to students, guide them through creating brief personal narratives about a weather-related experience. (30 minutes)





Educator Rationale and Answer Guide

Connection to Amplify

In this lesson, students make connections between their personal experiences with extreme weather and how extreme weather has been part of New Hampshire history. This opportunity to extend personal narrative writing skills uses a variety of source material and text types including personal narratives, non-fiction text, maps, and historic photographs to help students build vocabulary and schema. Students reinforce their understanding of personal narrative by comparing samples of that genre to a piece of informational text.

Discuss the current weather

Whether printing or projecting a map of the weekly weather forecast, be sure that students observe all the features included in that source that help people understand the information. Talk with students about whether or not the forecast is typical for the season and what might happen if the temperature increased by 10 degrees each day or if it rained or snowed more? Ask students why people want to know the weather forecast and how changes in weather impact people's daily lives.

Read about extreme weather

Distribute copies of the infographic "Extreme Weather in New Hampshire." Consider projecting the infographic to do a whole group preview of its features before students read independently. Explain that they will read about each type of extreme weather and event and then underline or highlight key details. Afterward, consider having students rank the impact the weather events have on people and the environment. Consider having students explain their thinking in a statement, written or oral, supported by evidence from the infographic.

Analyze historic photographs

Print enough copies of the image set so that groups of 3 to 4 students can share the materials. Prepare for the activity by cutting the caption material off each page and making separate piles. Begin the activity by giving just the images to each group. Ask students to look closely at the images and discuss with their group what weather event has occurred. (They can refer back to the infographic for help.) Then, provide the groups with the captions and challenge them to match the captions to the images.

This is a good place to pause if dividing the lesson across two sessions.

Read the Focus Texts

Explain to students that they will read writing created by people who lived through extreme weather events in New Hampshire. Explain that the pieces from 1826 are first-hand accounts, more like personal narratives, and the piece from 2008 was a story written for a newspaper. Ask students to think about what they already know about personal narratives. What do they notice in the 1826 texts that indicates they are personal narratives? What makes the 2008 piece different from a personal narrative? Use the "Notice and Wonder" questions to help guide the discussion. Help students identify vocabulary and other text features the writers use to tell their personal stories.

Write personal narratives

Ask students to think about a time when they lived through extreme weather. Use the formats familiar to students to help them plan and draft a brief narrative about that experience. A brainstorm template is provided. Students should be sure to use descriptive language to help the reader understand the setting, actions, and emotions in their narratives. Refer back to the Focus Texts as needed for examples.

EXTREME NEW HAMPSHIRE WEATHER

New Hampshire's climate means the state can have some pretty incredible weather! People in the Granite State have learned how to live with all kinds of wild storms.



Hurricanes happen when warm air rises off the ocean and hits cool air in the sky. The air moves quickly in a spiral. When it reaches land, the wind can be over 100 miles per hour!

When do they happen? Mostly late summer and fall

How do people prepare?

People put away or tie down all loose items outside their houses. Some people who live near the ocean will cover their windows with boards so they don't get broken. It's important to have extra drinking water in case water sources are damaged. Some hurricanes are so strong that people need to leave their homes to go somewhere safer until it's over.

Major New Hampshire hurricanes: 1804, 1815, 1938, 1954, 1985, 1991, 2011, 2013



Blizzards happen when cold, polar air mixes with warm, southern air. They have winds over 35 miles per hour! The snow makes it very hard to see.

When do they happen? Winter

How do people prepare?

People store extra food and water in case the power goes out. Some people have wood stoves or fireplaces for heat. People can use generators to power their homes or they can use candles and flashlights for light. School is usually cancelled and the government asks people to stay at home until they can plow the roads. Driving in a blizzard is very unsafe!

Major New Hampshire blizzards: 1717, 1888, 1978, 1997, 2003, 2013, 2015



Ice Storms happen when super-cold rain falls and lands on surfaces that are colder than freezing. Ice can cover trees, roads, buildings, and cars. Ice is heavy and can cause lots of damage.

When do they happen? Winter

How do people prepare?

Ice storms can cause people to lose electricity for days because the ice can pull down power lines. Towns and cities work hard to put down sand and salt to melt ice on the roads. People with big trees near their homes trim the branches so they won't fall and damage their roofs. It is important to stay indoors as much as possible until the ice melts.

Major New Hampshire ice storms: 1921, 1998, 2008



Floods are caused by heavy rains. When lots of rain falls quickly, it can overwhelm rivers, stream, dams, and drains. Flooding can also happen when storms cause the ocean to surge.

When do they happen?

Any time of year, but mostly spring

How do people prepare?

Flooding is the most common type of extreme weather in New Hampshire. Sometimes towns and cities will put up sandbags near water sources to help keep them from overflowing. People listen carefully to the news to see if they need to leave their homes before the area floods. Water can push cars off the road so people avoid driving on flooded streets.

Major New Hampshire floods:

1895, 1896, 1936, 1981, 1987, 1996, 2005, 2006, 2007, 2008, 2019





What about tornados?

A tornado is a spinning column of air that stretches from the ground to the clouds. They usually form out of thunderstorms. New Hampshire doesn't get many tornados because the air doesn't usually get hot and wet enough to let them form. However, that doesn't mean we have none! New Hampshire averages about two tornados per year but they aren't usually very big. The worst ones recorded in New Hampshire were in 1787, 1821, and 1898.



- 1. What are some of the similarities in how people prepare for different kinds of extreme weather?
- 2. Why do you think floods are the most common kind of extreme weather in New Hampshire?
- 3. How do you think the way people experience extreme weather today is different than it was 150 years ago?
- 4. What kinds of extreme weather have you experienced? How did you prepare? What happened?



Extreme Weather Events Image Set

Flooded Car



Caption:

In March 1936, it rained for two straight weeks, resulting in massive flooding. The floods wiped out roads, dams, and buildings all over New England. It was the worst flooding in 14,000 years. This car was flooded out in Ossipee Valley, NH.



Downed Trees



Caption:

For such a small state, New Hampshire certainly experiences some wild weather. Storms with winds powerful enough to rip up trees sometimes occur throughout the state. This photo might have been taken after the hurricane of 1938.



Ice Storm



Caption:

One strong ice storm swept through Portsmouth in the winter of 1886. This is a photograph of people wandering around their neighborhood after the storm.



A Shoveled Path



Caption:

Large snow storms hit New Hampshire every winter, sometimes dropping several feet of snow! It often takes a lot of work for people to dig themselves out after one of these storms.



THE STORM OF 1826



These two accounts talk about a storm that moved through the White Mountains on August 28–29, 1826. The storm caused flooding, landslides, and lots of damage to the region.

Benjamin Willey wrote: As I came toward my house, I took note of the gathering clouds. I had often seen storms gather in the regions of the White Mountains, but never before with such grandeur and awfulness. The clouds were not moving quickly, but their size and blackness made up for the want of speed. They reminded me of some heavy armed soldiers moving slowly and steadily to battle. At the close of that day, when the darkness was just coming on, it began to rain; and such a rain I never knew before. It came on in its fury.

Lucy Crawford wrote: The next morning the storm had passed, and we were awakened by our little boy coming into the room, and saying, "Father, the earth is nearly covered with water, and the hogs are swimming for life." I arose immediately and went to their rescue. I waded into the water and pulled away the fence, and the hogs swam to land. What a sight!

The sun rose clear; not a cloud was to be seen; all was still and silent, excepting the rushing sound of the water, as it poured down the hills. The whole valley was covered with water. The bridge which had so lately been crossed had come down and taken with it 90 feet of the shed. Fourteen sheep that were under it drowned, and those which escaped looked as though they had been washed in a mud puddle. The water came within eighteen inches of the door of the house, and a strong current was running between the house and stable. It carried away timber and wood, and moved a wagon which stood in its course.

Notice & Wonder

- Circle any words you don't know and look them up in a dictionary.
- Based on their accounts, how do you think Benjamin Willey and Lucy Crawford felt before and after the storm of 1826?
- How would people's experiences of such a strong, damaging storm be different today than they were in 1826?



Sources: Benjamin G. Willey, *Incidents in White Mountains History* (Boston: Nathaniel Noyes, 1856), p. 119–20; Lucy Crawford, *History of the White Mountains from the First Settlement of Upper Coos and Pequaket* (Portland, Me: F.A. & A.F. Gerrish, 1846), p. 92. These excerpts have been edited to make them easier to read.



There have been freezing cold mornings and rotted food, days without showers and a limit to how often people can flush their toilets—all problems that Monadnock Region residents without power have suffered with for up to 12 days. Power is now being turned on across the region, but for some, this is when the real headaches start.

"There have been a ton of burst pipes," said Lynne B. Keating, owner of Keating Plumbing and Heating in Marlborough. Local plumbers and electricians say they have seen a surge in business due to outages throughout the region.

As power is restored to homes that have been nearly frozen for a week or more, pipes can burst, plugged-in appliances can create electrical hazards and houses can flood. "We've been busier than we've been in a long time," Keating said. Last weekend, there were three different crews out working—normally, Keating said, it's just one person on call. "It's just going to be busier and busier as more power comes on," she said.

From a plumbing standpoint, Keating said the biggest problem for homeowners is split or burst pipes, which can happen as power is restored and frozen pipes begin to thaw.

If homeowners drained their pipes before the storm hit or had antifreeze in their heating system, burst pipes probably won't occur, she said. But if a home's pipes are full of water when power comes back on, there is the potential for a leak.

Notice & Wonder

- Circle any words you don't know and look them up in a dictionary.
- How does the ice storm continue to affect people, even weeks later?
- How can people protect themselves and their homes from ice damage?

Source: This excerpt of a newspaper article was written by Jessica Arriens and Anika Clark and published in the *Keene Sentinel* on December 25, 2008. This article refers to the ice storm that struck New Hampshire on December 11–12, 2008.





Stormy Stories

