WELCOME!

Teaching with Primary Sources across Tennessee, administered by the Center for Historic Preservation at Middle Tennessee State University, engages learners of all ages in using primary sources to explore major issues and questions in many different disciplines.

Contact: Stacey Graham or Kira Duke at (615) 898-2947 or www.mtsu.edu/tps

NEWS

- Did you know that the Library of Congress has acquired the entire Twitter archive of public tweets? If you have heard about or used Twitter, you know that it is full of primary sources—i.e., on-the-spot reactions to various issues and events that affect us every day. The Library wants to preserve this archive as a record of how social media is used and how it evolves over time. Maybe your Tweets are now at the Library of Congress! Read the news release here, and follow the Library of Congress on Twitter here.

- Can you believe there is a National Doughnut Day? Well, there is, and it falls on the first Friday in June (this year: June 4th). It honors the women who made treats for WWI soldiers on the front lines. Read all about it in this Wise Guide article.

“AWESOME” SOURCE OF THE MONTH:

“Four Roses” Barometer: Infallible Weather Indicator [n.d.]

How accurate is this amusing weather predictor?

THEME: WEATHER

We had already selected the theme for this issue before the recent floods that damaged or destroyed so many houses, businesses, historic sites, and lives in Middle and West Tennessee. After these recent disasters, we felt this topic was especially timely.

In this issue, you will find lesson ideas built around the negative effects of extreme weather, and on the process of predicting the weather. The Library of Congress has hundreds of primary sources that show how Americans have reacted to and tried to predict or measure the weather over two centuries. How has the way we have predicted weather changed over the years? How has our response to weather disasters changed?

UPCOMING EVENTS:

- June 14 (Nashville)- Civil War workshop with Metro Nashville Public School teachers, 1:30—3:30 p.m.
- July 13-14 (Murfreesboro)- TPS-TN 2010 Summer Institute, “Impact of the Civil War on the Tennessee Homefront,” 9 a.m.—3 p.m.; click here for info
- July 27-29 (Memphis)- Memphis City Schools Teacher’s Conference—time TBD
- August 5 (Memphis)- Shelby County Schools in-service workshops, 9 a.m. & 1:30 p.m.
- August 10 (Nashville)- Metro Nashville Public Schools in -service workshops—times TBD

I’d do as much for you; Hmm, we’re having lovely weather. 1912

Courtesy of Duke University Library.

Teaching with Primary Sources is a program of the Library of Congress, and is administered in Tennessee by the Center for Historic Preservation at Middle Tennessee State University.
LESSON IDEA—WEATHER & THE DUST BOWL

In the 1930s, the Great Plains experienced one of the worst climatic and ecological disasters of the 20th century. A combination of severe drought and poor soil conservation caused the Dust Bowl which severely impacted agriculture and farming from Colorado to Arkansas. The Dust Bowl caused the largest (short-term) migration in U.S. history as families fled the Great Plains in search of better conditions in other parts of the country.

The Dust Bowl provides a great example for students on how weather and human activity can impact the environment. The Library of Congress Web site contains a vast collection of images related to the Dust Bowl. On the Teachers Page, you will find a primary source set related to the Dust Bowl that provides a sample of images that you can share with your students.

Ask students what they observe in the images. What impact did the dust storms have on people? On their towns and homes? How did human activity contribute to create the conditions of the period?

After students have formed their own hypothesis on the causes of the Dust Bowl, share with them NASA's findings.

This idea can be adapted to meet curriculum standards for Grade 4 science (SPI 0407.71), Grade 5 science (SPI 0507.2.3), Grade 7 science (SPI 0707.7.7), ecology (3255.5.1), and environmental science (3260.4.2).

LESSON IDEA—PREDICTING THE WEATHER

Humans have tried to predict the weather in many different ways throughout history, from farmers’ observations to new technologies. In the United States, weather forecasting has included folk wisdom, the scientific method, and modern technologies, all based on the observation of natural phenomena. How do you learn about the weather today? How accurate are the forecasts? (For lesson ideas on weather folk wisdom, see Forecasting Folklore handout in "Important Links" above.)

Divide your class into three groups. The first group will examine early American weather charts: Benjamin Banneker’s 1792 almanac [pages 7-18] and Jehu Harden’s 1806 weather observations chart. The second group will look through photographs from two early twentieth-century collections (search keyword “weather”): Farm Security Administration/Office of War Information Black-and-White Negatives and Photographs from The Chicago Daily News 1902-1933. The third group will look for current weather forecasts on the internet, radio, TV, or newspapers, as well as make predictions based on thermometers, barometers, and other equipment.

Have each group present its findings, addressing the following questions: What types of instruments were used during this time? Why is it important to predict the weather? For a rural population? For an urban population? During wartime? How do these methods compare to each other in their approaches to the weather? Which of the older methods look familiar to us today?

This idea can be adapted to meet curriculum standards for grade 6 Science (0607.T/E & 0607.8) and high school Earth Science (3204) and U.S. History (Eras 7 & 8).
LESSON IDEA– COMPARING WEATHER DISASTERS

Weather can have a devastating effect on the landscape and human life. Tennesseans experienced the impact of severe weather on May 1 and 2 with record setting rains and flooding. In this activity, students will identify types of weather systems and their impact by examining different primary sources. This activity can also be used to have students talk about their own experiences with weather.

Begin by showing the class clips from the 1900 Galveston hurricane filmed by Edison Manufacturing Co. The Edison film catalog contains video from the Tremont Hotel, Power House, and Broadway Street. What do they see in the clips? What type of weather might have caused this destruction? Does this remind them of images they have seen of other cities hit by hurricanes?

Students can research more about the aftermath and recovery of in Galveston by looking at Today in History.

Then have students examine images of levees being sandbagged and the 1937 Memphis flood followed by listening to a clip of an interview from a flood survivor in West Virginia. What do these sources say about the impact of flooding on communities and individuals? How are these experiences similar to what happened in Tennessee in May 2010?

You could also ask students to bring in pictures that they have from the May floods to compare with the images in the Library of Congress collection.

This idea can be adapted to meet state curriculum standards for Physical Science (high school—3204.2.9, Grade 5 spi 0507.2.3 & Grade 4—4.3.spi5).

Flood in North Memphis, Tennessee, [1937]

FEATURED FEATURE– LIBRARY OF CONGRESS WEBCASTS

Webcasts are presentations given by guest speakers (authors, scientists, performers, scholars, et al.) that are recorded for viewing over the internet. They cover a huge variety of topics, and more are added every week. They usually run anywhere from 30 to 90 minutes; some feature one speaker, some feature several speakers, and others include PowerPoint slides or musical performances. Though many Webcasts may be too long or advanced for K-8 students, they are great teaching resources for high school and college-level students.

Webcasts stream via RealPlayer, a common application that can stream on many older computers. Download RealPlayer and learn more about how to view webcasts here. The viewing screen is rather small, but you can “launch in a new window” and then expand to the full size of your computer screen. Picture quality will not be perfect if expanded, but it is still decent. Please note, however, that the program cannot be fast-forwarded, paused, or rewound if launched in a new window.

Check out these weather- and climate-themed Webcasts:

- NASA's Exploration of Hurricanes [64 min.]
- Our Sun - Its Influence on Climate and Life [65 min.]
- Earth's Water Cycle in a Changing Climate [42 min.]
- Climate Change [51 min.]
- Weather Forecasting [38 min.]
The Sound of Weather Music

The storm; An imitation of nature. 1858
Click through the pages of this piece of sheet music and look at the notes. How does the music capture the feeling of a storm? Can you think of other music that mimics the sounds of a storm? What sounds stand for rain? thunder? wind?

Official Weather Station

Official Weather Station for Paradise Valley [1978]
Mr. Rudolph Schwartz, a Nevada rancher, stands in front of a western “weather station.” What does this white box look like to you? Why would this type of weather station be used on a ranch in Nevada? Why would ranchers and cowboys need to forecast the weather?

Hurricane Katrina

What do you see in this image? What does the damage to this structure tell you about the impact of a hurricane? What do you think the markings on the building mean?

For more information on Hurricane Katrina see Today in History: August 29.

Hail Stones

Hailstones exhibited in a man’s hand. [1903]
What is the man holding in his hand? What else do you observe in the photograph? Why does he have the objects laid on a piece of fabric in his hand? How large do you think the objects are? How are these objects formed? Where are they most likely to be found?