

PHOTO COLLECTIONS OF HURRICANES CAMILLE AND
KATRINA

PI/NAH43.6 and PI/2005/0024

<https://da.mdah.ms.gov/series/camille>

<https://da.mdah.ms.gov/series/katrina>

A hurricane is one of the largest types of a storm, often measuring up to 350 miles wide. They are the most powerful of storms and often cause severe damage to homes, land, and people. The damage most commonly caused by hurricanes are associated with storm surge flooding, strong winds, and tornadoes. The Atlantic hurricane season begins June 1 and continues through November 30, with the number of storms changing from year to year.

Not all storms are created equal however; some do not even get to be hurricanes. Hurricanes form when warm moist air over water begins to rise. The rising air is then replaced by cooler air. This continues to grow into large clouds and thunderstorms. These storms continue to build and begin to rotate. Storms that have a contained wind speed of less than 39 miles per hour are classified as tropical depressions, next at 39 to 74 miles per hour are tropical storms, storms with winds stronger than 74 miles per hour are called hurricanes and receive a name from the World Meteorological Society.

Hurricane Camille made landfall around midnight on August 17, 1969, on the Gulf Coast east of Bay St. Louis, as a category 5 hurricane. The estimated wind speed was near 200 miles per hour, and the tides were estimated to be between 15 and 32 feet. As the storm moved northeast, it dumped close to 30 inches of rain, causing flash floods and landslides. Overall, the storm system caused an estimated 259 deaths and \$1.421 billion in damage. Camille was the largest single act of destruction in United States history for 23 years, until Hurricane Andrew in 1992.

Hurricane Katrina made landfall at 6:09 a.m. on August 29, 2005, on the Mississippi-Louisiana state line as a strong Category 3 hurricane. The estimated sustained wind speed was 125 miles per hour and a storm surge between 20 and 30 feet flooded the areas affected. Bay St. Louis, Long Beach, Pass Christian and Waveland, endured most of the force of the storm, while the entire Gulf Coast was affected greatly. Hurricane Katrina caused the death of an estimated 1,800 people, damaged around 275,000 homes, and cost victims over \$100 billion.

Note: This activity can be done as a full class discussion or as individual student work. A fillable PDF student version is provided at <https://www.mdah.ms.gov/learning-lagniappes>.

Subjects that can be addressed within this digital archive:

- Hurricane Camille 1969
- Hurricane Katrina 2005
- Emergency preparedness and recovery
- Roles of government

Curricular Connections

Below are key standards featured in this Learning Lagniappe.

Mississippi Studies

- MS.1.6 Assess the political, economic, and social effects of geographic processes (great Flood in 1927, Hurricanes Camille and Katrina) on technological and economic development in Mississippi.
- MS.10.3 Examine the various forms of local governments and evaluate how they meet the needs of local communities.
- MS.10.4 Compare types of services offered by local and state governments to meet the needs of Mississippians.

Introduction to Geography

- ITG.2.2 Contrast the way that places change because of physical and human processes.

Advanced World Geography

- AWG.11.3 Describe how people perceive, prepare, and cope with environmental hazards and disasters.

7th Grade Science

- E.7.9A.6 Research and use models to explain what type of weather (thunderstorms, hurricanes and tornadoes) result from the movement and interactions of air masses, high and low pressure systems, and frontal boundaries.

Directions: Use items from the MDAH Digital Archives entitled Hurricane Camille Photograph Collection and Hurricane Katrina Photographs found at <https://da.mdah.ms.gov/series/camille> and <https://da.mdah.ms.gov/series/katrina> to lead your class in analyzing and interpreting the following items.

Note: Navigate to items by going to <https://da.mdah.ms.gov/series/camille> or <https://da.mdah.ms.gov/series/katrina>, clicking on the first picture, and then entering the desired item number in the box below the image.

Use the Camille series of photos for the first 2 questions.

1. **Navigate to item number 11.** This photo shows damage to buildings along Highway 90 in Biloxi, after Hurricane Camille made landfall in August of 1969. What stands out to you the most in the photograph?

Possible Student Answers: The buildings in the foreground are completely demolished, while the hotel in the background is still standing, cars are being allowed to drive down the highway, and the light poles and power lines are still physically up.

2. **Navigate to item number 23.** The selected photo is from Harrison County. Here, a large boat has come to rest next to a home during Hurricane Camille. What are some of the hazards this family may have faced if they chose to ride out the hurricane in their home?

Possible Student Answers: Drowning in surge waters, electrical or propane fires, debris breaking through the house (like the boat), or winds completely tearing apart the house.

Use the Katrina series of photos for the remaining questions.

3. **Navigate to item number 32.** The selected image of a home site on the beach was taken twenty-two days after Hurricane Katrina made landfall. A. What are some assumptions you could make about this specific hurricane as well as hurricanes in general, based on this image?

Possible Student Answers: A hurricane is a dangerous storm; Hurricane Katrina was especially dangerous as this house is completely gone. Hurricane damage is unpredictable. The photo shows some things still at the location while the house is gone.

- B. What are some questions this photograph causes you to have about Hurricane Katrina and hurricanes in general?

Possible Student Answers: What were the specific details about the hurricane? (wind speed, surge water depth, number of casualties, damage amounts) Is this damage normal, how often do hurricanes make landfall in this area?

4. **Navigate to item number 53.** This photograph is the Hancock County Courthouse in Bay St. Louis. The photograph was taken 22 days after Hurricane Katrina made landfall. A. What are some things that stand out to you in this photograph?

Possible Student Answers: Flags at half-mast, they still have the windows boarded up, there is debris everywhere, and there are people standing on the steps.

- B. What would the main function of this building be after a disaster like Hurricane Katrina?

Possible Student Answers: The storage of donations or supplies, shelter for those without it, a command center for county leaders and departments.

- C. What are some of the responsibilities of local governments immediately following a disaster such as Hurricane Katrina?

Possible Student Answers: Emergency management is to prepare, respond, recover and mitigate. Prepare: means to evacuate people, shelter them, provide provisions such as sandbags etc. Respond: means to save people if necessary or if possible from emergency situations that occur because of the disaster. Recover: means to find alive and deceased people after the immediate threat is over. Mitigation: means to help people with their needs after the active disaster has ended (medical, food, or comfort).