

Disaster! Natural Catastrophes in the Pacific Northwest

Guide for Teachers

Washington State History Museum

Introduction

Who was “the man who wouldn’t go”? Why did an avalanche destroy two Great Northern trains? How many active volcanoes are there in Washington state? Find out the answers to these questions - and more - as you and your students shake, rattle and roll with characters from Washington’s past. Use this guide to help prepare your students for their expedition!

Program Description

“Disaster!” seeks to capture the imagination of your students and enrich their understanding of the human history of natural disasters in Washington state, while building the foundation to study this topic in depth back in the classroom. While your students are at the museum, they will be introduced to these ideas through a series of dramatic monologues performed by local professional actors. At the conclusion of each monologue, the actors stay in character and encourage students to ask them questions about their life and what happened.

Before Your Visit (in the Classroom)

Three readings are provided which will introduce your students to the history of natural disasters in Washington State. Each reading is presented as a “case” complete with “evidence” in the form of “Exhibits.” While your students are in the museum, they will be interviewing actor/witnesses for each case and using their answers to complete a student worksheet.

The cases for the 2008-2009 school year are:

- Case 1: The Mystery of Mount St. Helens
- Case 2: Danger on Mount Rainier
- Case 3: Where’s Wellington?

Depending upon your time constraints and the grade level of your students, you may wish to divide the class into groups, each group focusing on one subject. Each group would read one of the essays and then report on what they found most interesting about their topic. Alternatively, students may simply just read a combination of one, two, or all three cases before their visit without reporting.

Use these cases as an opportunity to:

- Build vocabulary
- Increase familiarity with geographic locations and natural history
- Provide students with the background they need to ask effective questions during the visit
- Launch a more in-depth research project on one of the topics

During Your Visit (at the Museum)

When students arrive at the museum, they will receive a quick orientation. This will remind them of behavioral expectations in the galleries.

Staff will then hand out “Disaster!” activity sheets and students will be welcomed to the galleries by a special guide who will divide groups and take them to different points in the museum where they can explore the events introduced in the cases.

In groups and with their chaperones, students will work their way through the gallery. The activity sheets are designed to encourage students to reflect and engage more deeply with the material as they encounter it. These are the students’ to take back to the classroom, both for fun and to reference historical information.

After Your Visit (in the Classroom)

When you return to the classroom, you have the option of extending your museum visit into a creative writing or research and writing assignment. If you choose the latter, you can springboard the assignment into a Classroom-Based Assessment in history.

The cases can also be used as tools for student examination. We also recommend that you consider supplementing your CBA with materials from our website at WashingtonHistory.org or use some of the helpful resources listed on these materials.

Links to State Standards

- Can be used to introduce students to the concept of the Ring of Fire and volcanic activity in Washington.
- Satisfies GLEs in History, Geography, and Science.
- Can be used as part of one of the following CBA units:
 - Elementary: Dig Deep, Causes of Conflict, and Humans and the Environment.
 - Middle: Dig Deep, Causes of Conflict, and Humans and the Environment.
 - High: Dig Deep, Causes of Conflict, and Humans and the Environment.
- Can be used to prepare for the Science WASL.

Evaluation

As part of our ongoing mission to keep our programs meaningful to you and your students, we encourage all teachers to provide us with feedback about your museum visit. After you have visited the museum, a short survey will be sent via email, and we encourage you to respond with your comments and suggestions.

Questions

For more information about this, or any of our Ghosts of the Great Hall school programs, please contact Gwen Perkins, School Programs Coordinator, at gperkins@wshs.wa.gov.



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Evidence Key

Washington State History Museum

Instructions

This document is meant to provide you with some basic information about each piece of evidence provided with the student cases. Have students discuss the pictures and information to formulate questions, then dig deeper as a class to talk about some of the things that this document reveals about each image.

For purposes of this investigation - "Natural Disaster" is defined as, "an event caused by natural forces that resulted in significant loss of human life."

Case #1: The Mystery of Mount St. Helens

EXHIBIT A: The image shown is of Mount St. Helens during the 1980 eruption. It was taken by a photographer from the United States Geologic Survey. Many of the photographs that were taken of Mount St. Helens during this time were done so from helicopters. Despite the distance away from the volcano, helicopters still faced enormous dangers from the debris that shot upward from Mount St. Helens.

EXHIBIT B: This picture reveals a car that was caught in the mudflows that spilled from the volcano. There were some who tried to take shelter in their cars but the best escape was simply to reach high ground. This image was taken in 1980 by Daniel Dzurisim.

EXHIBIT C: This USGS map shows Mount St. Helens and the outlying areas. St. Helens Lodge is where Harry Truman was at the time of the eruption.

Case #2: Danger on Mount Rainier

EXHIBIT A: This scrapbook page is from the Mountaineers' summer outing of July to August 1912. It has three photographs from Mount Rainier, a popular mountaineering destination. Nisqually Glacier is where the blizzard of 1924 occurred. Also shown are whirling clouds, sometimes a sign that snow is on the way! Ask students if they see people in the images - what are they wearing and why? This image is from the Tacoma Public Library.

EXHIBIT B: In 1933, the Northern Pacific Railway promoted Mount Rainier as a tourist destination for people all over the world. Brochures and fliers like this one were part of what drew travelers - and director Cecil B. DeMille - to Washington state. You can find this brochure, and others like it, in the Washington State Historical Society collections.

EXHIBIT C: On October 28, 1924, the *Seattle Daily Times* printed this article about Cecil B. DeMille and the dangers that the cast and crew of *The Golden Bed* faced when filming on the mountaintop.

Case #3: Where's Wellington?

EXHIBIT A: This photograph looks out through the Cascade Tunnel at the site of the Wellington Avalanche. Photographer Asahel Curtis snapped this image on March 10, only nine days after the tragedy occurred. Courtesy of the Washington State Historical Society Collections.

EXHIBIT B: Men stand among downed trees that cover Great Northern mail train no. 27. The train was swept 150 feet into a ravine below the tracks at Wellington. Asahel Curtis took this picture on March 10, 1910. Courtesy of the Washington State Historical Society Collections.

EXHIBIT C: The snow is piled high at the end of this snow shed at Wellington. Some of the snow had already melted by the time this photograph was taken by Asahel Curtis on March 10, 1910. Courtesy of the Washington State Historical Society Collections.

Questions

For more information about this, or any of our Ghosts of the Great Hall school programs, please contact Gwen Perkins, School Programs Coordinator, at gperkins@wshs.wa.gov.



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EVIDENCE

Sample Answers!

CASE FILE: Where's Wellington?

For Teachers Only!

YOUR MISSION: Review the evidence to determine what happened. Answer the questions below about the case, then write your own report about what happened.

EYEWITNESS STATEMENT: "White Death moving down the mountainside above the trains. Relentlessly it advanced, exploding, roaring, rumbling, grinding, snapping — a crescendo of sound that might have been the crashing of ten thousand freight trains. It descended to the ledge where the side tracks lay, picked up cars and equipment as though they were so many snow-draped toys, and swallowing them up, disappeared like a white, broad monster into the ravine below."

— Charles Andrews, railroad engineer



What Washington town was covered with snow in 1910? See if you can find the answer! Washington State Historical Society Collections.

WHEN DID THIS DISASTER STRIKE?

March 1, 1910

WHERE DID IT TAKE PLACE? (Describe where to look for it on a map.)

Wellington, Washington - this city is now called Tye (also Stevens Pass)

WHO WAS INVOLVED?

Passengers on 2 Great Northern trains, railroad workers, postal clerks & the people of Wellington

WHAT KIND OF NATURAL DISASTER WAS IT?

An avalanche! (Students might also say a blizzard.)

LIST ONE THING THAT MIGHT HAVE CAUSED THE DISASTER AND ONE RESULT.

Heavy snow that kept piling up on the tracks and the mountainside kept the trains from moving. The excess snow also caused the avalanche.

USING YOUR NOTES ABOVE, WRITE A SHORT NEWS ANNOUNCEMENT ABOUT WHAT HAPPENED AND WHY. (Use the back of the paper if needed.)

(Here, students should be encouraged to use their imaginations and take a number of different routes to tell this story. They could "interview" someone from the readings, do a report from the weatherman's point of view, etc.)

EVIDENCE

Sample Answers!

CASE FILE: The Mystery of
Mount St. Helens

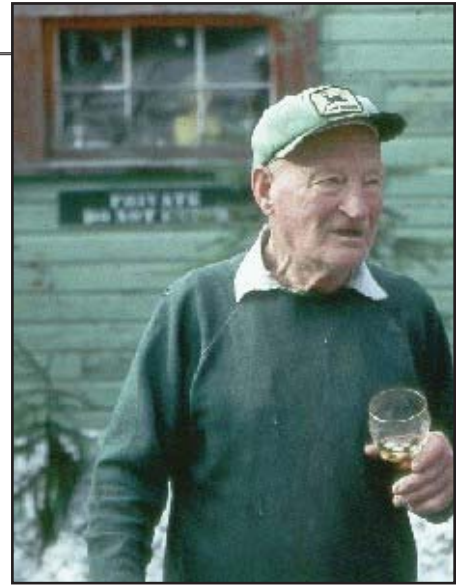
For Teachers Only!

YOUR MISSION: Review the evidence to determine what happened. Answer the questions below about the case, then write your own report about which type of natural disaster was responsible.

EYEWITNESS STATEMENTS: "There are dozens of quakes every... minute. There is never a dull moment. About the time things settle down, here comes one of those babies." - Harry Truman, lodge owner

"I've walked that mountain for 50 years. I know her. If it erupts with lava, it's not going to get me at Spirit Lake. Those geologists might know something about the inside of the mountain, but I know her contours. If I left this place, it would worry me to death. If this place is gonna go, I want to go with it, 'cause if I lost it, it would kill me in a week anyway."

- Harry Truman, lodge owner



What famous Washingtonian said, "I've lived here over 50 years... That mountain's part of Harry and Harry's a part of that mountain."? See if you can find the answer! Courtesy USGS.

WHEN DID THIS DISASTER STRIKE?

May 18, 1980

WHERE DID IT TAKE PLACE? (Describe where to look for it on a map.)

Mount St. Helens, a volcano in Southwestern Washington

WHO WAS INVOLVED?

People across Washington - from Spirit Lake to Yakima (Specific people are okay too)

WHAT KIND OF NATURAL DISASTER WAS IT?

A volcanic eruption

LIST TWO KEY "EVENTS" THAT LED TO IT AND ONE THING THAT HAPPENED AS A RESULT.

1. Tiny earthquakes, 2. An explosion that left a huge hole. After these events, a explosion of trapped gas blew the top off the mountain.

USING YOUR NOTES ABOVE, WRITE A SHORT NEWS ANNOUNCEMENT ABOUT WHAT HAPPENED AT MOUNT ST. HELENS. (Use the back of the paper if needed.)

(Here, students should be encouraged to use their imaginations and take a number of different routes to tell this story. They could "interview" someone from the readings, do a report from the weatherman's point of view, etc.)

EVIDENCE

Sample Answers!

CASE FILE: Danger on Mount Rainier

For Teachers Only!

YOUR MISSION: Review the evidence to determine what happened. Answer the questions below about the case, then write your own report about which type of natural disaster was responsible.

EYEWITNESS STATEMENTS:

“At first the way is easy and the task seems light. The broad snow- fields over which I have often hunted the mountain goat, offer an inviting path. But above that you will have to climb over steep rocks overhanging deep gorges where a misstep will hurl you far down - down to certain death. You must creep over steep snowbanks and cross deep crevasses where a mountain goat could hardly keep his footing. You must climb along steep cliffs where rocks are continually falling to crush you, or knock you off into the bottomless depths... And if you should escape these perils and reach the great snowy dome then a bitterly cold and furious tempest will sweep you off into space like a withered leaf.”

- Sluiskin, climbing guide

“I don't envy them [the guides] their job when the mountain is acting up.”

- Cecil B. DeMille, film director



What happened on Mount Rainier's Nisqually glacier in 1924? See if you can find the answer!

WHEN DID THIS DISASTER STRIKE?

October 26, 1924

WHERE DID IT TAKE PLACE? (Describe where to look for it on a map.)

Mount Rainier (or Mount Tahoma), a Washington volcano

WHO WAS INVOLVED?

Cecil B. DeMille and his film crew (Lillian Rich may be another name)

WHAT KIND OF NATURAL DISASTER WAS IT?

A blizzard

LIST TWO SIGNS THAT LED UP TO THE DISASTER AND ONE RESULT.

Heavy winds began to howl and the snow fell thick and fast. Because DeMille didn't pay attention to the warning signs, he lost over \$20,000 in equipment.

USING YOUR NOTES ABOVE, WRITE A SHORT NEWS ANNOUNCEMENT ABOUT WHAT HAPPENED ON MOUNT RAINIER. (Use the back of the paper if needed.)

(Here, students should be encouraged to use their imaginations and take a number of different routes to tell this story. They could "interview" someone from the readings, do a report from the weatherman's point of view, etc.)