

GeoContext: A social and political context for geoscience education

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## **Companion Document for "Collecting Geologic Samples: An Example with Meteorites"**

Contributors: Christine Y. Chen Keywords: meteorites, planetary science, resource extraction, museums, Indigenous groups, Inuit, Inughuit Location: United States, Greenland, Arctic People: Robert E. Peary, Minik Wallace Last updated: December 6, 2020

This companion guide accompanies the slides for "Collecting Geologic Samples: An Example with Meteorites." We provide a list of references for the content in the slides. For accessibility purposes, we also provide alternative text for images.

## Sources

The contents of the slides reference the following resources. We recommend that the instructor read, at minimum, the first two references listed below before teaching from these materials.

- Minik and the Meteor, Allison C. Meier, Narratively: Hidden History, 2013.
- <u>Caught in the Middle: the Tragic Life of Minik Wallace</u>, Perry-MacMillan Arctic Museum, Bowdoin College, 2020.
- Patricia A. M. Huntington (2002) Robert E. Peary and the Cape York Meteorites, Polar Geography, 26:1, 53-65, DOI: <u>10.1080/789609353</u>
- <u>The Cape York meteorite: Making an impact on Greenland</u>, Emily Johnson, University of Washington, 2019.
- Martin Appelt et al. (2015) <u>The Cultural History of the Innaanganeq/Cape York</u> <u>Meteorite</u>. Technical Report. Greenland National Museum and Archives.
- Dr. Erin L. Thompson's <u>Twitter thread</u> (<u>@artcrimeprof</u>) about the meteorite

Although these slides focus on only one meteorite, there are other examples. For instance, as a more contemporary example, the AMNH also owns a large piece of the meteorite Tomanowos (the "Willamette Meteorite"), which the Confederated Tribes of Grand Ronde (CTGR) in Oregon holds sacred. In 2002, the <u>NYTimes reported</u> that the museum had traded a 28-pound piece of it for another meteorite, of Martian origin. Needless to say, the CTGR believe the sacred object should not have been tampered with.

Some may also find the following articles on modern-day meteorite hunting to be of interest, in particular the descriptions of how meteorite collectors interact with the communities in which meteorites make landfall:

- "<u>The Mad Scramble to Claim the World's Most Coveted Meteorite</u>." *Wired Magazine*. December 2018.
- "<u>An unusual meteorite, more valuable than gold, may hold the building blocks of life</u>." *Science Magazine*. August 2020.

## Alternative Text for Figures/Images

*Slide 2* | Small samples slice of the Allende meteorite

An 11.51 gram partial slice of the Allende meteorite. The exposed side of this piece that is photographed is flat. The rock is dark gray and brown with small white inclusions in it that are rounded and of varying sizes.

Slide 3 | Photograph of the Hall of Minerals, American Museum of Natural History

The center of the Hall of Minerals exhibit at the American Museum of Natural History featured a large meteorite that is dark brown in color and blocky in shape. Visitors view it from a circular platform around the meteorite. Stairs lead up to the meteorite on all sides. There are railings on the stairs. Behind the meteorite are other exhibits. The space is dark but lit by spotlights from above.

Slide 4, left | American Museum of Natural History webpage on the Ahnighito meteorite

A screenshot of the webpage description of the Ahnighito meteorite. It reads, "When you touch the 4.5-billion-year-old Cape York Meteorite, you are touching an object that is nearly as old as the Sun. Discovered in 1894 in Greenland, this iron meteorite slammed into Earth some 10,000 years ago.

*Slide 4, right* | Portrait of Robert E. Peary on the SS Roosevelt, 1906.

A black-and-white photograph of Robert E. Peary standing on the desk of a ship. Peary is wearing thick furs of wild animals from head-to-toe, including around his head. The deck has areas that are icy.

Slide 5, left | Photo of "The Tent" fragment in situ

A black-and-white photograph of Ahnighito in situ, in its original resting place. Behind the large block of meteorite is a woman with long dark hair.

*Slide 5, middle* | Photo of "The Woman" fragment in situ

A black-and-white photograph of "The Woman" fragment in situ. Surrounding the large meteorite fragment are many large pieces of stone that were used as heavy hammer stones to knock pieces of meteorite fragment off.

*Slide 5, right* | Hand tool by Inughuit

A close-up image of the end of a hand tool. It appears to be a wooden stick with metal at its end, with the metal worked into a blade.

Slide 6 | Painting of meeting between Captain Ross and Inughuit

A painting depicting the first meeting between Captain John Ross and Inughuit. There are two large boats with sails and flags on the masts sitting in dark open ocean waters. On the right of the painting, there are several human figures meeting face-to-face on top of the sea ice. In the background, there are large snow-covered mountains.

*Slide 7, left* | Photo of Inughuit hauling a jack up a hill

A black-and-white photograph showing approximately a dozen humans hauling a large jack up a steep hill. The individuals are wearing furs and other long-sleeved clothing.

*Slide 7, right* | "The Tent" fragment secured on board *The Hope* 

A black-and-white photograph of the large Ahnighito meteorite secured on the deck of a boat. It is held in place metal chains. Several other men are on the boat.

Slide 8, left | Horses hauling Ahnighito to the American Museum of Natural History

A black-and-white photograph showing 28 horses hitched to one another in a line in front of a wheeled platform that is bearing the Ahnighito meteorite. *Slide 8, middle* | Josephine Peary with daughter Marie Ahnighito Peary

A black-and-white photograph featuring Josephine Peary holding her daughter Marie Ahnighito Peary, a toddler in this image, in her arms, balancing on her hip. Behind them is an ice-covered landscape.

*Slide 8, right* | Josephine Peary's *The Snow Baby* (1901)

The cover of the book written by Josephine Peary about her travels. The cover is teal in color and features a photograph of Marie Ahnighito Peary as a toddler prominently in the center of the cover. The photograph is surrounded by an illustration of sea ice and snow-covered mountains.

Slide 9 | Six Inughuit aboard The Hope en-route to New York, 1897

A black-and-white photograph showing six Inughuit and one other individual posing on the deck of a ship. Some dogs are also in the photograph.

## *Slide 10* | Portrait of Minik Wallace, 1899

A black-and-white portrait of a young Minik Wallace, approximately aged 8-9. He is wearing western clothing and has short hair. He is standing, leaning against the side of an ornate wicker chair with his left hand on the chair armrest.

*Slide 11, left* | Minik Wallace in a kayak, 1914

A black-and-white photograph of Minik Wallace in a kayak on the water. He has his right paddle in the water, mid-stroke. He is seen smiling.

*Slide 11, right* | Minik Wallace's grave

A photograph of Minik Wallace's gravesite. There is green grass and an abundance of trees. In the background, there is a tree-covered mountain. In the foreground, his grave is marked with several light-colored stones.

*Slide 12, bottom* | Meteorite accumulation in Antarctica

A greyscale diagram depicting how meteorites accumulate and are found in greater abundance in certain locations in Antarctica.

*Slide 12, right* | Researcher posing next to a meteorite find

A color photograph featuring a research scientist next to a meteorite find. The researcher is wearing a large bright red puffy coat, large black eye goggles, and large black mittens. He is lying across the ice next to a meteorite that is approximately the same size as his head. The meteorite is dark gray and stands out compared to the blue-white color of the ice.