

## **Unit Guide / Lesson Plan:**

# **Archaeological Excavations at the South Ferry Terminal Site**

**Subject:** American History, New York City History, Historical Archaeology

**Grade Level:** 7-8                      **Date:** 2011

**Historic Period/Social Studies Units:** A Nation is Created (Unit 3) and Life in the New Nation (Unit 5)

**Goal:** The first goal of this lesson is to provide students with information about the history of a specific part of Manhattan—South Ferry and Battery Park—and to give them the tools to understand how activities and structures in this area were significant in the development of New York City and the nation. The second goal is to explain what public archaeology is and why it is necessary, and to show students how archaeology is an integral part of the study of American history of the 17th, 18th, 19th, and even 20th centuries.

**Unit Concepts:** [\[Page references refer to the South Ferry Public Report\]](#)

1. Students will learn about the history of the South Ferry Terminal excavations. Using this project as an example, students will learn why archaeology is required for some development projects and how information gained from these projects is part of our common patrimony.

[\[P.1-4\]](#)

2. Students will become familiar with the techniques used to excavate archaeological sites and how archaeologists garner information from the objects found during excavations.

[\[P.3-4 \(Techniques\) & P.47-52 \(Information\)\]](#)

3. Students will see that archaeology is not just the spectacular finds shown in movies and other popular entertainment. They will gain an understanding of how studying artifacts helps to learn about the past. [\[P.17 Insert & P.20 Insert\]](#)

4. Students will see how information from documentary research combined with excavated data has been used to understand the history of the South Ferry/Battery Park area.

[\[P.61 summary\]](#) [\[P.47-59 Artifact Research\]](#)

## **Opening Question & Initial Class Discussion**

Why do we learn about the past? How do we learn about the past? What do material items and other resources have to offer us in shaping our understanding? [\[Teachers should begin by questioning students about their current knowledge of the area \(Lower Manhattan in general and South Ferry / Battery Park in particular\).\]](#)

## **Instructional Procedures:**

1. Teachers should first read the South Ferry Public Report to familiarize themselves with the subject. [\[Report available on CD or hard copy by request\]](#) If some students are sufficiently interested, or if the curriculum allows, students could also read this Report. Teachers should also be familiar with the terms defined on the “Archaeology Glossary” attached.

2. Students should visit, preferably in class, the *Archaeology 101* lesson on the web site of the Archaeological Institute of America

<http://www.archaeological.org/pdfs/education/Arch101.2.pdf>

Teachers should be sure that students understand the main points of the Archaeology 101 lesson: what is material culture?; when and how archaeologists excavate a site?; and what happens after excavation?

3. With this background, students should access the South Ferry Terminal web site found [here](#) [physical address also below]

<http://apps.mtacc.info/SFArch/index.html>

Teachers should ask the students a series of questions for different sections of the site, either during in-class discussions or as answers to writing assignments. Suggested questions follow.

**Section: Timeline** [ <http://apps.mtacc.info/SFArch/nyctHistoryTimeline.htm> ]

- When did Europeans first come to New York City? How did New York’s position as a center of trade affect its shoreline?
- What are “landfills” and “water lot grants?” [\[This information is in the Public Report as well as in the “Battery Wall” and “Whitehall Slip” sections of the website. Definitions are in the attached Glossary\]](#)
- What were the “New Amsterdam Municipal Charter” and the “Dongan Charter” mentioned in the timeline? Explain to students what a City Charter is.

**Section: South Ferry Station Past and Present**

[ <http://apps.mtacc.info/SFArch/pastPresent.htm> ]

- Why was (and is) South Ferry one of the important transportation hubs of Manhattan?
- What kinds of public transportation existed in New York before subways and buses?
- Can students imagine what it was like to travel in horse-drawn trolley cars?
- When the first subway station at South Ferry was built in 1905, it was the height of modern technology. What happened to make it obsolete?
- What are the improvements in the new subway station?
- What was the Battery Wall?

**Section: What Do Archaeologists Do?** [ <http://apps.mtacc.info/SFArch/whatArchDo.htm> ]

This section of the web site is organized in the order in which archaeologists execute their work.

- Why do archaeologists begin with documentary research? Look at the images in the Historic Maps section and discuss how the area at the tip of Manhattan has changed over time. What might archaeologists have expected to find, based on these maps? [Maps on the website are small but they can be printed for students from an e-copy of the Public Report.]
- What kinds of tools do archaeologists use in the field? Go over the steps archaeologists take after their work in the field is completed.
- Discuss what artifacts are (anything made or modified by people). What sorts of artifacts were found at the site?
- What might archaeologists have expected to find?

**Section: Why Did We Do It?** [ <http://apps.mtacc.info/SFArch/whyDidWeDoIt.htm> ]

This section explains why archaeology was necessary at the South Ferry Terminal site and summarizes the results of excavations and documentary research. [Some of this information is accessible from the “Battery Wall” and “Whitehall Slip” tabs on the Home Page.]

- Why was the Metropolitan Transportation Authority (MTA) required to do archaeology at the site of the new subway terminal?
- What were Sections 1 and 2 of the Wall made of? And Sections 3 and 4?
- Where is there a new permanent display of a portion of the Battery Wall?
- How was the date of construction of the pier-like log feature at Wall 3 determined?
- Archaeologists generally say that there are three goals of their work: to determine when things happened; to describe daily life in the past; and to investigate how material culture and the rest of culture interact. How does the discovery of the remains of Whitehall Slip and the artifacts within it fit into these goals?

**Section: Artifacts** [ [http://apps.mtacc.info/SFArch/artifacts\\_intro.htm](http://apps.mtacc.info/SFArch/artifacts_intro.htm) ]

The opening page of this section shows side by side images of ceramic bowls as they were found in Whitehall Slip and after processing in the lab. Note that these artifacts have been washed and mended.

- What do the artifacts shown tell us about life in Manhattan in the 18th and 19th centuries?
- In the illustration “Old Woman at Prayer,” have the students look at the objects and food in the painting and determine what would survive after being in the ground for 250 years. Pieces of an earthenware cooking pot survived but what else would have? (The food illustrated includes a large round cheese, small rolls, a large loaf of rye bread, butter, and a piece of salmon.)

4. Lead a discussion about how the information in the website has changed students’ ideas about what archaeology is and what archaeologists do. Include the following points: archaeology is not just for ancient sites in exotic locations; how do archaeologists excavate; what sorts of artifacts and features were found in each case and what did they tell the archaeologists about people and places in the past?

## **Materials:**

1. CD or physical copy of *The South Ferry Public Report*
2. Archaeology Glossary (attached)
3. The South Ferry Archaeology [website](#)

## **Assessment/Evaluation:**

Assessment is based on student participation during in-class discussions, completion of assigned readings, short essays and/or oral presentations. Some information may be incorporated into quizzes or tests for assessment purposes.

## **Educational Standards Addressed:**

From Social Studies Learning Standards <http://www.emsc.nysed.gov/ciai/socst/ssrg.html>

Standard 1, Key Idea 2

“Important ideas, social and cultural values, beliefs, and traditions from New York State and United States history illustrate the connections and interactions of people and events across time and from a variety of perspectives.”

Key Idea 3

“Study about the major social, political, economic, cultural, and religious developments in New York State and United States history involves learning about the important roles and contributions of individuals and groups.”

This lesson plan will contribute to the implementation of these standards.

## **Resources:**

### **Books:**

*In Small Things Forgotten: An Archaeology of Early American Life* by James Deetz. Available at many books stores and in a Kindle edition.

*Unearthing Gotham: The Archaeology of New York City* by Anne-Marie Cantwell and Diana diZerega Wall. Available at many bookstores.

*Unlocking the Past: Celebrating Historical Archaeology in North America*. Edited by Lu Ann De Cunzo and John H. Jameson Jr. Available at some bookstores and on-line.

## **Web Sites:**

Information from the Metropolitan Transportation Authority about the South Ferry Terminal Project:

<http://www.mta.info/capconstr/sft/>

In particular the section about archaeology (written while the excavations were in progress):

<http://www.mta.info/capconstr/sft/archaeology.htm>

An account of old subway stations at the tip of Manhattan:

<http://www.columbia.edu/~brennan/abandoned/bowling.html>

An architect's critique of the new station:

[http://www.archpaper.com/e-board\\_rev.asp?News\\_ID=3109](http://www.archpaper.com/e-board_rev.asp?News_ID=3109)

New York Times article about the old subway station:

<http://www.nytimes.com/2008/12/12/nyregion/12station.html?emc=eta1>

Web site of the artists who created the artwork at the new terminal:

[http://www.starnstudio.com/MTA\\_SF.html](http://www.starnstudio.com/MTA_SF.html)

## *Glossary*

<i>archaeology</i>	The study of past human culture through the systematic recovery and analysis of the artifacts/material evidence left behind.
<i>archival research</i>	Research conducted in places where public or historical records, charters, and documents are stored and preserved.
<i>artifact</i>	Any object shaped, modified, and/or produced by man, or as a result of human activity.
<i>assemblage</i>	Collection of persons or things: in this context, a collection of artifacts from a particular site, from a stratigraphic level or cultural component within the site, or of a particular artifact class, such as lithics or ceramics.
<i>bioturbation</i>	Disturbance to soils from root action.
<i>cistern</i>	A hole dug in the ground and lined with stone or brick covered with plaster to make it water tight. Gutter pipes run into it to collect water.
<i>culture</i>	A uniquely human system of behavioral patterns, beliefs, habits, and customs acquired by man through a nonbiological, uninherited process, learned by his society.
<i>datum</i>	A point, line, or surface used as a reference, as in surveying.
<i>diagnostic</i>	An artifact that can clearly be dated and/or identified as to maker, date, place or origin, etc.
<i>feature</i>	Any soil disturbance or discoloration that reflects human activity, or an artifact that is too large to be removed from a site and is only recorded (e.g. a house).
<i>historical archaeology</i>	The archaeology of the period from initial European settlement of North America to today.
<i>in situ</i>	In the original place.
<i>landfill</i>	Materials—household, commercial, or manufacturing refuse, soils from various sources, demolition debris, etc.—used to fill up low-lying or inundated ground to create dry land.
<i>locus</i>	A defined archaeological site or testing location.

<i>material culture</i>	That segment of the physical environment which is purposely shaped by humans.
<i>midden</i>	A refuse heap usually containing household and domestic debris.
<i>mitigation</i>	In archaeology, refers to minimizing the destruction or disturbance of an archaeological site by construction projects, erosion, farming practices, etc., through excavation of the site and systematic recovery of the artifacts or other material representative of past life.
<i>Phase I</i>	Determination of the absence or presence of a site.
<i>Phase II</i>	Further investigation of a site to define its limits, integrity, and eligibility for inclusion in the National Register of Historic Places.
<i>Phase III</i>	Data recovery phase of archaeological investigation. Usually involves intensive archaeological and historical investigations to recover as much data as possible and mitigate the effects of proposed construction.
<i>privy</i>	An earth closet or outdoor toilet. Most often, it is a dug-out shaft feature lined with stone or brick.
<i>profile</i>	A side view of a feature or test unit.
<i>research design</i>	A strategy developed at the beginning of a project to guide the research.
<i>sediment</i>	Soil deposited by wind, water, or glaciers.
<i>sheet refuse</i>	Artifacts haphazardly discarded in yards, fields, or other open areas. These artifacts are usually broken into small pieces from trampling and exposure to weathering.
<i>sherd</i>	A piece of broken pottery or glass.
<i>site grid</i>	The two-dimensional intersection network defining the squares (test units) in which archaeologists excavate.
<i>stratigraphy</i>	The origin, composition, and succession of natural soil, rock, or cultural (i.e. man-made) layers.
<i>stratum</i>	(1) A mass of sedimentary deposits laying in a vertical sequence, and (2) a layer in which archaeological material (such as artifacts or dwelling remains) is found within a site. (Plural is “strata.”)

*terminus post quem*

(*TPQ*) The “date after which” an archaeological stratum or feature’s fill was deposited, based on the date of the most recently made artifact found in the stratum or fill.

*test unit*

A precisely measured and situated area of excavation. Units are most often square (5 feet by 5 feet for example) but can be rectangular.

*water lot*

A piece of land adjacent to the shoreline but under water, granted to a person or persons with the stipulation that they would fill and develop it within a set amount of time.