

## Lesson 1: Tracing Mannahatta

### *Background for Educators*

Of the many historic maps that have helped form the foundation of the Mannahatta Project research, the most remarkable is the one known as the British Headquarters Map. Completed in 1782, this map was drawn by British military cartographers as part of an attempt to keep control of Manhattan during the American Revolution. New York City was the headquarters of the British military during the war, and the British controlled the island. In its original form, the map is over ten feet long – it was completely hand-drawn and colored. Unfortunately for the British, by the time they had completed their painstakingly drawn map, they had already lost the war to the Americans. But a copy of the map was presented to the King, and a copy still remains in the British National Archives in London.

A close look at this map reveals incredible detail in the landscape. The lower portion of the island, which was originally settled by the Dutch in 1624, and named New Amsterdam, shows the streets and buildings of the colony. Broadway is the broad street (marked by the words *Town of New York*) that runs northeast from the green circle of Bowling Green park. Further north, one sees farms dotted with trees. Fortifications and walls can be seen throughout the landscape. Isolated farm houses and other rural buildings are drawn as tiny red squares. Beaches (indicated with a stippled yellow color) line the island's edges, and salt marshes (the tan-colored areas marked by horizontal lines) are adjacent to the coast in many areas. (The island is situated in an estuary, meaning that the rivers and harbor surrounding it are a mix of salt and fresh water.) In many cases blue or brownish streams flow through the salt marshes, and in the lower part of the island, which was the most populated part, these streams were straightened and channelized by colonists in order to better drain the marshes for use as farmland. Further north, freshwater wetlands can be found. These wetlands are symbolized similarly to salt marshes, but can be distinguished from them by the fact that they are situated in the interior, away from the brackish coasts. Throughout the island, blue streams, small ponds, and springs (small blue pools at the upper reaches of some streams) cover the landscape. The large blue pond at the bottom of the island, directly north of the street grid, is the Collect Pond, the only deep pond on the island, and the population's main source of fresh water.

Precise location of water bodies and hills was crucial for directing troop movement, so the British were particularly careful with mapping these features. Hills are indicated by shading. Cliffs, indicated by a darker, more distinct brown, are visible along the edges of the island in some places, and are more prominent in the craggy terrain of the island's far north, in present-day Inwood. The Harlem Plains, as is evident on the map, was the primary agricultural zone of the island. Even before the Dutch and British arrived, the native Lenape people had regularly burned the Harlem area in order to keep the land cleared for agriculture. The soft marble bedrock that underlies this area – so different from the hard granite that underlies most of the rest of the island – meant that the area was relatively flat, and that its soil was relatively rich in nutrients: a perfect place for farming. Other special features to note include Sherman's Creek, which ran west and south of the Harlem Plains; the Minetta Water, a creek that ran through present-day Greenwich Village, in the island's southwest; the forts at the highest terrain, at the very top of the island; and Blackwell's Island, now called Roosevelt Island, in the East River.

Though this map was made in 1782, most of the natural features above the street grid probably had not changed in the time since 1609. This map, therefore, has been an excellent resource for helping envision Mannahatta in 1609, the year of Henry Hudson's arrival. In this lesson, students engage in a process similar to the process engaged in by the scientists working on the Mannahatta Project: they trace the natural features found on the British Headquarters Map, and layer those tracings over the modern orthophoto of Manhattan in order to see where the historic natural features would have been in relation to modern streets and landmarks.