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## Natural History, Geology, and the Civil War Battlefield at Port Hudson, Louisiana

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### ABSTRACT

Beginning in August 1862, the area surrounding the southeastern Louisiana town of Port Hudson was the site of the construction of strategic Confederate fortifications, overlooking the Mississippi River. The fortifications and batteries on top of the bluff were there to prevent the upriver movement of the Union navy. This bluff location along a sharp meander of the Mississippi River north of Baton Rouge was the first observable high ground, as explorers traveled up the Mississippi River. The bluff is famous for the early researchers who visited the location and documented it. Among those were Mr. William Bartram, Sir Charles Lyell, and Prof. Harold Fisk. Prof. Fisk of the Louisiana Geological Survey reported that it was at these bluffs that loess was first recognized in North America (by Sir Lyell). On July 8, 1863, the “last bastion on the Mississippi” became the “Sebastopol” of the Confederacy, ending the longest siege in American military history (48 days).

The geology at Port Hudson, similar to that of Vicksburg, Mississippi (the Confederate Gibraltar), and the Valley of the Somme, France (World War I), significantly impacted the way the battles were fought. The presence and engineering properties of loess on top of the bluff at Port Hudson had a profound impact on the resilience of the Confederate earthworks, and provided the presence of a natural obstacle to assaulting Union forces, in the form of a steep ravine and vertical bluff. The 48-day siege, and associated bombardment, had a deep impact on the local vegetative cover. Severe erosion occurred in the years following the battle.

Van Biersel, T. P., 2010, Natural history, geology, and the Civil War battlefield at Port Hudson, Louisiana: Gulf Coast Association of Geological Societies Transactions, v. 60, p. 669-677.