

# Soil Stories — Activity #70



## TEKS:

Science only  
K.2 A,C, D, E  
K.4 A, B  
K.5 A  
K.7 C  
1.2 A, C, D, E  
1.4 A, B  
1.5 A  
1.7 A  
2.2 A, C, D  
2.4 A, B  
2.5A  
3.2 A, B, D, F  
3.4 A, B  
3.5 A  
3.7 A  
4.2 A, B, C, D, F  
4.4 A, B  
4.5 A  
4.7 A  
5.2 C, D, F, G  
5.4 A, B  
5.5 A  
5.7A  
6.2 A, B, C, D, E  
6.4 A, B  
7.2 A, B, C, D, E  
7.4 A, B  
8.2 A, B, C, D, E  
8.4 A, B

## Texas Overview:

Soil Stories shows students how the physical characteristics of soil help qualify some areas as potential historic landmarks. In this assignment, students examine the physical characteristics of soil and then predict the appropriate land use.



To understand, we must go back to the 1840s-1860s — a time when Texas had cotton plantations and slaves who worked on them. In 1860, 31 percent of the Texas population was made up of slaves.

This story focuses on an area of fertile ground by the Brazos River in Waller County on what is now the Prairie View A&M University campus. Two large, profitable cotton plantations — Alta Vista and Liendo — were located in this area. After the Civil War, the widow of the man who owned Alta Vista sold it to the State of Texas. That land now serves the location of Prairie View A&M.

In the northernmost area of the campus are Pond Creek and Wyatt Chapel Cemetery. According to oral histories, slaves from both the Liendo and Alta

Vista plantations were buried in the area near Pond Creek. The cemetery adjoins Wyatt Chapel Baptist Church, which was established in 1894.

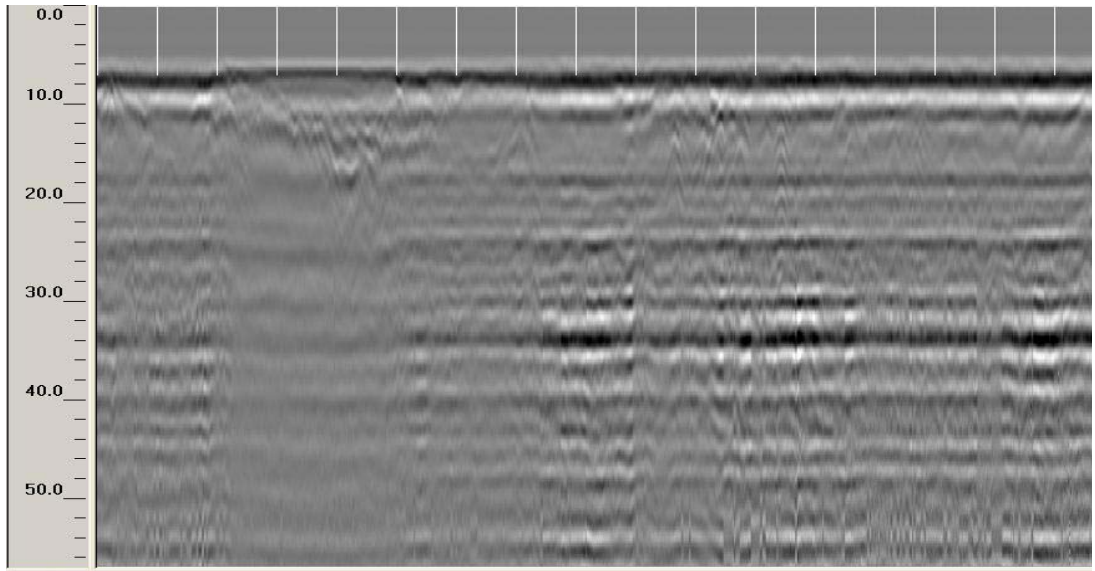
A few headstones indicate the person on the marker was buried after the Civil War, but there is no evidence of graves before the Civil War. Oral histories provide the only clue that this cemetery was a burial site for slaves. Floods from the Brazos River would have wiped out any markers or headstones from that time.

This is where our soil enters the story. The area soil is comprised of three-to-six feet of sand on top of a very hard layer of clay. The clay layer is so hard that even modern day equipment has extreme difficulty penetrating it. Thus, the top layer of sand is where all burials would have taken place. The physical characteristics of the sand make it a good medium for ground penetrating radar. The radar could possibly locate the unmarked slave burials sites.

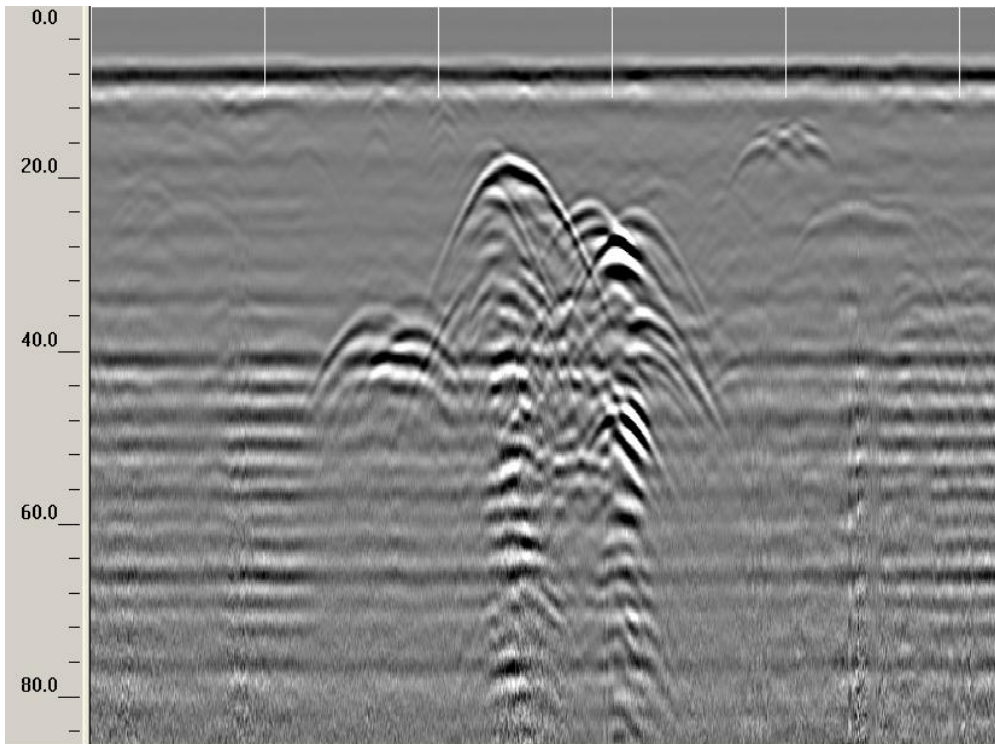
A team from Rice University in Houston now is spending summers studying the area. Using the radar, they have located several "anomalies" including two that have been excavated and identified as burial sites. All sites are being marked so archeologists and historians can further study the area and possibly identify its cultural and historical significance.

Meanwhile, research is continuing and the team is identifying additional burial sites in the hope that the knowledge they gather from them will help fill in the missing pieces needed to make this a state historical area.

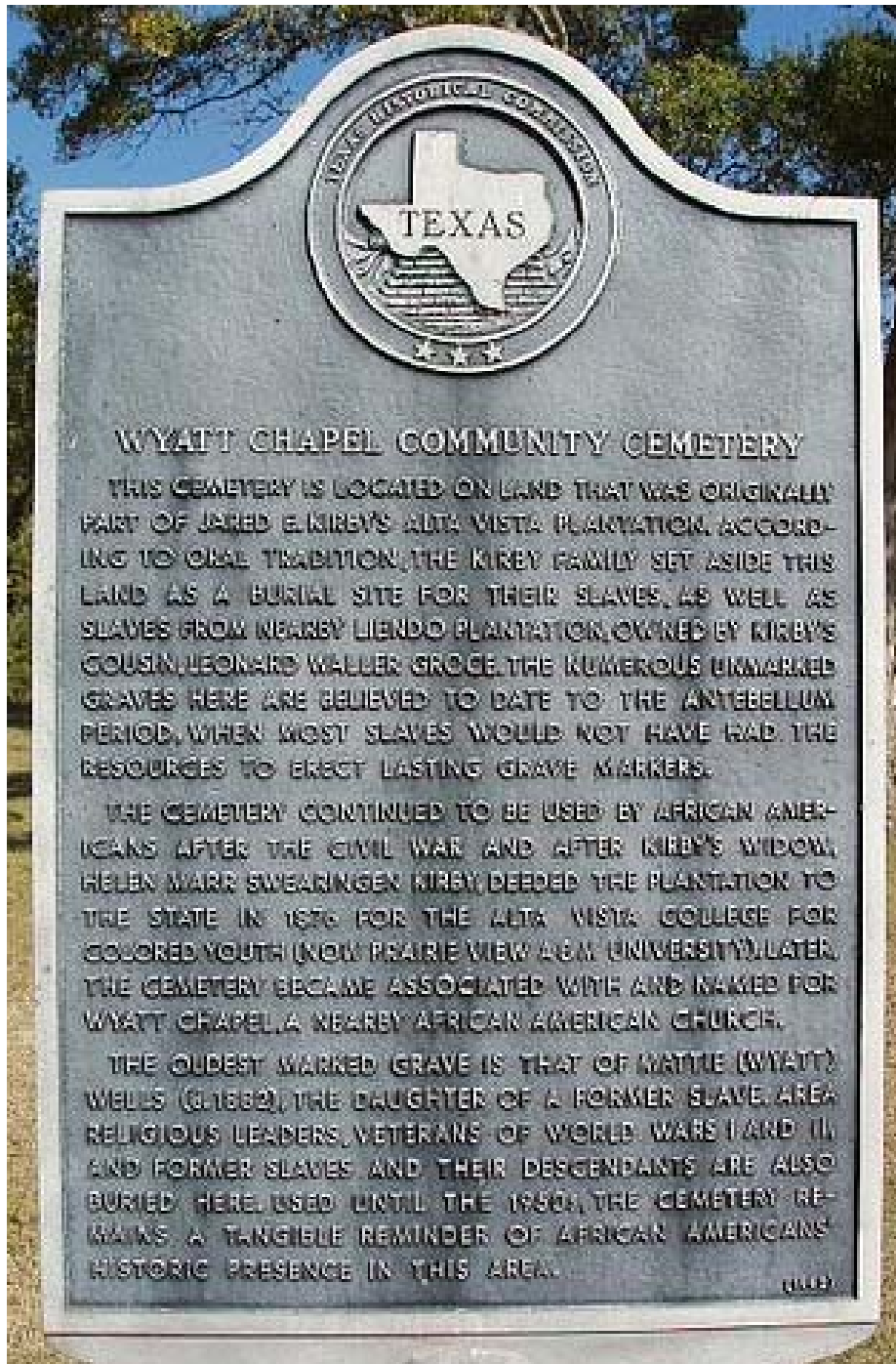
If not for the uniformity of the sandy layer of soil in this area, an important piece of Texas history could have been lost.



**Normal, ground-penetrating radar image of the Wyatt Chapel Community Cemetery area.**



**Radar Image that shows an anomaly that could be a burial site.**



**Citations:**

Henning, Alison T. et.al.; *Journal of History and Culture* 2008; *Using Science to Uncover History: A Geophysical Investigation of Wyatt Chapel Cemetery*; page 51.

Rice University Earth Science Class of 2007 and 2009.