

Group 2

2009 Rice Earth Science Program

**Research was done at Prairie View A&M
at the Wyatt Chapel Cemetery**



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Group 2 – Questions

Question: Does the Eastern part of the old cemetery show signs that would indicate more burials?

Secondary Question: Can we find any proof that would date the time when people were still accessing the Eastern part of the cemetery?

Group 2 Objectives

1. Measure distances of positions using the total station and target poles
2. Operate and interpret results from the Ground Penetrating Radar (GPR)
3. Uncover the History and Historical Figures of Wyatt Chapel Cemetery
4. Plot way points and navigate using hand held Global Positioning Systems (GPS)
5. Load GPS way points and organize points and information in ArcGIS, a computer program.

Objective 1 - Measure distances of positions using the total station



- The total station is a laser based distance measurement system.
- It can tell you the distance within 3 mm one point to another.

How the Total Station Works

To find the distance, the laser in the main station (pictured on the left) must be shot to a target (pictured to the right).



Here Omar is shooting at the target held by Davin.



Objective 2 - Operate and interpret results from the Ground Penetrating Radar (GPR)

The GPR is located on the underside of the cart. It sends and receives radio waves.

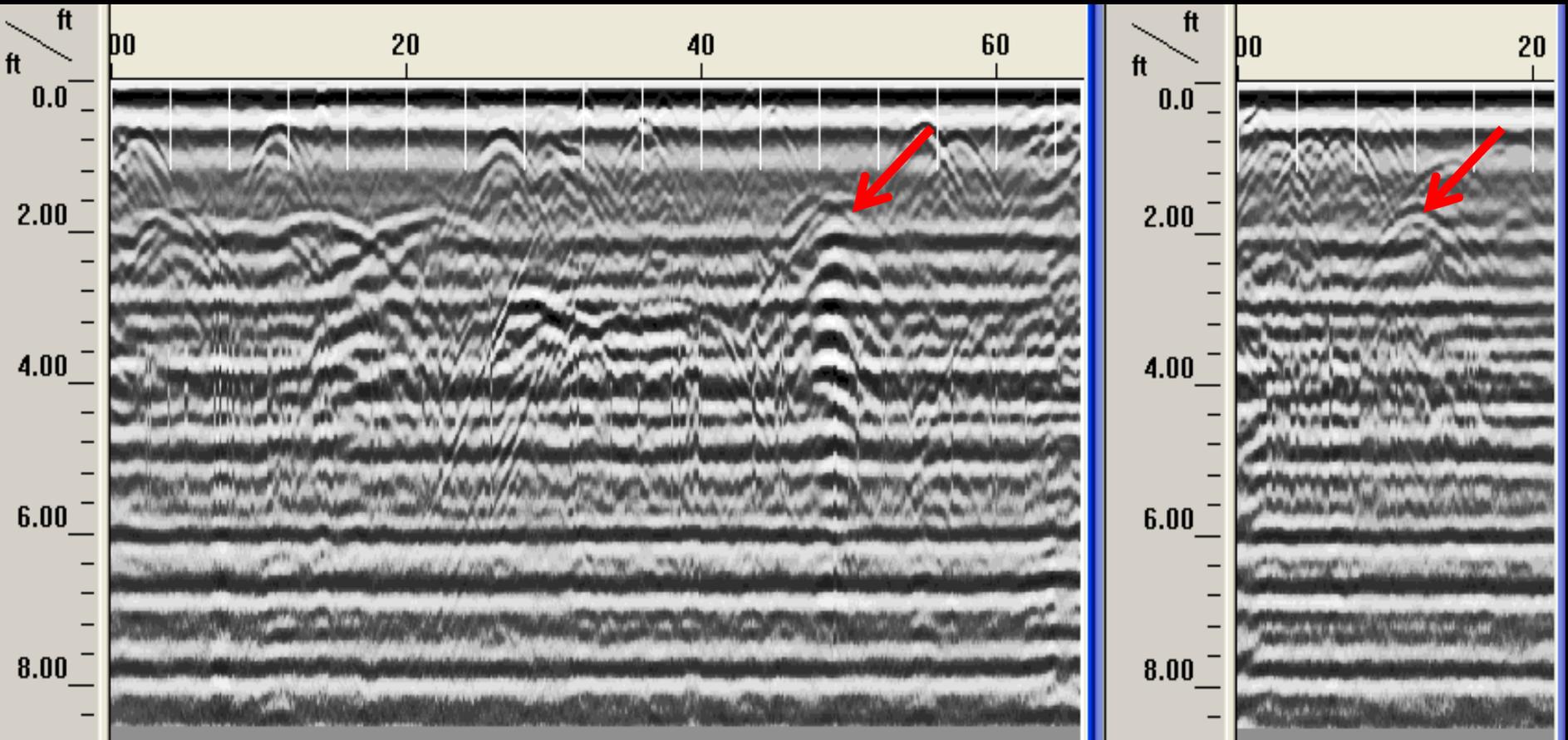
When there is something dense underneath the GPR's screen it displays an anomaly which looks like a parabola.



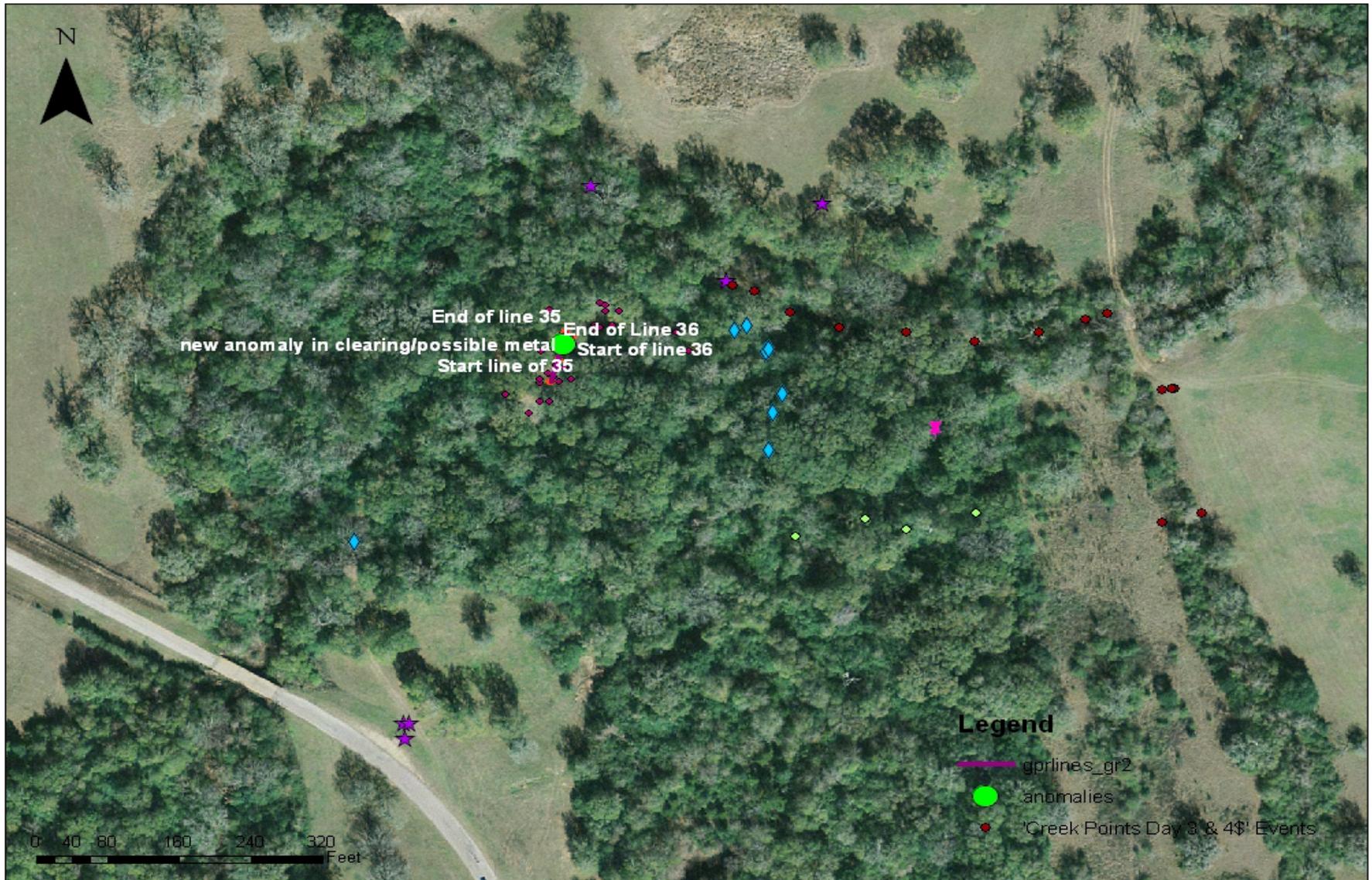
Alison shows group 2 how to use the GPR.

Here is an anomaly we found

- This is what an anomaly looks like on the GPR screen.
- This is possibly an unmarked grave.



The anomaly in the big picture



Where the anomaly is located:

A close up view of our GPR lines with start points, stop points, the anomaly, and the path of our line.



Objective 3 - Uncover the History and Historical Figures of Wyatt Chapel Cemetery

We researched at two different libraries:

- Rice University Library

At Rice we looked at primary sources such as letters written by and to the Groce family.

- Prairie View Library Archives

At Prairie View we scanned books like [A History of Waller County](#) and maps for any information on Prairie View, the Groce Family, and the Wyatt Chapel Cemetery.

What we found at Rice

- The contract for the plantation. This document shows the purchase amount, people involved, and parameters for the deal.
- An envelope that carried the information about the assassination of Leonard Waller Groce, Jr., who was executed in Nicaragua, October 16, 1909.

What we found at the Prairie View archives

- Jared E. Groce started the first cotton plantation in Texas. He sold most of his cotton to Mexico.
- Jared E. Kirby held church services in the parlor of his home on Alta Vista Plantation. They were lead by Rev. Nathaniel Norris Allen M.D. (he was a doctor and reverend). Later, Kirby Chapel Methodist Church was founded 6.5 miles East of Hempstead – it also had a cemetery this church was the first church used only for worship.
- Wyatt Chapel was an African American community occupied by Henry Richards, Jesse Wilson, C.H. Waller, the Wysongs, the Thibideaus, the Davis family and others.
- Dr. Leonard Waller Groce practiced medicine in Hempstead for many years and then died at a railroad crossing accident on July 6, 1901.

More information that was uncovered

- Elisabeth Ney, the famous sculptor, inhabited the Liendo Mansion after the Groce family. It is said that the first born of Elisabeth was buried by Ponds Creek, after she attempted to cremate him on the chimney. We wonder if it refers to the same creek in the area of study: Pond Creek.
- Military Records couldn't be found because a fire destroyed 80% of the Army records. On July 12, 1973, a disastrous fire at NPRC (MPR) destroyed approximately 16-18 million Official Military Personnel Files.
- A possible explanation for the pattern followed by the headstones in Baptist Cemeteries:

“Do you know why they bury people facing east and west? Well, it's because when Jesus comes, he is going to come from the east and that way, when people rise up to meet Him, they will be facing Him.”

“Know why they bury some facing north and south? Because they probably did something bad. And up yonder is buried that man. He was sparking this woman, and this man told him not to come back. He did. And, that man shot him dead right off his horse”

-Jon McConal, “Cemetery Working: A link with the past”



Objective 4 - Plot waypoints and navigate using hand held Global Positioning Systems (GPS)



Here is our group plotting a waypoint on our GPS and marking it with a flag. We were exploring the area with Xanthia.

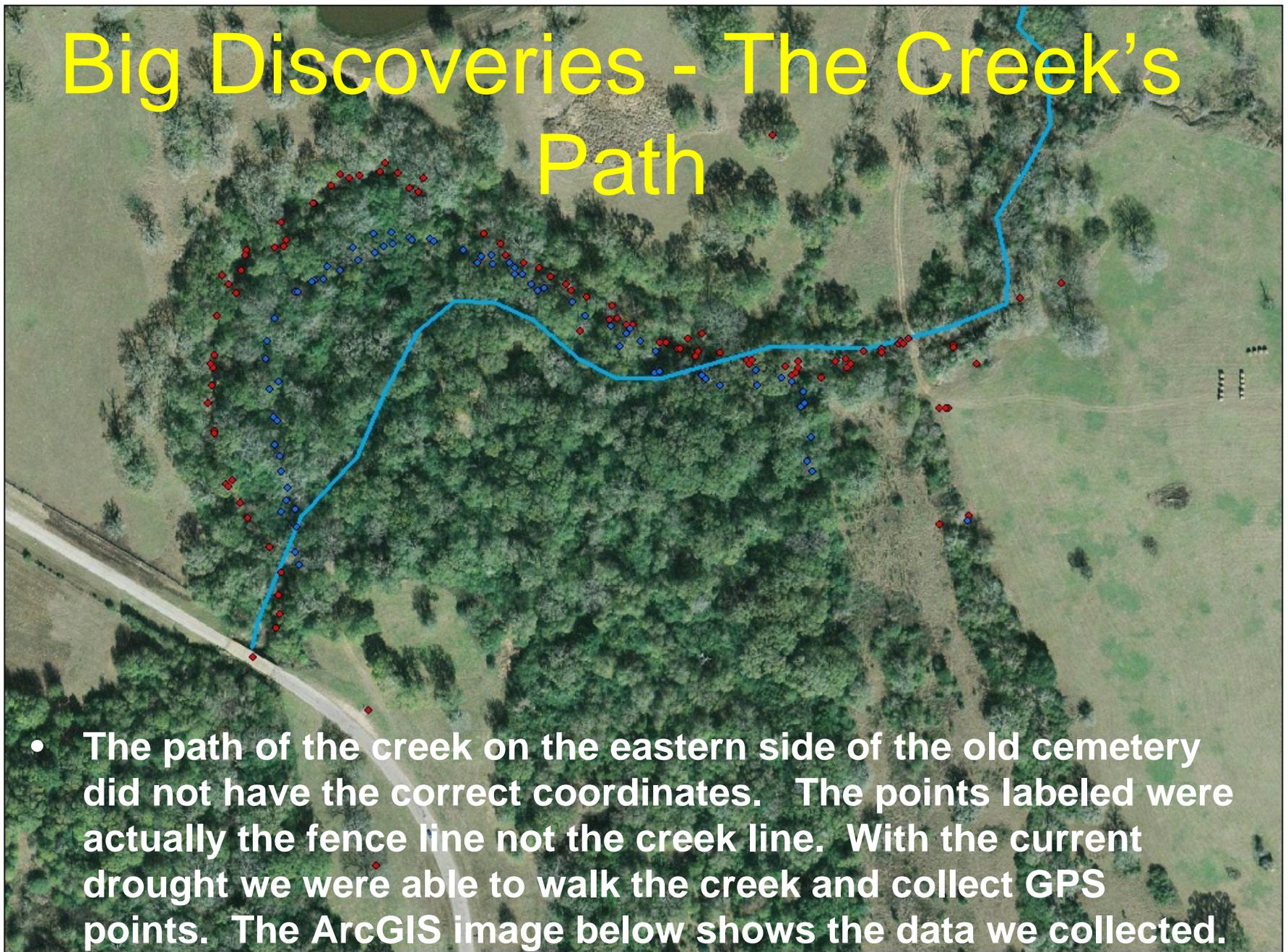
Making a waypoint for a piece of pottery in the hand held GPS.



Objective 5 - Load GPS waypoints and organize points and information in ArcGIS a computer program.



Big Discoveries - The Creek's Path



- The path of the creek on the eastern side of the old cemetery did not have the correct coordinates. The points labeled were actually the fence line not the creek line. With the current drought we were able to walk the creek and collect GPS points. The ArcGIS image below shows the data we collected.

Big Discoveries - Signs of dumping from the 1950's



Map showing Glass Piles



Thank you!

- Rice University
- Prairie View A&M University
- Prairie View A&M Library Archives
- Mr. Jackson - The Mayor of Prairie View
- Alison, Xanthia, Davin, Russ, and everyone else who helped make this project a success