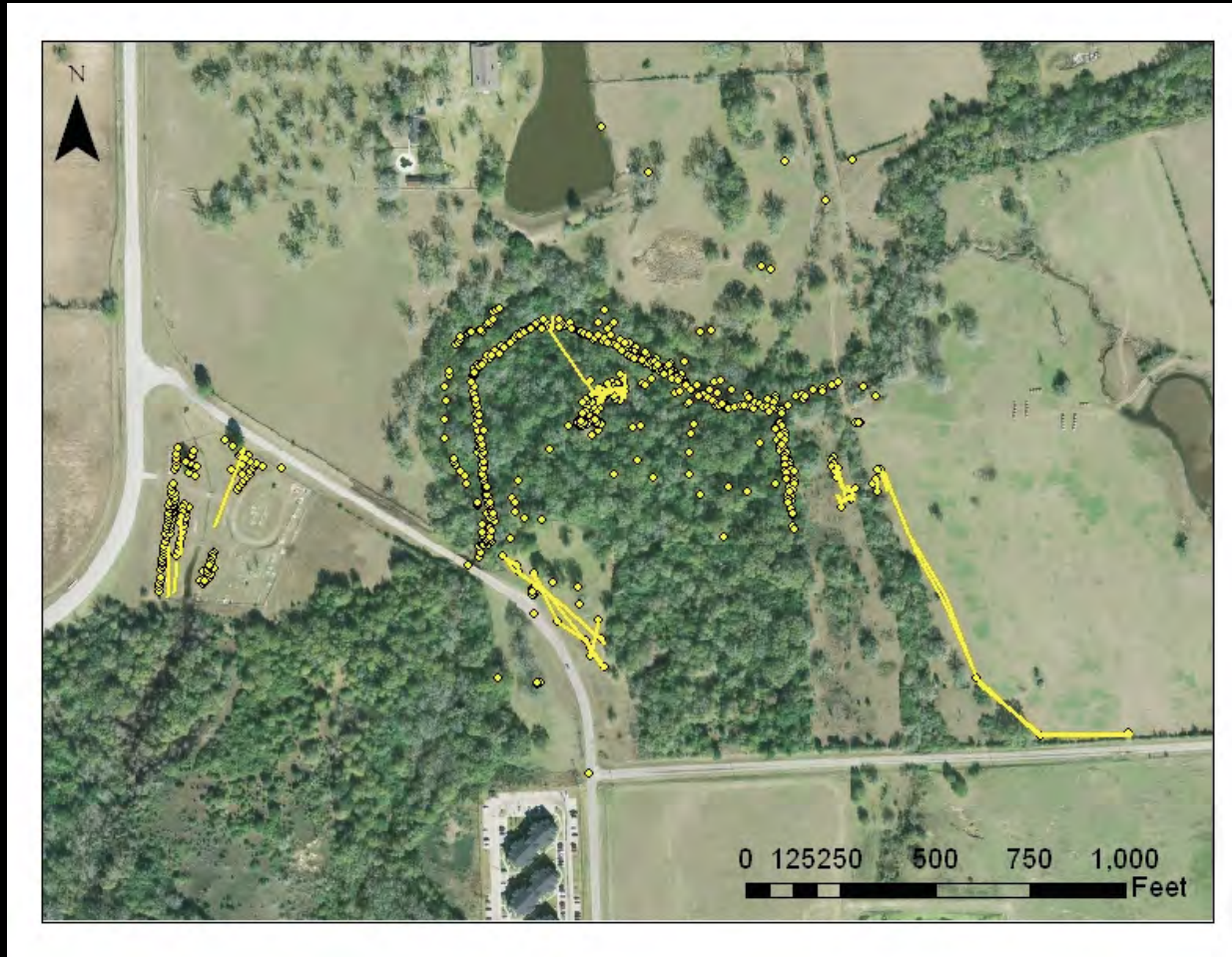


In Search of the
Wyatt Chapel Cemetery
Boundaries

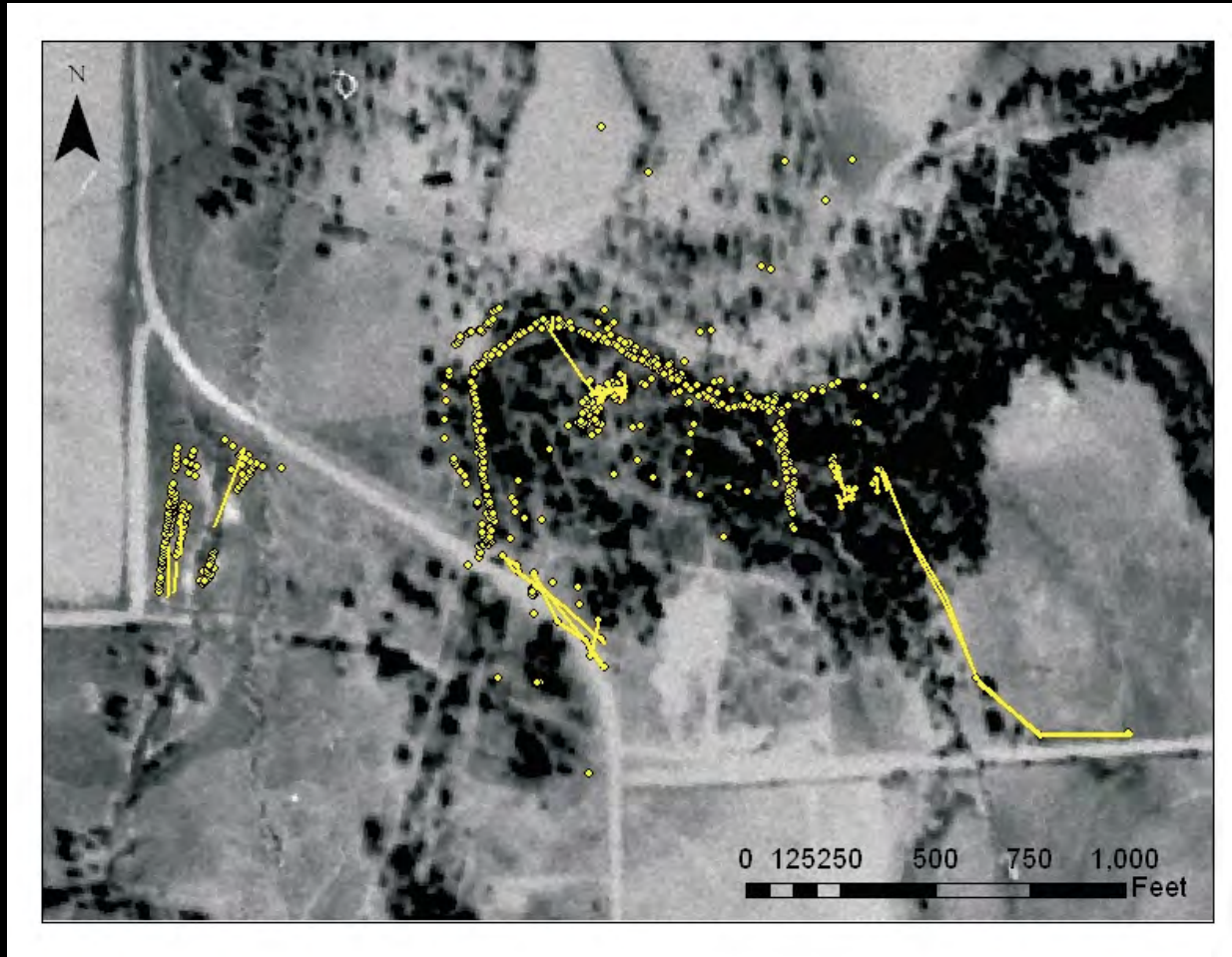


Rice University
Visiting Graduate Students
Bill Baker
Jared Sallee
July 2010

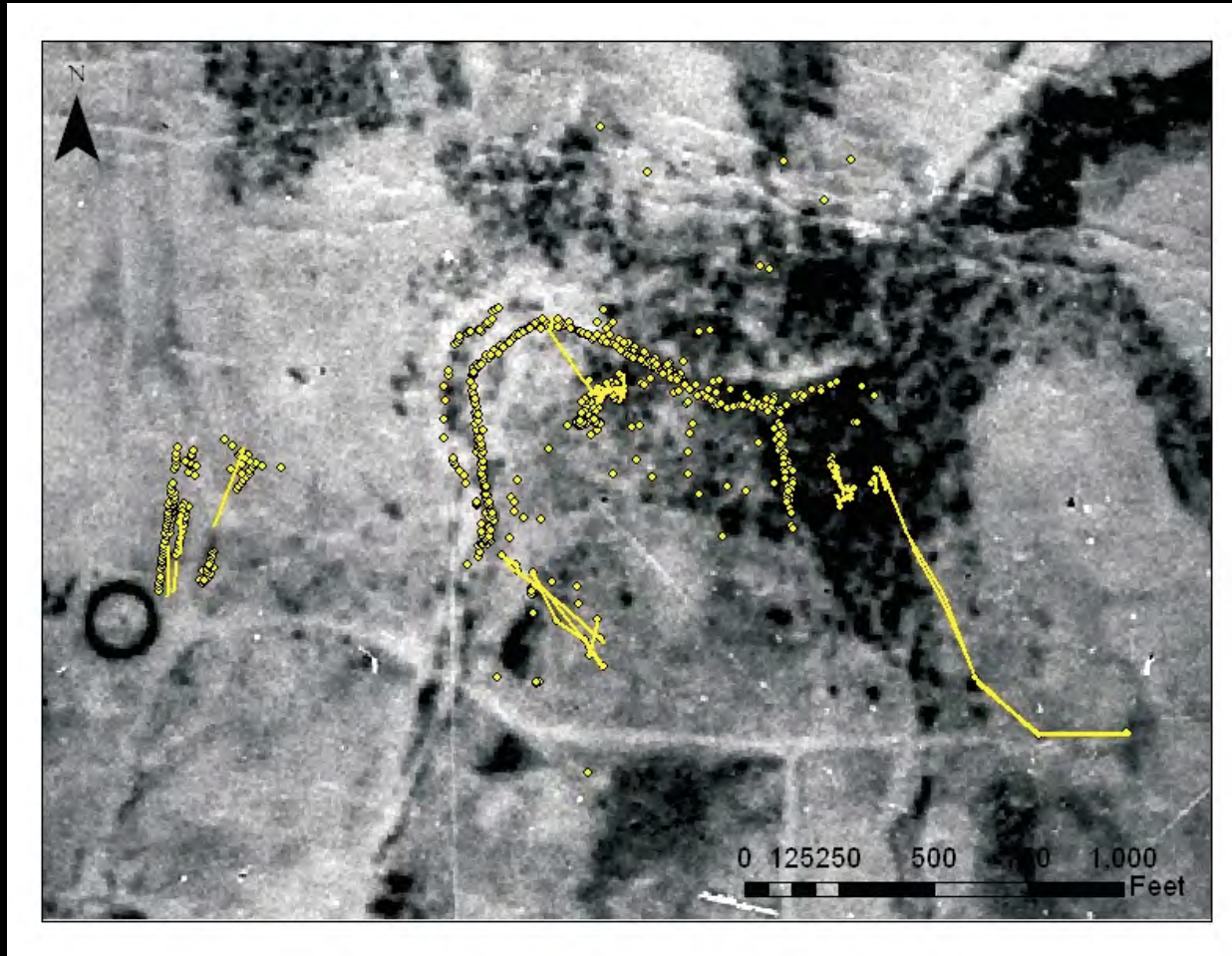
Review of Aerial Photographs - 2006



Review of Aerial Photographs - 1956



Review of Aerial Photographs - 1930



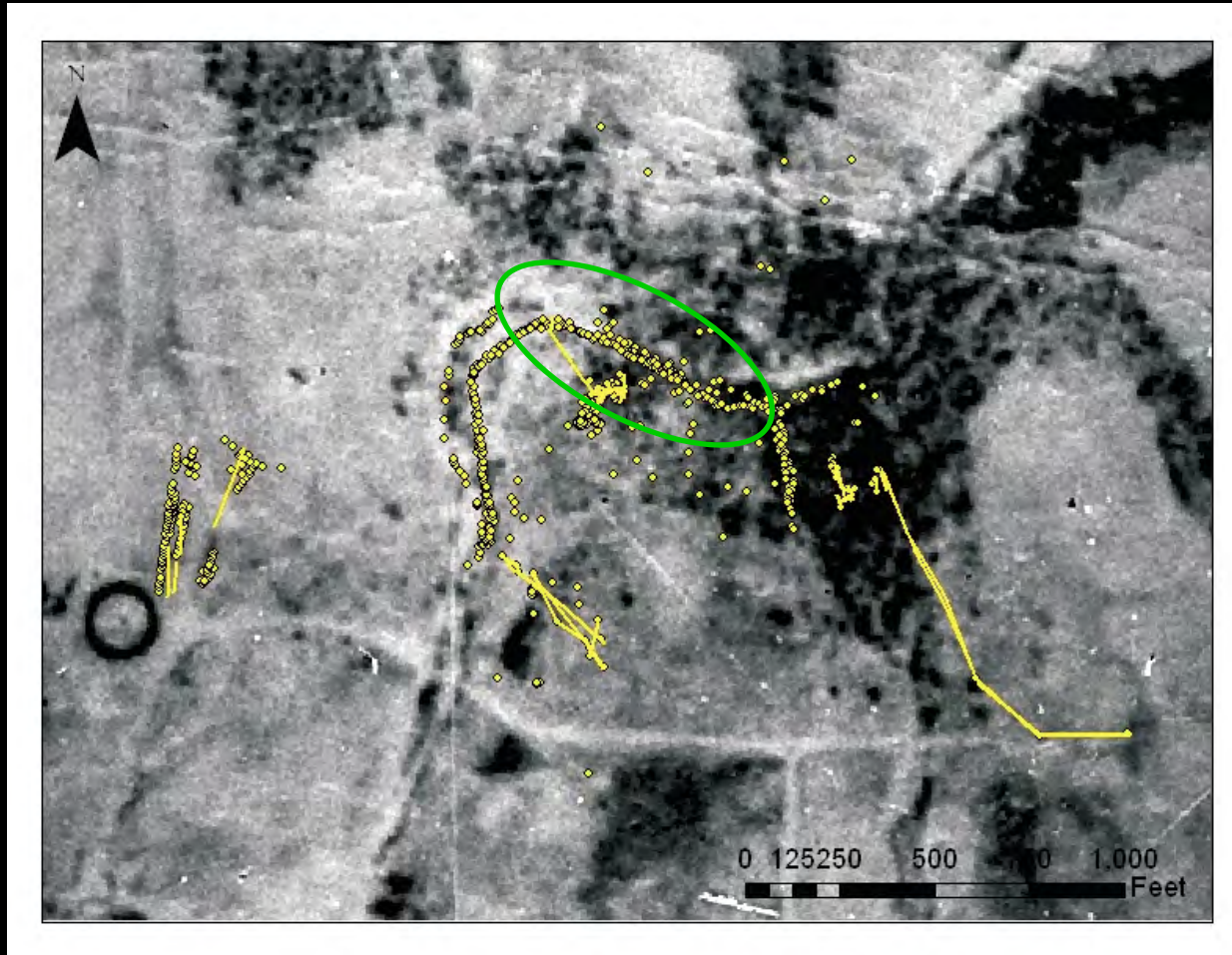
Vegetation in Aerial Photographs

- We noted that the 1930 view had the least vegetation. This indicates the plant succession of the area over 76 years.
- There are 5 stages of plant succession:
 - Herb stage
 - Shrub stage
 - Young Forest stage
 - Mature Forest stage
 - Climax Forest stage

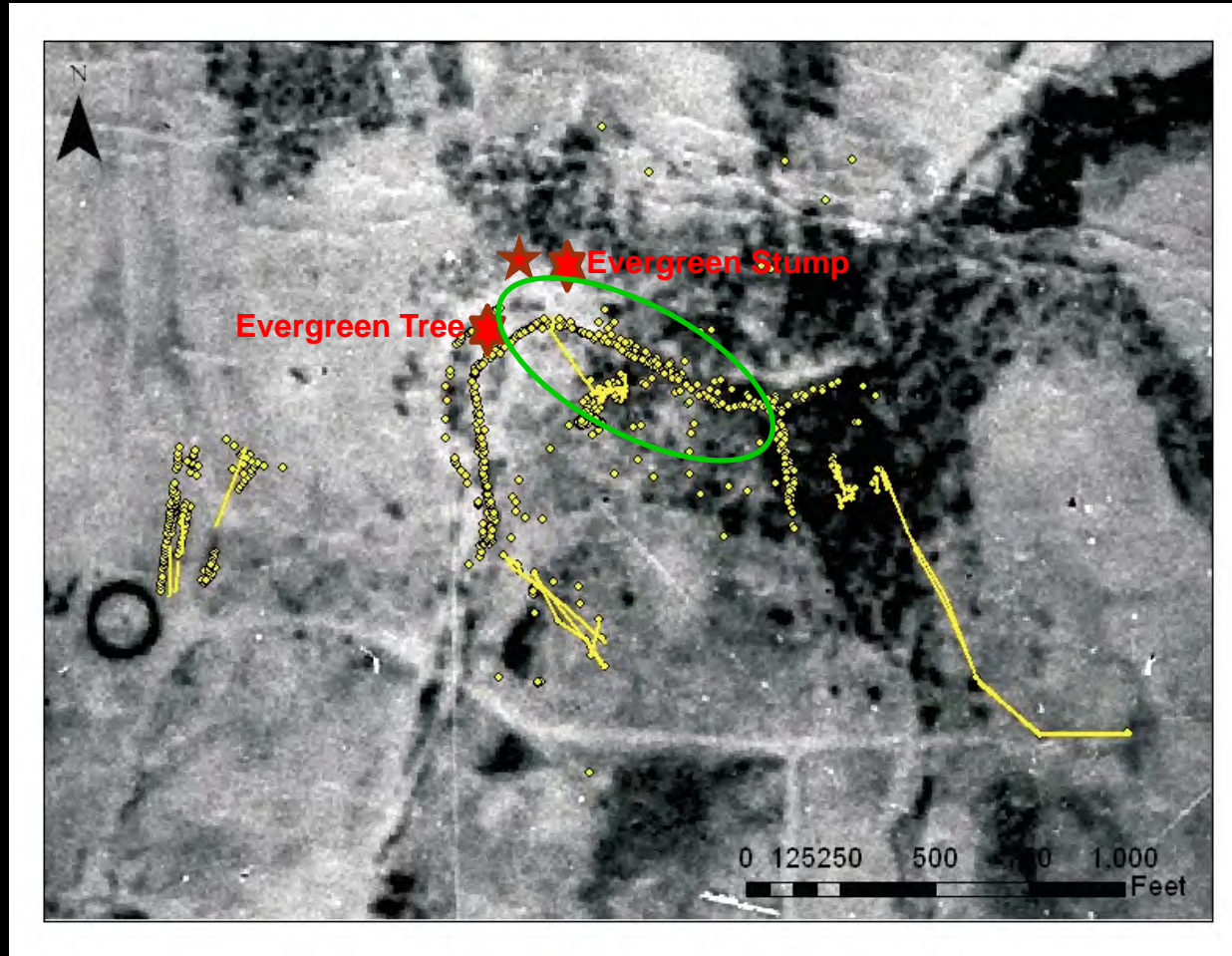
Data Analysis

- We superimposed the tree data over the 1930 aerial photograph to try to identify a vegetative boundary.
- We plotted the vegetative boundary alongside the creek.
- We identified two evergreen trees that we believe mark the entrance to the original slave cemetery.
- We plotted known burial sites inside the vegetative boundaries to compare against the proposed cemetery boundaries.

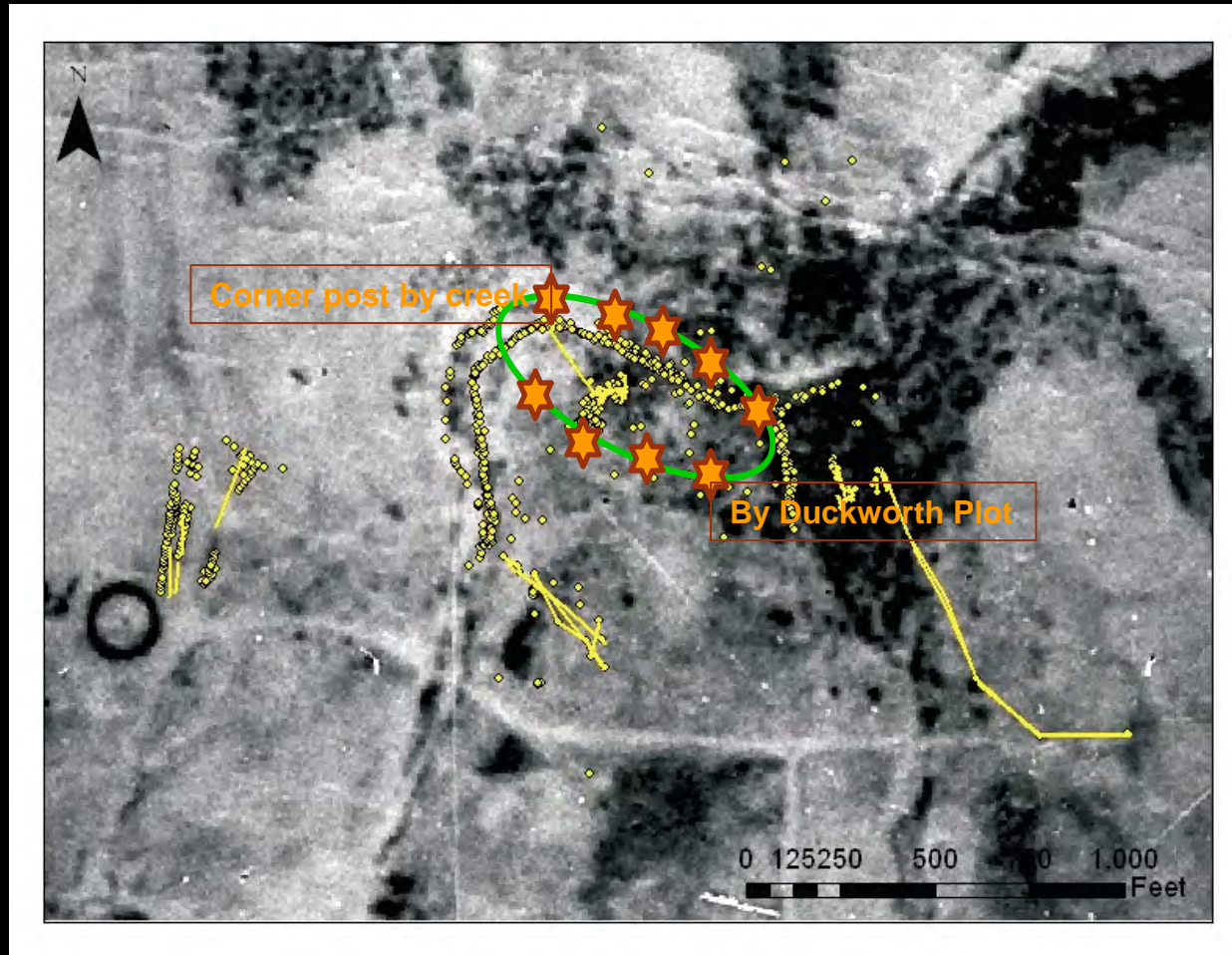
Vegetative Boundary Superimposed Over 1930 Map



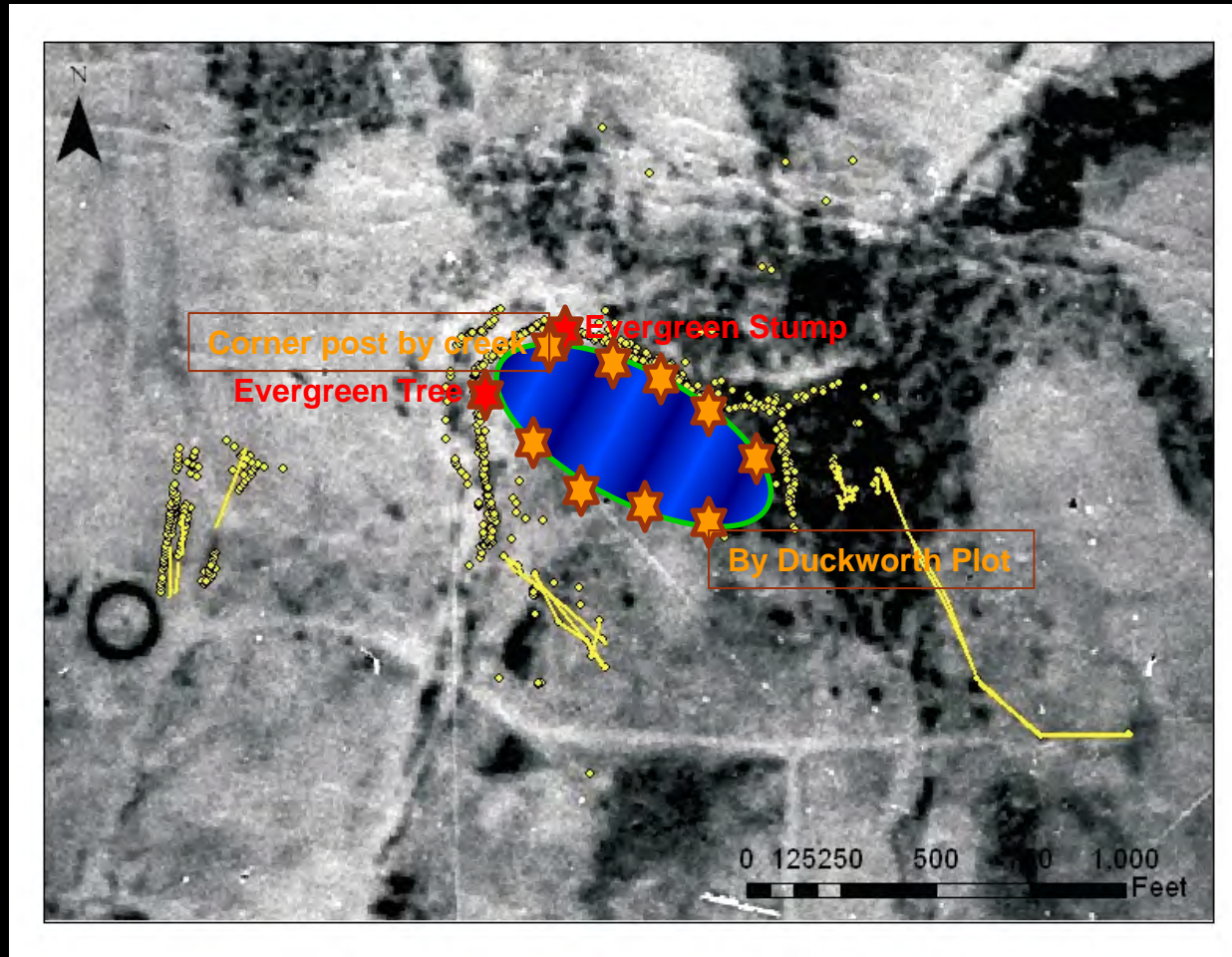
Evergreen Entrance Superimposed Over 1930 Map



Existing Oak Trees & Stumps Superimposed Over 1930 Map



Existing Grave Markers Superimposed Over 1930 Map



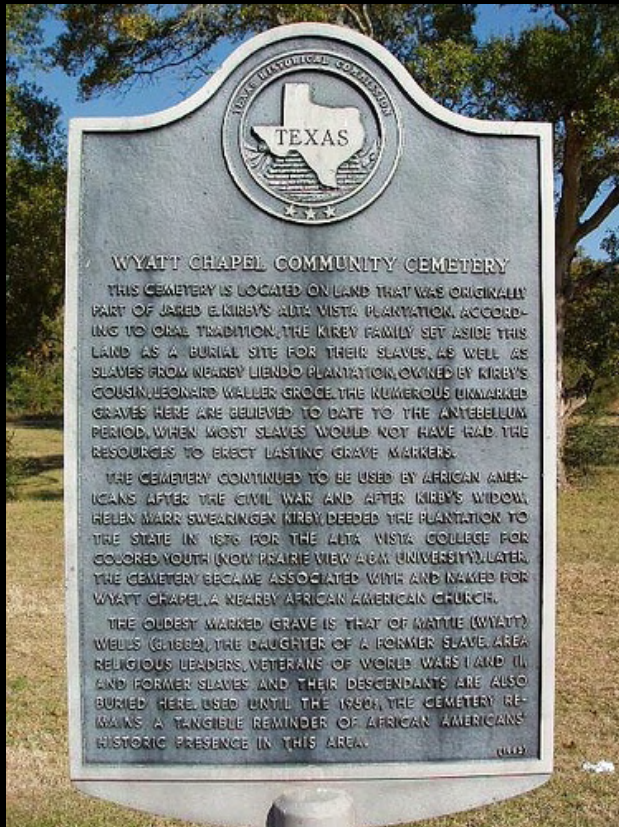
Conclusions

- It appears that there is an oval-shaped vegetative boundary marking the cemetery plot.
- It appears that two evergreen trees were planted (one is a stump) near the corner post of the northwest boundary near the creek. We did not locate any other evergreens in the plot area. The two evergreen trees were the oldest trees in the plot and mark the original slave plot.
- In the northwest corner, bottles, broken dishes, and rocks were found. These items have been used in the past to mark slave graves.
- We believe that the oak trees were planted in a pattern at a later time shortly before 1930. The pattern was plotted to establish the boundaries of the cemetery plot.
- We do not feel comfortable at this time establishing the southwest boundary due to the tremendous amount of vegetation found near the creek.

Recommendations

- Continue removing existing brush so that debris, stones, pottery, and impressions can be studied next summer.
- Work with Prairie View A&M to better define the boundaries of the cemetery. We were told that an old plot map existed but it was not available to be integrated into this project.
- Due to the tremendous amount of vegetation on the northwest boundary of the cemetery plot moving toward the creek, we were unable to establish a vegetative boundary.

A New Fence Line



Running the Distance

Summer 2010

Jan Grout and Sarah Wall

Problem: Are there any anomalies in the subsurface along a proposed fence line in the Wyatt Chapel Cemetery Area?

What was done:

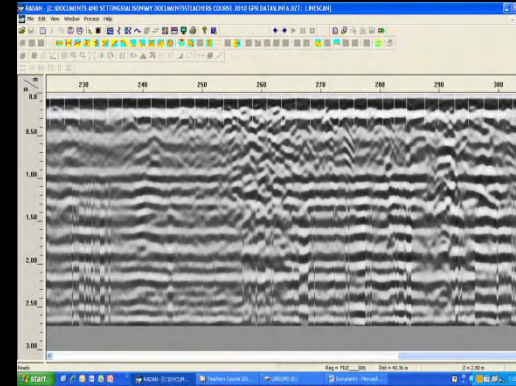
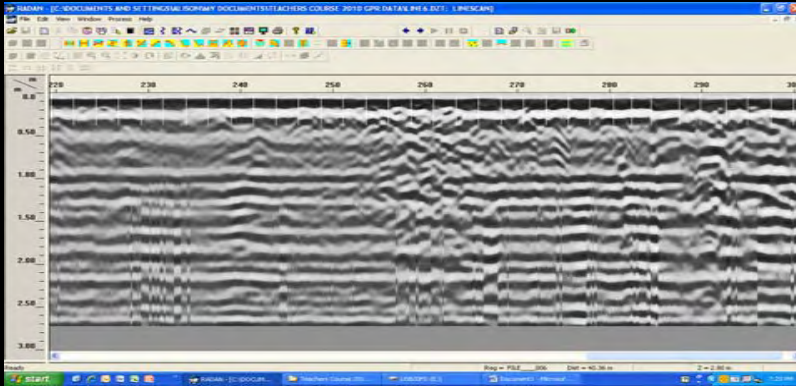
1. A GPR (Ground Penetrating Radar) line was run along the tree line in the front clearing area to the main clearing to determine if any anomalies would impede the building of a civil war style fence.
2. A visual observation was made to look for any obstacles that would prevent the building of a fence.



The yellow indicates the area of data collection.



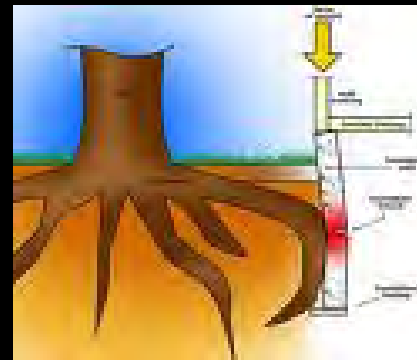
Results



- Many shallow anomalies were found which are believed to be tree roots.



Letspaintnature.com



Earthideaslandscaping.com

Why Tree Roots



Backyardnature.net

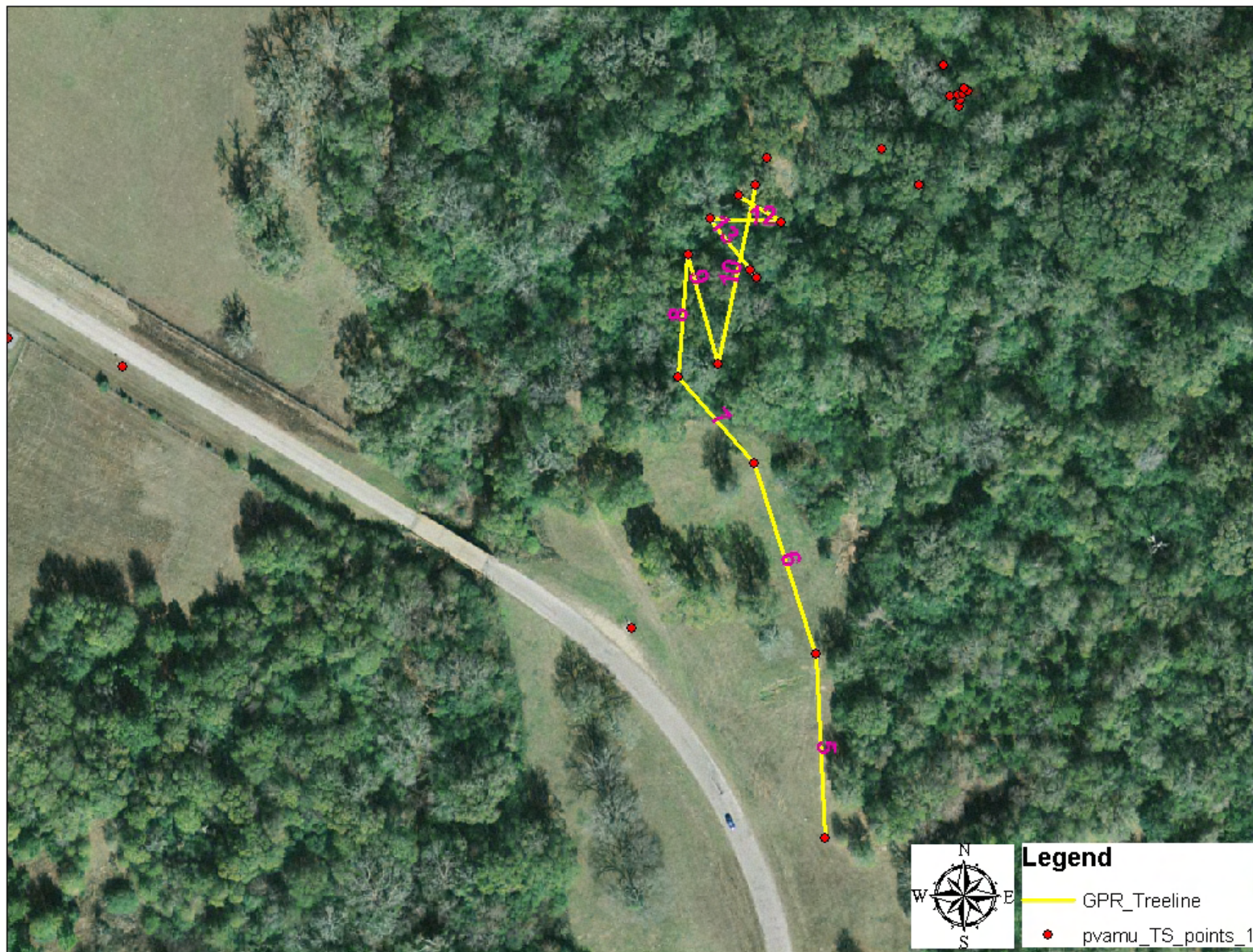
- Water Oaks (*Quercus Nigra*) are the most common tree found along the line.
- The average Water Oak will grow 50'to 80' with a spread of 60'to 70'.
- The root system of the water oak is shallow and widespread. The spread will be roughly the same as the tree canopy.
- The GPR showed shallow anomalies that would be consistent with tree roots.

A Water Oak toppled by a storm. Notice the extensive root system.



Anomaly Along GPR Line 5

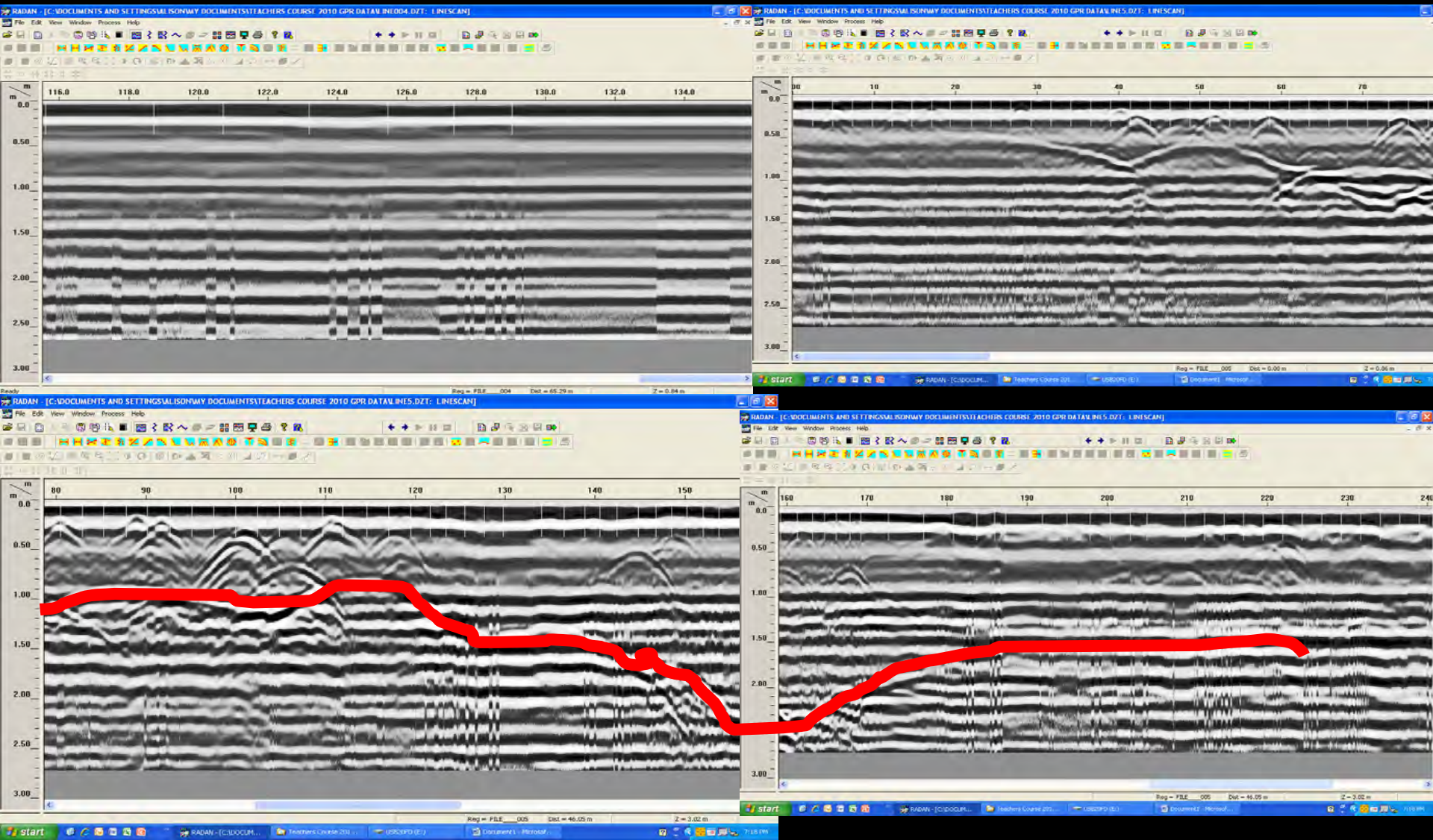
- An anomaly along GPR Line was found.
- A profile was observed that could possibly be the historic creek channel for Pond Creek.
- Historically the creek has moved North to Northwest based on aerial photographs and GPS data from Summer 2009.



Legend

- GPR_Treeline
- pvamu_TS_points_1

Start of Tree line-Line 5



Visual Inspection of Site

- The area has been used for dumping in the past. This is evident by broken glass bottles, plates and other debris that can be observed at the surface.
- Bricks and concrete that are not part of the cemetery have also been dumped in parts of this site.
- GPR lines over area's of debris also are consistent with buried glass and bricks.

Recommendations



Centerforinvestigativereporting.org

- ◎ There are many shallow, large tree roots that will have to be worked around when putting in the fence post. Care to avoid cutting through many of the roots from the same tree should be taken. If too many of the roots are destroyed the tree will die.
- ◎ There are many areas where dumping and litter has taken place. These need to be approached with care, avoiding broken glass and sharp edges.
- ◎ The clearing going into the central cemetery area has not shown any noticeable anomalies. Walkways that meet ADA requirements could be made to access existing headstones.



Acknowledgements

Dr. Akel Kahera

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