

Historic Cemetery Preservation and Care

5th Annual Preserving Historic Cemeteries Workshop



Sarah Lowry, MA, RPA – Director of Geophysics and Cemetery Studies – New South Associates, Inc.
J. Faith Meader, MS – Senior Historian and Principal Investigator – New South Associates, Inc.
Jason Harpe, MA – Director of Cemetery Conservation – Richard Grubb & Associates, Inc.

Agenda

- Archival Research
- Delineating a Cemetery
- Gravemarker Preservation
- Additional Resources



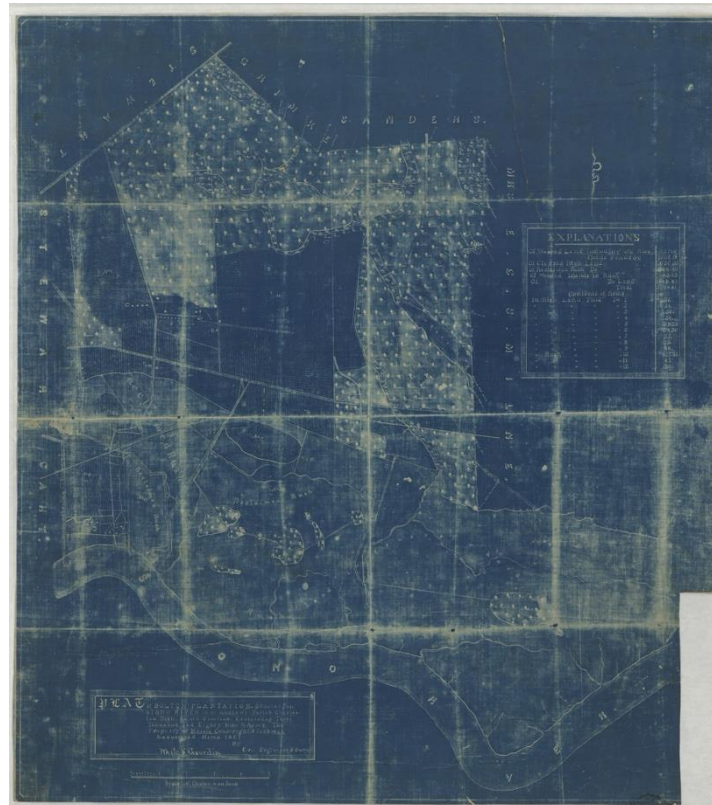
Archival Research for Forgotten Cemeteries

J. Faith Meader

Some Points Before You Get Started

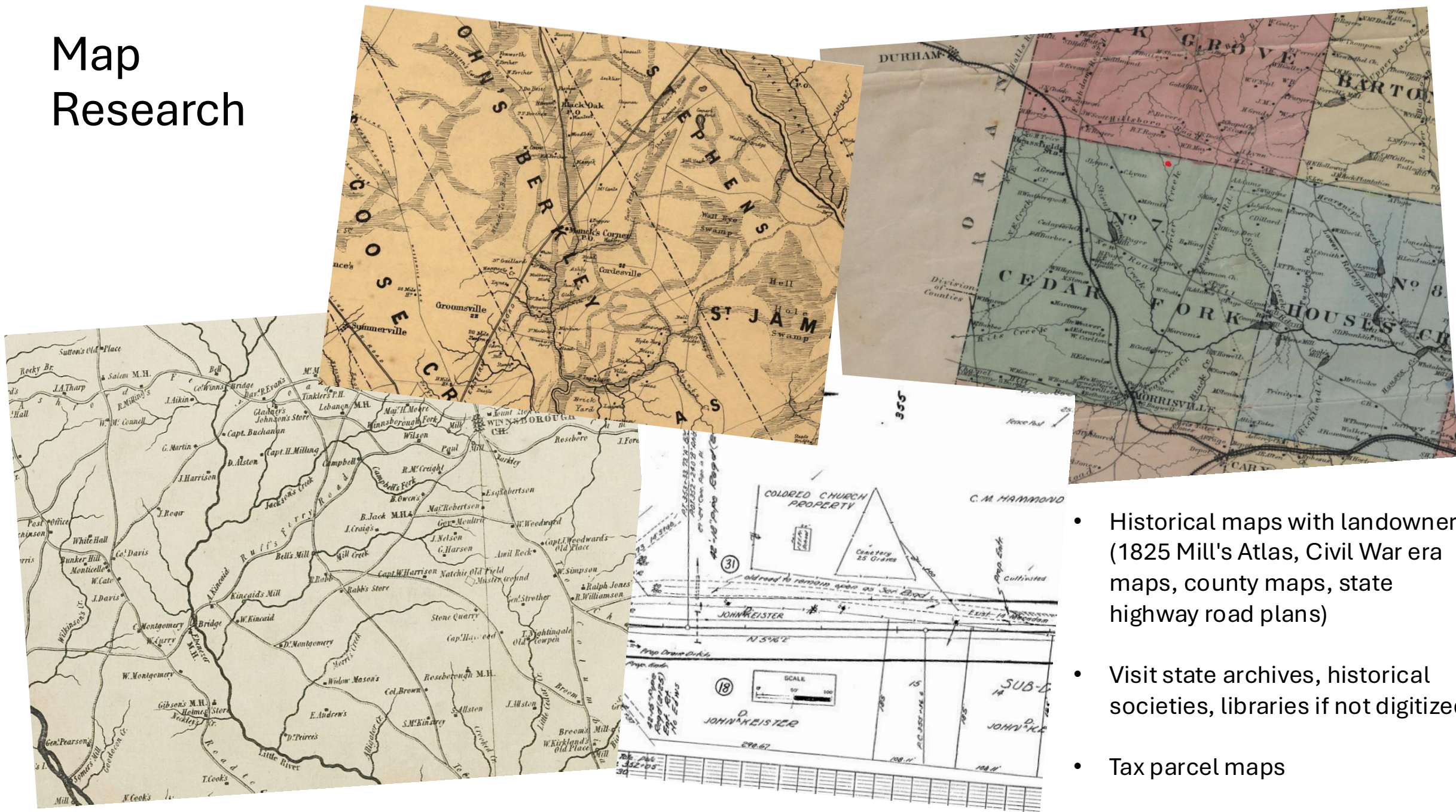


- Names or no names?
- What's available in digital archival records varies by county.



- Cemetery research is detective work! You will have a web of red string connecting people, properties, and events from a variety of archival sources.
- Research the area surrounding the burial ground, not just the cemetery.

Map Research



- Historical maps with landowners (1825 Mill's Atlas, Civil War era maps, county maps, state highway road plans)
- Visit state archives, historical societies, libraries if not digitized
- Tax parcel maps

Land Ownership Records

REAL ESTATE.									
Name of Militia District	No.	District,	Georgia Militia.	Vol. 456.	Part of White.	Layers.	Deeds.	Deeds.	Deeds.
SAMES--(First Names in Full.)									
Will George M	1				40	100	3	250	
Harbin Wm B	2				245	100	3	1500	
	3				300	100	2	150	
Wall James L	4				40	100	3	150	
	5								
	6								
Jeffers Mary	7				160	100	3	960	
James John L	8								
Jones William	9				780	100	3	2330	
Johnson James W	10								
Johnson Rice B	11								
Johnson Ada B	12								
Johnson E Cy Jun	13								
	14								
Jones Columbus	15				320	100	3	960	
	16								
Johnson E Cy Jun	17				260	100	3	1800	
	18								
	19								
	20								
Kennedy Joseph	21				30	100	3	250	
Knot Wm M	22				240	100	3	1200	
Kiser Irene	23								
	24								
	25								
Lackey	26				120	100	3	800	
Lackey Samuel	27				40	100	3	150	
Lackey Lewis	28				60	100	3	225	
Larry J	29								
	30								



- Do a chain of title (FamilySearch, SC Land Records, GSCCCA, or other)
- Read the deed description for geographical clues about the parcel, and look for any plats referenced.
- Use tax lists and court records too!

[Family Tree](#)
[Search](#)
[Memories](#)
[Get Involved](#)
[Activities](#)

Jennifer FaithMea...

Union. Grantor Records 1785-1913

#008152067

Image 1 of 329

255052

1

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Lancaster County, SC

Layers Home Map Search Results Sales Search Sales Results Sales List Report Pictometry Imagery GIS Links

Scanned Property Card

Property Card Note: Property Cards are current as of 4/1/2020 and are no longer updated

Owner Information

STALLINGS TONI

4120 NICOLE EILEEN LANE

CHARLOTTE NC 28216

LLOYD LESLIEW

4120 NICOLE EILEEN LANE

CHARLOTTE NC 28216

Land Information

Land Use	Number of Units	Unit Type	Land Type	Frontage	Depth	AgUse Value
QualAg (QUSE)	36.91	CROP/TIMBER	SITE	0	0	\$4,503

Sales Information

Sale Date	Sale Price	Instrument Number	Deed Book	Deed Page	Sale Qualification	Vacant or Improved	Grantor	Grantee
2/9/2026	\$0	DEED OF DIST	2022	1	Unqualified - FAMILY SALE	Improved	KIRKLAND JOHN	STALLINGS TONI
9/27/2016	\$0	DEED OF DIST	998	249	Unqualified - FAMILY SALE	Improved	WOOD BRENDA K	KIRKLAND JOHN
8/17/2012	\$0	DEED	682	241	Unqualified - WILL	Improved	KIRKLAND RUTH	WOOD BRENDA K & JOHN KIRKLAND
7/13/1961	\$0	DEED	A-5	97	Qualified	Improved	KIRKLAND BEN MET UX RUTH	KIRKLAND RUTH

Area Sales Report

Sale date range:

From: 09/01/2023 To: 09/01/2026

Information

Metadata describing the entire group of images

Image Group Contents

Union, South Carolina, United States

Grantor Records 1785-1913

References

Collections (0)

Research Wiki

Details

Title

Volume

Language English

Creator [Union County \(South Carolina\), Register of Mesne Conveyance](#)

Custodian

Archival Reference Number

803-285-6964

Senior GIS Analyst

[Marcus Cureton](#)

803-313-2180

GIS Technician

[Will Dutton](#)

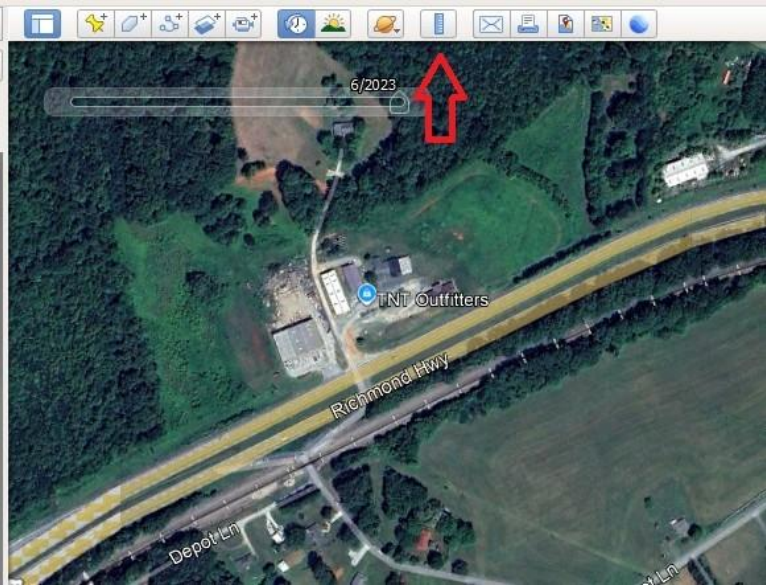
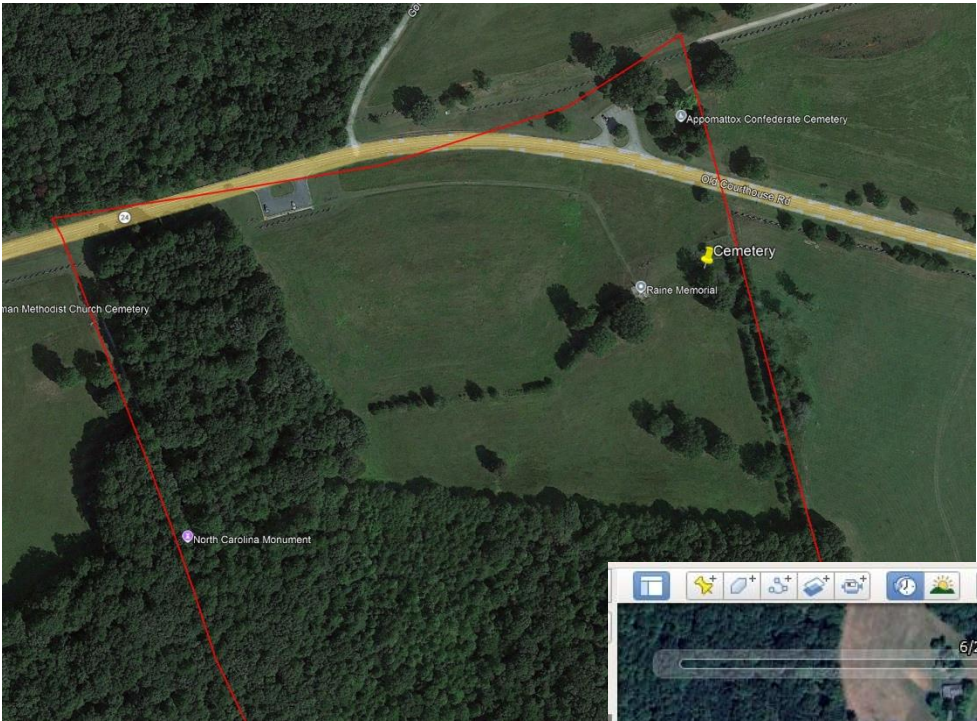
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GIS Technician

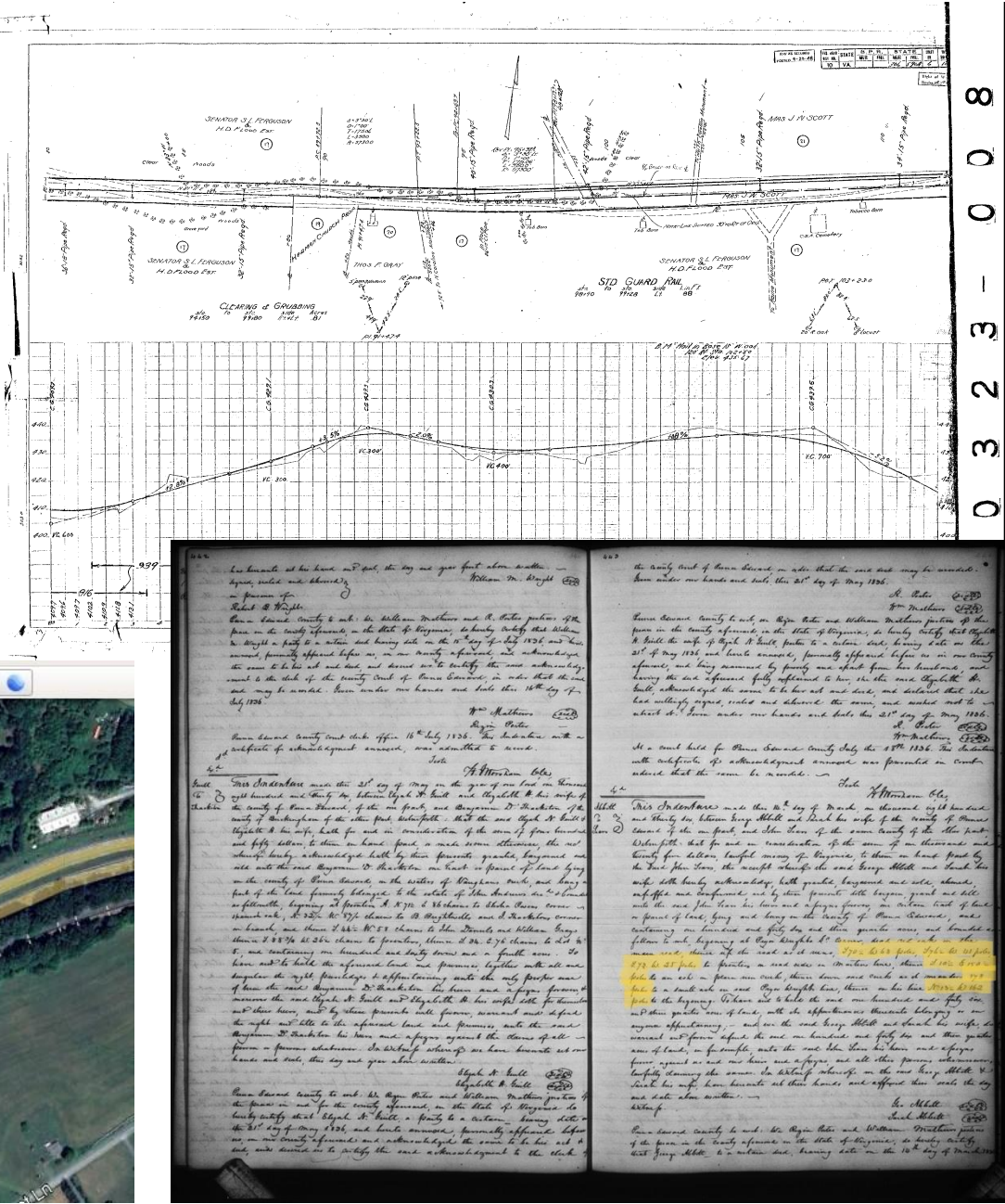
[Patricia Butledge](#)

803-416-9313

Deciphering Deed Descriptions



Don't be intimidated by parcel description compass bearings and measurements. Plot them on a map!



0323-008

1-28

TWELFTH CENSUS OF THE UNITED STATES.

B

State Virginia County Bedford Supervisor's District No. 6 Sheet No. 3

SCHEDULE No. 1.—POPULATION.

Enumeration District Bedford Supervisor's District No. 6 Sheet No. 3

Township or other division of county Part First Manassas District Name of Institution, X

Name of incorporated city, town, or village, within the above-named division. X Ward of city, X

Enumerated by me on the 6 day of June, 1900. Arthur Walker, Jr. Enumerator. 5388

LOCALITY	NAME	RELATION	PERSONAL DESCRIPTION	NATIVITY	PLACE OF BIRTH			OTHERS	OCCUPATION, TRADE, OR VOCATION	EDUCATION	SPECIAL INQUIRY
					Place of birth of father	Place of birth of mother	Place of birth of person				
1	2	3	4	5	6	7	8	9	10	11	12
67	Walter J. W.	Self	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
68	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
69	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
70	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
71	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
72	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
73	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
74	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
75	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
76	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
77	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
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83	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
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85	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
86	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
87	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
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91	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
92	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia			Teacher	2	W. 7 Jan. 1895 54 24 30
93	Walter J. W.	Wife	W. 7 Jan. 1895 54 24 30	Virginia	Virginia	Virginia					

Form No. 10

Margin Reserved For Blinding.

Write Plainly With Unfading Black Ink—This is a Permanent Record.

NOTE.—Every item of information should be carefully supplied. AGE should be stated EXACTLY. PHYSICIANS should state CAUSE OF DEATH in plain terms so that it may be properly classified. Exact statement of OCCUPATION is very important. See instructions on back of certificate.

1. PLACE OF DEATH

County of Richland

Township of Calhoun

or

Inc. Town of

or

City of Arden

2. FULL NAME Poppy Williams

CERTIFICATE OF DEATH

STATE OF SOUTH CAROLINA

Bureau of Vital Statistics

State Board of Health

Registration District No. 2846

Registered No. 1059

(For use of Local Registrar)

(If death occurred in a Hospital or Institution give its NAME instead of street and number.)

(No. on S.A.S.P.R. Ward)

Residence In City Yrs. 0 Mos. 0 Days. 0

PERSONAL AND STATISTICAL PARTICULARS

3 SEX 2 4 COLOR OR RACE B 5 SAMPLE MARKED Married ON DIVORCED (Write the word)

6 DATE OF BIRTH Jan 29 1921 (Month) (Day) (Year)

7 AGE 28 yrs. mos. days. If LESS than 1 day. hrs. min.

8 OCCUPATION (a) Trade, profession, or particular kind of work. Cash (b) General nature of industry, business, or establishment in which employed (or employer).

9 BIRTHPLACE (State or Country) Richland Co

10 NAME OF FATHER Jordan Long

11 BIRTHPLACE OF FATHER (State or Country) SC.

12 MAIDEN NAME OF MOTHER Mary

13 BIRTHPLACE OF MOTHER (State or Country) SC.

14 THE ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE (Informant) Mrs. Knight (Address) 3507 Main

15 DATE OF DEATH Jan 29 1921 (Month) (Day) (Year)

16 MEDICAL CERTIFICATE OF DEATH

17 I HEREBY CERTIFY, That I attended deceased from Jan 1 to Jan 28 and that death occurred, on the date stated above, at Arden m. The CAUSE OF DEATH was as follows: Presumably Intermittent

(Duration) yrs. 6 mos. days

Contributory (SECONDARY) (Duration) yrs. mos. days

18 Where was disease contracted If not at place of death?

Did an operation precede death? Date of.

Was there an autopsy?

What test confirmed diagnosis? Autopsy (Signed) 1/29/21 (Address) 1570 Main M. D.

*State the Disease Causing Death, or, in deaths from Violent Causes state (1) Means of Injury; and (2) whether Accidental, Suicidal or Homicidal.

19 Place of Burial or Removal Williams S.B. DATE OF BURIAL 1/31/21

20 UNDER SIGNATURE OF LOCAL REGISTRAR W.H. Williams City

Death records for researching decedents in the 20th century

Newspapers, Oral Histories, City and County Meetings, and More!

DEATH OF MISS RICH.
Passed Away of Fever in Cedar Fork Township.
Miss Dalila Rich, daughter of Joseph Rich, died at the home of her father in Cedar Fork township, on Sunday afternoon at 3 o'clock, of fever and a complication of diseases.
Deceased was 30 years of age, and was a consistent member of the Baptist church.
She leaves a father, one sister, a number of other relatives and many friends to mourn her death. These have the heartfelt sympathy of all who know them in the bereavement that has come upon them.
The interment took place this afternoon at 2 o'clock in the old family burying ground at Zachariah Rich's. Quite a concourse of people were present to attend the last sad rites.
Miss Irene Rich, sister of the deceased, is reported to be quite sick of fever.

Working On Lovettsville Road.
The work of improving the Lovettsville road was resumed last Thursday, and is now being pushed rapidly under the direction of Road Engineer Quensenberry. Part of the road was improved last summer and autumn, but a section in Lovettsville and about a mile of road from the bridge toward Lovettsville had to be left until this year. In a few days the workmen will begin laying stone at Lovettsville. Before any stone could be placed it was necessary to do some subgrading. Considerably damaged the roadbed. The section of road finished last year has held up very well and is now in good condition.

Co. requested to move two graves from MacDill Field



Col. H.H. Young advised the Board that there are the remains of two persons buried along the prolongation of the northwest-southeast runway at the north end of the runway and approximately 200 feet South of the railroad track, MacDill Field, which are in the way of further construction, and the Air corps would be glad to furnish the necessary labor and trucks to move these graves if the County would supervise the movement and move them away from the field, and he would like to be advised if the County would co-operate in getting this matter attended to. After discussion, it was moved, seconded, and carried, that this request be referred to Commissioner Ball and County Attorney Cobbey to handle.

- Newspapers! Search through them for any information on people (obituaries, weddings, other announcements), road construction, estate sales, church news, farm reports, etc.
- Other sources—Oral history studies, local city meeting records, county commission minutes, Works Progress Administration surveys, local cemetery surveys (not digitized)

Land Use Through Aerial Photos

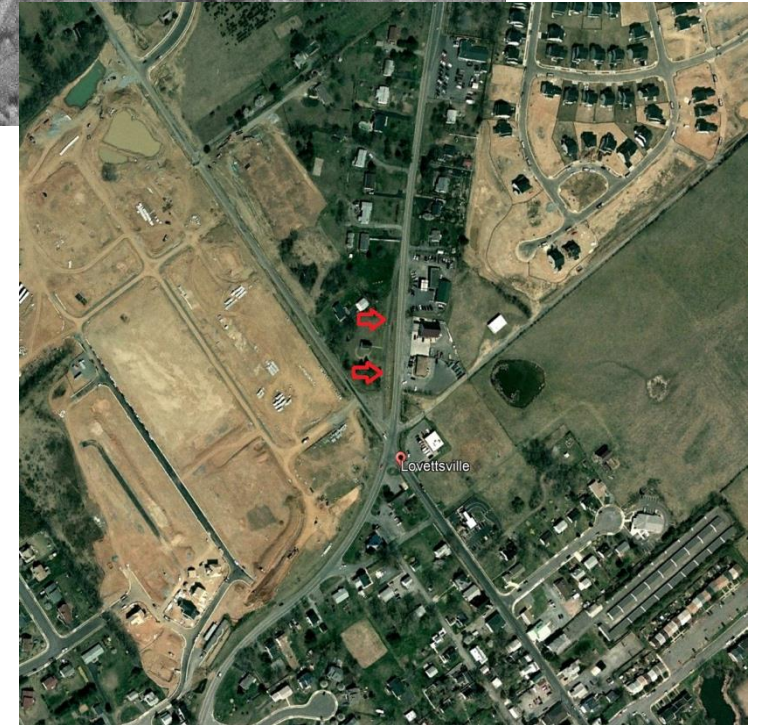


1951



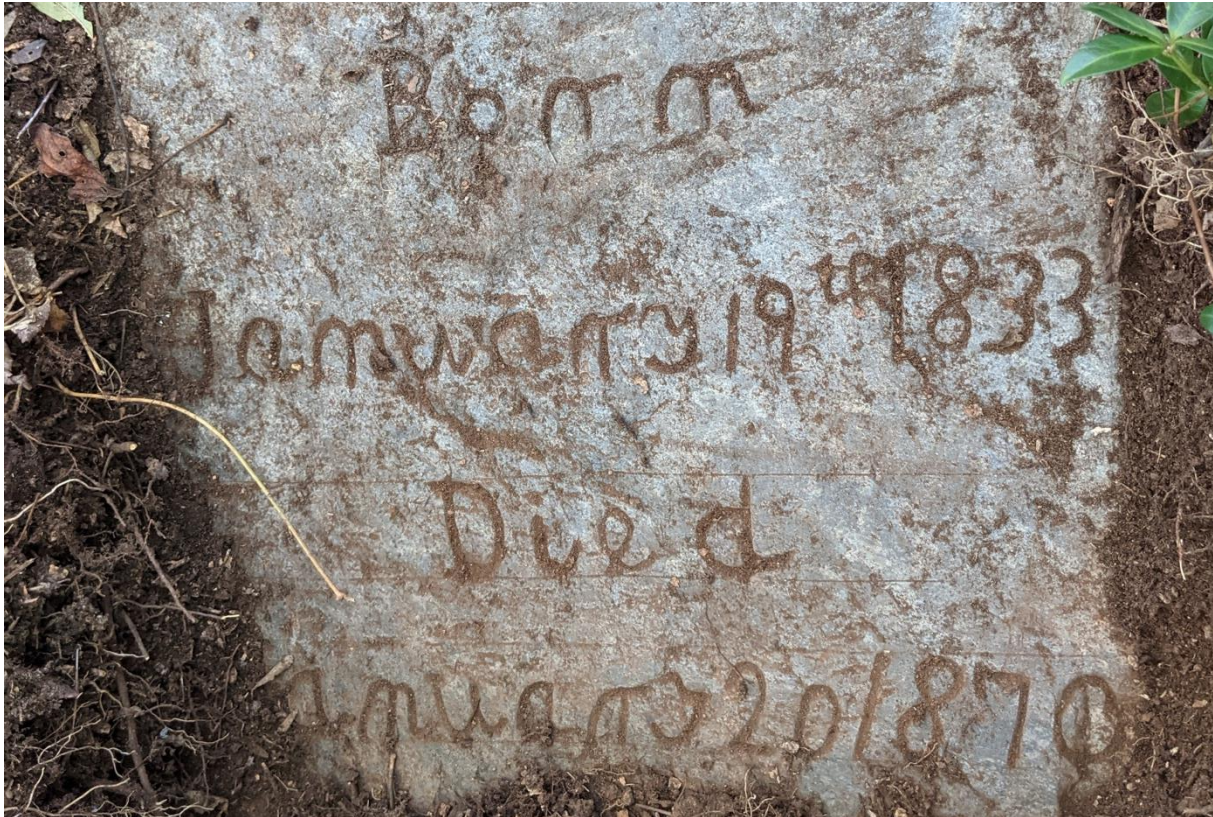
1976

- Compare aerial photographs to find changes to the cemetery and nearby landscape.



Cemetery Delineation

Sarah Lowry



What is Delineation?



Grand Avery Cemetery, Johnston County, North Carolina

Where is the cemetery?



Define where the burials are located.



What needs to be protected?



Then you can add to property maps and site files

What is in the cemetery?



What kind of markers?



Do the markers have names and dates?



Are markers indicative of a particular community or family?



Where are unmarked graves?

Cemetery markers are only one way to identify graves in a cemetery. They are an unreliable indication of the actual number of graves.

Why Delineate?



Elmwood Cemetery, Mecklenburg County, North Carolina



Beaufort Marine Corps Cemetery, South Carolina

Ground Disturbance Planned

Development planned near the boundary

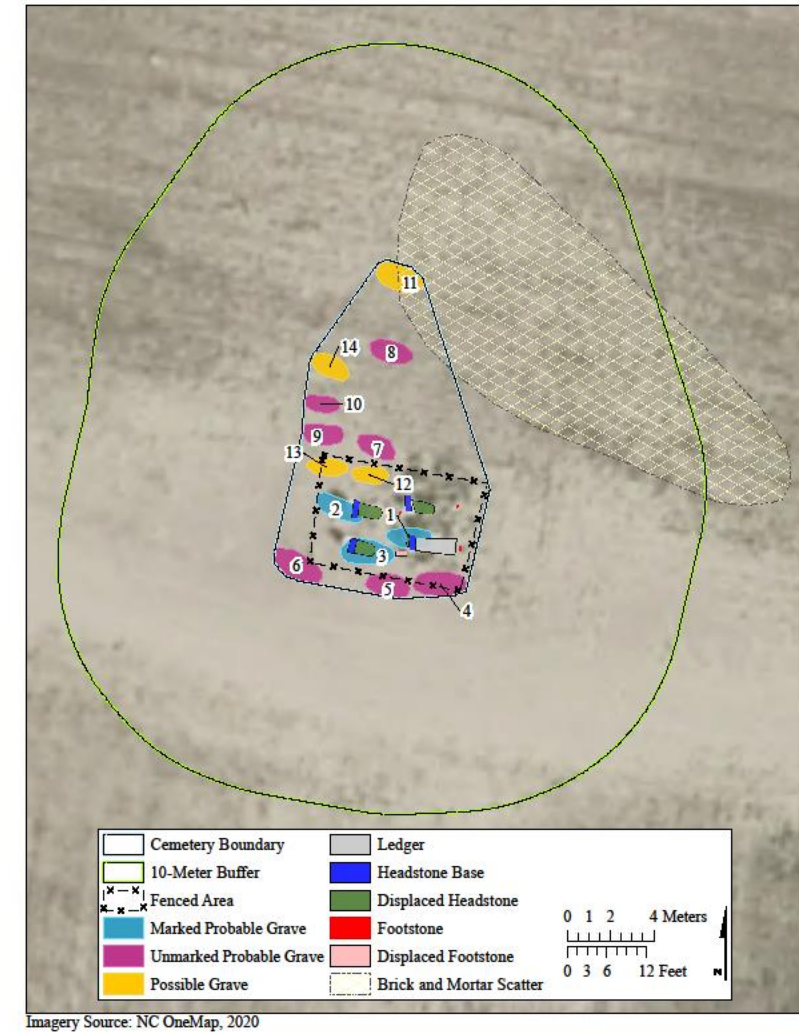
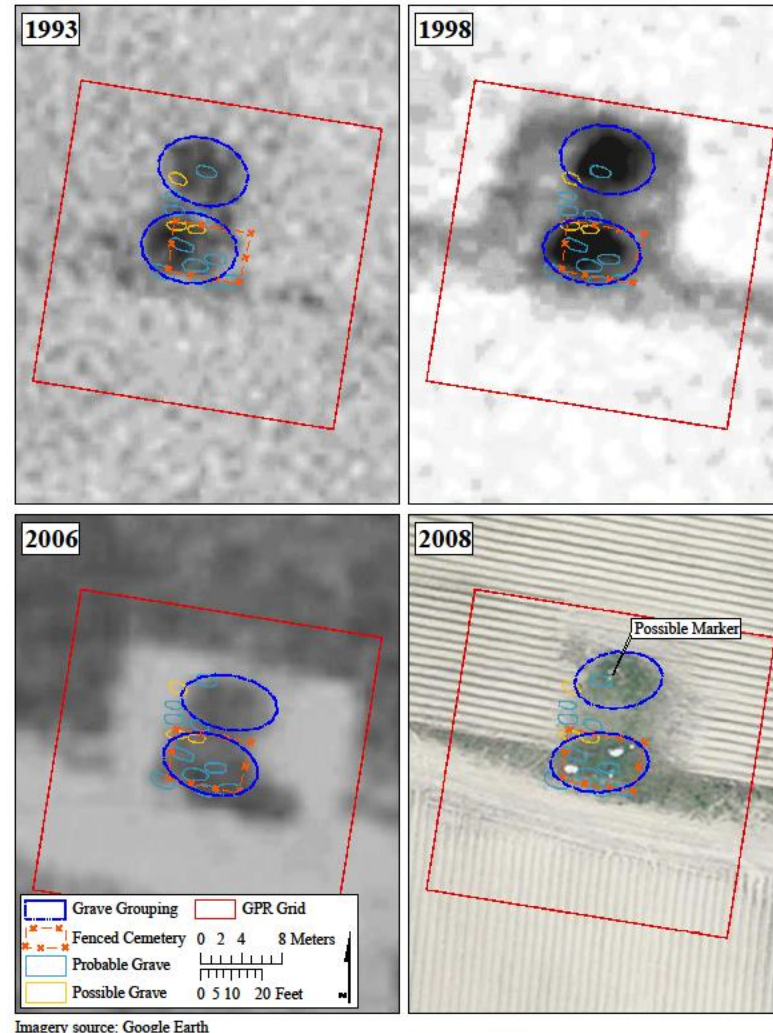
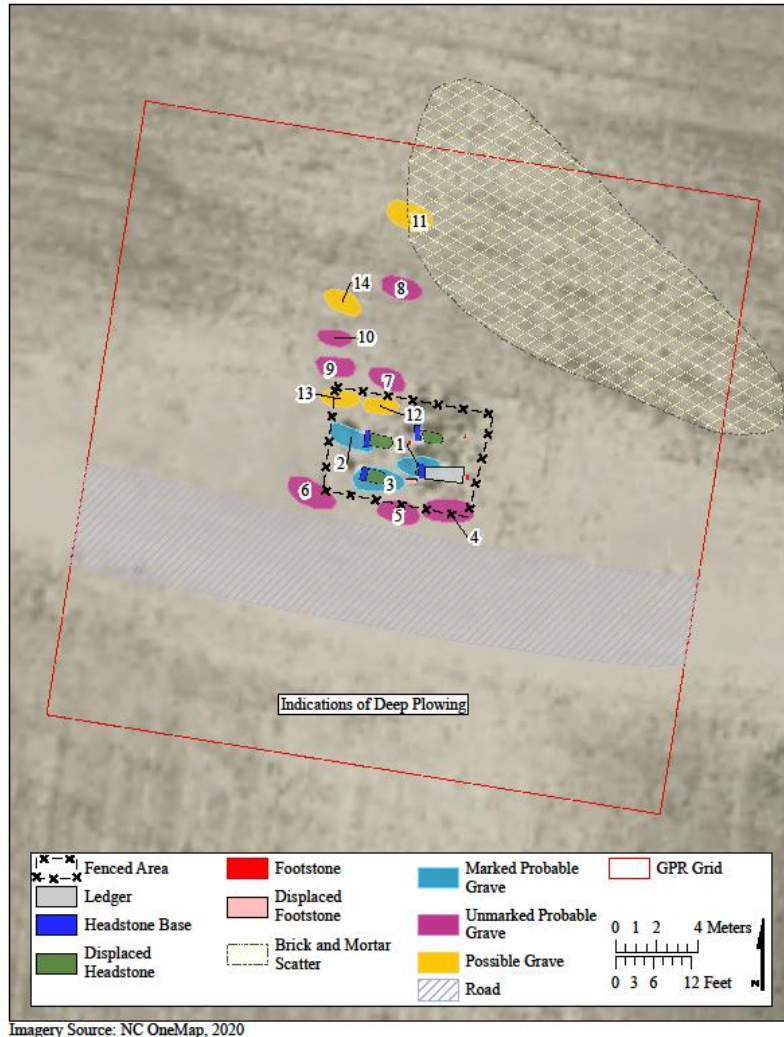
Placing future interments within the cemetery

Research

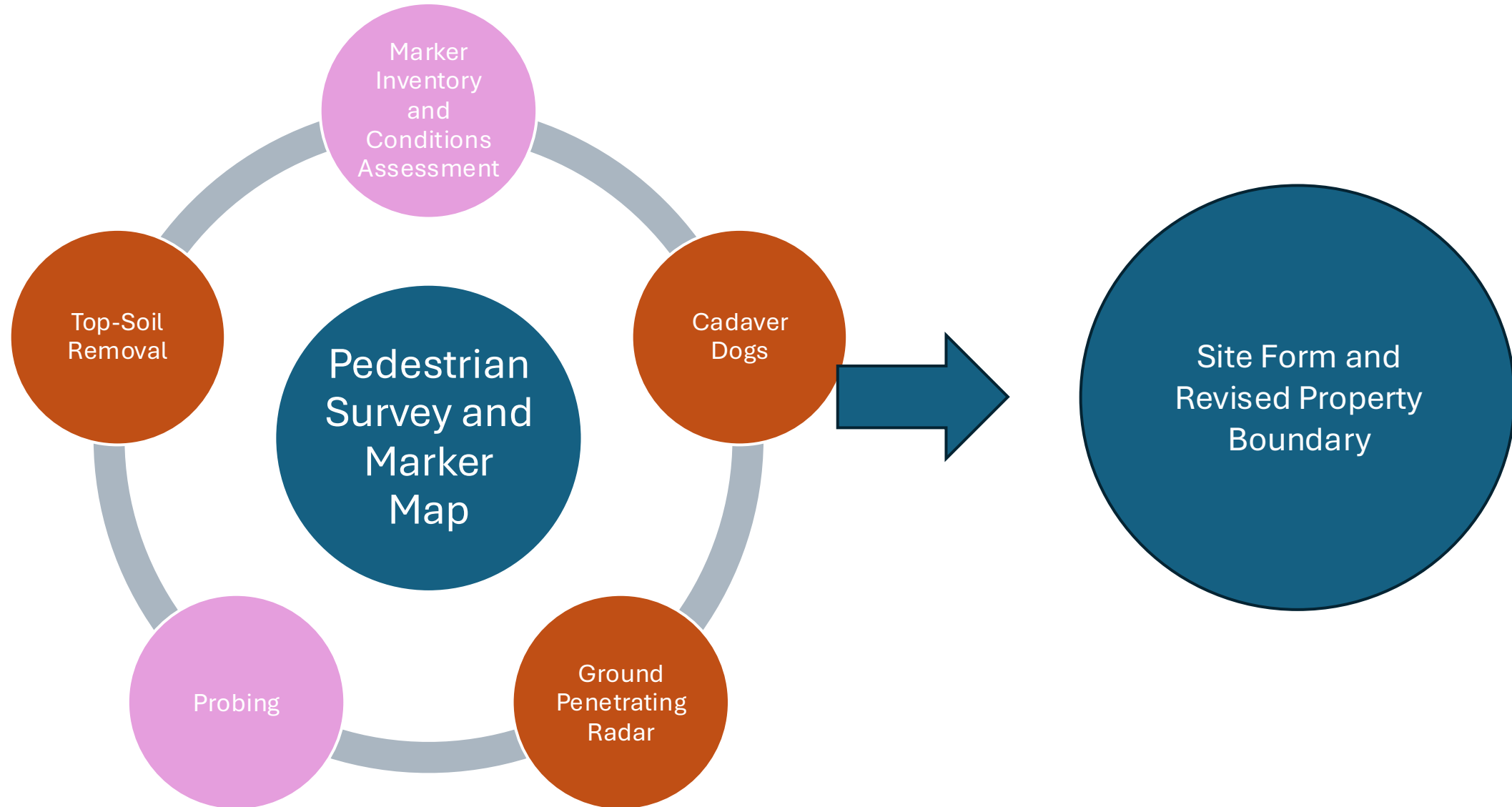
Communities want to identify the location of graves

Memorialize the cemetery

What You First See Can Deceive You



How to Delineate?



Pedestrian Survey

1. Walking cemetery
2. Flagging markers and depressions
 - Note plantings, landform changes, funerary offerings
 - Older trees (e.g. “Witness Trees”)



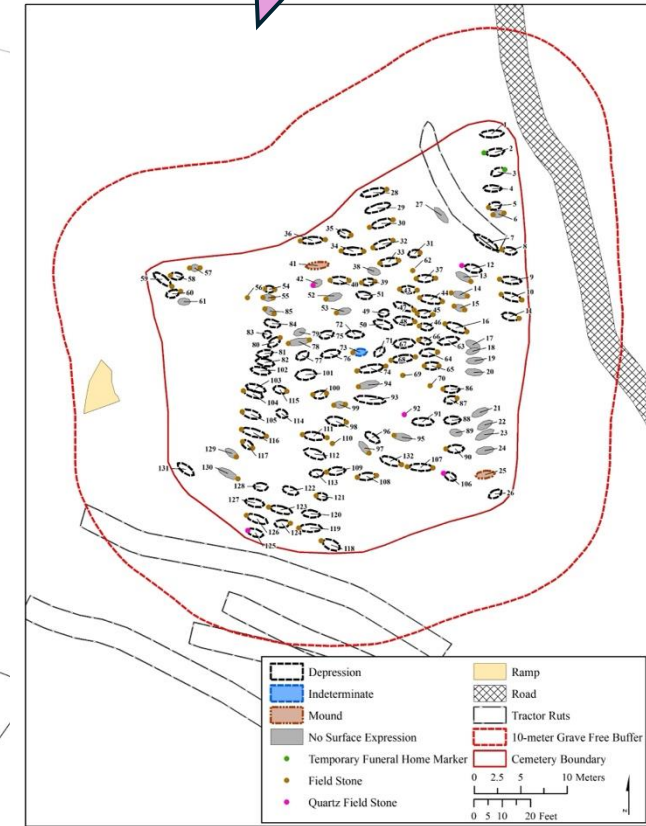
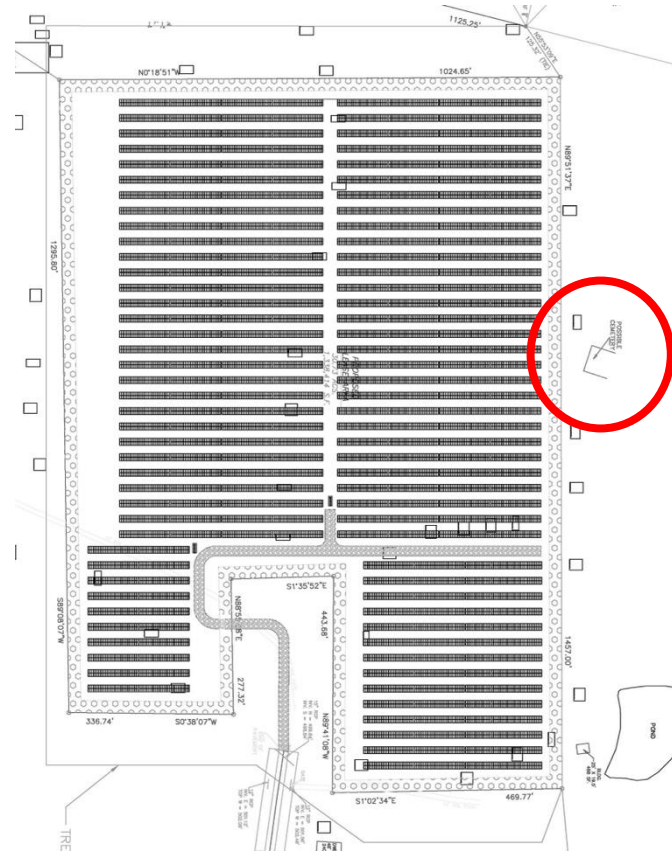
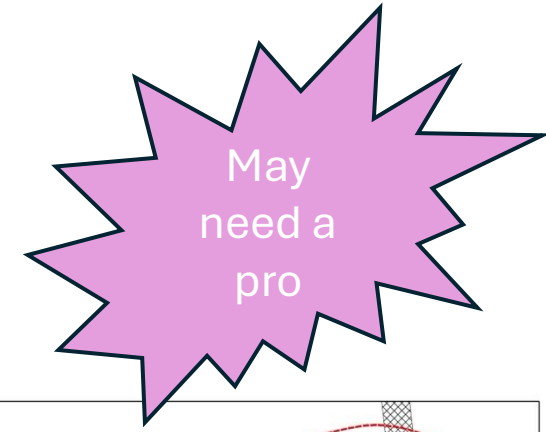
Unknown enslaved persons cemetery, Dillon County, SC



May be able to DIY

Marker Mapping and Inventory

- May require someone with expertise in precision mapping
- Mapping can be followed up with:
 - Inventory
 - Condition Assessment
- Inventory
 - Marker Inscription
 - Marker Type
 - Material
- Condition Assessment
 - Allows to prioritize cleaning and preservation work



Cadaver Dogs



Can be helpful in areas where vegetation makes accessibility difficult for other methods



Surveys are usually done by non-profit organizations and highly trained volunteers



Professionals may be useful for managing the survey

Probing and Penetrometer



Systematic survey to identify areas with less compaction in the shape of a grave

Works best outside of agricultural fields and compacted clay areas

Good companion method in areas not suitable for geophysics

Non-professionals may be able to use with minimal training



Photo by Paige Dobbins

Geophysics

Need a
Pro



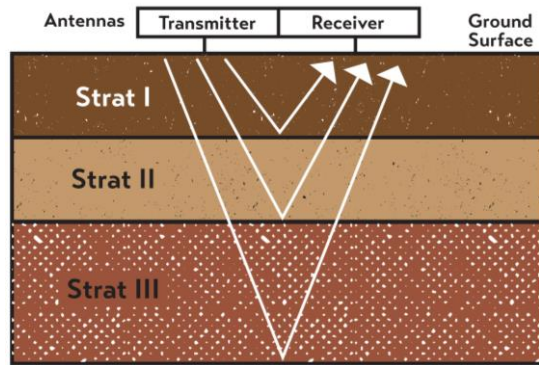
Patteson-Hix Cemetery, Appomattox, VA



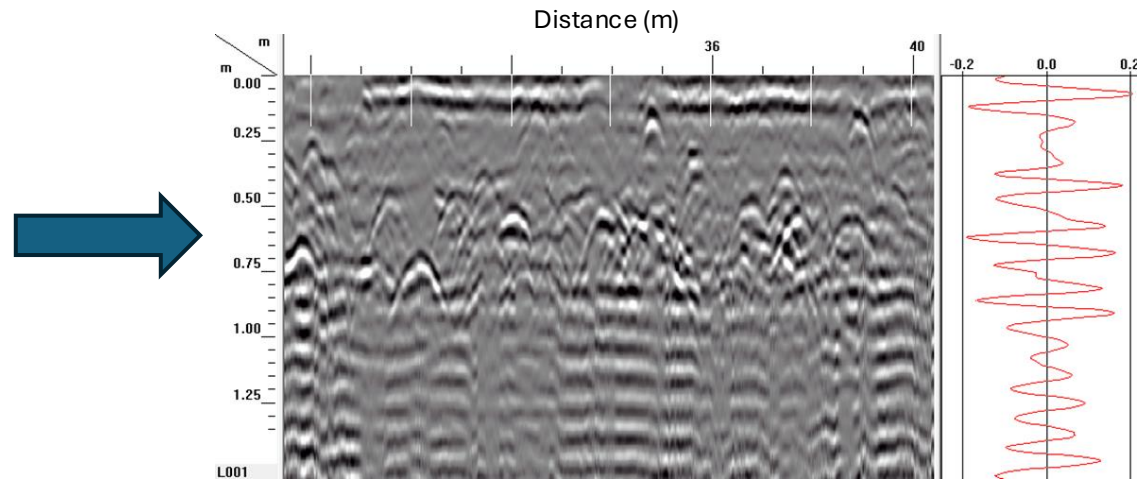
Sholar Cemetery, Wake County, NC

- There are five geophysical methods commonly employed in historic cemeteries
 - Ground-penetrating radar (GPR)
 - Electromagnetic conductivity
 - Resistivity
 - Magnetic gradiometer
 - Metal Detecting
- GPR is the most common and typically the most effective in historic cemeteries

How Does GPR Work?

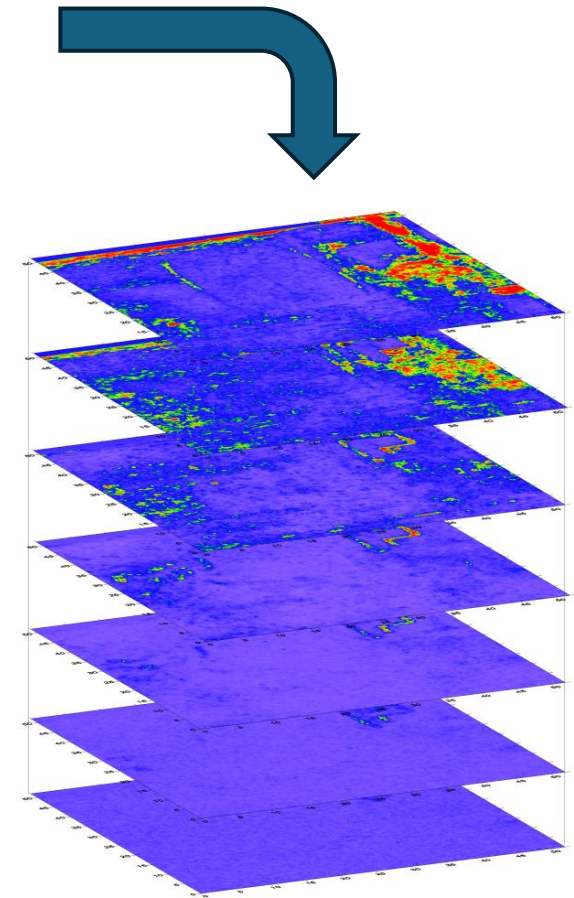


Friendship Chapel Baptist Church, Wake County, NC



GPR Profile Example

GPR only works when there is contrast between the features of interest and the surrounding material.



How does GPR not work?



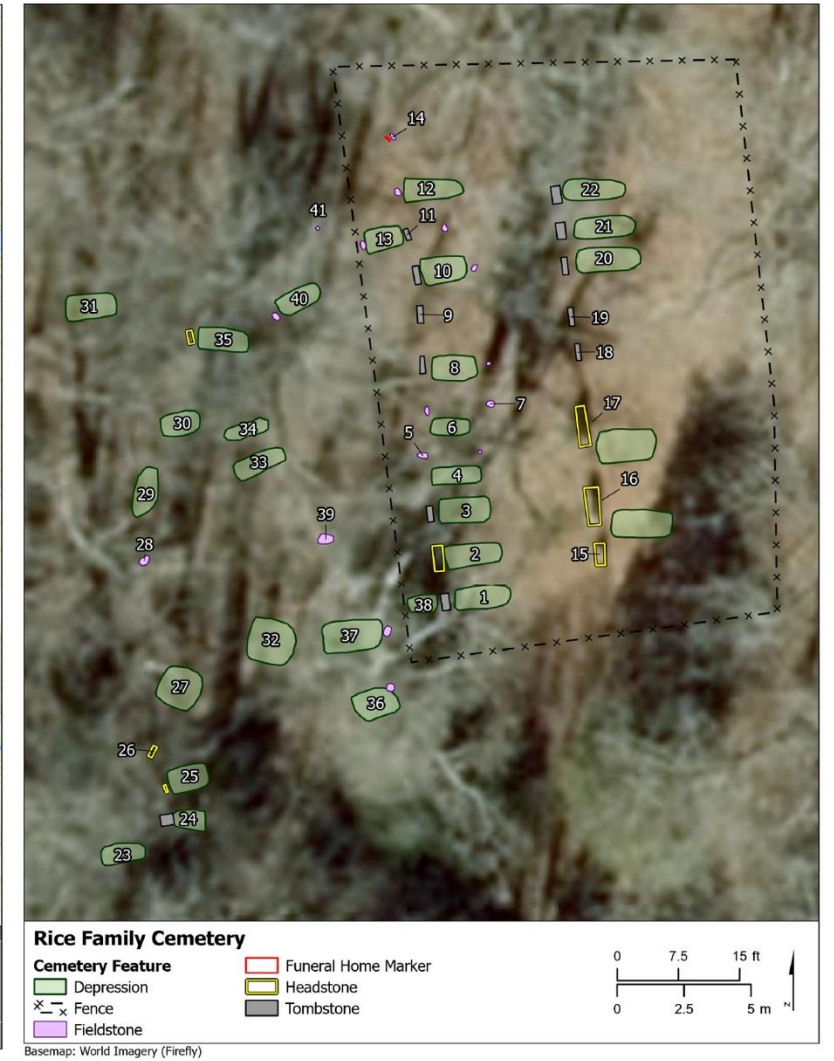
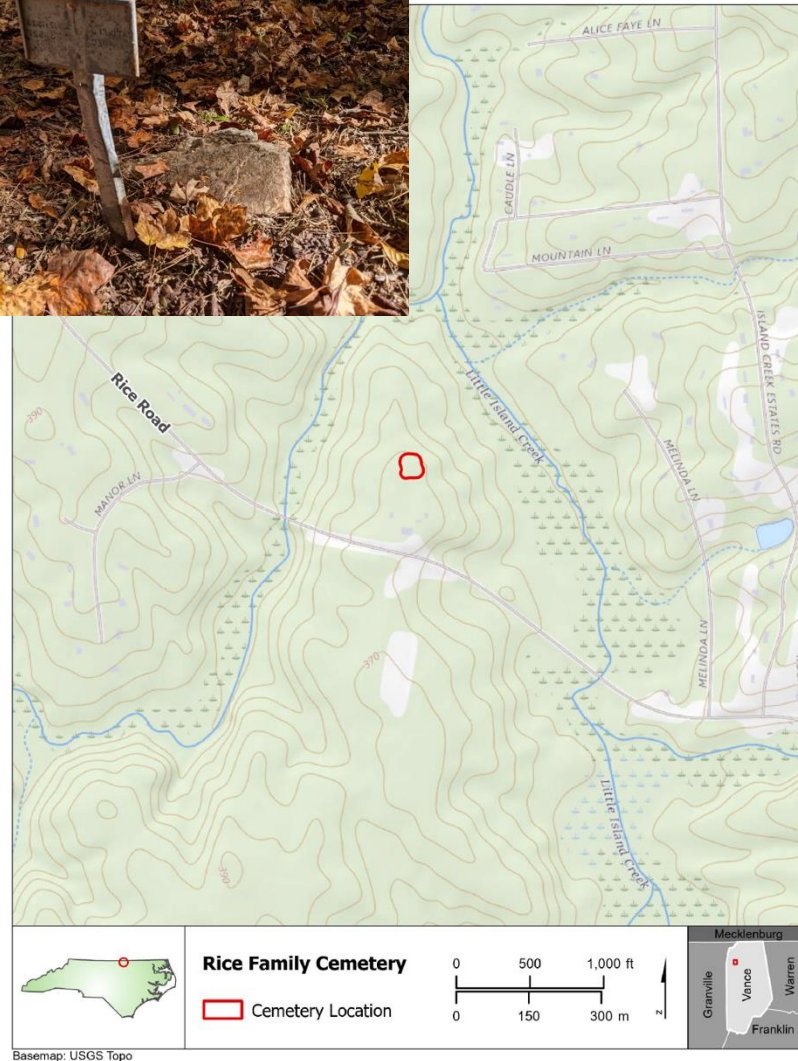
Image from CSI: New York

Popular media depicts GPR as a machine that tells you where to find graves.

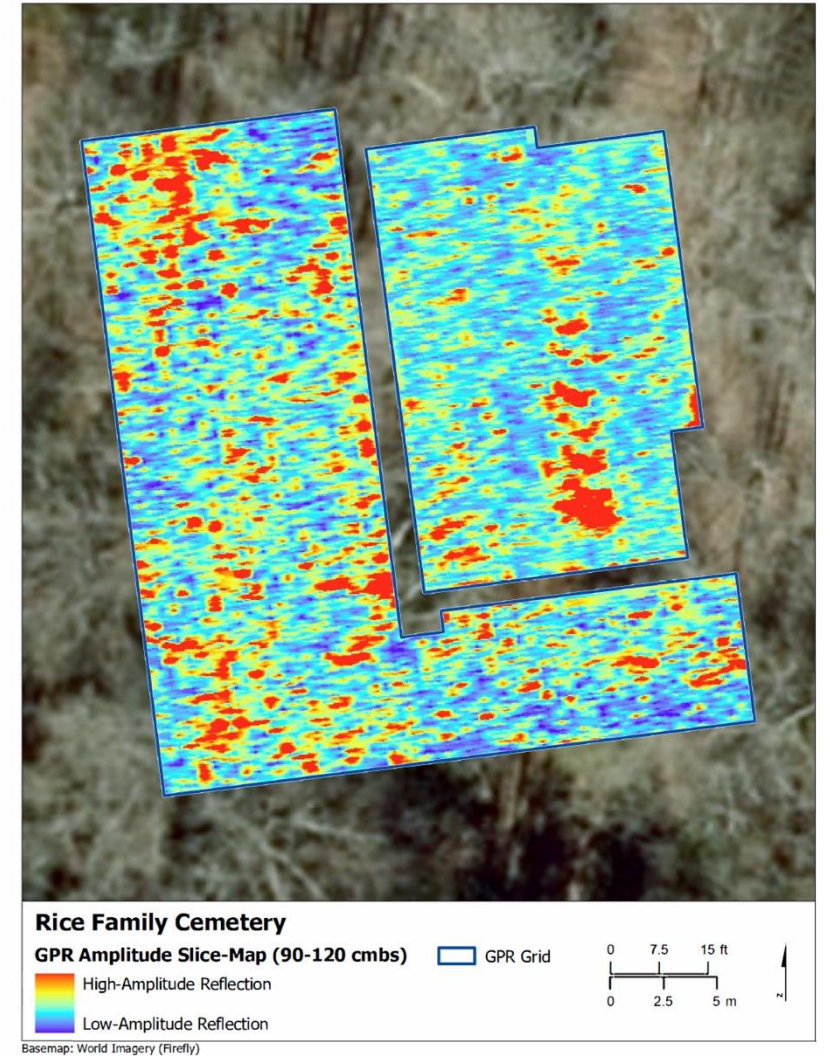
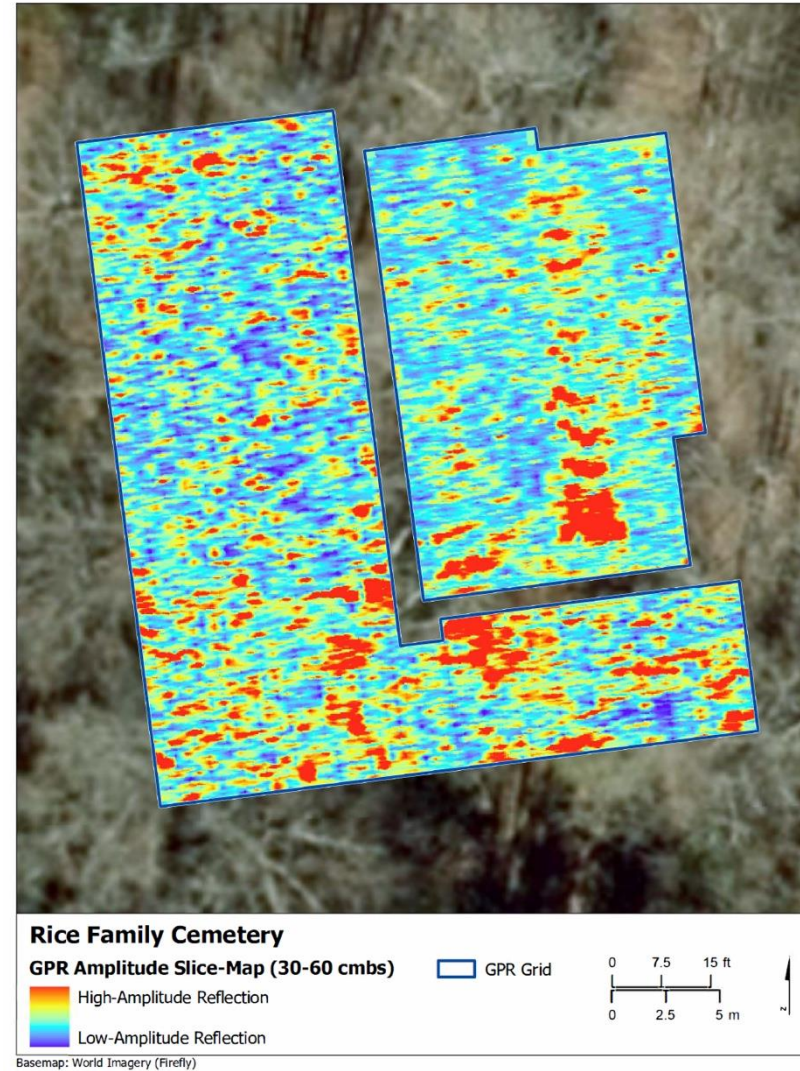
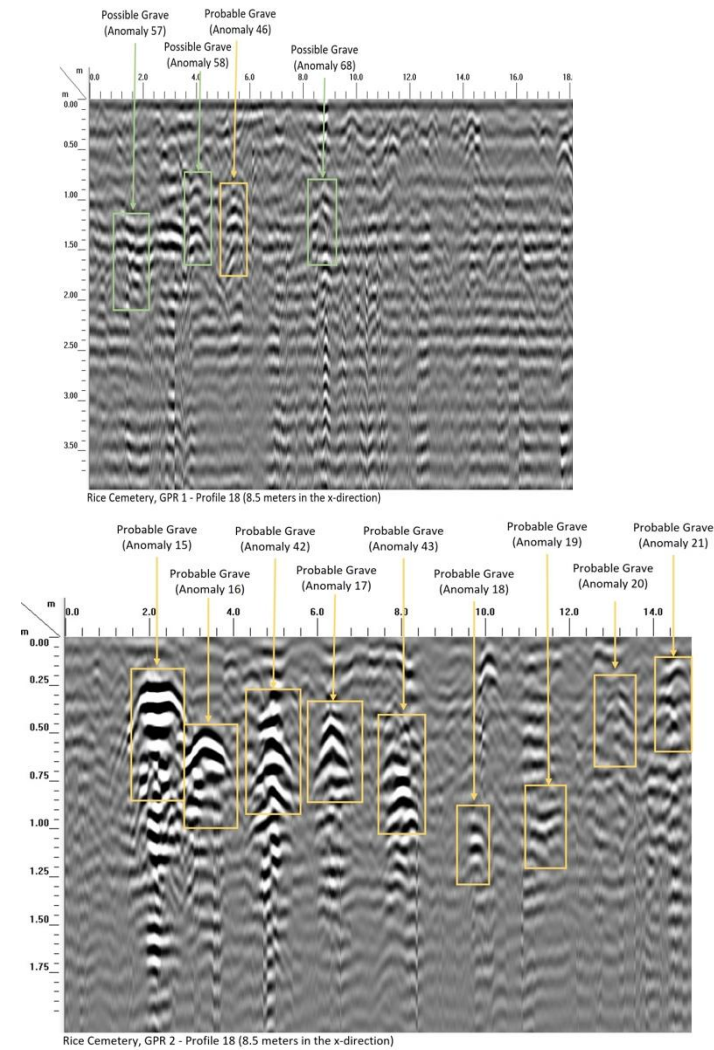


Images from Bones

Case Study: Rice Family Cemetery, North Carolina



GPR Profiles and Slice Maps



GPR Interpretations



- Cemeteries of the poor, disenfranchised, and enslaved can often appear on the surface to be sparsely used
- Layouts may follow seemingly erratic patterns.
- Fences are not always and an indicator of cemetery extant

Subsurface Testing – Topsoil Removal

Need a
Pro



Does not involve the
excavation of graves



Removal of topsoil to look
for soil staining

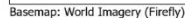


This may be advised if
construction must impact
cemetery near boundaries



Should be done under
supervision of qualified
archaeologist

May be able to DIY



Identity

Please attach a map showing the cemetery's location

Gravemarker Preservation and Care

Jason Harpe

Gravemarker Care: Preservation Begins with Understanding



Gravemarkers are historic objects rather than simply stones that need cleaning or straightening.

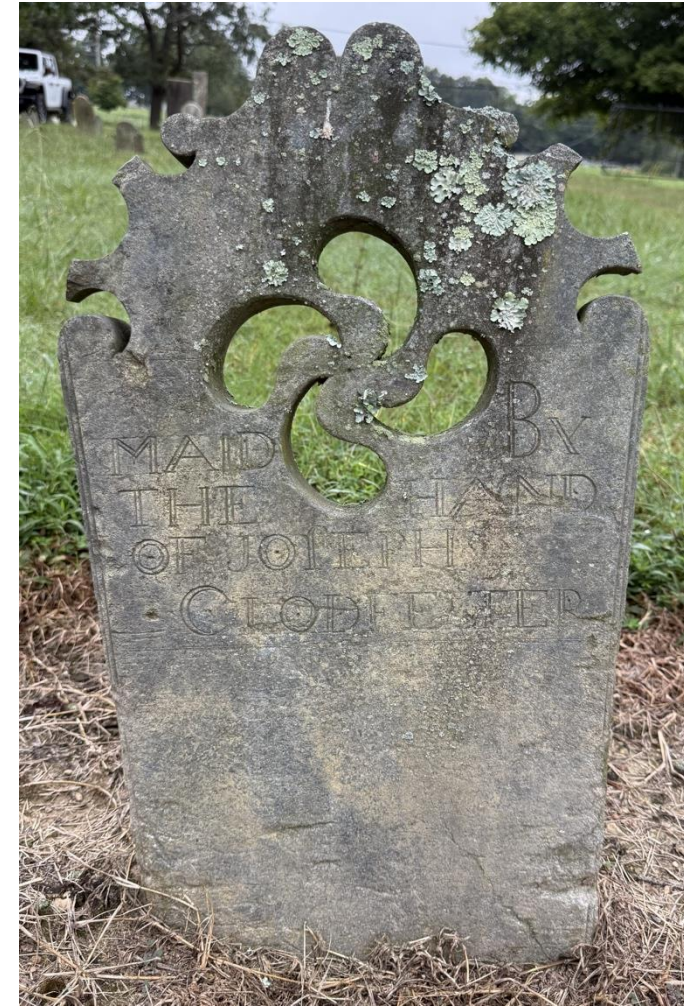
Gravemarkers Are Cultural Resources

Gravemarkers contain:

- Genealogical info
- Craftsmanship
- Iconography
- Social history
- Geology
- Technology
- Evidence of changing funerary traditions
- Weathered surfaces are part of their history



Obelisk, Cynthia Graham McEwen, Rest Haven Cemetery, Franklin, TN



Pierced headstone, Josiah Spurgin. "Maid By The Hand of Joseph Clodfelter." Abbott's Creek Primitive Baptist Cemetery, Wallburg, NC. Photo courtesy of Doug Compton @dcthecemetryman.

First Principle: Do No Harm

- Minimal Intervention
- Compatible materials
- Documentation
- Retention of historic fabric

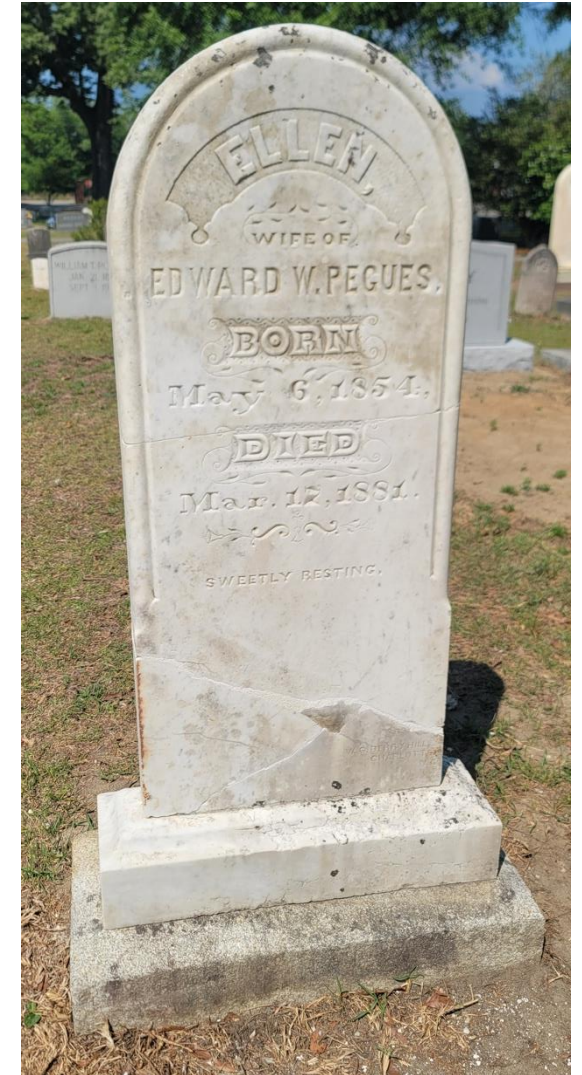
Improving appearance is not necessarily preservation

American Institute for Conservation (AIC) emphasizes:

- Careful examination
- Responsible treatment
- Preventative Conservation

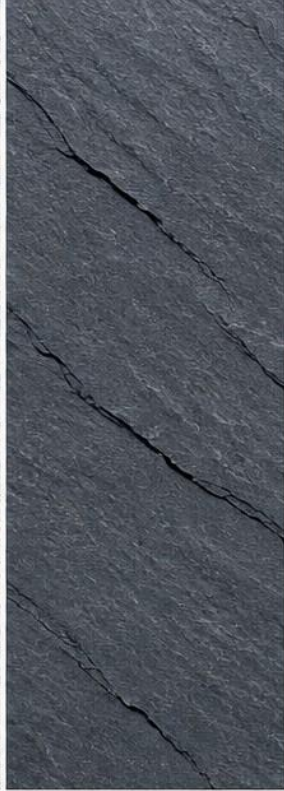


HARM!



NO HARM!

Know What You're Working With: Materials

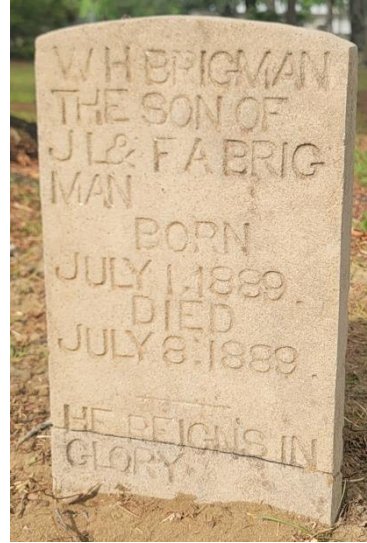
						
Marble <i>White or light-colored with characteristic veining; crystalline texture.</i>	Limestone <i>Light-colored, fine-grained, often with small fossil fragments; porous texture.</i>	Brownstone <i>Brown to reddish-brown, fine-grained sandstone; uniform color and gritty texture.</i>	Soapstone <i>Gray to bluish-gray, soft and smooth texture; often with subtle veining.</i>	Granite <i>Coarse-grained with visible mineral crystals (black, white, gray, pink, etc.); very hard and durable.</i>	Slate <i>Dark gray to black (or greenish-gray); fine-grained, layered texture with natural cleavage planes.</i>	Cement (Concrete) <i>Gray, fine to medium-grained with visible sand and small aggregate; porous texture, commonly used for vernacular gravemarkers.</i>

COMMON STONE TYPES USED FOR GRAVESTONES

Each stone has distinct color, texture, and visual characteristics that can help with identification in the field.

Know What You're Working With: Materials

- Marble
- Limestone
- Brownstone
- Slate
- Granite
- Concrete/cast stone
- Bronze
- Cast Iron
- Wrought Iron
- Zinc (white bronze)



Left to right: limestone; **top row:** concrete, slate, brownstone, and cast iron; **bottom row:** white bronze, granite, soapstone, and marble

Know What You're Working With: Safety and Structural Risks

Identifying Safety Hazards:

Leaning, unstable, or toppling stones

Tall obelisks, stacked monuments, and pedestal tombs

Cracked bases

Immediate Actions:

Temporary stabilization measures

Restrict Public Access

When to call the professionals:

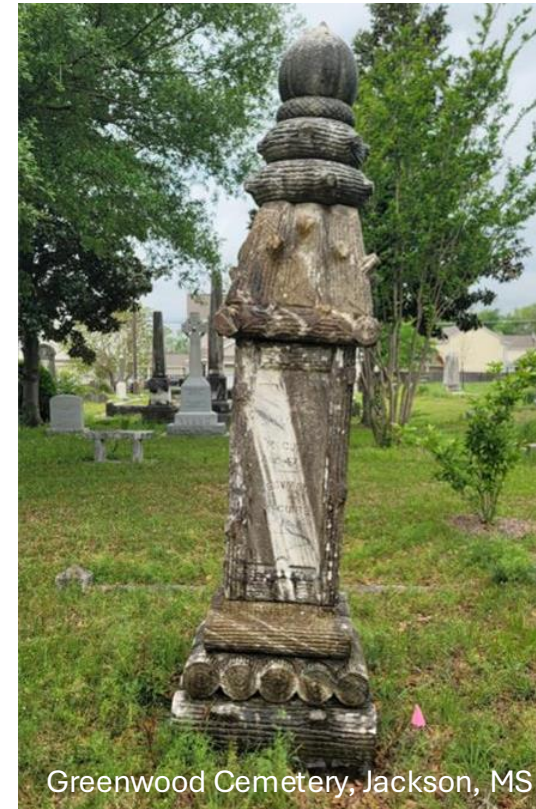
For gravemarkers with extensive damage (broken into many pieces)

When specialty products are required

For very large monuments.

When you must have an exact mortar match

Signs of advanced deterioration



Greenwood Cemetery, Jackson, MS



Cedar Lawn Cemetery, Paterson, NJ



Greenwood Cemetery, Jackson, MS

Read the Condition Before Treating the Stone

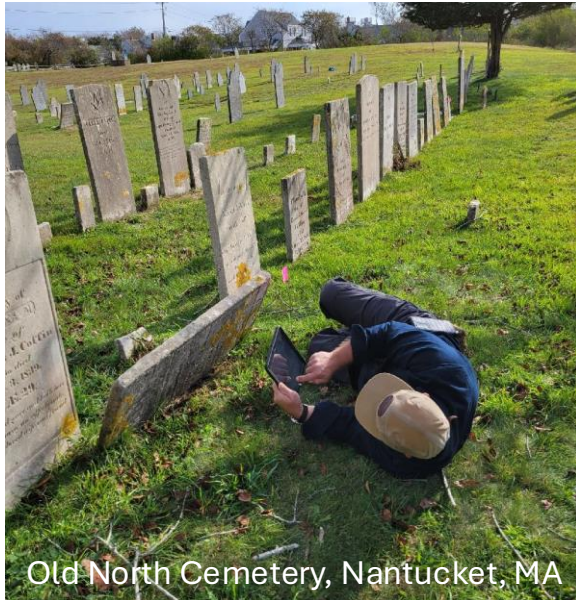


Look for:

- Cracks
- Delamination
- Sugaring
- Erosion
- Staining
- Failed repairs
- Instability
- Settlement
- Missing elements



Document Before You Touch Anything



Old North Cemetery, Nantucket, MA



Old North Cemetery, Nantucket, MA



Passaic County Cemetery Survey		Page 1
Richard Grubb & Associates 259 Prospect Plains Road Building D Cranbury, New Jersey 08512 609-655-0692 www.rgaincorporated.com		
Cemetery:	Cedar Lawn Cemetery	
Location:	Within town limits	
Context:	Urban	
Is the cemetery an out of parcel in the tax records? No		
Cemetery Type/Design/Style/Layout:		
☐ Colonial/Early American Burying Ground	☐ Prison	☐ African American
☐ Churchyard	☐ Institutional	☐ Potter's Field
☐ Formal Town Burying Ground	☒ Rural Cemetery Movement	☐ Military/Veterans
☐ Lawn Park	☐ No design evident	
☐ Memorial Park	☐ Single Burial	
☐ Mass Grave	☐ Family	
Type of Ownership:	Private-nonprofit	
Accessibility:	By road	
Condition:	Currently in use	
Topography:		
☒ Flat	☐ Intermittent stream	☐ Forest
☒ Hilltop	☐ River	☐ Swamp
☒ Unpaved pathways	☐ Lake	☒ Rolling
☒ Roads	☐ Power lines	☒ Sloped
☒ Paved or Gravel Pathways	☒ No Paths or Roads	☒ Walkway
☐ Rail lines	☐ Stream	☐ Marsh
☐ Other		
Ethnic Group/Nationality Affiliation:		
☒ African American	☒ German	☒ Irish
☒ Asian	☐ Hispanic	☒ Italian
☐ Jewish	☐ Native American	☐ Quaker
☐ Slavic	☐ Unknown	☐ Other
Grave Groupings:		
☒ Ethnic heritage	☒ Family	☐ Fraternal order
☐ Military	☐ Occupation	☐ Religious
☒ Other		
Cemetery Boundaries:		
☒ Curb	☒ Fence	☐ Vegetation
☒ Wall	☐ None	☐ Other
If you checked fence, please indicate fence style:		
☐ Bow & hairpin	☒ Chain Link	☐ Hairpin
☐ Bow & picket	☒ Gas pipe railing	☐ Hairpin & picket
☐ Milled point	☐ Wood	☒ Other
☐ Picket (metal)	☐ Woven wire	

RGA survey database form, Passaic County, New Jersey

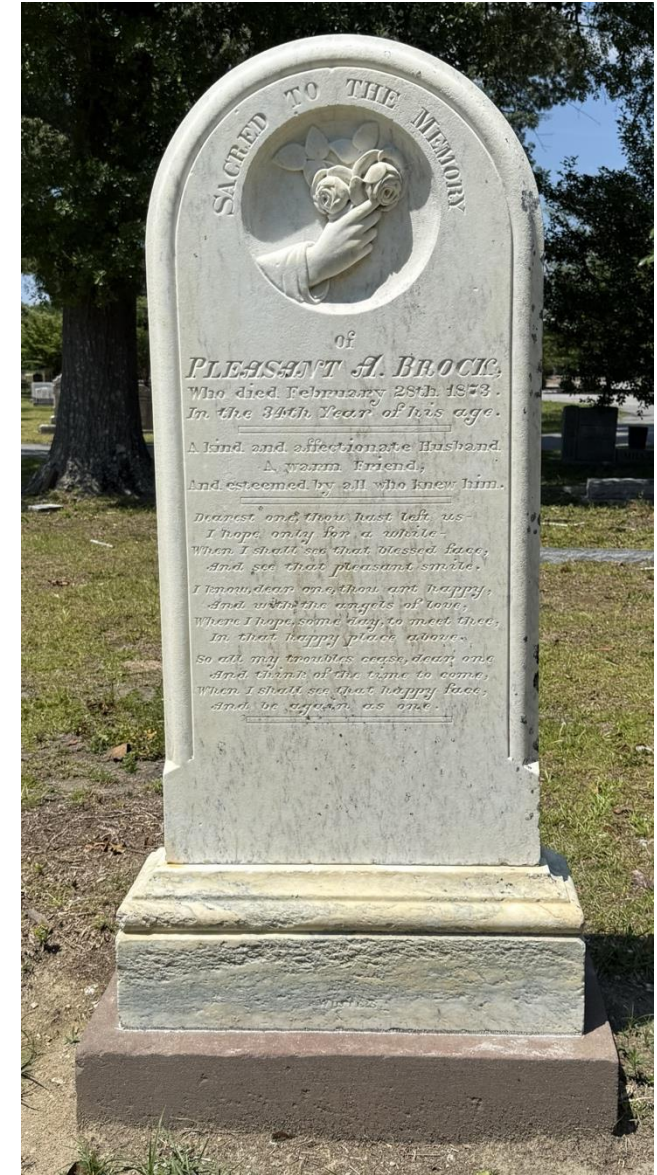
- Photograph the stone
- Record:
 - Dimensions
 - Materials
 - Iconography
 - Orientation
 - Inscriptions
 - Conditions
 - Previous repairs
 - Surrounding landscape
 - Stonecutter's markers
 - Backdating

Cleaning: The Most Common and Misunderstood Treatment

- Does this stone actually need cleaning?
- Cleaning should have a preservation purpose, not simply an aesthetic one
- Biological growth
- Atmospheric soiling
- Staining
- Cleaning cannot reverse deterioration



Old St. David's Episcopal Church Cemetery, Cheraw, SC



How to Clean Without Damaging the Stone

- Water
- Conservation Cleaners/biocides
- Soft natural/nylon brushes
- Low-pressure rinsing
- Testing
- Common Sense
- Patience
- Controlled treatment
- Supervision



What NOT to do

- No pressure washers
- No wire brushes
- No power tools
- No bleach
- No acids
- No household cleaners
- No grinding
- No sandblasting
- No aggressive scraping
- No re-lettering
- No polishing historic stones
- **NO CONCRETE!**



Courtesy of Doug Compton
@dcthecemeteryman



Leaning, Fallen, and Sunken Markers



Resetting isn't simply "dig a hole and make it straight"

Consider:

- Original setting
- Soil conditions
- Buried portions
- Bases
- Fragments
- Adjacent graves
- Archaeology
- Appropriate aggregate/support system



Sunset Cemetery, Shelby, NC

Broken Does Not Mean Lost



Conservation of fractured/broken markers

- Retain original material
- Carefully recover fragments
- Determine whether repair is necessary
- Use compatible conservation material and appropriate structural methods
- Avoid improvised adhesives and irreversible repairs.

Greenwood Cemetery, Jackson, MS

Sometimes the Old Repair Is the Problem



Historic markers frequently contain:

- Portland cement
- Inappropriate mortars
- Iron pins
- Epoxies
- Caulk
- Paint

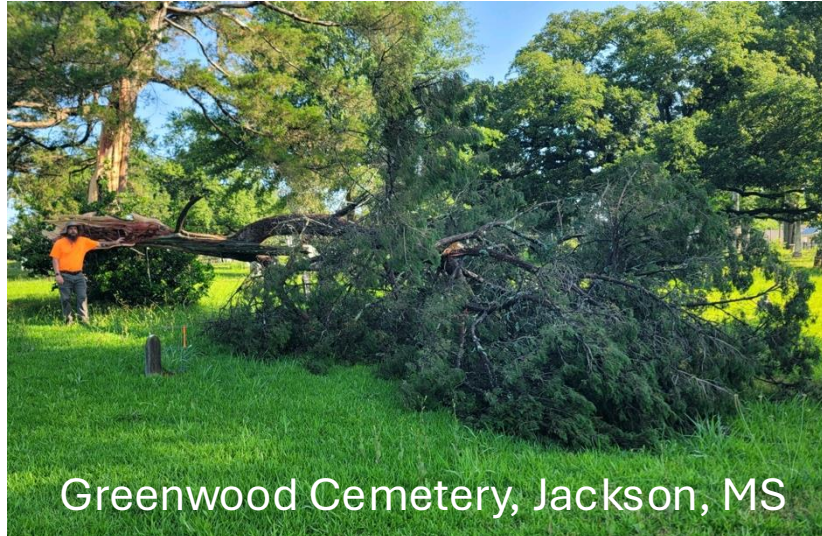


Sometimes conservation means carefully undoing previous work.

The Landscape Is Part of Gravemarker Care



Colonial Cemetery, Metuchen, NJ



Greenwood Cemetery, Jackson, MS



Prospect Hill Cemetery, York, PA



Zion Lutheran Cemetery, Hickory, NC

Gravemarker preservation is not only about the stones.

Issues:

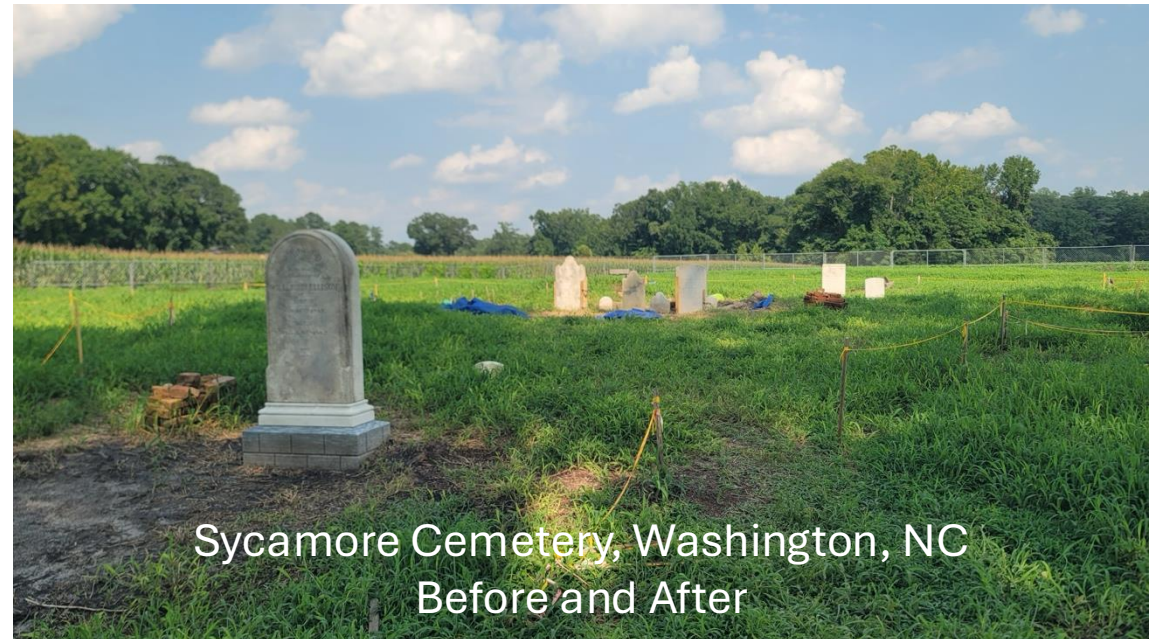
- Mower/weed eater damage
- Falling limbs and trees
- Roots
- Drainage
- Erosion
- Irrigation
- Vines
- Vandalism
- Visitor Impacts
- Critters (groundhogs)

Maintenance Beats Restoration

Preventative Conservation

1. Regular Inspections
2. Vegetation Management
3. Appropriate Cleaning Cycles
4. Drainage Management
5. Documentation
6. Minor Stabilization

Preventative Conservation is preferable to waiting for catastrophic failure.



The Five Rules of Gravemarker Care

1. Identify
2. Document
3. Diagnose
4. Intervene Minimally
5. Maintain



Greenwood Cemetery, Jackson, MS

Final message: *When you don't know what to do, doing nothing until you obtain appropriate guidance is often safer than doing the wrong thing.*

Resources

- Historic Maps Sources
 - Historic Aerials (private company): <https://www.historicaerials.com/viewer>
 - Historic USGS Topo Maps (USGS): <https://ngmdb.usgs.gov/topoview/>
 - Check Individual Counties for historic aerials and property boundaries
- Society for Historical Archaeology – Abandoned Burial Grounds (<https://sha.org/resources/abandoned-burial-grounds/>)
 - Identification
 - Laws and Regulations Summary
- The National Academies of Sciences, Engineering, and Medicine - Transportation Research Board – “Practical Guide for Developing Effective Scopes of Work for the Geophysical Investigation of Cemeteries” (<https://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=3973>)
 - Description of geophysical methods
 - Determine if a cemetery is good candidate for geophysics
- Cemetery Guidebook - <https://gahistoricburialgrounds.org>
- National Park Service – Preservation Brief 48: *Preserving Grave Markers in Historic Cemeteries* (<https://www.nps.gov/articles/000/preserving-grave-markers-in-historic-cemeteries-preservation-brief-48.htm>)
 - Primary federal guidance for the preservation and conservation of historic gravemarkers.
 - Covers stone identification, condition assessment, deterioration, cleaning, resetting, repair, maintenance, and treatment planning.
 - Particularly useful for determining when treatment can be undertaken by trained cemetery personnel and when a professional conservator should be consulted.
- National Center for Preservation Technology and Training (NCPTT) – Cemetery Conservation Resources (<https://www.nps.gov/subjects/ncptt/cemetery-conservation.htm>)
 - Extensive collection of practical information on gravemarker cleaning, resetting, repair, documentation, monument materials, and cemetery maintenance.
 - Includes articles, research, instructional videos, course materials, and preservation guidance developed specifically for historic cemeteries.