

Gravestone Recording How To Conduct a Project – How To Use The Data

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What is now Rhode Island was visited by English colonists as early as 1622, and Providence, the first town, was settled by 1636. When the earliest settlers died, their graves were marked with wooden markers or plain fieldstones. After a few decades of economic and social development gravestone carvers began to work in New England, and slowly examples of their work appeared in burial grounds. There are about 300 gravestones in Rhode Island burial grounds today marking a few of the graves of the thousands of settlers who died in the seventeenth century. The earliest gravestone in Rhode Island is for John Coggeshall who died in 1647. He was an important man in his day, the president of the colony and founder of a large, prosperous family who maintained a lovely family burial ground for hundreds of years. The surviving seventeenth century stones are typically for prominent people like him.

Wouldn't it be wonderful for genealogists if there was a searchable database of all of the early gravestones in a state settled this early? Well, there is. Rhode Island has now recorded 435,000 gravestone inscriptions in 3,143 cemeteries in a project that started in 1990. The original concept was to find all possible cemetery transcripts and put them into a computer database. Nineteen years later we have now found over 150 separate transcripts in historical



Gravestone of John Coggeshall, 1747,
Coggeshall Cemetery, Newport, Rhode Island

societies, public and private libraries, and collections both in state and in several other states. These early transcripts cover probably two thirds of the cemeteries and a little less than one half of the gravestones now in the database. Although occasional recordings of stones were made in the eighteenth century by Ezra Stiles and his contemporaries, they typically covered only a single lot or people of a single family. Large scale transcripts of gravestones were not made until around 1860.^[1] In the 1880s several recorders did some

1. Ira Peck manuscript transcript of Smithfield and Cumberland in Rhode Island as well as several Massachusetts towns gravestones before 1800, undated but probably done in 1860. Frank Williamson transcript of the North Burial Ground in Providence undated but determined by gravestones recorded and those not recorded to be done in the mid 1860s. Reverend Frederick Denison recorded every cemetery he could find in the town of Westerly and published them in 1867.

rather comprehensive transcripts that were preserved in historical societies.^[2] Every decade since then, additional people set out to record Rhode Island's burial grounds and cemeteries, almost always without consulting the work of those who came before them. Particularly picturesque burial grounds and those where famous people were buried were recorded many times, others only rarely, and some – we found to our surprise – not at all. We decided early in the project that it was necessary to incorporate all of the early transcripts in a flexible master database for the state that could be constantly updated and corrected to increase the accuracy. With the old transcripts we found that some of the worn, broken, or missing stones could be identified. We developed a custom database designed for the data and note fields we needed to record, search and report on gravestones and cemeteries. We use map numbers to keep gravestones in the natural order in which they occur in the cemetery so the relatives like a mother-in law might be spotted nearby that could advance your research back another generation. There are ways to search by first name and death year, or Civil War veteran and death between 1861 and 1865, or by maiden name, and many more. This database was later adopted by the Association for Gravestone Studies as the standard for recording gravestones.

We realized after starting the project that not all of these transcripts were of the same quality and none was perfect. The average was probably 85% to 90% accurate, but we did find some that were less than 50% accurate. As we entered two transcripts into the database by different recorders, we found discrepancies. We soon decided it would be necessary to check every gravestone. Thus the project took on a phase I and phase II approach. Phase I involves entering existing or newly taken transcription data. Phase II is to verify the data by taking printouts of the phase I data to the cemetery to verify, not only the original transcription but the accuracy of the input to the computer. Codes representing the dimensions, composition, shape and condition of the stone are also recorded during Phase II. This method of recording the data increases the accuracy to probably 98%-99%.

The earliest gravestones were fieldstones pulled out of farmers' fields. Local slate was quarried and used as the primary material by professional gravestone carvers through most of the seventeenth and eighteenth centuries in Rhode Island.^[3] After the Revolutionary War marble slowly became the most fashionable stone and became the predominant material until granite took over in the late nineteenth century. Most gravestones in the United States in the nineteenth century were made of marble, but these gravestones are unfortunately proving to be temporary markers. Thomas Meierding discussed gravestone weathering at the 1995 Association for Gravestone Studies conference.^[4] Dr. Meierding detailed how sulfur dioxide, from coal burning, is the main enemy of upright stones and acid rain is the enemy of horizontal gravestones. My experience in Rhode Island is that 2% to 4% of the marble stones are unreadable, even with the best gravestone reading techniques including lighting the stones with a mirror.

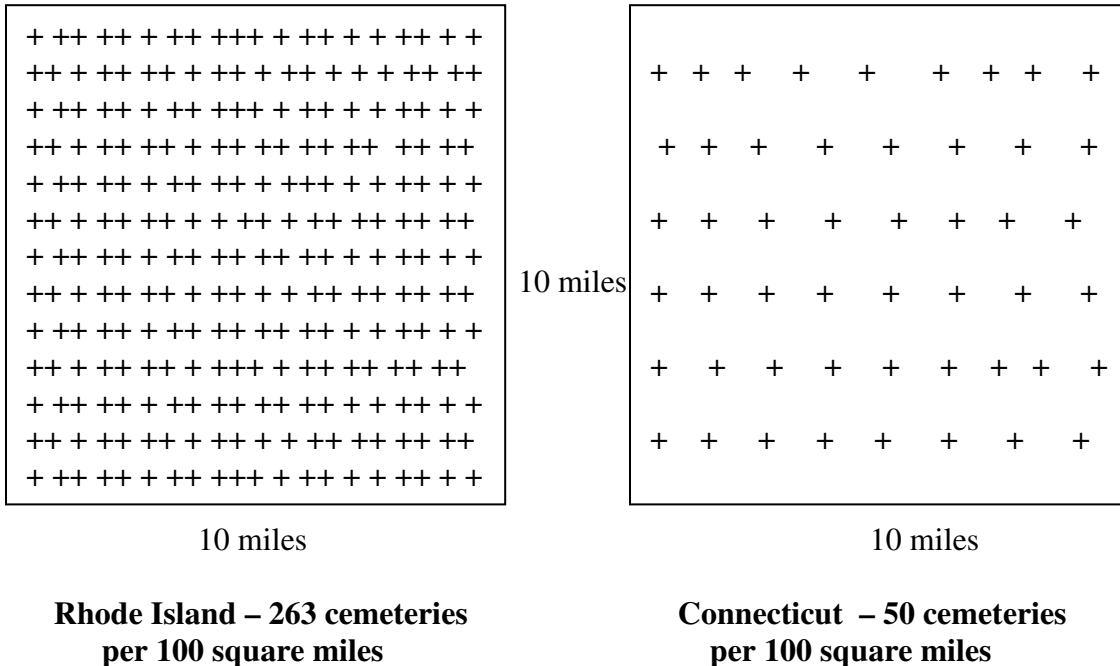
2. James Newell Arnold recorded over 1500 cemeteries in about half of the 39 towns in the state between 1880 and 1927. George H. Richardson recorded most of the cemeteries in Newport, Portsmouth, and Middletown.

3. Along the Connecticut River and in coastal New York and New Jersey red or brown sandstone was common and was the predominant material used for gravestones there. New York City has many brownstone houses built of this material.

4. Thomas C. Meierding, *Annals of the Association of American Geographers*, 83(4), *Marble Tombstones Weathering and Air Pollution in North America*, pp. 568-588 (Cambridge, Ma.: Blackwell Publishers, 1993)

That number is somewhat lower in rural areas that had less exposure to sulfur dioxide. In some areas where sulfur dioxide pollution was higher or where poor quality marble was used, the percentage of unreadable gravestones can be as high as 50%.

When I mention that Rhode Island has 3,200 cemeteries and that some towns have over 200 cemeteries I get quizzical looks. Most of the other colonies had a much lower density of cemeteries. Rhode Island is 1,215 square miles, so with 3,200 cemeteries there are 2.63 cemeteries per square mile or 263 cemeteries per 100 square miles. A town 10 miles by 10 miles, larger than any Rhode Island town, would have on average 263 cemeteries in Rhode Island.^[5]



The neighboring state of Connecticut has 2500 cemeteries and an area of 5000 square miles or 50 cemeteries per 100 square miles. Thus Rhode Island has 526% more cemeteries than Connecticut on a square mile basis.

Vermont has 20 cemeteries per 100 square miles and New Jersey has 25 cemeteries per 100 square miles. The reason for this disparity in the density of cemeteries in Rhode Island and the other colonies dates back to how the colonies were originally organized. Rhode Island was the only colony that had separation of church and state, something we take for granted in each of the United States. In the Massachusetts Bay Colony or in Plymouth Colony each town was essentially a parish of the church. There was a town green with a meeting house, a place to browse cattle and exercise the militia, and usually a cemetery. The town collected taxes and out of which the minister’s salary was paid.

Rhode Island was a place of refuge for those who were banished from other colonies for infractions usually involving religion like Roger Williams, Ann Hutchinson, and a number of Quakers. They came to Rhode Island for the religious freedom they could not find anywhere else in the world. Throughout the state there were several sects of Baptist

5. Scituate, 48.7 sq. mi., has 228, South Kingstown, 57.1 sq. mi., has 204, Coventry, 59.5 sq. mi, has 197.

churches, Episcopalian churches, Congregational churches, Quaker meeting houses, and in Newport a Jewish settlement that dates to 1658.^[6] A rural town might have six or seven small denominations. In all but the largest towns of Newport and Providence, most of these congregations were small enough to meet in private homes, and they did not have a central cemetery. When a child or a spouse died, he or she was buried in a family cemetery usually located within three hundred feet of the house and usually uphill from the house. The cemetery was sometimes surrounded by a stone wall, or granite posts and iron rails, or a wood picket fence, or sometimes left unprotected. There are some exceptions to the small cemetery pattern in the large port towns. Many of the town house lots were too small to accommodate a family cemetery. Newport opened the Common Burying Ground in the 1660s, and Providence opened the North Burial Ground in 1700.^[7]

This pattern of small family cemeteries continued in Rhode Island until about 1850 when almost every town built large public and private garden cemeteries after the style of Mt. Auburn Cemetery in Cambridge, Mass. While there were still some burials in the small family cemeteries through the rest of the nineteenth and into the early twentieth century, the pattern was to buy plots in these new cemeteries as family members died. Many of the small family cemeteries were removed to these new larger cemeteries. We can tell this was happening because there are gravestones in these cemeteries that predate their incorporation. Riverside Cemetery in South Kingstown was incorporated February 24, 1870, and the first burial was made in April of that year. Today there are 316 gravestones, such as those for Benjamin Hull and his wife Robey who died in 1864 and 1869 and three of their children who died between 1845 and 1861, that predate the incorporation. When this cemetery was recorded in 1880 by James N. Arnold, ten years after it was opened, he found 239 interments of which 151, or 63%, predated the incorporation.

We generally don't think about gravestones and modern technology as being compatible, but in the nearly two decades we have been recording cemeteries we have embraced technology to help with data collection, to help users get access to the data, and to publish books of transcriptions. As technology improved we were able to record more data, more accurately and we were able to serve more users, especially over the internet.

The most obvious change has been in the computers we are using. In 1990 we were using IBM XT and AT computers with chip speeds of 12MHz. Today with 1.8GHz to 3.0GHz chips searching and processing data is considerably faster, although data input is still limited by my relatively slow typing speed. The hard disk storage space has increased from megabytes to gigabytes, nearly three orders of magnitude. I remember ordering a 40MB hard disk to replace an insufficient 20MB hard disk at a cost of \$500. Today for \$59 you can buy 120GB of storage capacity. The database today is 500MB or more than ten times the size of my first upgraded hard drive.

In the early 1990s we became aware of the capabilities of a GPS (global positioning system) when Trimble lent us a large GPS unit mounted in a backpack. Because of the selective availability (SA) or distortion added to the satellites processing of the data proved too time consuming. In 2000, through a change in policy by the Defense

6. Touro Synagogue was built from 1759 to 1763, for the Jeshuat Israel congregation in Newport and is the oldest extant synagogue in North America.

7. Bristol, Warren, and Barrington were Massachusetts towns until they were given to RI in 1747. They all have a pattern of cemeteries that looks more like Massachusetts than Rhode Island.

Department, the SA was removed, eliminating the need for the lengthy correction. Units for reading the coordinates have evolved to the size of a cell phone. Final readings can now be made in two to three minutes. This allows us to locate cemeteries accurately on a map using latitude and longitude. The best thing we can do to protect these cemeteries is to put them on the town planners' maps: when the land is eventually developed, the cemetery is brought to the developer's attention and he must deal with it in his plans. With the lat/long coordinates and a handheld GPS unit (cost about \$100) or a GPS equipped cell phone you can now navigate to a farm cemetery located deep in the woods. The GPS can also give you this distance from the road to the cemetery which in some cases can be as much as 4000 feet with no road or trail. Google Earth is now used to check the accuracy of the on-the-ground GPS readings. Not all of the small farm cemeteries can be seen on Google Earth, but if the coordinates show the cemetery to be, for instance, in Narragansett Bay as happened recently, we know an error has been made. We are now in the process of adding the longitude and latitude to the description of each cemetery.

The biggest technological change to improve gravestone recording is the digital camera. Now that an 8 megapixel camera is in the price range of our volunteers, most of the recording of gravestones is done with digital photographs. It is absolutely necessary to light the gravestones with a large mirror to reflect sunlight across the surface of the stone to cast shadows in all the letters and numbers to get high quality photographs. In a colonial cemetery where all the gravestones face west it is necessary to do this photography in the morning so the sunlight is behind the stone and can be reflected across the front surface which is in shadow. Two people, one with the mirror and one with the camera on a tripod, can photograph 60-100 gravestones in an hour or up to 500 in a morning. These photographs can be enhanced with a program like Photo Shop to lighten or darken them and the contrast can be increased or decreased. They can then be used to record a cemetery or to check data that is already in the database. We often have two or more people read the stones and then compare the data and correct discrepancies. With 2 MB files it is possible to zoom the lettering to full size on your computer screen to read the inscriptions.

I now live in Illinois but work with volunteers in Rhode Island that send me digital photographs to enhance and record. We are currently working on the Common Burying Ground in Newport that dates to 1660. There are over 7,000 gravestones and it has been recorded at least three times in the past, in 1880, 1900, and 1984. Unfortunately all three recorders made many errors recording the gravestones. Some mistakes were as simple as the wrong month or day, but some had the name wrong or the death year or age wrong. We are now almost finished and have made almost 1000 corrections to the database and have added almost 300 gravestones never before recorded. On stones that are difficult to read I email the photographs to several people to get their opinions. In many cases we know the carver and his style of work and can tell the stone was carved in 1734 not 1754 as the stone was recorded in an earlier transcription. These photographs will eventually be added to the database so that researchers can check the data on the primary source.

There is an African section in the Newport Common BG that is called God's Little Acre.^[8] It has the largest collection of colonial markers for Africans, both free and slaves. On many of the gravestones erected by the master they referred to them as faithful

8. For a more detailed look at this burial ground see: colonialcemetery.com

servant. The gravestone for Cesar Serring says “A good and faithful servant.” John Stevens and four of his sons ran a stone cutting business in Newport starting in 1704 and made many of the gravestones in this section of the cemetery. One interesting stone was cut by a slave in their shop. It says “This stone was cut by Pompe Stevens in memory of his brother Cuffe Gibbs who died December 17, 1786 aged 40 years.”



Two Negro sarvants to
Mr. Edward Baner
Common BG, Newport, RI



Hector Butcher negro, late servant to
Ms Ann Butcher of Barbadoes
Common BG, Newport, RI

In the process of collecting digital gravestone photographs from many people we developed a naming standard so that various collections of photographs can be combined and searched.^[9] This standard has been submitted to the Association for Gravestone Studies for comments and possible adoption as a national standard. We now have 30,000 digital photographs.

When a volunteer drives all the way to the other end of the state, forty miles in the case of Rhode Island, to record a cemetery a light rain shower can quickly end the session when rain drops on the paper stop the pen from writing. The space pen eliminates that problem and lets you finish the task. It lets you write over wet paper or even with the pen pointing upward as you might do lying in a hammock writing in a spiral-bound notebook.

A few years ago I acquired an inexpensive digital voice recording device. Cemeteries heavily overgrown with briars require acrobatic talents to hold the briars away from my tender skin while reading the inscription on a gravestone. It was sometimes necessary to memorize the inscription, then gingerly back out of the briars to commit it to paper. With the voice recorder I can record the inscription and then play it back as I write it down.

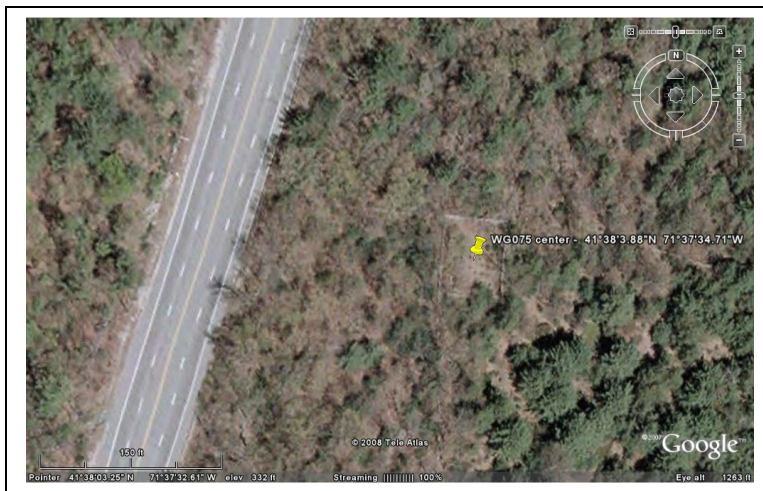
9. file name is: 2 digits for state, a dash, 2 digits for town or county, 3 digit number for cemetery, last name, comma, first name, death year, .jpg

I am somewhat concerned when walking around the cellar hole of a long abandoned homestead looking for the family cemetery that I might accidentally fall into the well, so now I carry a cell phone with me. My wife says that if that happens I will probably have my arms pinned to my side and not be able to reach my cell phone. Fortunately I have not had to test that technology, although I have called home to say I had just found another cemetery and would be late.

We have made the full database available on computers at the Rhode Island Historical Society Library and at several other libraries around the state.^[10] These must all be updated periodically. To do this with floppy disks was very time consuming early in the project, but with writable CD ROM drives the entire 500MB database can be copied to a CD. This CD can be used to update the library computers in a fraction of the time. This is also an excellent way to backup the database.

The internet has grown with us and provided extremely helpful technology. Volunteers keep in constant touch throughout the state via e-mail. Recording tips, hunting season alerts, and information about deer ticks are exchanged. We even send updated databases to each other as data is added. We subscribe to genealogy mail lists where people ask questions about historical cemeteries and supply us with information about ones we have not found. Recently two cemeteries were found and registered through information sent to the RIGenWeb.

We have put the entire 435,000 name index to our database with dates on the internet where people looking for ancestors can search to see where they are buried. We have over 95% of all pre-twentieth century gravestones in Rhode Island in the database. Once a genealogist has identified the cemetery where his ancestor is buried, he can go into the database to get a detailed description of the cemetery location including the GPS coordinates. Many of the cemeteries can be seen on Google Earth.



West Greenwich, RI historical cemetery #75, the John Matteson Lot, a typical family cemetery 55 feet by 70 feet surrounded by a stone wall on the family's farm as shown on Google Earth.

Electronic mapping software was developed in the 1990s to a point where it is very easy to put a cemetery symbol with the number of the cemetery in the correct location on a street map.^[11] In the last few cemetery books covering all the 150-200 cemeteries in one town, we included these maps in the book to show the cemetery locations. Electronic

10. The index to the database is available on the internet at RIGenWeb.

11. The software used is DeLorme Street Atlas USA.

topographical maps are also now available, and we use these with the GPS to navigate in the woods looking for lost cemeteries.

We have now published ten books each one containing all of the gravestone inscriptions for one town. Our earliest computer printers were nine-pin dot matrix which were unsuitable for creating camera-ready copy for a book. Fortunately technology brought the cost of laser printers down by 1994 when we published the first book so that we could format and print the pages for the books. At that time inserting photographs was time-consuming (creating blank spaces for the pictures on the page, photocopying a mock-up, and mounting the photos on cardstock with instructions) and expensive (each photo added to the cost of the printing). We now submit the manuscripts for publication electronically in pdf format, with all pages precisely as they are to appear in the finished book with no extra charge for illustrations.

There is nothing more exciting for a genealogist than seeing the final resting place for several generations of his or her ancestors. If your research leads you to one of Rhode Island's small family cemeteries to find your ancestors here are a few tips to help you succeed. Learn as much as you can about it from the Rhode Island Historic Cemetery Database at the RIGenWeb. Books that have been generated by the project—ones with maps and photographs of many gravestones—are available for ten of the thirty-nine Rhode Island towns.^[12] If your ancestor is buried in one of the large burial grounds in one of the port cities like Newport, Bristol or Providence come anytime as these burial grounds are well maintained and easy to walk around. Be aware that some of these are quite large. The North Burial Ground in Providence is 110 acres and contains over 100,000 burials. You will need to have some idea of where in the burial ground your ancestor is buried. It would be a good idea to arrive when the office is open and be aware that the records are chronological so know the death date of your ancestor. You can also find this information in the full database at the RI Historical Society in Providence.

If your ancestor is buried in one of the small family cemeteries, come in the off-season. Many burial grounds, while once in a prominent location on the family farm, are deep in the woods that now cover the site of the homestead. They are commonly overgrown with trees, bushes, bittersweet, briars, poison ivy and other vegetation. When we visit these cemeteries to record them for the database, we usually go in November through May. We try to finish by June 1st, as it is considerably more difficult to get to and to read the gravestones in June, July, August, and September. Most genealogists arrive during precisely these four months when getting into the cemeteries is the hardest. Some leave disappointed that they were able to get to the wall of their ancestor's cemetery but were unable to see a single gravestone for green briars and poison ivy. Visiting off-season also lessens the risk of insect-borne diseases.

For those working on a computer transcription project or contemplating one the ideas and technology applied to the Rhode Island project should help make your project more efficient and accurate. For Illinois genealogists who trace their roots back to New England the tips presented here should help you get more out of gravestone records. Treat them with caution as our experience is that cemetery transcripts contain a 5% to 20% error rate and some are much worse. Be sure to be skeptical and check the data. With any luck you will get into your ancestor's cemetery and get some great photographs.

12. For more details about what is included in the cemetery books see the RI Genealogical Society web site at: rigensoc.org