

Minot State University: Center for Extended Learning Power of 100 Centennial Project: Veteran Headstone Cleaning Project

TO: Superintendent, Rosehill Cemetery, City of Minot, North Dakota (Bonnie Ripplinger)



Figure 1. Volunteers clean headstone in Section 12, Row 1. Photograph by Eunice Timbrook.

Project Description:

The campus challenged faculty, staff, students, community, friends, business, and organizations to complete a service project in honor of Minot State University's centennial. In response, Mark and Eunice Timbrook, with the Center for Extended Learning partnered to clean 100 veteran headstones in section 12, Rosehill Cemetery during the spring and fall 2013. Volunteers were sought from across the campus and community.

Cleaning was conducted in accordance with National Center for Preservation Technology and Training standards for cleaning government issued marble grave markers (see attachment). Supplies and equipment was provided by Minot State University, D/2 cleaning solution was provided by the Center for Extended Learning, and all labor was volunteer-based. The project began on July 8, 2013 and was completed on August 2, 2013. Based on need and condition, approximately 102 headstones were cleaned, which includes all stones in the first four rows.

Site Projector Coordinators

Mark Timbrook, site supervisor and trainer

Eunice Timbrook, project manager and photographer

Section 12-Site Description:

Section 12 of Rosehill Cemetery, Minot, North Dakota is centrally located on the grounds. The section contains 226 government furnished markers for veterans. The upright headstone averages 42 inches in length, 13 wide, and 4 inches thick. They weigh approximately 230 pounds each. The markers have not been spaced with any real consistency. They average 32 inches between each stone with variations ranging between 26 and 36 inches apart.

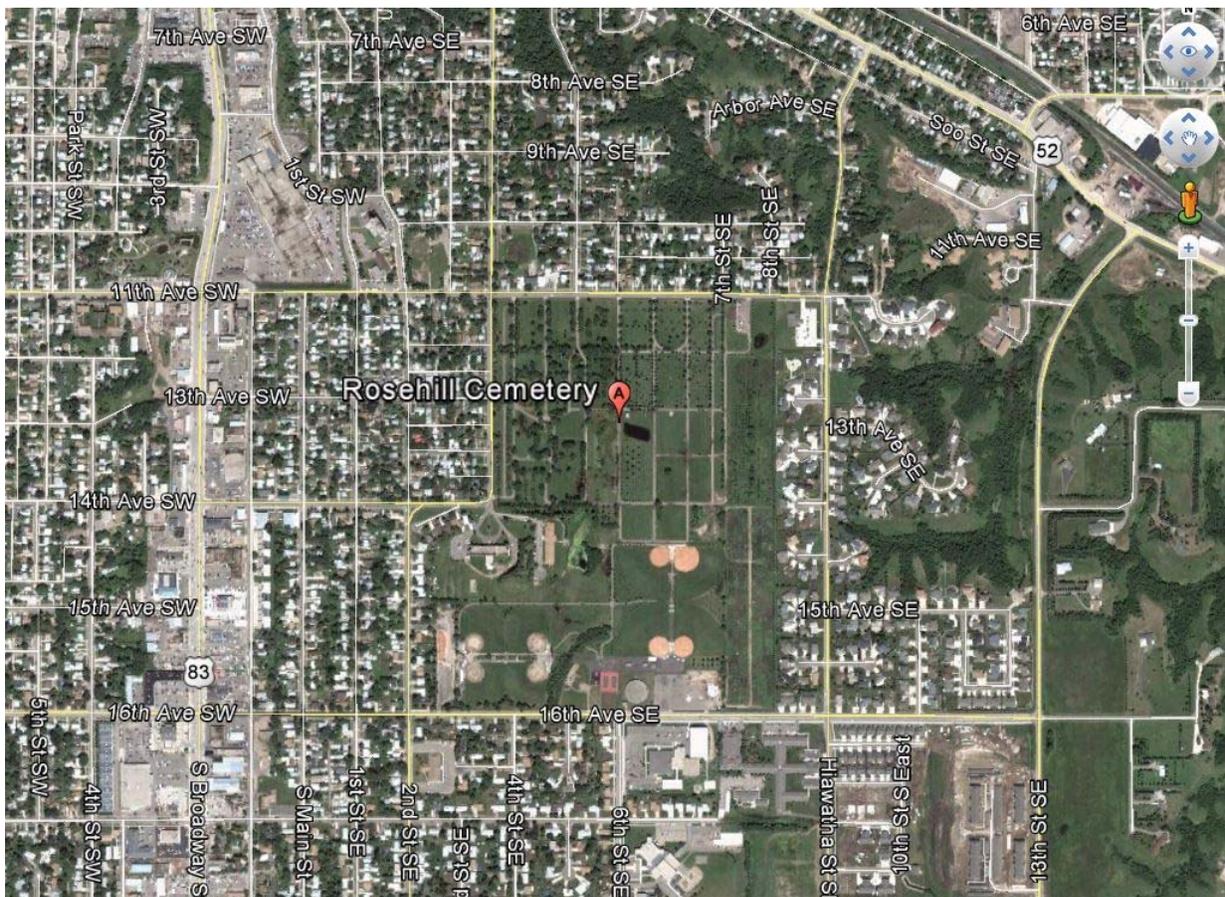


Figure 2. Rosehill Cemetery, Minot, North Dakota. North is top of map image. Image courtesy of Google Earth.

The headstones are a mix of Colorado Yule and Cherokee White marble. As with all government furnished markers, the headstones in section 12 are inscribed with the name of the deceased, the years of birth and death, and branch of service. Optional items that also may be inscribed at VA expense are: military grade, rank or rate; war service (such as "World War II"); months and days of birth and death;

an emblem reflecting one's beliefs; valor awards received; and the Purple Heart. Additional items have been inscribed at private expense.

The section consists of nine rows of headstones, properly oriented and facing (text) west. The earliest marker is dated November 28, 1921, and the most recent, as of this documentation, is dated February 4, 1992. The section contains veteran internments from the Spanish American War, World War I, World War II, Korea, Vietnam, Cold War, and Gulf War I. All of the headstones bear the Christian crucifix, with exception of two, which bear no religious symbol.

The elevation of Section 12 is positive, which prevents the flooding common to other areas in Rosehill Cemetery (to the east and south). The perimeter of the section has 14 trees, which include a mix of American Elm, Siberia Elm, and Common Hackberry species (see Tree Plan 2013 attached). Markers around the perimeter, which fall under the tree canopy, clearly show the impact of sap, bird droppings, and related biological growth. Several trees on the west edge have large dead branches overhanging the headstones. One dead branch measure 3 inches in diameter fell during the final cleaning day, narrowly missing stones. Other large, dead branches remain overhead in the area. Headstones toward the center of the section are not under the canopy and as a consequence, are in considerably better condition; some not even requiring cleaning in the immediate future.

Section 12-Site Area Cleaned

The section cleaned during the 2013 Power of 100 Project consists of the first four rows, accounting for 102 headstones, facing east to the early morning sun and facing inscriptions. Internments in this part of the section were limited to the Spanish American War, World War I, and World War II. Colorado Yule and Georgia White marble were mixed across the section. Many of the stones suffered significant staining from trees and fragment loss due to mover damage and environment conditions such as freeze-thaw. Several have significant bedding cracks which threaten their long term safety, as shown in the attached photograph portfolio. One only gravestone was not cleaned due pre-survey damage: T. Connors, Row 4, and Headstone 26.

One headstone is leaning and pressing the 15° angle for repair: A. Radtke, Row 5, and Headstone 24.

Several markers have lost their concrete footer to the elements and need repaired. They include:

- a. J. Parrent, Row 1, Headstone 5
- b. W. Beck, Row 1, Headstone 6
- c. D. Stegzal, Row 1, Headstone 23

Methodology of Cleaning

A pre-condition assessment was conducted on each headstone prior to cleaning to determine its condition for cleaning and to officially document any problems for the Rosehill cemetery administration. All materials for the project were provided by Minot State University, with exception of the D/2 which was funded publicly, and the hose with water, which was provided by the City of Minot.

In accordance with National Center for Preservation Technology and Training standards (see attached), the headstones were saturated with clean water before cleaning. D/2 biological solution was used in the process and markers were cleaned from the bottom to top. Solution was rinsed from the stone and reapplied as necessary during the process. Once the cleaning was completed, the headstone was thoroughly rinsed with clean water. Soft bristle brushes were used to clean the stones. D/2 solution was applied using small handheld spray bottles. Headstones with substantial damage were photographed before or during the cleaning process when damage was discovered.

Volunteers

Mark Timbrook	Kris Warmoth
Eunice Timbrook	Meghan Stewart
Merri Jo Connole	Vicki Olson
Nicola Roed	Cathy Holt
Rick Heit	Evelyn Klimpel
Heidi Benavides	Pamela Hopkins
Jeanne Narum	Julie Keller
Kathy Holte	Jessica Hudson
Melissa Bembnowski	Sherie Saltveit
Jared Bembnowski	Amy Lisner

Findings:

1. Mower damage is consistent across section 12, caused by running the mowers too close to the stones and scrapping them and chipping at the vertical edges of the markers.
2. Several markers have crosscut bedding cracks of substantial nature.
3. Tree sap damage is consistent on those stones located beneath or in close proximity to the trees.
4. The trees on the west and south side of the section contain large dead branches (3 to inches in diameter), which constitute a considerable threat to the headstones and pedestrians in the area.
5. The acidic nature of bird droppings has contributed to the staining of the stones located beneath the trees.
6. Numerous stones have spalling underway, a consequence of the freeze-thaw nature of our environment.
7. Several headstone foundations have been compromised and require attention.
8. Several stones have been damaged by improper cleaning. The nature of the damage indicates bleach or other harsh cleaning material. These stones are beyond repair.